## A REASONABLE FREEDOM: THE DEVELOPMENT OF KANT'S "THIRD ANTINOMY"

by

#### JEREMY BYRD

(Under the Direction of O. Bradley Bassler)

#### ABSTRACT

The aim of this dissertation is to follow the development of Kant's theory of freedom from his discussion in The New Elucidation of the First Principles of Metaphysical Cognition (1755) to the theory of transcendental freedom presented in the solution to the "Third Antinomy" in the Critique of Pure Reason (1781, 1787). In this earlier work, Kant defends a compatibilist theory of freedom which, contrary to traditional interpretations, explicitly rejects the ability to do otherwise as a necessary condition for free agency. This is a result of his acceptance of the Principle of Sufficient Reason. By the time of the Critique, Kant had come to reject this view in favor of an incompatibilist theory of transcendental freedom. At the same time, the Principle of Sufficient Reason had become a mere regulative principle intended to help organize our investigations. The problem here is threefold: 1) to explain why Kant came to reject compatibilism, 2) to explain why Kant came to regard the Principle of Sufficient Reason as a regulative, rather than a substantive, principle, and 3) to explain why, given the cosmological nature of the antinomy, Kant expresses its solution in largely moral terms. These issues are intimately connected. I contend that these changes in Kant's views are the result of his growing

awareness during this period of the fundamental tension between the compatibilism required by his rationalist metaphysics and the incompatibilism of his ethics. In light of this, I argue that the "Third Antinomy" is best understood as an attempt to resolve this tension by demonstrating that the legitimate regulative use of the Principle of Sufficient Reason does not challenge our status as moral agents.

INDEX WORDS: Kant, Principle of Sufficient Reason, Freedom, Pre-Critical, Antinomy

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### DEDICATION

I dedicate this dissertation to my parents, James and Linda Byrd, and to my wife, Miriam.

#### **ACKNOWLEDGMENTS**

I would like to thank those who have contributed their time and energy in this project. First, I want to acknowledge the invaluable contributions of my advisor, O. Bradley Bassler. Though, at times, we may have disagreed, he has been a constant source of encouragement and I know that my struggles to meet his expectations have given this dissertation, modest as it is, whatever worth it has. Also, I want to thank the members of my dissertation committee: Yuri Balashov, Randolph Clarke, Edward Halper, and Richard Winfield. Finally, I would like to thank my wife, Miriam Byrd, for her assistance in preparing the manuscript.

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#### **INTRODUCTION**

For some time now, I have been interested in Kant's theory of freedom. Ever since my first graduate course on Kant, I have been convinced that there was something important in Kant's repeated attempts to come to grips with the apparently ineluctable tension between our competing views of human agency. On the one hand, we tend to view ourselves and our actions just as we view other ordinary events in nature. Falling stars, tumbling rocks, and exploding volcanoes all have natural explanations. They are each part of a series of causes and effects stretching back into the eons of time. Likewise, we assume, human actions can be explained in the same way. If a man chooses to kill another, or to ride a bike, or even to run for President, it seems this action is also the result of some causal chain stretching back to past events which have led, unavoidably, to his decision. And so we might explain his action by citing some combination of events from his childhood, his genetic heritage, and his surroundings.

On the other hand, we also tend to view ourselves as morally responsible agents. When we act, we do so for reasons. Sometimes we act out of self-interest. Sometimes we act for immediate gratification. And sometimes, when we are feeling nobler, we act because we realize that it is the right thing to do. But regardless of our motivations, we are typically held responsible for what we do. Usually, if pressed, we would explain this fact by noting that, when they make such a decision, agents have the power to choose otherwise. And so it seems right to hold them responsible for the choices they make. In each case, it is up to the agent what to do, and, right or wrong, they should be held accountable for their actions. The problem, of course, is that these views seem, at least intuitively, incompatible. If my choices are simply the result of a causal chain, then it is hard to see in what sense they are up to me. Likewise, if I truly possess the power to do otherwise, then it seems that, when I am trying to make a decision, the future is open and I am faced with a genuine alternative between different courses of action. But there is little place for such an open future in our mechanistic worldview. According to this point of view, my path is as certain as that of a falling meteor in the night sky.

In Kant, we find a major figure in the history of philosophy who struggled with this tension throughout his career and who managed both to consider nearly the entire range of philosophical responses and to defend radically different solutions. This is interesting in its own right. More interesting still, however, is the depth of his account. In the "Third Antinomy" of the *Critique of Pure Reason*, Kant proposed a theory of human actions according to which we are responsible for our actions because we cause them and we are not caused to do so by any prior events. Such a solution, however, is not without its problems. As Kant realized, it is difficult to explain such an event as anything more than just a random happening: if nothing caused my decision, then it seems to be a random, unexplainable event.

Kant struggled with the solution to this problem over the course of his career. In the *Groundwork of the Metaphysics of Morals* and the *Critique of Practical Reason*, for example, we find Kant grappling with the details of his account. There he argues for a fundamental connection between morality and rationality such that an action is morally right if and only if it is the rational thing to do. Even if he is right about this connection,

however, Kant must still explain why it is that we are motivated to do the right thing. But this leads us to the same problem. Kant must explain why it is that the agent acts without recourse to any event which causally explains the agent's choice.

Kant's solution is to invoke a feeling of respect which any rational agent would feel when they recognize that a given course of action is the right thing to do. We respect the moral law. And, when we act morally, we act out of respect for morality. Respect, however, is a most unusual feeling, and it motivates in a most peculiar way. It is unusual because, unlike other human emotions, respect for morality cannot be a contingent feeling which we only happen to have as a matter of fact. Otherwise our obligations would be contingent as well, since it would not be inappropriate to hold people responsible for failing to act on a motivation which, through no fault of their own, they do not have. Nor can this motivation compel our actions. Instead, the agent must somehow stand back from his motivations and choose, independently, which of them to satisfy. But this hardly seems to explain such a choice at all since, in the end, it simply amounts to pointing out that we make choices and that, sometimes, we act because it is the right thing to do.

I do not think that Kant was satisfied with this solution. And when I started this dissertation, my goal was to explain and evaluate Kant's later attempts to develop a more satisfying account of rational agency. It still is. My initial assumption, however, was that I had a good understanding of these initial stages in Kant's critical theory. This assumption was wrong. Over time, I kept returning to and puzzling over Kant's "Third Antinomy." I soon came to realize that there were problems in the prevailing

interpretations of Kant's arguments. He seems to present a standard cosmological argument for the existence of a first cause. This is meant to stand in contrast to Kant's critical doctrine that every event must have a cause. So understood, Kant's arguments present us with an antinomy of reason. We have good reasons to believe in a first cause and good reasons to believe that the causal chain continues on infinitely into the past. The problem, however, is that, despite first appearances, there is no satisfactory account of Kant's argument for such a first cause. He speaks, for example, of its existence as following from "the law of nature" which informs us that nothing happens which is not "sufficiently determined *a priori*." Though this certainly suggests something like the traditional Principle of Sufficient Reason, Kant's phrasing remains obscure and unexplained. More perplexing still, it is clear that, by the time of the *Critique of Pure Reason*, Kant no longer accepted such a principle. How, then, could this principle be used to generate a true antinomy?

Moreover, Kant's solution to this supposed antinomy appears to be only tangentially connected, at best, to the antinomy itself. The problem of the antinomy is that we must both accept and reject the existence of a first cause of the universe. Kant's solution, however, mainly focuses on the claim that we must be like such a first cause when we act in order to be responsible for what we do. It is far from clear what this has to do with our initial problem.

In this dissertation I seek to address these concerns and to provide a plausible reading of the "Third Antinomy." I contend that Kant's entire discussion of this antinomy can best be understood as being, in a sense, a summary of his developing views on the problem of free will. To interpret it properly, we must look back at Kant's earliest observations on free agency and moral responsibility and chart the progression of his views throughout this so-called pre-critical period. This dissertation is intended to provide an examination of this backdrop in support of this contention and so to place Kant's critical theory of freedom within the context of his earlier views. It thus presents a beginning of my overall project to elucidate the developments in Kant's theory and to assess the strengths of Kant's position as well as its relevance to contemporary concerns.

This dissertation consists of five chapters.

In Chapter 1, I argue that, contrary to the standard interpretation, Kant's earliest theory of freedom already displays Kant's willingness to break with the rationalist tradition of his day. In the *New Elucidation of the First Principles of Metaphysical Cognition* (1755), Kant agrees with Leibniz that freedom and determinism are compatible. In addition, he agrees that we must accept the Principle of Sufficient Reason and so some form of determinism. Nevertheless, he sides with Leibniz's critics in maintaining that this principle implies that there is no relevant sense in which we can do otherwise than we do. This leads Kant to accept an alternative compatibilist account according to which we are free despite the fact that our actions are both logically and physically necessary.

In Chapter 2, I examine Kant's reasons for accepting the Principle of Sufficient Reason in the *New Elucidation*. I conclude that Kant's argument for this principle is based on something similar to Leibniz's analytic theory of truth according to which all true propositions are tautologies.

In Chapter 3, I skip ahead to Kant's 1768 essay *Concerning the Ultimate Ground of the Differentiation of Directions in Space*. There Kant claims that we can infer the existence of absolute space from the differing orientations of objects such as left and right hands. I argue that Kant's conclusion implies that, by this time, he has rejected the Principle of Sufficient Reason and is no longer committed to the analytic theory of truth upon which it was based. Thus this essay serves as a useful indication both of the direction of Kant's thoughts, which is becoming increasingly empiricist, and of the timeline of his development.

In Chapter 4, I turn to the period between these two works and to Kant's writings and lectures from 1768 through the mid-1770's. I argue that these works demonstrate Kant's increasing awareness of the tension between his ethical views, which rely on an incompatibilist theory of freedom, and his metaphysical commitments. At the same time, we find an increasing focus on practical reason and a willingness to subordinate these metaphysical commitments to his ethical concerns. Freed from his earlier rationalist constraints, Kant now accepts a full-blooded incompatibilist theory of freedom according to which moral responsibility requires that our decisions are made independently of past events and the laws of nature. Finally, in Chapter 5, I urge that this history helps to explain Kant's wording and interests in both his presentation of the antinomy as well as its solution.

I should note, however, that there are two important aspects of Kant's developing theory which I will not be discussing. First, Kant's theory of transcendental freedom in the Critique of Pure Reason relies on his distinction between things as they appear to us, phenomena, and things as they are in themselves, noumena. In the Critique, Kant claims that we are, *qua* noumena, free despite the fact that, *qua* phenomena, all of our actions are determined. A full account of this theory, then, requires a good explanation of this distinction. Second, in the *Critique*, Kant's reliance on this distinction appears to be forced by his commitment to an incompatibilist theory of freedom and his conclusion, from the "Second Analogy," that every event which we might experience has a cause. Together, these imply that our freedom is beyond our experience, and so it is something we exercise as noumenal agents. A full understanding of Kant's critical theory of freedom, then, would require us to explore the argument of the "Second Analogy." I have done neither of these things. By way of excuse, I can only point out the extraordinarily controversial nature of both these subjects. There is no standard interpretation of Kant's phenomenal/noumenal distinction or any standard account of Kant's argument from the "Second Analogy." There is not even agreement about whether Kant had an unambiguous distinction in mind or a single argument. I have put off discussing these issues, then, in order to avoid needlessly complicating what is already a difficult task. I felt that this was necessary if any progress was to be made. Instead, we must simply remember that Kant thought that there was some relevant distinction to be made and that the argument of the "Second Analogy" was sound. We can make sense of the further features of Kant's theory so long as we bear this in mind.

This is not to say that the details of these issues can be completely ignored. For now, however, we must postpone examining these details in any depth. A complete treatment of Kant's theory of freedom must take on these aspects of his theory of transcendental idealism. At the same time, such a treatment must move beyond these early stages in Kant's theory and examine Kant's full solutions to the problems which originally motivated this dissertation. This means looking at Kant's account of rational agency in his critical works to see how it is that we can act freely and for reasons. This discussion, however, will have to wait until another day.

#### **CHAPTER 1**

#### Kant's Compatibilism in the

#### New Elucidation of the First Principles of Metaphysical Cognition \*

It is generally assumed that, during his early pre-critical phase, Kant accepted a Leibnizian account of freedom according to which we are free to do otherwise than we do even though our actions are determined.<sup>1</sup> This assumption is false. Far from endorsing such an account, Kant explicitly argues in the *New Elucidation of the First Principle of Metaphysical Cognition* (1755) that there is no relevant sense in which we can do otherwise than we do. Nevertheless, he is equally convinced that we are free and responsible for our actions. Consequently, he concludes that we can be responsible for what we do even if we could not have done otherwise. Little attention, however, has been paid to this argument. This is unfortunate, since a better understanding of this stage in Kant's theory of freedom would surely help us in understanding the later critical developments. This chapter seeks to remedy this deficiency.

#### 1. Kant's Rejection of Leibnizian Compatibilism

The *New Elucidation* account of freedom is in large part a reaction against the compatibilism of Leibniz and his followers. It is the failure that he perceives in the Leibnizian account which Kant is trying to overcome. In order to understand Kant's precritical position, then, let us briefly review Leibniz's compatibilist account of freedom.<sup>2</sup>

<sup>\*</sup> This chapter is a slightly modified version of an article with the same title forthcoming in *Kant-Studien*.

#### 1.1 Leibniz's Theory of Freedom

Leibniz defends the thesis that freedom and determinism are compatible; however, he faces a more difficult challenge than most compatibilists. Given his commitment to the Principle of Sufficient Reason (PSR), Leibniz holds that there is an explanation for every event. Thus he must endorse some version of determinism. In addition, however, Leibniz is also committed to the thesis that every true proposition is an analytic truth.<sup>3</sup> It seems, then, that, for Leibniz, not only are all of our actions determined, but they are also logically necessitated. This is especially problematic since he also accepts the following conditions which he holds are individually necessary and jointly sufficient for free agency:

(C1) It must be logically possible for the agent to do otherwise

and

(C2) The act must be caused by the agent's non-impaired judgment and must not be the result of any external determination or coercion.<sup>4</sup>

Determinism appears to undermine C2. If all of my actions are the result of a causal chain stretching back into the distant past, then it is hard to see in what sense they are up to me. Further, if our actions are logically necessitated, then it seems that it is not logically possible for us to do otherwise. Thus C1 is never satisfied and we are never free.

Leibniz only deals explicitly with the latter problem. He does so by appealing to the distinction between absolute and hypothetical necessity. According to Leibniz, our actions are not absolutely necessary. Instead, they are merely necessary given our

motives.<sup>5</sup> They are only hypothetically necessary: hypothetically, if these are our motives, then we must do as we do. It is logically possible, though, that our motives could have been otherwise.<sup>6</sup> Hence it is logically possible that we could have done otherwise. Our actions can be free so long as they are not necessary in this absolute sense, i.e. so long as their denial is not contradictory. Thus we can be free so long as it is logically possible for us to have different motives than we in fact have even if, given our particular motives, our actions are determined and we cannot do otherwise.

Having dealt, to his satisfaction, with this problem, Leibniz does not attempt to support the joint sufficiency of these conditions. It does not appear difficult, though, to reconstruct an argument on his behalf. Though our actions are determined by our motives, this merely implies that our actions are hypothetically necessary and thus not a threat to our ability to do otherwise. Likewise, being determined neither implies that we are somehow coerced or forced to act as we do, nor that our judgments are somehow impaired. And so, even though determinism is true, we can still do otherwise than we do and what we do is up to us and our own judgments. Surely this is all that freedom could require. Thus determinism is compatible with both C1 and C2 and, though our actions are determined, we can nevertheless conclude that we are free to do as we see fit and responsible for whatever it is we see fit to do.

#### 1.2 Kant's Pre-Critical Critique

In the *New Elucidation* Kant rejects C1 as a necessary condition for freedom: He claims that we can be free and hence responsible even if it is logically impossible for us

to do otherwise. Kant's argument here proceeds in two steps. First, he argues that hypothetical necessity is incompatible with C1. Second, he argues that some condition similar to C2 must be a necessary and sufficient condition for free agency since there is no other plausible alternative. Given this, Kant concludes that so long as an action is appropriately caused by an agent, the agent acts freely even if the agent is determined to perform this action and could not have done otherwise.

Under "Proposition IX" in the *New Elucidation*, Kant begins the first step of his argument with a discussion of a criticism raised by Crusius against Leibnizian compatibilism. Crusius had attacked the usefulness of the distinction between absolute and hypothetical necessity for establishing the possibility of human freedom.<sup>7</sup> He concluded from this that, since we are free, our actions must be neither hypothetically nor absolutely necessary. Though we shall see that Kant reaches a different conclusion, he agrees with Crusius's criticism of the Leibnizian position:

The illustrious Crusius attacks the often used distinction between absolute and hypothetical necessity, his opponents thinking that, by means of this distinction, they would be able to escape him, as through a crack. But the distinction obviously has no power at all to break the force and effective power of necessity.<sup>8</sup>

Thus Kant objects that, if free agency depends upon the agent's ability to do otherwise, this ability is not to be understood in terms of the absolute/hypothetical distinction.

Kant supports his objection with two separate arguments. In the first, he argues that everything which is hypothetically necessary is also absolutely necessary. Hence if a free act is one which is not absolutely necessary and every act is hypothetically necessary, there are no free acts. Since, in Kant's view, Leibniz is committed to both of the antecedent conjuncts, Kant agrees with Crusius that the Leibnizian position involves "the immutable necessity of all things."<sup>9</sup>

Before examining this first argument, though, it is important to note the context in which this argument occurs. Under "Proposition V" Kant has attempted to prove the PSR. Assuming that he has succeeded, he continues, under "Proposition VII" and "Proposition VIII" to argue that everything that exists contingently does so for a reason and that the ultimate reason for the existence of contingent things is God. Like Leibniz, Kant accepts that God necessarily exists and that all other beings are dependent upon God for their existence.<sup>10</sup>

Taking this to be already established, Kant continues by noting that everything which occurs does so necessarily as a consequence of the PSR:

And thus, by tracing one's way along the inexorable chain of events which, as Chrysippos says, once and for all snakes its way along and weaves its path through the eternal series of consequences, one eventually arrives at the first state of the world. And this state immediately reveals God, the Creator, the ultimate ground of events, and the fertile ground of so many consequences. Once this ultimate ground is posited, other grounds follow, and others from them, down through the ages which follow, in accordance with an ever constant law.<sup>11</sup>

In other words, given that God, with all of his characteristics, necessarily exists, and that everything which happens does so as a consequence of God's initial act of creation, we can, in principle, demonstrate the necessity of everything which occurs thereafter.<sup>12</sup> Since Leibniz accepts that, given God's nature, he will necessarily (in the hypothetical sense) choose to create this world and that God necessarily (in the absolute sense) exists and necessarily (in the absolute sense) has the nature that he does, Kant's argument appears especially forceful.<sup>13</sup>

Unfortunately, this argument is only convincing if we accept, along with Leibniz and the pre-critical Kant, the necessity of God's existence and the PSR. The second of Kant's arguments, however, may be more appealing to a contemporary audience, and even to Kant himself during his critical period, as it makes no appeal to suspect metaphysical claims or principles. In this argument, Kant challenges the thesis that the logical possibility of doing otherwise is relevant to our ability to do otherwise. Thus even if some acts are hypothetically necessary without being absolutely necessary, we still, as a matter of fact, cannot do otherwise. Under the "Refutation of Objections," Kant writes:

What is at issue is the necessitating principle: namely, *whence* the thing is necessary. I readily admit that here some of the adherents of the Wolffian philosophy deviate somewhat from the truth of the matter. They are convinced that that which is posited by the chain of grounds which hypothetically determine each other still falls a little short of complete necessity, because it lacks absolute necessity. But in this matter I agree with their illustrious opponent: the distinction, which everyone recites parrot-fashion, does little to diminish the force of the necessity or the certainty of the determination. For just as nothing can be conceived which is *more true* than *true*, and nothing *more certain* than *certain*, so nothing can be conceived which is *more determined* than *determined*.<sup>14</sup>

Hence, though it may be true that, if things were different I could have done otherwise, as a matter of fact things were not different and so I am determined to do what I do and I can do nothing else.

To illustrate his point, Kant asks us to consider the following example.<sup>15</sup> A certain man, Caius, has lied and, moreover, he was determined to do so by antecedent conditions. Could he have done otherwise? Kant points out, as he demonstrated in his first argument, that Caius could only tell the truth under different antecedent conditions, i.e. if, contrary to fact, God had created a different world. If this is logically impossible, Caius could not have told the truth. But, even if we do not rule out all such counterfactual propositions as

necessarily false, this does not help Caius. Though it may be true that, in some possible world, Caius (or his modal counterpart) can tell the truth, in *this* world he is determined to lie and so, regardless of what might be true in other possible worlds, the actual Caius cannot do otherwise. Similarly, since our actions are determined, there is no relevant sense in which we can do otherwise than we do.

Though Kant is convinced that we cannot do otherwise than we do, he is equally certain that we are free. Indeed, this is a conviction which he will later claim is certain as it follows from a "fact of reason."<sup>16</sup> Thus, in the *New Elucidation*, Kant defends the thesis that determinism and freedom are compatible even though determinism implies that we cannot do otherwise. Again, his defense of this claim can be separated into two arguments.

In the first, Kant distinguishes between determination and compulsion:

So, too, in the case of the free actions of human beings: in so far as they are regarded as determinate, their opposites are indeed excluded; they are not, however, excluded by grounds which are posited as existing outside the desires and spontaneous inclinations of the subject, as if the agent were compelled to perform his actions against his will, so to speak, and as a result of a certain ineluctable necessity. On the contrary, it is in the very inclinations of his volitions and desires, in so far as that inclination readily yields to the blandishments of his representations, that his actions are determined by a fixed law and in a connection which is most certain but also free.<sup>17</sup>

This is a familiar compatibilist complaint which accuses incompatibilists of confusing causation with coercion. Compatibilists insist, to the contrary, that, while it is true that all of our actions are caused, this does not mean that we are somehow compelled or forced to perform them against our will. Instead, the vast majority of our actions are presumably

the result of our deliberation and reflect what we want to happen. Thus it seems appropriate to say that we performed them of our own free will.<sup>18</sup>

In his second argument, Kant provides what has become another standard response to the concerns of incompatibilists, who feel that a compatibilist sense of freedom is, at best, second-rate and, at worst, a "wretched subterfuge," as the critical Kant would insist.<sup>19</sup> According to this response, the possession of an incompatibilist freedom would prove to be more of a bane than a boon insofar as it would imply a loss of control. Kant argues as such in the *New Elucidation* in a dialogue between Caius and Titius. The former has just expressed a desire for a freedom of indifference such that his actions would not be determined by the past and he would face an open future with genuine alternatives. In response, Kant argues through his mouthpiece Titius that there would be nothing desirable about such a state of affairs:

If any deity granted you this wish, how unhappy you would be at every moment of your life. Suppose that you have decided to follow the path of virtue. And suppose that your mind is already sustained by the precepts of religion and whatever else is effective in strengthening your motivation. And suppose that now the occasion for acting arrives. You will immediately slide in the direction of what is less good, for the grounds which solicit you do not determine you. I seem to hear you expressing still more complaints. "Ah, what baleful fate has driven me from my sound decision? Of what use are precepts for performing the work of virtue? Actions are the product of chance, they are not determined by grounds!"<sup>20</sup>

If the past does not determine a unique future, then it seems that what will happen is, to some degree, a matter of chance. The lack of such determination could only lessen our control over what we do. As such, it would be a nuisance to our deliberation or, worse still, it could thwart the utility of deliberation altogether. Thus it seems that a freedom which requires such indeterminism would not be a freedom "worth wanting" (to use Daniel Dennet's memorable phrase).<sup>21</sup>

With this in mind, Kant's argument may be summarized as follows:

- (1) We are free, rational beings.
- (2) The actions of free, rational beings must be determined, though this does not mean that they are coerced or forced in any way.
- (3) There is no relevant sense in which a free but determined agent could have done otherwise.
- (4) Thus we are free even though we could not do otherwise.

Hence we should reject C1 as a necessary condition of free agency. Instead, a free action is simply an action which is appropriately determined, i.e. which is caused by the desires and inclinations of the agent.<sup>22</sup>

#### 2. Kant's Pre-Critical Theory of Responsibility

By itself, however, such an argument would hardly convince the skeptic, who is not so confident in his freedom. To satisfy such a skeptic and to support (1), Kant must offer some reason for thinking that his compatibilist sense of freedom is sufficient for moral responsibility. Though he does not address this issue as such, Kant does attempt (again in the words of Titius) to provide such a reason in his solution to the problem of evil. In the dialogue, Caius is worried that the existence of evil in a deterministic world is inconsistent with God's goodness. After all, God chose to create this very world and so to create the evils which exist. Further, it appears that the standard free will defense, which seeks to absolve God of some of the responsibility by attributing some of it to us, is of little help. Though we do commit evil acts, we are determined to do so by prior conditions which are likewise determined in a chain of causality stretching back to God's initial act of creation. In this original act, it seems that God chose to cause us to sin. Again, it seems that God is ultimately responsible for the evil in this world.

Titius attempts to assuage Caius's concerns by pointing out that our role in the

production of evil is far more active than this description would lead us to believe:

In instituting the origin of the totality of things, God initiated a sequence of events. This sequence, in the fixed connected series of interlinked, interconnected and interwoven grounds, embraced even more evils, as well as the physical evils corresponding to them. From this, however, it does not follow that God can be accused of being the Author of morally corrupt actions. If, as happens in the case of machines, intelligent beings were to comport themselves passively in relation to those things which impel towards certain determinations and changes, I would not deny that the blame for all things could be shifted to God as the Architect of the machine. But those things which happen through the will of beings endowed with understanding and the spontaneous power itself of self-determination obviously issue from an inner principle, from conscious desires and from a choice of one of the alternatives according to the freedom of the power of choice.<sup>23</sup>

The skeptical temptation to absolve us of our responsibility for what we do is based on a misconception. The skeptic points to the fact that our actions are determined as if this somehow implied that we are mere puppets in the hands of fate. If this were true, then, obviously, we would not be free and responsible for our actions. Instead, however, we are responsible for what we do because we intentionally bring it about. We are not merely passive media through which God acts. Rather, we act for our own reasons and as a result of our own deliberations. As such, we are aware of what we are doing and we do it because it is what we most want to do. And though God is aware of what we are going to

do, and though he is responsible for the fact that we are oftentimes tempted to do evil, it is we who choose to sin and not God.

Ought does not imply can. Instead, agents are morally responsible for what they do so long as their actions are deliberate and uncoerced. Thus C2 is elevated to a necessary and sufficient condition for moral responsibility. And so, although it is true that we ought to do otherwise than we sometimes do, this merely means that our actions are the result of our own deliberate, voluntary choice and they are sometimes morally wrong. This, however, is consistent with the fact that these actions are determined so that we cannot do otherwise than we do.

#### 3. Conclusion

The problem with this account is clear. Kant is relying on the supposed fact that there is some relevant distinction between actions which are directly coerced and those which are coerced through a series of intermediary events of which we might not even be aware. Thus, we are not free when another compels us at gunpoint, yet we are free when our behavior is determined by God (or possibly some other agent) who starts a series of events culminating in our action. The relevance of this distinction is, to say the least, not obvious, and Kant offers no support in its defense. Perhaps this is not surprising. After all, Kant himself eventually rejected all such compatibilist approaches in favor of his critical account of transcendental freedom. This account, however, would require Kant to reject much, if not all, of the metaphysical framework we find in his early pre-critical

work. And this would require a revolution in Kant's philosophy, a revolution that would be over two decades in the making.

#### **CHAPTER 2**

#### The Principle of Sufficient Reason in Kant's New Elucidation

It is well-known, that, by the time of the Critique of Pure Reason, Kant had changed his views on the PSR. In the New Elucidation he attempts to deduce the principle.<sup>24</sup> and. in a number of his other essays during this period, he appears to assume that this proof is successful.<sup>25</sup> In the *Critique*, however, we find that Kant has awoken from his dogmatic slumber and regards all such metaphysical principles, which claim to give us insight into things in themselves, as dubious and beyond proof. Unfortunately, the details of this radical transformation in Kant's thoughts on the status of the PSR are not so wellknown.<sup>26</sup> This is, perhaps, a consequence of the view that the details of the general transformation in Kant's pre-critical views, the so-called critical turn, are, more or less, thoroughly documented. If this is correct, then it seems plausible to assume that the advance of Kant's thoughts on particular subjects such as the PSR will fall into line with the general trends in Kant's progression which others have already observed. This assumption is in fact true, at least in this case. It is also true, however, as I will demonstrate over the course of the next few chapters, that a better understanding of the development of Kant's thoughts on the PSR will certainly strengthen our grasp of the later critical turn. In this chapter, I will begin the project of explicating this development by examining Kant's argument for the PSR in the New Elucidation. I contend that this argument relies on Kant's early pre-critical theory of truth, which serves as a background assumption of many of Kant's essays during this period. The later changes in this theory

and their impact on Kant's conception of both the PSR and freedom will be examined in the chapters that follow.

#### 1. Kant's Early Pre-Critical Theory of Truth

It will, perhaps, appear misleading to speak of Kant's theory of truth here; as I argue below, Kant accepts three different criteria for truth in the *New Elucidation*, each of which apparently specifies necessary and sufficient conditions for the truth of a proposition. It will be the task of this section and the next to show that these three criteria fit consistently into a single theory of truth. For now, let us examine each of the three separately, beginning with the one which appears to be at the forefront of Kant's thinking during this period.

#### **1.1 The Analytic Theory**

Like Leibniz before him, the pre-critical Kant accepts that all truths are analytic:

Since all our reasoning comes down to uncovering an identity between a predicate and a subject, viewed either in itself or combination, *as is obvious from the ultimate rule of truths*, we are led to see that God has no need of reasoning (my emphasis).<sup>27</sup>

By identity, however, it is clear that Kant did not mean that all truths are *prima facie* tautological, i.e. propositions of the form A is A. Instead, Kant relied on a Leibnizian account according to which true propositions can be reduced to such truths through analysis. To understand Kant's account, then, let us turn to a brief and very rough sketch of the Leibnizian original. In the section that follows, we shall see that there are some differences between the two on several important points.

According to Leibniz, true propositions are either outright tautologies or they can be reduced to such. This reduction occurs by a process of analysis which involves making explicit the concepts which, in some way, are implicitly contained within the subject of the proposition.<sup>28</sup> Before spelling out the details of Leibniz's notion of containment, however, we need to become familiar with the ontology of Leibniz's account. First, there is the basic distinction between sentences and propositions. There are English sentences and German sentences, Latin and Greek, but there are not English propositions and German propositions, Latin or Greek. Instead, propositions are whatever it is that such sentences express. E.g. the English sentence, "It is raining," and the German sentence, "Es regnet," both express the proposition that it is raining. They are both true, on Leibniz's account, just in case this proposition is analytically true.<sup>29</sup>

Second, there are the parts which constitute these wholes. Sentences, or at least the categorical sentences which concern Leibniz and with which we will be concerned hereafter, are made up of subject terms, predicate terms, and the copula. Corresponding to the subject and predicate terms, propositions are constituted out of subject and predicate concepts. To cite a classic example, the sentence "Snow is white,' is composed of the subject term, 'snow,' the predicate term 'white,' and the copula which establishes their relation. The corresponding proposition that snow is white is similarly composed of the subject concept of snow and the predicate concept of whiteness. The analytic theory of truth, then, is just the claim that such propositions are true if and only if the subject concept contains the predicate concept. Here this amounts to the claim that it is true that snow is white if and only if the concept of snow contains the concept of whiteness.

Third, Leibniz distinguished between primitive and complex concepts. It is perhaps easier to start with the latter. Complex concepts are concepts which are composed of other concepts. For example, the concept of bachelor is composed of the concepts of unmarried and man. For Leibniz, however, the concept of man is also complex and consists of the concepts of rational and animal. Thus we can reduce the concept of bachelor to the concept of unmarried rational animal. All such reduction, however, bottoms out when we reach the primitive concepts which lie at the foundation of all complex concepts. Such primitive concepts are not complex and hence do not admit of further reduction. They are conceptual bedrock, and they are many. In fact, there are infinitely many. Leibniz postulates this infinity of primitive concepts to explain the richness of the complex concepts which we find in the world, and this postulate is of no small importance to his account. Rather, as I discuss below, Leibniz relies upon the existence of an infinitude of primitive concepts to distinguish between necessary analytic truths and their contingent, though surprisingly still analytic, countertypes.

We are now in a position to formulate Leibniz's account. Sentences are true just in case their corresponding propositions are true. In turn, these propositions are true just in case the predicate concept is contained in the subject concept. Such containment will either be obvious, as is the case with tautologies, or it will not, as is the case with most of the more interesting propositions. When it is not, nevertheless such containment can be demonstrated by the process of analysis. This process is merely the act of reducing complex concepts down to their constituent parts. The analytic theory of truth, then, is equivalent to the following thesis:

## (AT): A proposition is true if and only if i) it is a *prima facie* tautology or ii) it can be reduced to a *prima facie* tautology by analysis.

Thus it is analytically true, according to AT, that a bachelor is unmarried since analysis reduces this to the tautology that an unmarried man is unmarried.

This thesis is supplemented by Leibniz's notion of infinite analysis. Notice that AT does not itself require the existence of primitive concepts, much less an infinite number of them; however, Leibniz's account of contingent truths does. Contingent truths are especially problematic for Leibniz. He takes it to be clear that there are such truths, and yet it is difficult to see how any analytic truth could be contingent. He attempts to resolve this problem by distinguishing between propositions whose truth is revealed by a finite analysis, i.e. one in which the reduction to tautology takes a finite number of steps, and those which require an infinite analysis. The former are necessary truths and the latter are contingent. Thus, while it is clear that it is necessarily true that a bachelor is unmarried since it only takes a one step reduction of the concept of bachelor to the concept of unmarried man to reveal the tautology, it is not at all clear how many steps would be required to show that it is analytically true that I had eggs for breakfast this morning. For Leibniz, propositions such as the latter require an infinite analysis. While we need not concern ourselves too much with the details of such an analysis, presumably the idea is that the reduction of some concepts converges toward a tautology rather than terminating in a tautology after some finite number of steps. Thus, if we assume, as I think we safely can, that it is a contingent truth that I had eggs for breakfast this morning, then, though

the concept of me will never be reduced to reveal the concept of having eggs for breakfast this morning, such a reduction will somehow converge toward this concept.

It is clear that Kant accepted some version of AT.<sup>30</sup> What is not clear, however, is to what degree he accepted the further features of Leibniz's account. For example, though Kant accepts the existence of primitive concepts,<sup>31</sup> he appears to be agnostic concerning their abundance.<sup>32</sup> Nor, though he does hold that most things are contingent, does he explain how this is possible if all existential claims are analytically true. As we shall see, these lacunae in Kant's account make it difficult to see how AT is consistent with his other criteria of truth. Before turning our attention to this problem, however, let us briefly examine these alternative criteria.

#### **1.2 The Causal Theory**

In his discussion of the PSR, Kant distinguishes between two different types of sufficient reason.<sup>33</sup> The first, antecedent reason, is the reason why something is the case. To cite Kant's example, it is true that light does not travel instantaneously. This is true, accepting Descartes' explanation along with Kant, because of the properties of air and the laws of nature governing the relevant interactions. Here the fact that air has these properties and the fact that the laws of nature are as they are would be the antecedent reason for the non-instantaneous velocity of light. By antecedent reasons, then, Kant seems principally to have in mind the causal factors which explain events in the world.<sup>34</sup>

Second, Kant identifies consequent reasons as those which explain how we come to know that something is the case. Again to cite one of Kant's examples, it is true that there are many evils in this world. We know this through our experience. Thus our experiences of evil are the consequent reasons for our knowledge. Clearly, the PSR is not concerned with such reasons. Sufficient reasons explain what is the case regardless of what we know or how we come to know it.<sup>35</sup>

Kant appears to introduce antecedent reasons in order to explain the existence of contingent things:

It is, however, agreed that there is no need for an antecedently determining ground to establish a truth: the identity which exists between the predicate and the subject is sufficient for the purpose. But, in the case of existing things, it is necessary to search for the antecedently determining ground. If there be no such ground, then the being in question exists absolutely necessarily. If existence be contingent, then, as I have already irrefutably demonstrated, the antecedently determining ground cannot fail to precede existence.<sup>36</sup>

Kant is referring to his proof under "Proposition VIII" to the effect that nothing that exists contingently can lack an antecedent reason.<sup>37</sup> This proof relies on the PSR. (There is a sufficient reason for the existence of every object. If a contingent object does not have an antecedent reason, then it must be the sufficient reason for its own existence. This implies a contradiction, however, since this would make the object absolutely necessary. Thus contingent objects require antecedent reasons for their existence.)

It is not clear, however, why Kant should hold that there are any contingently existing objects. Though this may seem like mere common sense, AT implies that every true proposition is necessarily true. This would apply to existential claims as well as more obvious tautologies. Moreover, as we have seen in Chapter 1, Kant has no qualms with the necessary truth of every proposition in his pre-critical theory of freedom. Why, then,
should he countenance the existence of contingent objects and introduce antecedent reasons to explain them here?

One possibility is that Kant is here rejecting AT. This is suggested by the above quotation. There Kant noted that antecedent reasons are not necessary conditions for demonstrating the truth of a proposition. Thus, for example, if we want to prove that A is A, we need not deduce this proposition from claims about the past along with the laws of nature. Instead, it suffices to point out that this proposition is tautological. AT, however, implies that this is not merely sufficient in some cases. Instead, it is, at least in principle, possible to do this in all cases without appeal to antecedent reasons. And so, if contingent objects can only be explained by appeal to antecedent reasons, AT is false.

Alternatively, perhaps Kant is simply recognizing that, though it is possible to provide such an analytic demonstration in principle, in practice it is often difficult if not impossible given our limited knowledge and abilities. Thus, like Leibniz, Kant may be simply acknowledging that, though all propositions are analytically true, the proofs of many propositions require greater analytic skills than we possess. Unlike Leibniz, however, he does not explain what skills would be required. Instead, he simply moves on to the sort of explanation we might expect to find, viz. antecedent reasons.

Neither reading is satisfactory. It is implausible that Kant simply rejects a view which he has explicitly stated just a few pages earlier and which he continues to accept as late as 1764.<sup>38</sup> Nor is it likely that Kant holds that antecedent reasons merely provide us with practical explanations for true propositions. Instead, Kant contends that antecedent reasons are necessary and sufficient conditions for truth:

Nothing is true without a determining reason.<sup>39</sup>

A reason ... makes determined things out of things that are indeterminate. And since all truth is produced by the determination of a predicate in a subject, the determining reason is not only a criterion of truth, but also its source. If you forsake this reason, many things would be found to be possible, but nothing at all to be true.<sup>40</sup>

This suggests, at least for existential claims, the following causal theory of truth:

(CA): A proposition is true if and only if it has an antecedent reason

where the antecedent reason is typically a proposition or conjunction of propositions citing the relevant physical facts and laws of nature.

Of course, CA does not explain why Kant accepted the existence of contingent objects. In addition, it creates a new difficulty insofar as AT and CA are *prima facie* inconsistent. If a proposition is true when and only when it has an antecedent reason, there does not seem to be any reason to think that, in addition, it must be analytically true. Thus it appears that CA motivates us to reject the necessity condition specified by AT. Likewise, AT seems to imply that, if a proposition is analytic, it is true regardless of whether it has an antecedent reason. Admittedly, then, the account so far is puzzling. Let us, however, reserve judgment for the moment. Once all of the pieces are on the table, we will be in a better position to put them together. And so, let us set these problems aside and turn our attention to Kant's third criterion of truth.

## **1.3 The Correspondence Theory**

Beyond AT and CA, Kant is also committed to a correspondence theory of truth. This is clear from his discussion of the existence of evils in this world:

We ask, for example, for the reason for the evils in this world, and so we have the proposition: The world contains many evils. The reason that, or how we know something to be a fact, is not being sought, because [in this case] experience takes its place; what is being sought is the reason why.<sup>41</sup>

Kant gives this example in order to illustrate the difference between antecedent and consequent reasons. Let us focus on the consequent reason he cites.

Experience teaches us that the world contains many evils. And so we know that the

proposition that the world contains many evils is true. The reasoning here is clear enough.

But it is important to note that it relies upon the following correspondence theory of truth:

(CO): A proposition is true if and only if what it says is the case is the case.<sup>42</sup>

Though somewhat awkward, there is nothing perplexing about this statement. It simply says that a proposition is true just in case it correctly describes the way the world is. So, for example, consider the proposition that there are many evils in the world. CO tells us that we can infer that this is true since we know by experience that there are, in fact, many evils in the world.

Ascribing CO to Kant also helps explain an apparent confusion in Kant's discussion of antecedent reasons. Reasons *simpliciter* are presumably propositions:

To determine is to affirm a predicate in conjunction with the exclusion of its opposite. That which determines a subject in regard to any of its predicates is called a reason.<sup>43</sup>

A reason is whatever it is that implies that a given predicate applies to a subject while its negation does not. Since propositions are implied by other propositions, they would seem to be the only likely candidates for reasons.

Antecedent reasons, however, are not propositions. Whereas propositions are composed of concepts, antecedent reasons are constituted out of objects, properties, and laws of nature. Recall Kant's paradigm example of an antecedent reason: the properties of air along with the relevant laws of nature. Air is neither a concept nor a proposition. And so we are left with the impression that either Kant misspoke somewhere along the way or he is fundamentally confused about the distinction between propositions and ordinary objects.<sup>44</sup>

CO allows us to avoid such conclusions. It tells us that, since air has certain properties, the proposition that air has these properties is true. And, if laws of nature are not themselves propositions, CO likewise says that the propositions that express these laws are also true. And so, since we can easily identify the corresponding propositions once we find the relevant causal factors, the gap between propositions and the world which they describe is easily bridged.

Let us review. We have seen that, in the *New Elucidation*, Kant either explicitly acknowledges or is implicitly committed to three different criteria of truth: AT, CA, and CO. Given the disparity of these theories, one would expect to find inconsistencies and other difficulties in Kant's overall account. We have identified three: 1) though it is clear that Kant accepted much of Leibniz's analytic theory of truth, the extent of this influence and the details of Kant's version of AT are not; 2) though CA appears to be invoked in

order to explain the truth of contingent propositions, AT seems to rule out the possibility of such propositions being true; and 3) since CA offers antecedent reasons as sufficient conditions for truth, it is difficult to see why, in addition, true propositions must be analytic. These are serious problems for any proposed interpretation of Kant's pre-critical position. At first glance, it appears that Kant is massively confused and that no coherent, plausible reading can be found. Before dismissing the *New Elucidation*, however, as the work of a great but novice talent, I would like to propose another interpretation which both acknowledges Kant's acceptance of AT, CA, and CO and, yet, resolves the three apparent inconsistencies and difficulties identified so far. Let us turn now to this proposal.

### 2. Kant's Theory of Existence

What I would like to suggest is that these three criteria are connected by Kant's precritical theory of existence. Some motivation for this suggestion can be found in the very difficulties we have identified so far. Kant is well aware that many truths appear to be contingent. Existential claims provide, perhaps, the most obvious candidates. Kant, at the very least, appears especially concerned with the contingency of existential claims. After all, he identifies contingent beings as those whose non-existence is possible.<sup>45</sup> It is naturally a problem, then, to explain how the existence of a contingent being is analytically true and so logically necessary. Further, as we have seen, Kant's appeal to antecedent reasons to explain the truth of such existential claims seems merely to exacerbate the problem. Instead, since such truths are inconsistent with AT, Kant must either explain away the illusion of contingent truths or argue that there is some relevant sense of 'contingent' which is consistent with AT. In fact, he does both. To do so, he initiates his departure from the rationalist tradition by insisting that, despite the fact that

all truths are analytic, existence is not part of the concept of any being.

In what is perhaps his most famous dictum, Kant claims, in the Critique of Pure

*Reason*, that existence is not a predicate.<sup>46</sup> This claim however, is not new to the

Critique. In The Only Possible Argument in Support of a Demonstration of the Existence

of God (1763), we find Kant defending this familiar thesis:

Existence is not a predicate or a determination of a thing. This proposition seems strange and absurd, but it is indubitably certain. Take any subject you please, for example, Julius Caesar. Draw up a list of all the predicates which may be thought to belong to him, not excepting even those of space and time. You will quickly see that he can either exist with all these determinations, or not exist at all. The Being who gave existence to the world and to our hero within that world could know every single one of these predicates without exception, and yet still be able to regard him as a merely possible thing which, in the absence of that Being's decision to create him, would not exist. Who can deny that millions of things which do not actually exist are merely possible from the point of view of all the predicates they would contain if they were to exist.<sup>47</sup>

Kant's position here is clear. Though he recognizes that we may use the term 'existence' as a predicate in our sentences,<sup>48</sup> this does not mean that there is a corresponding concept of existence which helps make up our complex concepts of objects. Though we may think of Julius Caesar, for example, and consider his various attributes, the concept of Julius Caesar will not include his existence. It would be the same concept even if Julius Caesar had never existed. As a matter of fact, this concept happened to be instantiated. All that this means, however, is that there was an object in the world which matched the

concept of Julius Caesar. In general, while a concept can certainly be instantiated, there is no concept of being instantiated included as part of a complex concept.

This is consistent with Kant's claim in the *New Elucidation* that "to say that something has the ground of its existence within itself is absurd."<sup>49</sup> Since existence cannot be contained in the concept of a thing, we cannot deduce the existence of an object by analysis of its concept. Nothing exists simply by definition. Instead, if something is brought into existence at all, it must be caused to exist. To ground the existence of an object is to cause that object to exist. Thus nothing can have the ground of its existence within itself because nothing can be self-causing. Kant regards beings which are caused to exist as contingent insofar as they depend on the existence of another object. This allows Kant to maintain the paradoxical sounding claim that contingent truths are analytically true. There is no clear contradiction in saying that propositions about beings whose existence is dependent are, nevertheless, analytically true. And so, there is a relevant sense of contingency which is consistent with AT.

Moreover, though Kant considers God to be a necessary being and so to be uncaused, he does not hold that the proposition that God exists is itself a tautology or that it is reducible to one by analysis. Instead, he infers God's existence from other necessary propositions; God necessarily exists because, necessarily, there are possible objects and, necessarily, there would be no possible objects if God did not exist.<sup>50</sup> Thus this proof of the necessity of God's existence does not imply that the concept of God includes his existence.

Of course, this theory of existence is consistent with the fact that all truths are analytic and hence necessary. Yet we may still wonder about the status of what appear to be contingent truths. Though the claim that I exist may be a contingent truth in Kant's sense insofar as I am a contingent being, it is far from clear that this truth is contingent in the more ordinary sense, to which we have seen Kant himself appeal, of being possibly false. Kant's theory of existence seems to do little to alleviate this concern. On Kant's account, God is still viewed as a necessary being. And as we saw in Chapter 1, from God's existence we can infer the actuality of this world since this is, presumably, the best of all possible worlds and God would, necessarily, create the best of all possible worlds.<sup>51</sup> Any world that a necessary being necessarily creates must itself be necessary. And so, again, we are led to the conclusion that this world necessarily exists. Indeed, if this were not the case, then it is hard to understand Kant's lack of incredulity regarding AT. Surely any plausibility which AT enjoys is connected to the idea that this world necessarily exists.

How, then, does Kant's theory of existence resolve the inconsistencies and difficulties we have identified? Well, to start, it requires a revision of AT. Though it is analytically true that God exists, this is not because existence is included in the concept of God. Rather, his existence follows from the fact that, otherwise, nothing would be possible. Since this is necessarily false, God necessarily exists. From the concept of God, we can deduce that this world necessarily exists. This, however, does not mean that existence is included in the concepts of the individuals that make up this world. Instead, these individuals necessarily exist as a consequence of the fact that, necessarily, this is the best of all possible worlds and, necessarily, God would create the best of all possible worlds. Thus, though it is analytically true that this world exists, the existence of any individual in this world cannot be deduced by analysis of its concept. This suggests the following revised version of AT:

(AT'): A proposition is true if and only if i) it is a *prima facie* tautology, ii) it can be reduced to a *prima facie* tautology by analysis, or iii) it is implied by a necessarily true proposition.

Thus it is analytically true, according to AT', though not according to AT, that God exists and that He created this world.

We are now in a better position to see how Kant's account of the analytic theory of truth differs from that of Leibniz. First, both recognize that God necessarily exists. For Leibniz, this is a consequence of AT and the fact that the concept of God includes the concept of his existence.<sup>52</sup> For Kant, however, this follows from AT' and the fact that, without the existence of God, nothing would be possible. Second, both recognize the need to account for the apparent contingency of many truths. Since Leibniz accepts AT, he can only distinguish necessary and contingent truths by appeal to differences in the types of analysis required to reveal these truths. AT', on the other hand, allows Kant to distinguish necessary and contingent beings by appeal to differences in the grounds of their existence.

Moreover, adopting AT' allows Kant to avoid the inconsistencies between AT and CA. If we understand contingent propositions as propositions about contingent beings, then, oddly enough, it turns out that contingent propositions may be necessarily true.

There are contingent beings, i.e. beings which are caused to exist, and so there are contingent truths about these beings. Nevertheless, it might necessarily be true that such beings are caused to exist. Granted that God necessarily exists and that he necessarily created this world, for example, it is necessarily true that you and I exist despite the fact that we are contingent beings.

If, however, we understand contingent truths in the traditional sense of non-necessary truths, then the distinction between necessary and contingent beings allows Kant to explain why some necessary truths appear to be contingent. Again, there are contingent beings and it is necessarily true that these beings exist. To demonstrate this necessity, however, we would have to trace the causal chain of events which led to their existence back to the original act of creation and explain why this series of events belongs to the best of all possible worlds. Since this task is obviously beyond us, necessary truths involving contingent beings appear to be contingent.

Either way, AT' is consistent with CA so long as we restrict CA to truths about contingent beings, the very truths which CA was initially invoked to explain. It is analytically true, according to AT', that God exists. God, however, is the only necessary being in the sense that he is the only being whose existence is uncaused. Unlike most objects, then, God does not have an antecedent reason since his non-existence is impossible; however, the rest of the objects in the world, including ourselves, are caused. This does not mean that it is not analytically true that this world, and the individuals within it, exist. The existence of this world is, for Kant, an analytic truth. Yet, with the exception of God, no object would exist without a cause, and so no existential claim would be true without an antecedent reason, where the antecedent reason is a proposition or conjunction of propositions citing the relevant physical facts and laws of nature.

Let us now put the pieces of the puzzle back together. All truths are analytic in the sense specified by AT'. Since, however, existence is not a predicate, all existential claims are true if and only if they are implied by other necessary truths. These other necessary truths will be, with one notable exception, antecedent reasons. This notable exception is, of course, God. In the case of God, he necessarily exists because, otherwise, nothing would be possible. All other objects have antecedent reasons, where these reasons are the propositions expressing the relevant causal factors. CO is invoked to bridge the gap between these propositions and the causal factors which they express. And so, restricted to existential claims about contingent beings, we find that all truths require an antecedent reason, typically causal, just as CA requires. With this, we have finally arrived at a single consistent theory of truth.

# 3. Kant's Proof of the Principle of Sufficient Reason

With this background in mind, it is now easy to reconstruct Kant's argument for the PSR in the *New Elucidation*. Consider Kant's statement of the proof:

Every true proposition indicates that the subject is determinate in respect of a predicate. That is to say, the predicate is posited to the exclusion of its opposite. Thus, in every true proposition, it is necessary that the opposite of the predicate be excluded. However, a predicate is excluded if it is incompatible with another concept which has already been posited, and it is excluded in virtue of the principle of contradiction. Therefore no exclusion occurs if no concept is present which conflicts with the opposite which is to be excluded. Accordingly, there is something in every truth which determines the truth of the proposition by excluding the opposite predicate. Since this is what is called the determining ground.<sup>53</sup>

So far the proof is relatively uninteresting. It appears to be a simple move from an analytic theory of truth ("no exclusion occurs if no concept is present which conflicts with the opposite which is to be excluded") to the conclusion that nothing is true without a ground. The reason for the truth of a proposition is presumably the fact that, in every case, a true proposition is either an outright tautology or reducible to one.

What is interesting is Kant's paraphrase of this conclusion in the "Scholium" which follows. There he remarks that if one considers this proof along with his distinction between antecedent and consequent grounds, "it can easily be seen that there is always an antecedently determining ground".<sup>54</sup> By itself, an analytic theory of truth cannot support this inference. Given Kant's unified theory of truth, however, it can be easily understood, at least with regard to contingent truths.<sup>55</sup> From AT', we have the premise that all true propositions are analytically true. Since existence is not a predicate, however, the reason for the existence of an object cannot be found in its concept. Thus we arrive at CA and we can conclude that no contingent object lacks an antecedent reason. Equating contingent truths with truths about contingent objects, it follows that there is an antecedent reason for all contingent truths. Finally, since all non-contingent truths are analytically true and so are true for a reason, we can bring the argument to a close; nothing is true without a reason.<sup>56</sup>

## 4. Conclusion

Beyond its reliance on Kant's theory of existence, this proof fits well within the rationalist tradition. This is not surprising. In the *New Elucidation*, Kant is still deeply

immersed in his dogmatic slumber. It is worth noting, however, that there are already tendencies, even at this early stage, which threaten to rouse him from his sleep. As we have seen, Kant's criteria of truth are tied together by the necessity of God's existence. But Kant breaks from the rationalist tradition in rejecting the familiar ontological proof of God's existence. This leaves the necessity of God's existence, and hence Kant's early pre-critical theory of truth, on shaky ground. In addition, though he still gives AT' primacy as "the ultimate rule of truths," he recognizes the need to appeal to antecedent reasons known through experience to explain the multitude of apparently contingent truths. Thus we find that, even at this early date, Kant is willing to give experience a greater pride of place than many of his rationalist predecessors.

As one might expect, this larger role for experience will eventually undermine Kant's confidence in AT'. As we shall see in the next chapter, Kant comes to acknowledge that there are certain truths which can only be known through experience. This acknowledgement, in turn, later leads Kant to distinguish between the objects which are known through experience, the objects of sensibility or phenomena, and those which are known through reason alone, the objects of intelligibility or noumena. It is this distinction which sets the table for Kant's later critical turn.

## **CHAPTER 3**

#### **Incongruent Counterparts and the Principle of Sufficient Reason**

So far we have seen that, in the *New Elucidation*, Kant accepted the PSR as a consequence of his commitment to an analytic theory of truth and that, further, this led him to accept a rather unique compatibilist theory of freedom. In this chapter I argue that, by the time of his essay *Concerning the Ultimate Ground of the Differentiation of Directions in Space* (1768), Kant had, most likely, come to reject the PSR as a result of his recognition of the existence of incongruent counterparts.<sup>57</sup> This is important insofar as it reveals that, presumably, he has also come to reject his own earlier argument in support of the PSR and, by implication, his commitment to the analytic theory of truth from which it followed. Thus it serves as a useful benchmark by which to judge the direction of Kant's thinking during this period.

Unfortunately, this essay is fraught with difficulties. Problems in translation, the fusion of distinct but related arguments, and the general obscurity of many of Kant's comments have led some critics to set aside the *Directions in Space* essay as a "mare's nest of confusions."<sup>58</sup> It cannot be denied that this essay is perplexing. One need only skim the volumes of critical disagreement it has engendered to realize the immense task this short essay poses for any interpreter.<sup>59</sup> Nor should we dismiss the possibility that Kant is genuinely confused about some of the issues involved. But as we shall see, understood against the backdrop of Kant's philosophical inheritance, this essay presents a penetrating criticism of the rationalist tradition with which Kant previously identified. It

thus signals a significant break with the largely Leibnizian approach of the *New Elucidation*, and, as I shall argue, it strongly suggests an emerging empiricist element in Kant's philosophy.

Before turning to Kant's arguments in the *Directions in Space* essay, though, it would perhaps be helpful to sketch the overall argument of this chapter. At first, it is perhaps somewhat of a mystery what the connection is between this essay and the PSR. After all, Kant does not explicitly mention this principle in *Directions in Space*. Nor is there any obvious relation between the PSR and the facts about the shape of objects to which Kant is appealing. I am arguing, however, that, once placed in its historical context, this relationship can be made clear and that, in all likelihood, Kant was fully aware of this consequence of his argument.

Briefly, my argument is as follows. Kant is seeking to account for the existence of incongruent counterparts such as left and right hands which, though similar in every other respect, differ in orientation and so cannot be made to coincide. In the *Directions in Space* essay, Kant concludes that the existence of such counterparts supports an absolute theory of space. Thus Newton, who accepted and defended the existence of absolute space, was right, and Leibniz, who denied its independent existence and provided a relational theory in its stead, was wrong. If absolute space exists, however, then the PSR is false. Leibniz understood this, and it provided him with a fundamental motivation for denying the existence of absolute space. Kant, most likely well aware of the debate between Newton and Leibniz on this point, and perhaps even inspired by Leibniz's

comments, was, more than likely, aware of this implication. And so, his argument in favor of absolute space can be understood equally well as an argument against the PSR. That is the sketch of the argument. Now, we shall take a look at the full picture.

## 1. Newton and Absolute Space

The best-known theory of absolute space in the eighteenth century, and clearly the theory with which Kant was most familiar, was that of Sir Isaac Newton. This theory represents a significant step forward towards the goal of providing an empiricist account of space.<sup>60</sup> The fundamental problem facing any defender of absolute space is the fact that we cannot have any direct empirical evidence of its existence. To overcome this, an empiricist has to offer some plausible indirect evidence. This is precisely what Newton did.<sup>61</sup>

In the *Principia*, Newton offered his famous theory concerning the causal interactions of bodies. According to this theory, such interactions are governed by three laws. Newton's laws are of interest to us because, according to him, they require a commitment to absolute space. If Newton is right, then the force of his argument is clear. Newton's three laws provided a powerful framework that seemed capable of explaining the entirety of the physical world. This theory was strongly supported by the empirical evidence, and so there was overwhelming motivation to accept it as true. If, in turn, this theory entailed the existence of absolute space, then there was also overwhelming motivation to accept absolute space as well. And so, if Newton is right, though we cannot directly experience space, we might nevertheless have empirical evidence for its existence. As we shall see, Kant's argument in support of absolute space has a remarkably similar structure.<sup>62</sup>

Before discussing the details of his argument for the existence of absolute space, however, we should get clear on exactly what it was Newton thought his theory required. What did Newton mean by absolute space? The answer to this question can be found in Newton's well-known "Scholium" following the definition of terms in the *Principia* in which he sets out his views on absolute space and argues for its existence. In this "Scholium," Newton describes absolute space as follows:

Absolute space, of its own nature without reference to anything external, always remains homogenous and immovable.<sup>63</sup>

Just as the order of the parts of time is unchangeable, so, too, is the order of the parts of space. Let the parts of space move from their places, and they will move (so to speak) from themselves.<sup>64</sup>

Newtonian absolute space exists independently of other objects. It is composed of parts which, besides differing with regard to their positions relative to one another, are identical and which cannot be moved. Since the parts of space do not move, we can infer by Newton's second law, which states that the force applied to an object is equal to the mass of that object multiplied by its acceleration (F = ma), that they are not acted upon by any force. Likewise, since, according to Newton's third law, any action has an equal and opposite reaction, we can deduce that the parts of space do not act on physical bodies. Otherwise there would be a reaction resulting, *per impossibile*, in a movement of the parts of space. And so we can conclude that absolute space is causally inert. Absolute space as a whole, then, is, according to Newton, everywhere the same, unchanging, and inactive.<sup>65</sup>

In addition, Newton claims that absolute space is such that we can talk meaningfully about the absolute motions of objects within it. Absolute motion is the change in an object's position relative to absolute space. Newton contrasts such motion with the merely relative motion of one body in relation to another. Thus, to use Newton's example, if we imagine a sailor sitting still on a ship, we can say that he is not in motion relative to the ship. If, however, the ship is sailing along, say across the English Channel, then the sailor and the ship are in motion relative to the Earth. All of this, however, leaves undecided which of these three is in absolute motion. Perhaps the sailor is at absolute rest. In this case the ship is as well, and it is the Earth which is in motion. Or, it could be the other way around: the Earth is still, and the sailor and his ship are changing their positions with respect to absolute space. Or all three could be in motion.<sup>66</sup> The point is that we cannot infer that an object is in absolute motion just because it is moving relative to some other object.

This presents Newton with a problem. If we cannot detect absolute motion from the relative motions of objects, then how can we tell whether an object is in absolute motion? Direct inspection will not do since we cannot experience absolute space. But if we cannot tell when an object is changing its absolute position in space, then why should we think that this ever happens? Why should we accept the existence of absolute motion?<sup>67</sup> Further, if it turns out that we do not need to accept absolute motions, then maybe we can dispense with the appeal to absolute space altogether. After all, if it turns out that we can satisfactorily explain motions in terms of the change in position of one body with regard

to another, then it seems plausible that we might find a similarly satisfactory way to account for the other spatial properties of objects without recourse to absolute space.

One obvious motivation for removing absolute space from our ontology is its oddness. As we have observed, unlike ordinary physical objects, we cannot have any direct empirical evidence for the existence of absolute space. This suggests that we might be able to explain all of the empirical facts for which we do have evidence without positing the existence of such a space. If this is so, then absolute space is merely superfluous and it seems profligate to include it in our physics. A more economical, and hence, *ceteris paribus*, a better physical theory will find a way to reduce all apparent references to absolute space instead to references to the spatial properties of and spatial relations between objects. And so, the lack of empirical evidence could be thought to lead naturally to a relational theory of space, which offers just this sort of reduction.

Tempting as such a proposal might sound, Newton argues that no such relational theory of space could satisfactorily account for the empirical facts. This is because, according to Newton, the fundamental laws of motion require the existence of absolute space. In support of this contention, he invites us to consider two experiments. In the first, we are to take a bucket of water which is hanging by a piece of rope and twist it round and round before letting go. Once we let go, the bucket will spin around in the opposite direction. As it does so, the water will begin to move outwards and up the sides of the bucket. The overall effect will be that the surface of the water will become concave.<sup>68</sup>

The second is a thought experiment. We are to imagine two balls connected by a length of cord rotating about a common center of gravity. Like the water, these two balls, if not tethered, would move outwards and away from one another. This results in a certain amount of tension in the cord as it strains to hold them together. This tension can be increased or decreased. If we apply an equal force to the opposite faces of the balls in the direction of their motion, they will accelerate and the tension in the cord will increase. Likewise, if we apply an equal force to the opposite faces of the balls away from the direction of their motion, they will decelerate and the tension in the cord will decrease.<sup>69</sup>

In both cases, we can tell by their effects that forces have been applied.<sup>70</sup> Consider the first case. If we actually perform this experiment, as Newton apparently did,<sup>71</sup> we will find that the surface of the water does, as a matter of fact, become concave. This requires some sort of physical explanation, and Newton's laws provide us with one. They tell us that a force is being applied to the water and that, as a consequence, the water is accelerating outwards and up the side of the bucket. The key to Newton's argument is the fact that this explanation cannot be provided in terms of the water's acceleration relative to the bucket. Relative to the bucket, the water is decelerating. When we first let go of the bucket, it begins to spin around while the water is still. As time goes by, however, the water begins to spin in the same direction as the bucket. While the water is truly accelerating, however, as we can tell from its increasing concavity, it is not doing so relative to the bucket. Thus while the acceleration described by the laws of motion increases, its relative acceleration decreases.<sup>72</sup> Similar considerations apply to our Gedankenexperiment.<sup>73</sup> It seems, then, that we can only conclude that the 'a' in the

formula 'F = ma' does not refer to the acceleration of one body relative to another. On the assumption that all acceleration is acceleration relative to something, there must be something else relative to which objects accelerate. It seems the only plausible candidate is absolute space. And so we have arrived at the desired conclusion: Newton's laws of motion require the existence of absolute space.<sup>74</sup>

#### 2. Leibniz and Relational Space

While Newton argued in support of absolute space based on the requirements of his physical theory, Leibniz's arguments against the existence of absolute space are characteristically metaphysical in nature. In his correspondence with Samuel Clarke, in which Clarke was working in collaboration with Newton,<sup>75</sup> Leibniz argued against the absolute theory of space on the grounds that it violated two of his most cherished metaphysical principles, viz. the PSR and the Principle of the Identity of Indiscernibles.<sup>76</sup> Since Leibniz accepts the Principle of the Identity of Indiscernibles as an implication of the PSR,<sup>77</sup> these arguments amount to the same thing and we can safely limit our discussion to the incompatibility of the PSR and absolute space.<sup>78</sup>

In his *Third Letter*, Leibniz contends that, unless space is a mere abstraction, its homogeneity violates the PSR. His argument, as we shall see, is especially relevant for our concerns and should be considered in full:

I say then, that if space was an absolute being, there would something happen for which it would be impossible there should be a sufficient reason. Which is against my axiom. And I prove it thus. Space is something absolutely uniform; and, without the things placed in it, one point of space does not differ in any respect whatsoever from another point of space. Now from hence it follows (supposing space to be something in itself, besides the order of bodies among themselves,) that 'tis impossible there should be a reason, why God, preserving the same situations of bodies among themselves, should have placed them in space after one certain particular manner, and not otherwise; why every thing was not placed the quite contrary way, for instance by changing East into West.<sup>79</sup>

If the parts of space are indiscernible, then there is no good reason why things should exist where they do as opposed to, say, five feet over in some other direction. Even if we cite the entire causal chain of events which led to the universe being situated where it is in absolute space, there is no reason which explains why this whole sequence of events could not have taken place just five, fifty, or five hundred feet over in some other region of space. Since all spatial relations between objects are preserved when the entire universe is translated to some other region of space, it would simply make no difference whether the universe is located where it is or in some far distant region. But if it makes no difference, then God's arbitrary choice to place the universe here as opposed to there is a clear violation of the PSR. Since Clarke acknowledged the PSR,<sup>80</sup> Leibniz's argument is an especially forceful *ad hominem*.

But let us pay careful attention to the example which Leibniz uses to illustrate this violation. According to Leibniz, if absolute space exists, then there could be no reason why God placed the universe the way it is instead of the other way around "by changing East into West." Unfortunately this phrase is ambiguous, and so careful attention must be given to its interpretation. The question we must answer is 'How might East be changed into West in such a way that the spatial relations of the objects in the universe are left unchanged?' It is clear that this is not a translation of the universe to some other location. Such a translation might move everything five more feet east, but it would not change East into West. But there are two other possibilities.

First, Leibniz might have in mind a mirror reflection. To get a handle on what this involves, let us apply a coordinate system to the universe. We will need the standard x, y, and z axes. So imagine three orthogonal lines intersecting at the center of the Earth. Now imagine further that one of these lines intersects both the North and the South Pole. Call this the y-axis. Now it is not clear which direction is East and which is West, but that detail is not really of great importance. So we'll just pick one of the other axes, call it the x-axis, and say that it runs from East to West, with East being in the positive x-direction and West the negative. We end up with the coordinate system illustrated in Figure 1 (with the z-axis, not pictured, extending out of the page).



Figure 1

Figure 2

To complete this thought experiment, imagine that God has decided, according to His own mysterious and divine reasoning, to switch things around. How might He do so? Well one way is to reflect everything across the yz-plane by sending each thing, located at some point (x, y, z) an equal distance away from the yz-plane in the opposite direction. Each thing will then arrive at its reflected position (-x, y, z). What was in the West will now be in the East and, conversely, what was East will now be West (Figure 2).

The spatial relations between objects, however, will remain unchanged. To see this, just consider the initial positions of the objects again, but this time switch the coordinate system around so that what was the positive x-direction is now the negative and *vice versa*. All this does is assign new coordinates to the same configuration of objects. The end result (Figure 3), however, is indistinguishable from the case of mirror reflection (Figure 2).



In both cases, objects that were at (x, y, z) end up at (-x, y, z). Since it is clear that assigning new coordinates did not change the spatial configuration of the objects, neither

will mirror reflection. And so we can conclude, as perhaps Leibniz suggests, that, since mirror reflection preserves these relations, such reflections are ruled out by the PSR.

Alternatively, Leibniz might be suggesting that these relations would be preserved under rotation. If God were to take the entire universe and rotate it 180° in the xy-plane, he would also succeed in "changing East into West." Unlike reflection, however, such rotation would also change North into South (Figure 4). But all the spatial relations between objects would clearly remain the same. And so, again, since such rotations make sense if we think of it as changing the positions of objects with regard to absolute space, the existence of such a space contradicts the decrees of the PSR.

With regard to Leibniz's argument, it is inconsequential which of these alternative interpretations we choose. Both show that, if absolute space exists, then the world could have been different than it is, though this difference would not have any possible effect on the world. Both are, in that sense, differences that do not make any real difference. Since God would have no reason to choose between creating this world, its mirror reflection, or its rotation, any such choice would be arbitrary, and, as the PSR informs us, God does not make arbitrary decisions.

It is a matter of some controversy which of the alternative interpretations Kant adopted.<sup>81</sup> It is generally assumed, however, and with good reason, that Kant was aware of Leibniz's argument. Kant was greatly influenced by both Newton's physical theory and his general methodology,<sup>82</sup> and, as we have seen, Leibniz's influence, directly or indirectly, on Kant's pre-critical works can hardly be overestimated. Given that there was an available German translation of the correspondence between Leibniz and Clarke<sup>83</sup> and that this correspondence explored in detail the Newtonian and Leibnizian positions on issues that were certainly of great interest to Kant, it seems highly implausible that he would have simply ignored it.<sup>84</sup>

Assuming that Kant knew of Leibniz's argument, then it does not matter much for our purposes which of these interpretations he accepted. If he adopted the former reading, then it would have been manifestly clear to Kant that his argument ran afoul of the PSR. As we shall see shortly, an essential premise of Kant's argument is that there are possible worlds which differ only in being mirror reflections of one another. This, however, is what Leibniz explicitly denies on this interpretation. If absolute space exists, then there is a possible world which is the mirror reflection of this one. But such a world is not possible since it would imply that God's choice to create this world over its mirror counterpart was capricious.

On the other hand, if Kant preferred the latter interpretation, then he still should have realized that his premise would likewise violate the PSR. It is an easy and obvious inference to make: if the rotation of the actual world is inconsistent with the PSR, then so is a reflection. Though it is possible, it is hard to imagine that Kant could have read Leibniz and recognized the truth of the antecedent without inferring the consequent. Whatever his shortcomings may have been, Kant was simply not that thick.<sup>85</sup>

To sum up, in the *Directions in Space* essay, Kant argues that absolute space exists. If he is right, then Leibniz is wrong and the PSR is false. On the reasonable assumption that Kant was well aware of these implications, we can conclude that, by 1768, Kant was no longer committed to AT' and that, consequently, he was no longer under the same pressure to find a satisfactory compatibilist theory of freedom as he did in the *New Elucidation*. Exactly what led to this reversal and its importance for Kant's theory of transcendental freedom will be the topic of the next chapter. For now, let us examine Kant's argument.

### 3. Kant and Incongruent Counterparts

There are, in fact, two separate arguments in the Directions in Space essay. The first, which has received the bulk of the critical attention, does attempt to establish the existence of absolute space. It is an ontological argument. It says that, given the existence of A, we can infer the existence of B. The second attempts to demonstrate that there was something paradoxical about the mathematical tradition which Kant inherited. This is an epistemological argument. It says that, given the properties of A, there is something wrong in our theory of A's. These arguments are closely connected. First, they share an initial premise. Both of these arguments start with the claim that there might be objects which differ only in orientation. Second, they share a common goal. Both target Leibniz's theory of space. It is perhaps understandable, then, that Kant did not clearly distinguish between them. In the *Directions in Space* essay, we find Kant switching between these arguments without warning, often from paragraph to paragraph. As one might expect, this has resulted in a great deal of confusion over the exact nature of Kant's arguments and over the issues involved in each. In order to avoid this pitfall, then, let us consider each of these arguments in turn.

## 3.1 Incongruent Counterparts and Absolute Space

In his lengthy opening paragraph, Kant makes the goal of the essay clear:

My purpose in this treatise is to see whether there is to be found in the intuitive judgments about extension, such as are to be found in geometry, clear proof that: Absolute space, independently of all matter and as itself the ultimate foundation of the possibility of the compound character of matter, has a reality of its own.<sup>86</sup>

With this goal in mind, Kant's introductory remarks continue with a brief statement of the method to be employed in his proof. He starts with a passing comment on the failure of all metaphysical attempts to establish or refute the existence of absolute space. Kant is presumably referring to the arguments of Leibniz and Wolff. It is clear from what follows that Kant will not be attempting to provide such an account. Instead, Kant is announcing that he will be offering what he calls a "so to speak a posteriori" method.<sup>87</sup> Following this method, Kant will appeal to certain facts which are given in experience from which he will deduce the existence of absolute space.<sup>88</sup> A pure a posteriori argument would, in contrast, appeal to our direct experience of absolute space. Given that no such experience is possible, it seems Kant's argument is the next best thing.

After a brief digression to note the importance of orientation for our experience of the world, Kant begins the argument proper. He starts by introducing the notion of incongruent counterparts. These are objects which, as Kant says, are "exactly equal and similar" to one another and yet cannot be made to coincide.<sup>89</sup> Kant seems to hold that there are no two-dimensional incongruent counterparts, and so he restricts his attention to three-dimensional objects. Perhaps this is because he failed to recognize that there is nothing special about the three-dimensional case. Just as there can be three-dimensional incongruent counterparts in a three-dimensional space, there can, in general, be n-

dimensional incongruent counterparts in an n-dimensional space. More likely, Kant was merely restricting his discussion to three-dimensional space because he thought that, as a matter of fact, we live in a three-dimensional space. Thus in our world, there are no two-dimensional incongruent counterparts. Either way, we can safely ignore this restriction.<sup>90</sup> And so, for ease of visualization, consider the following two-dimensional figures.







In Figure 5, triangles (a) and (b) are equal and similar.<sup>91</sup> Each is an isosceles right triangle, and their hypotenuses are of equal length. In addition, they can be made to

coincide. If we imagine moving triangle (a) to the right and rotating it by 270°, it would occupy the exact same region of space as that now occupied by triangle (b). The same cannot be said for the two-dimensional hands (L) and (R) in Figure 6. They are of equal magnitude. The distance from the thumb to the forefinger is the same for each as are all of the distances between corresponding parts. And they are clearly quite similar in shape. Again, the angle between the thumb and the forefinger is the same for each as are all the angles between their parts. Yet they are not quite the same. So long as we restrict ourselves to movements in the two-dimensional space of the hands, hand (L) can never be made to occupy exactly the same space as hand (R).<sup>92</sup> They are, in fact, mirror reflections of one another. Since the distances and angles between them are equal, they are equal and similar. Yet they cannot be made to coincide. They are, in short, incongruent counterparts.

This brings us to Kant's famous lone hand thought experiment.<sup>93</sup> Imagine that the universe contained only a single hand. This hand would be either left or right. It does not matter which. What is important is that there would be a difference between a universe that contained, say, my lone right hand and one which contained only my left. How we would distinguish between these universes or how we would go about labeling these hands left or right is beside the point. What matters is that there is a difference for which we must account.<sup>94</sup> Since the hands are similar and equal, the difference must involve a relation between the lone hand and something else.<sup>95</sup> And now the force of the thought experiment becomes clear. Each hand is by itself in the universe. There is nothing else besides the hand itself and the space which contains it. Thus there must be something

about the space they occupy which accounts for the difference between the hands. And so we must turn to our theories of space to explain this difference.

In 1768, the only plausible theories of space available were Leibniz's relational theory and Newton's absolute theory of space. According to Kant, Leibniz's account will not do: since all of the distances and angles between the parts of the hands are the same, there would be no differences in the spaces which contain them on Leibniz's relational view.<sup>96</sup> And so it must be that the difference between our imagined universes lies in the relations between the hands and the absolute spaces in which they would exist. But it cannot simply be a relation between the hands and the particular regions of space which they occupy. We cannot explain the difference between left and right hands by appeal to the distances and angles between the parts of space any more than we could by appeal to the distances and relations between the parts of the hands. Instead, the difference must involve differing relations between the hands and absolute space as a whole. But relations require relata, and so absolute space exists. Newton was right, and Leibniz was wrong.<sup>97</sup>

Many commentators have assumed that this amounts to an apagogic proof of the existence of absolute space.<sup>98</sup> If they are right, then it is a poor one indeed. Kant does not trouble himself to establish that these two competing theories of space are the only possible candidates. Nor does it seem worth the trouble, as Kant himself will present a third candidate in less than two years.<sup>99</sup> It seems more charitable, and perhaps more credible considering the modesty of Kant's claims,<sup>100</sup> to interpret Kant's argument as simply an inference to the best explanation. In 1768, Kant knew of two plausible theories of space. Up until this point, Kant had favored Leibniz's relational theory.<sup>101</sup> But that

year, he recognized that the existence of incongruent counterparts tipped the balance in favor of Newtonian absolute space. Kant's argument, then, is similar to that of Newton insofar as both claim that the best explanation for the empirical facts involves an appeal to absolute space. The difference, of course, is that, unlike Newton, Kant seemed to have no idea what such an explanation might be like. Nevertheless, given the context of a choice between an inadequate relational account and an, as yet unknown, absolute explanation, Kant's conclusion seems very reasonable.

We should not, however, be too charitable. It has been suggested, for example, that by 1768 Kant had achieved a deep insight concerning the relation between an object and the topological features of its space. Specifically, the claim is that Kant realized that the difference between left and right hands amounts to a difference in the way that they are embedded in space and the dimensionality and orientability of that space.<sup>102</sup> This is highly implausible. First, Kant did not provide anything close to such an explanation. In the *Directions in Space* essay, Kant does say that the difference between left and right hands "relate exclusively to *absolute* and *original space*" and that the talk of direction "refers to the space outside the thing ... to universal space as a unity."<sup>103</sup> But in these cases, Kant is merely trying to point out that we cannot explain the differing orientations of incongruent counterparts by reference to the regions of space which they occupy. This is far from an account of how we can explain such phenomena in terms of absolute space as a whole. Further, although Kant often came back to this argument over the years, he never provided such an explanation. Instead, he merely spoke of the same vague relation between the objects and space as a whole, though, of course, he later substituted his own account of space as the form of our intuition for Newton's theory of absolute space.

## 3.2 Incongruent Counterparts and Leibniz's Analysis Situs

This brings us to Kant's second argument against the relational theory of space. Kant begins the *Directions in Space* essay with a brief discussion of Leibniz's attempt to develop an *analysis situs* or analysis of situation.<sup>104</sup> Such an analysis would focus on the spatial qualities of objects as opposed to their magnitudes and would hence be an analysis appropriate to geometry rather than arithmetic or algebra. In arithmetic and algebra, for example, one of the fundamental relations is that of equality. When we do arithmetic or algebra, we often deal with equations such as  $^{\prime}7 + 5 = 12^{\prime}$  or  $^{\prime}x^2 - 4 = 0$ .' In contrast, Leibniz wanted an analysis which focused on what he regarded as purely spatial qualities such as congruence, which Leibniz saw as the spatial equivalent of equality.<sup>105</sup> In various places, Leibniz offered a very barebones account of such an analysis.<sup>106</sup> This account is important to Leibniz's relational theory of space insofar as the fleshed-out version of such a theory, which Leibniz does not provide, would have to describe in detail the spatial properties and relations of objects to which all talk of space is to be reduced. Thus, though it perhaps gives rise to considerable confusion, it is not surprising that Kant should present his criticism of Leibniz's analysis alongside his argument for the existence of absolute space; both point out serious, and possibly fatal, deficiencies in Leibniz's theory.

In his introductory paragraph, Kant starts off his critique by noting the immature status of Leibniz's project. To Kant's knowledge, most of which was presumably garnered from Wolff,<sup>107</sup> Leibniz's *analyis situs* had not been realized. These comments, though, are not merely an attempt to point out the short-comings of his predecessor. As we shall see, Kant believes he has found a fundamental problem in Leibniz's analysis, though he is admittedly unsure of its consequences.

After these introductory remarks, however, Kant leaves this issue behind until, following a brief discussion of our ability to discern left from right,<sup>108</sup> Kant returns to the subject with an obscure remark about our ability to form concepts of directions. Having already noted that our bodies can be divided along a horizontal and a vertical plane by means of which we distinguish up from down and left from right, Kant continues by claiming that there is a third plane by which a body can be divided into front and back and that this plane "makes possible the concept of the side in front and the side behind."<sup>109</sup> On a straightforward reading, this claim, though perhaps controversial, is still plausible. Kant is assuming without argument that, if we lived in a two-dimensional world without such a third perpendicular plane, we could not have a concept of directions in this third dimension. Now this is not obvious, but it does gain some support from the fact that we are unable to picture directions outside of the three dimensions of ordinary experience. If this is all Kant is saying, then we might well complain that he has not made his case, but it hardly seems relevant to the rest of his argument concerning Leibniz's theory of space.

But I fear that this claim points to a basic problem in Kant's argument. Kant is skeptical about the possibility of an *analysis situs*. For Leibniz, such an analysis would proceed from a given set of primitive spatial concepts. We have already seen Kant claim that his argument for the existence of absolute space relies on the existence of certain "intuitive judgments about extension." That is to say, he will assume that we are all aware of certain facts given in experience. Now Kant is claiming that our concepts of the various directions depend on the fact that we live in and experience a three-dimensional world. This is not damning in itself, but it demonstrates a tendency to focus on the role of intuition in our understanding of space at the expense of conceptual analysis. It is this tendency which comes to the fore in his concluding remarks to the *Directions* essay and, later, dominates the discussion in his return to this issue in the *Inaugural Dissertation*. There, this inappropriate focus leads Kant to the mistaken impression that his argument threatens the possibility of successfully constructing an analysis of space and its properties.

Nevertheless, though these passing observations are suggestive, we have yet to encounter Kant's real concerns over Leibniz's proposed analysis until we reach Kant's description of incongruent counterparts, such as left and right hands, well over halfway through the essay. There Kant defines such counterparts as being equal and similar but with an "inner difference."<sup>110</sup> While Kant's phrasing makes this difference sound mysterious, he quickly points out that the difference is just the fact that they cannot be made to coincide. Kant's choice of words, however, provides us with an important clue concerning the connection between incongruent counterparts and Kant's criticism of Leibniz's *analysis situs*.

Kant's wording recalls the Leibnizian, and later Wolffian, distinction between internal and external characteristics.<sup>111</sup> According to this distinction, those characteristics which can be detected in a lone object are inner, while those which require some other object for comparison are external. So, for example, the fact that one side of a triangle is longer than another is presumably an inner characteristic since this can be seen by examining the triangle in isolation. The fact that the longer side is 3 inches long, however, is an external characteristic since it involves a relation between the side of the triangle and a unit of measure.

The key to understanding Kant's criticism of Leibniz on this point is their shared view of what the list of inner and outer characteristics might include. According to Leibniz, the inner characteristics are limited to the number of sides of the object, the angles between its parts, and their proportions, whereas the external characteristics are limited to magnitudes. Objects are similar when they have the same internal characteristics and they are equal when they have the same magnitudes. For Leibniz, as for Kant, objects are congruent when they are both similar and equal. So far, then, we find Leibniz and Kant in agreement.<sup>112</sup>

There is, however, an easier way to see if objects are congruent than comparing their inner and outer characteristics. According to Leibniz, objects are congruent if and only if they can be made to coincide. And now we can see the problem that incongruent counterparts pose for Leibniz's analysis. It seems that incongruent counterparts such as
(L) and (R) must be congruent since they have identical inner and outer characteristics. Yet they cannot be made to coincide. There is a contradiction in Leibniz's account, and so something has to give.

According to Kant, there must be some further inner characteristic:

Since the surface which limits the physical space of the one body cannot serve as a boundary to limit the other, no matter how that surface be twisted and turned, it follows that the difference must be one which rests on an inner ground.<sup>113</sup>

Exactly how we are supposed to reach this conclusion is unclear. All that we are told is that incongruent counterparts cannot be made to coincide. It is hard to see how Kant infers from this that there is an inner difference between them. Perhaps, as has been suggested, he was simply unwilling to expand his list of outer characteristics.<sup>114</sup> This would hardly be convincing. The problem is compounded by the fact that, as we have seen, Kant himself claims throughout the *Directions* essay that the difference involves the differing relations between the counterparts and absolute space. Such a relation is certainly not an obvious candidate for an inner characteristic.<sup>115</sup>

Nevertheless, Kant goes on to conclude from this that, though absolute space exists, our concept of space is plagued with problems. In the *Directions* essay, however, Kant is still tolerant of these difficulties. There he sees them as just the standard troubles which arise "when one attempts to philosophise about the ultimate data of our cognition."<sup>116</sup> Given that we can infer the existence of absolute space from our experience of left and right hands, it seems we must simply prepare ourselves to accept such problems, perhaps in the hope of one day finding a better account.

In the Inaugural Dissertation, however, Kant is not nearly so sanguine:

Which things in a given space lie in one direction and which things incline in the opposite direction cannot be described discursively nor reduced to characteristic marks of the understanding by any astuteness of the mind. Thus, between solid bodies which are perfectly similar and equal but incongruent, such as left and right hands ... there is a difference, in virtue of which it is impossible that the limits of their extension should coincide — and that, in spite of the fact that, in respect of everything which may be expressed by means of characteristic marks intelligible to the mind through speech, they could be substituted for one another. It is, therefore, clear that in these cases the difference, namely, the incongruity, can only be apprehended by a certain pure intuition.<sup>117</sup>

The problem, then, is not restricted to Leibniz's analysis. Kant is no longer asserting that there is some mysterious inner difference between left and right hands. If he were, then there might be some hope of providing an explanation of this difference. But, here, Kant is asserting that no such explanation can be given; though we know from experience that left and right hands possess a different orientation, we cannot conceive of any property which might account for this difference. This is further evidence that, by this time, Kant is no longer committed to AT': it is true that there is a difference between left and right hands, but, since this difference cannot be explained conceptually, this truth is neither a *prima facie* tautology itself nor reducible to one. Instead, we can only indicate the difference by pointing to occurrences of such counterparts in our experience.

Of course, this still leaves open the possibility that the fact that there is such a difference might be derived from some necessary proposition in accord with the third condition of AT'. But we must remember why it is that this third condition was introduced. Kant's basic metaphysical position in his early pre-critical work is very much Leibnizian. And like Leibniz, Kant tended to understand truth in terms of analysis. For Kant, however, existential propositions were problematic since, in his view, existence is not a predicate. To explain the truth of existential propositions, then, Kant acknowledged

that there might be some analytic truths, viz. existential truths such as the proposition that God exists, which follow from the necessarily true proposition that something is possible. The proposition that left and right hands are incongruent counterparts, however, is not an existential proposition since it does not tell us that there are any hands at all. It seems unlikely, then, that Kant would account for its truth by appeal to this third condition.

But we must be careful. We cannot conclude that Kant has now explicitly rejected AT'. This conclusion is too strong. Kant's argument in the *Directions in Space* essay is inconsistent with the PSR. Assuming that Kant was familiar with Leibniz's argument in the *Correspondence*, it seems highly likely that he would have recognized this inconsistency. If so, then his argument in the 1768 essay is tantamount to a rejection of his 1755 argument for the PSR. But this only means that Kant was now aware that *something* was wrong with this earlier argument. At the same time, his remarks in the *Inaugural Dissertation* imply that he was no longer committed to AT'. But this is not enough to establish that Kant was even consciously aware of his previous commitment. AT' is a reconstruction of Kant's theory of truth. As such, it helps us to understand Kant's earlier position. Kant, however, never explicitly endorsed AT'. And so we clearly cannot infer that he now explicitly rejects it.

Fortunately, we do not need to make this inference. The purpose of this chapter is to establish that, during the thirteen years between the *New Elucidation* and the *Directions in Space* essay, there was a significant change in Kant's metaphysics. Though the evidence does not afford certainty, we have seen that it is more than likely that, by 1768, Kant no longer accepted the PSR. Thus, we can claim, with some confidence, that Kant

had also come to recognize that something was wrong with his earlier argument for the PSR. This weaker claim is enough to justify the conclusion that Kant's metaphysical views had undergone a radical transformation.

So what are we to make of Kant's overall argument? To answer this question, we should remember his goals, both explicit and implied. These were twofold. First, Kant believed that incongruent counterparts posed a serious threat to the possibility of an *analysis situs* such as Leibniz had hoped to achieve. On this count, Kant seems to have achieved a minor success. Something is wrong with Leibniz's account; incongruent counterparts are similar and equal, but they cannot be made to coincide. This, however, does not justify Kant's conclusion that, even with some modification, such an analysis cannot be achieved. The success mathematicians have achieved in topology since Kant's time speaks against this conclusion.<sup>118</sup> It appears that Kant made the simple mistake of assuming that no mathematical account can be given of orientation because the accounts with which he was familiar had failed to do so.

Second, Kant had hoped to show that relational theories of space cannot accommodate the existence of incongruent counterparts and that, given this failure, we should adopt an absolute theory. I believe that Kant is successful on this count so long as we are willing to provide him with a charitable interpretation and grant him certain assumptions. First, as I have suggested, we must read Kant's argument as an inference to the best explanation. We are to decide of the two competing theories of space, Newton's and Leibniz's, which is best able to explain the existence of incongruent counterparts. Second, we must assume that Leibniz could only explain the orientation of a lone hand by

appeal to its inner characteristics. (As I discuss in the below, however, it is not clear that Kant is being charitable enough to Leibniz here.) Third, we must assume that Leibniz's list of inner characteristics is complete. That is to say, we must assume that the relational theory could not be remedied by simply adding some further inner characteristic to our list, e.g. having a left-handed orientation. If we are willing to grant Kant these things, he does seem to have a point. Leibniz's theory, so interpreted, is flawed. And here we can see the connection between Kant's argument in support of absolute space and his criticism of Leibniz's analysis. Left and right hands are different, but their inner characteristics, on this account, are not. And so any theory which views space as reducible to the spatial properties of actual objects could not explain the difference between a universe with a single left hand and one with a lone right. So long as our choice is between such relational theories and Newton's, it seems the choice is clear, even if it is not so clear how Newton's theory would explain the difference. Given the controversial nature of these assumptions, though, this endorsement can only be tentative at best.

Regardless of the success of his arguments, however, we should not lose sight of what Kant's conclusions here tell us about the development of his philosophy. In 1768, Kant was convinced that absolute space exists. But as Leibniz had pointed out, and as Kant was most likely aware, the existence of absolute space runs contrary to the PSR. In the thirteen years following the *New Elucidation*, Kant's views had undergone a dramatic change. He no longer accepted the PSR, and, by implication, he was no longer committed to AT'. In its place, we find an increasing attention to the lessons of experience. As Kant

tells us, metaphysicians have failed in their attempts to prove a priori that absolute space does or does not exist. Instead, Kant insists we must look to experience. Evidence for the existence of absolute space lies, quite literally, in our own hands. In short, Kant is becoming, in his own peculiar fashion, an empiricist. The cause of this dramatic shift, however, remains to be seen.

#### 4. Contemporary Assessments of Kant's Argument

In his influential book, *The Shape of Space*, Graham Nerlich created quite a stir of interest in Kant's argument from incongruent counterparts.<sup>119</sup> According to Nerlich, Kant was essentially correct: incongruent counterparts can only be explained by appeal to absolute space. In support of this claim, Nerlich offers an argument which is certainly Kantian in spirit, though it has the extra advantage of providing some account of the orientation of left and right hands.

Consider again our two-dimensional hands (L) and (R). Can they be made to coincide? Well, in our three-dimensional universe they certainly can. Simply pick one of them up and turn it over. Now the two hands will have the same orientation. This same trick, however, will not work in two-dimensions. There is just no space in which to turn them over. And so, if we restrict the range of allowable motions to those possible within the 2-space of the hands, the hands appear to be incongruent. It seems, then, that the incongruency of the hands depends upon the dimension of the space in which they exist.

The same is true of ordinary three-dimensional hands. There is a difference between my left and right hands. They have a different orientation and so cannot be made to coincide by any rigid motion. This is evident to anyone who has ever mistakenly tried to place a right- or left-handed glove on the wrong hand. But this is only true in the threedimensional space in which we appear to live. If there were a fourth spatial dimension, then making left and right hands coincide would be as easy as flipping our twodimensional hands over. All we would need to do is pick up one of the hands and turn it over in the fourth dimension. Or, to use a less gruesome example, we could turn a lefthanded glove into its right-handed counterpart by likewise rotating it in our extra dimension. Since we cannot picture such motions, such examples are understandably less intuitive. But, nevertheless, it is a mathematical truth that any pair of n-dimensional incongruent counterparts can be made to coincide if we are allowed to move them through an n+1-dimensional space. Again, it seems that our hands are only incongruent because of the limitations of our space.

There is, however, another way in which a pair of apparently incongruent counterparts can be made to coincide. Imagine again our flat hands (L) and (R). We have seen that they can be made to coincide if we are allowed to rotate them in 3-space. But is there a way they can be made to coincide even if we restrict our motions to the flat space of the hands? There may not appear to be, but this is because we typically picture such flat, two-dimensional spaces as truly flat. That is to say, we do not usually imagine the hands as lying on a two-dimensional surface which is itself bent, curved, or twisted in any way. But there is nothing to stop us from doing so. For example, consider the Möbius strip in Figure 7 below.



Figure 7

If our hands lie on such a strip, then they can be made to coincide, even though they may appear to be incongruent when lying next to each other. To see this, picture taking one of the hands on a trip around the strip, leaving its counterpart behind. When it returns, the two hands will be indistinguishable. This is because such trips around the strip reverse the orientation of the hands. In other words, the two-dimensional space of the strip, curved and twisted as it is, does not preserve orientation. It is a non-orientable space. Our three-dimensional space, however, appears to be an orientable space. Merely sending off one of my hands on a journey across the universe would not reverse its orientation. And so, again, the incongruency of my left and right hands depends on a property of space.

From this, Nerlich concludes that incongruent counterparts such as left and right hands imply the existence of absolute space. Our hands cannot be made to coincide. They could, however, if our space were four-dimensional or non-orientable. We can deduce from this that the space in which we live must be both three-dimensional and orientable. But, Nerlich argues, to say that space has these properties implies that space exists. And so, as it turns out, Kant was right, despite the fact that he had little understanding, if any, about the relevant relationship between left and right hands and absolute space.

That is, Kant is right if we can indeed infer the existence of absolute space from its properties. Unfortunately, Nerlich overlooked the obvious relationalist reply. At first glance, it may seem obvious that we cannot talk about the properties of space without conceding the existence of space. And in some sense this is right. But the relationalist has never denied that we can talk meaningfully about the properties of space. Nor need they deny that we can talk meaningfully about the existence of space. What they have denied, however, is that any of this commits us to the existence of absolute space. Instead, they insist, all such talk of space and its properties can be reduced to talk of objects and their spatial properties and relations. And so a relationalist can accept that the difference between left and right hands should be understood in terms of the dimensionality and orientability of space, but, they will claim, these properties must, in turn, be understood as shorthand ways of referring to the spatial qualities of objects.

This opens the door to two possible relationalist responses. The first, originally proposed by John Earman, is to conceive of orientation as a primitive, monadic property of objects.<sup>120</sup> A left hand then would simply have the property of being-left-handed. We can then explain the difference between left and right hands as a difference in their orientational properties.

This will not do. As Lawrence Sklar has pointed out,<sup>121</sup> it just is not plausible that orientation could be a monadic property of an object. Reconsider again our hands, (L) and (R), lying next to each other on a Möbius strip. Initially they would have different

orientations. Following Earman's suggestion, we would explain this by citing the fact that (L) has some property such as being-(L)-handed whereas (R) has the opposite orientation because of its property of being-(R)-handed. Now send (L) around the strip. Amazingly, it comes back as a different sort of hand altogether. Simply by moving it around the strip, we have changed its basic properties. It has exchanged its property of being-(L)-handed for the property of being-(R)-handed. But objects do not ordinarily undergo changes in their primitive monadic properties as a consequence of such rigid motions. Nor does the relationalist seem capable of explaining this transformation. It is simply a mystery.

Assuming that we should not multiply our mysteries unnecessarily, let us turn to the second possible response. According to this line, the dimensionality of space and its orientability are to be explained in terms of the dyadic properties of objects. Objects stand in certain spatial relations, and we can abstract from talk of these objects and their relations to talk about the relations between points of space. For example, if a certain part of my desk is, say, twelve and a half feet from a certain part of my television, then I can abstract from such talk of objects and speak instead of this as a distance between the parts of space which my desk and my television occupy. This, however, does not mean that these parts of space really exist. It is just sometimes convenient to talk about space rather than objects, even though it is only the objects which exist, in much the same way as it is sometimes convenient to talk about the properties of fictional characters despite the fact that such characters do not actually exist.

But this cannot be the whole story. Relationalists must give us some idea of how they would account for the fact that our space is three-dimensional and orientable. It seems

that appealing to the properties of actual objects will not do. Remember again our solitary hands in their imagined universes. There is (by assumption) a difference between them. But, so long as orientation is not a primitive monadic property, it seems we cannot explain this difference in terms of the properties of the hands. But since the hands are the only existing objects, according to the relationalist, this exhausts the field of actual objects. Thus to explain the difference, it seems relationalists must appeal to the relations between the hands and other possible, but non-existing, objects.

This is hardly surprising. Again as Sklar has noted, relationalists have long recognized the need to appeal to possibilia.<sup>122</sup> For example, we often need to refer to the distances between the parts of empty space. But there is no apparent way to reduce this to talk of distance between actual objects. Instead, the relationalist must appeal to the fact that there might have been objects in these areas and that, if there had been, they would have been a certain distance apart. Likewise, relationalists would presumably want to account for the dimensionality and orientability of the imaginary space of our hands in terms of the relations between the hands and other possible objects in these spaces.

But that, however, is the tricky part. Kant's argument has led us to a real problem in the relational theory of space. This argument, by itself, is not enough to refute this theory. It does, however, make it clear what any successful relationalist theory must do. The difference between incongruent counterparts must be explained. The resources of the relational theory, however, are limited to the properties and relations between objects, actual or merely possible. Unfortunately for the relationalist, these resources are pretty clearly inadequate for the task.

# 5. Conclusion

We seem to live in a three-dimensional, orientable world.<sup>123</sup> But, presumably, things could have been otherwise. For instance, there might have been four-dimensional objects; four-dimensional objects are logically possible. And so we cannot explain the three-dimensionality of our space in terms of the dimensionality of logically possible objects. Nor can we appeal to merely physically possible objects. Though we could insist that only three-dimensional objects are possible, we must still explain why this is so. The absolutist has a ready answer. Four-dimensional objects are not possible because our space is three-dimensional. The relationalist, however, is in trouble. We cannot invoke physically possible objects in order to explain the dimensionality of space and then invoke the dimensionality of space in order to explain physical possibility.<sup>124</sup>

This presents the relationalist with a dilemma. It seems that talk of possible objects is either talk of logical possibility or physical possibility. But we cannot explain the dimensionality of space either way. Now the relationalist might simply insist that there is some further sense of possibility, say metaphysical possibility, according to which only three-dimensional objects are possible. Presumably, this further sense would likewise be invoked to explain why only orientable spaces are possible as well. But, in so doing, relationalism loses all of its charm. The relational theory of space is appealing precisely because it promises to allow us to talk meaningfully about space without the burden of adding such a mysterious entity to our ontology. But to do so, it seems we must multiply our mysteries elsewhere. It seems we can trade in the mystery of space only at the expense of accepting the mystery of metaphysical possibility.<sup>125</sup> And that is not much of a bargain.

## **CHAPTER 4**

#### Freedom and Morality in Kant's Pre-Critical Philosophy

So far, I have painted a straightforward picture. In 1755, Kant endorsed an analytic theory of truth from which he deduced the PSR. In turn, this principle led him to accept a compatibilist theory of freedom according to which we are free despite the fact that we are never able to do otherwise than we do. By 1768, after considering the negative implications of the existence of incongruent counterparts for relational theories of space, Kant's position became incompatible with his earlier theory of truth and he was thus free to endorse an incompatibilist theory freedom such as his later theory of transcendental freedom in the *Critique of Pure Reason*.

It is time now to fill in the gaps. In so doing, however, we will find the picture is a good bit more complicated than this outline suggests. Typically, Kant's work during this period is divided into two phases.<sup>126</sup> According to some, during the first, so-called rationalist phase (roughly 1755-1763), Kant is seen as especially dogmatic. Supposedly, we find Kant in these works flatly denying the compatibility of human freedom and determinism and baldly asserting that we are, nevertheless, absolutely free. By way of contrast, during his purportedly skeptical period (roughly 1764-1768), Kant came to have increasing doubts about his own rationalist assumptions and grew ever more critical about the possibility of knowing anything about the nature of the soul or the existence of such absolute freedom. Others argue that, since the focus of Kant's pre-critical project during this earlier period is clearly to reconcile his rationalist metaphysics with his

commitment to Newtonian physics and its emphasis on experience, the breakdown of this pre-critical project should be understood as a consequence of his recognition of the failure of these earlier efforts.<sup>127</sup> I do not believe that either of these approaches is entirely wrong, but both fail to appreciate both the continuity of Kant's thoughts on the compatibility of metaphysics and physics during this period as well as the importance of his emergent, though wavering, distrust of compatibilist theories of freedom. The central thesis of this chapter is that Kant's critical stance concerning his own metaphysical efforts is, to a considerable degree, a consequence of this distrust.

I have divided the argument of this chapter into three sections. In the first, I briefly examine Kant's attempt to reconcile Newton's empiricist physics with his own rationalist metaphysics. I argue that the basic features of this reconciliation can be found throughout Kant's pre-critical period. In the second, I consider how this account affected Kant's theory of truth. Though Kant's increasing focus on experience is certainly consistent with the theory of truth at work in the *New Elucidation*, it also clearly places a great strain on this theory insofar as it devalues the overall importance of analysis. In the third section, I turn to Kant's remarks concerning the nature and existence of freedom. Despite his apparent commitment to the PSR throughout most of these early works leading up to the *Directions in Space* essay, Kant's support for a compatibilist theory of freedom begins to falter. Understandably, given his earlier argument for compatibilism in the *New Elucidation*, this puts an enormous strain on Kant to reject the PSR and, hence, the analytic theory of truth upon which it was based. This pressure was relieved once Kant discovered the existence of incongruent counterparts.

# 1. The Reconciliation of Physics and Metaphysics

The need for a reconciliation of metaphysics and physics was generated by Kant's semi-Leibnizian position on space. As we have seen, until 1768, Kant accepted Leibniz's relational theory of space. And so space, for both Leibniz and Kant, was nothing over and above the external relations of substances. This naturally calls for some sort of explanation. How can space be reduced to such relations? The most obvious answer, and clearly the one most preferred by contemporary relationalists, is that objects are spatially related. Space, then, is just an abstraction which we arrive at by imagining the spatial relations between objects without the objects.

Leibniz, however, had a different answer.<sup>128</sup> According to Leibniz, finite substances are not really spatially related at all. They cannot be, because, such substances are not externally related to one another at all. Substances are simple, non-extended monads, which, though co-existent, stand in isolation from one another. As a consequence of this view, Leibniz had no real trouble explaining away the need for such a reduction: space is an abstraction from the spatial relations we perceive in objects, but these relations are themselves a consequence of our confused perception of isolated monads. Since our concept of space is based on such a confusion, there is no need to reduce talk of space to talk of monads and their relations.<sup>129</sup>

The problem for Kant, however, was that he rejected the metaphysical basis of Leibniz's answer. Like Leibniz, Kant believed that the world consisted of such simple substances or monads. But for Kant, the apparent interaction of substances was not *merely* apparent. We perceive the world as being causally interconnected. If, for example,

I accidentally brush against a glass of wine with my elbow, then this contact seems to cause the glass to tip and the wine to spill. Leibniz explained such apparent cases of causal interaction as, instead, instances of pre-established harmony. When God created the world, he arranged things so that our perceptions would appear to present just such a causal interconnection. But there is no real interaction. Instead, our various perceptions of such accidental encounters are, regrettably, followed by our perceptions of the wine spilling over.

Kant, however, denied pre-established harmony. In the *New Elucidation*, Kant argues that 1) substances can change only if they are connected with other substances and that 2) substances are not in connection in virtue of their existence alone.<sup>130</sup> Thus to explain the changes in substances, changes required by the hypothesis of a pre-established harmony, Kant maintains that there must be real relations between substances and that these relations must have been brought into existence by God in order to create a world of co-existing objects as opposed to separate worlds of isolated and unchanging substances. Since Kant is here describing relations between substances whereby they are connected so as to give rise to changes in one another's states, he is arguing for the existence of real causal relations between substances. Substances co-exist and change insofar as they have a causal influence on each other. The claim that there is such inter-substantial causality is the doctrine of physical influx.

Accepting physical influx, Kant has created a problem for himself which his more Leibnizian predecessors had managed to avoid.<sup>131</sup> Since Kant holds that space is nothing over and above the external relations of monads and that there really are such external relations, he has some obligation to provide an account of how non-extended monads are spatially related. In the *Physical Monadology* (1756) we find just such an account.

Kant's problem is to explain how it is that non-extended monads can occupy a region of extended space. Physics tells us that objects stand in certain spatial relations to one another and that these objects, in some sense, fill space. Kant's metaphysical theory holds that these objects are composed of simple non-extended monads. To reconcile the two, Kant will have to explain the spatial properties of ordinary objects in terms of the properties of the constituent monads. His solution is to attribute spatial properties to the monads, i.e. to posit that the basic constituents of physical objects are physical monads.

This solution, however, comes with its own problems. Physical monads have spatial properties. They exist or are located at certain points in space. Thus, for example, we can say that monads A and B are five feet away from one another. Given the existence of such spatial relations between monads, the problem of providing a relational theory of space is reduced to the standard difficulty of reducing all talk of space to talk of spatial relations between objects. In this regard, though, Kant is no worse off than any other relationalist. But Kant must still explain how it is that ordinary physical objects are composed of non-extended physical monads.

The problem is acute for Kant insofar as he accepts the old Aristotelian argument that non-extended parts can never compose an extended whole by simple addition.<sup>132</sup> This argument is certainly compelling. For example, if we are making seating arrangements for a large party, it is easy enough to understand how we might create a larger table out of smaller parts. If we take two tables that are five feet long, we can just push them together

to create a ten foot long table. But how many non-extended parts would it take to create an object that was, say, one foot long? Clearly no finite amount would do.  $(0_1 + 0_2 + ... + 0_n = 0$  for any finite number n.) Indeed, at least intuitively, it is hard to imagine that any amount would do. After all, how could the addition of zero to itself ever sum to one?

Kant avoids this problem by dismissing such composition by addition. Spaces are not filled by an aggregate of physical monads. Instead, physical monads fill a space by having what Kant would later come to call a virtual location:

The monad does not determine the little space of its presence by the plurality of its substantial parts, but by the sphere of the activity, by means of which it hinders the things which are external to it and which are present to it on both sides from drawing any closer to each other.<sup>133</sup>

In order to fill a space, physical monads must, in some sense, have a size. Ordinarily, the size of an object can be explained by the size of its parts. But monads are simple and nonextended and so they cannot be composed of extended parts. Instead, the size of a monad, the volume of space which it fills, is a consequence of its repulsive activity. Physical monads possess a repulsive force which prevents other monads from coming too close. If, for instance, a monad possessed a repulsive force that prevented any other monad from coming within five feet of it in any direction, then this monad could be said to occupy this spherical region of space. Likewise, every physical monad fills a region of space in virtue of its repulsive force.

Repulsive forces, however, create a new difficulty. Kant thinks of such forces as emanating from a monad. As this force spreads out over a region of space, however, it grows weaker as it becomes increasingly thinned out. Thus the example offered above is misleading. A monad cannot just exert its influence for five feet in every direction. Instead, it pushes other monads away in all directions and at all distances.

Thus, if monads only exerted a repulsive force, we would expect them to move farther and farther away from one another. To explain how it is that physical monads compose ordinary objects, Kant must posit an attractive force which holds the constituent monads of an object together.<sup>134</sup> With both forces at work, monads occupy a region as a consequence of a balancing of these forces. Imagine, for example, that two monads A and B are attracted to one another. And so they draw nearer. But as they do so, they begin to exert an increasingly strong repulsive force on one another. At some point, it seems that these two forces reach a stalemate. Because of their mutual repulsion, they will not be able to draw any nearer. But the force of attraction acting on each will also keep them from moving any farther apart. With this balancing act between opposing forces, these monads come to fill their spaces. In this sense, they have a size.

This is the account of the *Physical Monadology*. Metaphysically, Kant is, to a considerable degree, a Leibnizian. Fundamentally, the world is composed of simple, non-extended monads. Physically, however, Kant is a realist about the existence of ordinary objects and explains their interaction in terms of the causal laws of Newton's mechanics. To reconcile these two basic outlooks, Kant turns the monads of Leibniz's metaphysics into the basic constituents of the Newtonian world of physical objects and causal forces.

What is interesting about this account, for our purposes, is that, for better or for worse, Kant seems satisfied with it. For example, in the *Prize Essay* of 1764 and in the 1766 essay *Dreams of a Spirit-Seer*, we still find Kant endorsing his theory of physical

monads filling spaces by means of their repulsive forces.<sup>135</sup> A remarkably similar account of how matter fills a space is offered by Kant in the *Metaphysical Foundations of Natural Science* in 1786.<sup>136</sup> Likewise, Kant continues to advocate the physical influx account of causality in his lectures on metaphysics from around 1762-4 and 1782-3, in the *Inaugural Dissertation* of 1770, and, again, in the *Metaphysical Foundations* in 1786.<sup>137</sup>

This suggests that Kant's changing views on the status of the PSR have little, if anything, to do with his lack of confidence in the success of his attempt to reconcile Newtonian physics and Leibnizian metaphysics. This does not mean, however, that his interest in this project did not have an influence on his overall metaphysical position. As I will argue in the next section, Kant's confidence in the value of Newton's method resulted, during this period, in an increased focus on the role of experience as a guide for metaphysical inquiry. More and more, analysis tends to give way to the lessons of experience, and Kant's enthusiasm for metaphysical argumentation is tempered by the need to confirm his conclusions *in concreto*.

# 2. Metaphysics and Experience

In the *Physical Monadology*, though Kant is certainly enamored with Newton's success in the natural sciences, he still regards experience as merely providing a helpful check on metaphysics. Despite its salutary effects, however, he nevertheless believes we must move beyond experience to discover the fundamental nature of the world:

Certainly, nothing can be thought more useful to philosophy, or more beneficial to it, than this counsel [to seek the support of experience]. However, hardly any mortal can advance with a firm step along the straight line of truth without here and there turning aside in one direction or another. For this reason there have been some who have observed this law to such a degree that, in searching out the truth, they have not ventured to commit themselves to the deep sea but have considered it better to hug the coast, only admitting what is immediately revealed by the testimony of the senses. And, certainly, if we follow this sound path, we can exhibit the laws of nature though not the origin and causes of these laws. For those who only hunt out the phenomena of nature are always that far removed from the deeper understanding of the first causes. Nor will they ever attain knowledge of the nature itself of bodies, any more than those who persuade themselves that, by climbing higher and higher up the pinnacles of a mountain they will at last be able to reach out and touch the heavens with their hands.<sup>138</sup>

To attain such lofty heights, to "touch the heavens with their hands," philosophers must turn to metaphysics. Experience may be able to teach us about the laws of nature which govern the interactions of bodies, but there is a deeper understanding of the world which only metaphysics can provide: "Metaphysics, therefore, which many say may be properly absent from physics, is, in fact, its only support; it alone provides illumination."<sup>139</sup>

In the years that follow, Kant appears to remain committed to the fundamentals of AT'. In *The False Subtlety of the Four Syllogistic Figures* (1762) for example, we find Kant endorsing the *New Elucidation* principle that the truth of positive and negative propositions follows from the laws of identity and contradiction, respectively.<sup>140</sup> Likewise, in *The Only Possible Argument*, Kant continues to endorse the fundamental features of his analytic theory. There is a complete concept for every object, whether possible or actual. From this concept, all of the object's properties can be, in principle, deduced. <sup>141</sup> Such deduction relies on analysis which ends with primitive concepts.<sup>142</sup> Such complete concepts, however, as we have already seen, do not include the existence of the object. And again, the truth of a proposition still depends on whether its predicate is contained in the concept of the subject.<sup>143</sup>

Given this, it is unsurprising, in light of his arguments in the *New Elucidation*, that Kant goes on to derive the perfection of this world and the PSR from the necessity of God's existence. God necessarily exists and is the creator of this world. Therefore this world must be consistent with the nature of God. Since God wants what is best and since God's choices are always rational, this must be the best world and there must be a reason for everything in it.<sup>144</sup> It seems, then, that up until at least 1763, Kant is content with the basic approach to metaphysics advanced in the *New Elucidation*. While experience is certainly helpful insofar as it can provide us with insight into natural science and it can serve as a useful check for unconstrained metaphysical speculation, we must rely on metaphysics in order to understand the world in its entirety.

Yet during the same year, in his *Attempt to Introduce the Concept of Negative Magnitudes into Philosophy*, it appears that Kant's confidence in the success of metaphysics begins to erode. In the "Preface," for example, he starts by calling attention to the relative failure of metaphysics in comparison to the clear achievements of mathematics and physics.<sup>145</sup> As a consequence, he urges us to take the insights realized in these fields to heart in our philosophical efforts.<sup>146</sup> Thus while his assurance in the importance of the lessons of experience remains consistent, his confidence in metaphysics wanes as he notes its difficult and tentative nature:

In advancing to general principles from the examples which have been introduced and which are easy enough to understand, there are good grounds for extreme concern: in pursuing this untrodden path mistakes may be made which only come to be noticed as one advances. Accordingly, what I have yet to say on the matter is to be regarded as an experiment which is very imperfect ... I am fully aware that an admission of this kind is a very poor sort of recommendation to those who demand an assertive and dogmatic tone, if they are to permit themselves to be steered in the desired direction. I do not feel the least regret at losing this kind of acclaim. It seems to me, however, that in a branch of knowledge as difficult to handle as metaphysics, it is much more appropriate that one's thought should first of all be presented to public examination in the guise of tentative experiments than that they should be announced from the beginning with all the adornments of pretended thoroughness and complete conviction.<sup>147</sup>

Metaphysics is no longer envisioned as a structure built upon such sound foundations as the principles of identity and contradiction, the necessary existence of God, and the PSR. Instead, Kant now sees metaphysics as rooted in the concrete evidence of experience and as proceeding by way of hypotheses which must always be supported by appeal to the empirical and mathematical sciences.

Perhaps Kant's new vision is, to a considerable degree, a consequence of his subject matter. Negative magnitudes are discussed in terms of real opposition, and real opposition, in turn, is to be understood in contrast to the sort of logical opposition to which we appeal when we seek to deduce a negative proposition from the principle of contradiction. When, for example, we assert that a bachelor is a married man, we know this to be false because the predicate and the subject are in logical opposition. A married bachelor is a logical impossibility. Real opposition, however, has nothing to do with logical possibility. Rather, it is to be understood in terms of cancellation. For example, two forces are in real opposition insofar as they cancel each other out. Thus, if an object is being acted upon by a force in one direction, the real opposite of this force would be an equal force in the opposite direction. If we were to assign unit magnitudes to these forces, then one would be the positive magnitude, +1, and the other would be the negative magnitude, -1. The result of such real opposition is the cancellation of each force by the other and so no change in the object. According to Kant, the problem with traditional

metaphysics is that it has failed to account for such negative magnitudes and the real opposition which they express.<sup>148</sup>

At the same time, Kant has also become aware of an inherent tension in his analytic theory. Metaphysics proceeds, for the most part, by analysis. Analysis, however, ends in primitive concepts. Thus, for example, Kant holds that analysis of the concept of causation ends in the primitive notion of what he calls a real ground. A is the real ground of B if and only if, although the existence of A does not logically entail the existence of B, the existence of B somehow follows from the existence of A. The problem here is that Kant has no idea how anything is able to be a real ground.<sup>149</sup> Since this notion is a primitive, however, there can be no further explanation. But, for Kant, metaphysics is supposed to provide an explanation for everything. And so, accepting this goal, we are bound to be frustrated so long as we construe metaphysics as an analytic science.

Such tensions are not completely new, however, to the *Negative Magnitudes* essay. In *The Only Possible Argument*, we find similar strains on Kant's preference for metaphysics by analysis. In his proof of God's existence, for example, Kant relies on his distinction between logical and material possibility. Objects are logically possible if and only if their concepts do not include contradictory predicates. They are materially possible, however, if and only if the predicates which constitute their complete concept are or have been instantiated. Thus, though there is no logical contradiction in the concept of a green man, so that such a man is logically possible, a green man is only materially possible because there are, in fact, green objects and men.

Kant's argument is that objects are only possible if they are materially possible and that the material possibility of all objects ultimately depends on the existence of God. And so Kant understands modal claims as referencing both logical and material possibility. Since existential claims can only be supported by experience, though, we can only verify the material possibility of an object by appeal to experience. Thus all modal claims, as well, can only be justified by appeal to experience.<sup>150</sup> With the introduction of this distinction, then, Kant has given experience a primary role in his metaphysical arguments.

Further, this important new role is reinforced by Kant's distinction between the real, objective concepts of objects and the subjective concepts which we have of them.<sup>151</sup> All objective concepts are complete: for every pair of contradictory predicates, the objective concept includes one and only one of the two. The same cannot be said for our concepts. When I think of my concept of Kant, for example, this concept leaves out a lot of information about the man. It does not tell me his exact height, exact age, or where he was at any particular time. Yet Kant explicitly includes these predicates in the complete concept of any individual.<sup>152</sup> With subjective concepts, however, comes subjective analysis. So long as metaphysics must rely on the analysis of our subjective concepts of objects, there is an obvious danger that our conclusions will simply be off the mark.

With all of this going on, Kant's new attitude towards metaphysics should come as no shock. Thus, for example, already in *The Only Possible Argument*, Kant observes that experience provides us with a more firm conviction than metaphysical speculation. Regarding the greater persuasive power of the teleological proof of God's existence,

which starts with experience, over his own a priori and hence metaphysical proof, Kant writes:

It is unlikely that anyone would venture his whole happiness upon the pretended correctness of a metaphysical proof, especially if that proof were opposed by vivid objections which appealed to the senses. The power of the conviction produced by this method [i.e. the teleological proof] is, for the very reason that it appeals to the senses, so firm and unshakeable as to be unperturbed by any threats to it posed by syllogistic discourses and distinctions, and inaccessible to the power of the objections produced by sophistry.<sup>153</sup>

And just a little farther on, we find Kant dismissing with obvious sarcasm the objections

to his own theory of the formation of the solar system raised by those who prefer

metaphysical definitions to the empirical method of Newton's Principia.<sup>154</sup>

This clearly suggests that Kant is beginning to have doubts about both the method of

metaphysics and its prospects for success. This picture is supported by Kant's discussion

of the proper method of metaphysics in the Prize Essay:

But what method is this treatise itself to adopt, granted that it is a treatise in which metaphysics is to be shown the true degree of certainty to which it may aspire, as well as the path by which the certainty may be attained? If what is presented in this treatise is itself metaphysics, then the judgment of the treatise will be no more certain than has been that science which hopes to benefit from our inquiry by acquiring some permanence and stability; and then all of our efforts will have been in vain. I shall, therefore, ensure that my treatise contains nothing but empirical propositions which are certain, and the inferences which are drawn immediately from them.<sup>155</sup>

In this work, Kant is seeking to establish the proper method for metaphysics and to delimit its proper goals and chance of success. To do so, he can "rely neither on the doctrines of the philosophers, the uncertainty of which is the very occasion of this present inquiry, nor on definitions, which so often lead to error."<sup>156</sup> And so, since there are no

other obvious alternatives, Kant suggests that we turn to experience to find the right method.<sup>157</sup>

Though Kant seems confident that he has found this method in this way, and so that metaphysics has a sure footing by which to attain certainty,<sup>158</sup> his reliance on empirical evidence seems to put all previous metaphysical endeavors in doubt: "Metaphysics is without doubt the most difficult of all the things into which man has insight. But so far no metaphysics has ever been written."<sup>159</sup> Given that, on the very next page, Kant defines metaphysics as the science of first principles and that Kant claimed in the *New Elucidation* to have provided such first principles, this is tantamount to a wholesale rejection of his earlier efforts.

In fact, however, Kant's attitude towards his *New Elucidation* account is ambivalent. At the same time that he claims that there has never been a satisfactory theory of metaphysics, he still endorses the main components of his earlier account. Though the proper method of metaphysics is to be discovered empirically, metaphysics itself proceeds by analysis.<sup>160</sup> Moreover, and more perplexingly, Kant continues, just as he did in the *New Elucidation*, to endorse the principle of identity and the principle of contradiction as the supreme rules of all truths:

All true propositions must be either affirmative or negative. The *form* of every *affirmation* consists in something being represented as a characteristic mark of a thing, that is to say, as identical with the characteristic mark of a thing. Thus, every affirmative judgement is true if the predicate is *identical* with the subject. And since the *form* of every *negation* consists in something being represented as in conflict with a thing, it follows that a negative judgement is true if the predicate *contradicts* the subject. The proposition, therefore, which expresses the essence of every affirmative judgement and which accordingly contains the supreme formula of all affirmative judgements, runs as follows: to every subject there belongs a predicate which is identical with it. This is the *law of identity*. The proposition

which expresses the essence of all negation is this: to no subject does there belong a predicate which contradicts it. This proposition is the *law of contradiction*. These two principles together constitute the supreme universal principles, in the formal sense of the term, of human reason in its entirety.<sup>161</sup>

Likewise, he continues to endorse his argument for the necessary existence of God from *The Only Possible Argument* and God's role as the first cause, and hence ultimate explanation, of the world.<sup>162</sup>

In his *Announcement of the Programme of his Lectures for the Winter Semester 1765-1766*, written in 1765, Kant offers the same positive assessment of his earlier works. He begins by endorsing the method for metaphysics laid out in the *Prize Essay*.<sup>163</sup> But here, he claims that this has been his method for some time,<sup>164</sup> suggesting perhaps that, in Kant's mind at least, the approach to metaphysics presented there does not represent a major break from the *New Elucidation*. Finally, in his plan for his upcoming metaphysics lecture, Kant announces his intention to conclude by an examination of God's existence and his role as the first cause. It seems likely that Kant will here offer much the same position as that found throughout his prior works.

Kant's ambivalence, however, does not appear to have lasted long.<sup>165</sup> In his *Dreams of a Spirit-Seer*, Kant expresses a clear skepticism regarding the possibility of metaphysical certainty. Thus we find Kant proclaiming a new-found liberalism:

I have purified my soul of prejudices; I have eradicated every blind attachment which may have insinuated itself into my soul in a surreptitious manner with a view to securing an entry for a great deal of bogus knowledge. Now, whether or not it confirms or cancels my previous judgements, whether it determines me or leaves me undecided, nothing is important or venerable for me except that which, having followed the path of honesty, occupies its place in a tranquil mind open to any argument.<sup>166</sup>

In keeping with these remarks, we also find Kant professing his own ignorance concerning many traditional metaphysical problems<sup>167</sup> and rejecting the traditional approaches of both rationalism and empiricism.<sup>168</sup> And though Kant still holds out hope that we may attain metaphysical knowledge, his remarks are clearly more guarded:

Metaphysics, with which, as fate would have it, I have fallen in love but from which I can boast of only a few favors, offers two kinds of advantages. The first is this: it can solve the problems thrown up by the inquiring mind, when it uses reason to spy after the more hidden properties of things. But hope is here all too often disappointed by the outcome. And, on this occasion, too, satisfaction has escaped our eager grasp ... The second advantage of metaphysics is more consonant with the nature of the human understanding. It consists both in knowing whether the task has been determined by reference to what one can know, and in knowing what relation the question has to the empirical concepts, upon which all our judgements must at all times be based. To that extent metaphysics is a science of the *limits of human reason*.<sup>169</sup>

In some ways these remarks seem to anticipate Kant's position in the *Inaugural Dissertation* where he claims that there are two different types of cognition, intelligible and sensible, the first of which tells us about things in themselves and the second of which tells us about objects as they appear to us in experience.<sup>170</sup> Interestingly, though, Kant also appears to move beyond the *Dissertation* position towards his critical doctrines that all knowledge begins with experience<sup>171</sup> and that metaphysics, properly understood, concerns the limits of our cognition.<sup>172</sup>

Regardless, it is clear that by the time of the *Dreams* essay, Kant has grown far more wary of metaphysical speculation. Perhaps, to some degree, this is simply an unavoidable consequence of his increasing reliance on a posteriori reasoning and empirical confirmation. As we have seen, this certainly placed a considerable amount of strain on Kant's analytic approach to metaphysics. Yet, in the *Prize Essay* and in his *Announcement*, Kant seems to believe that he has reached a satisfactory solution: though we can achieve metaphysical knowledge through a priori analysis, our dependence on subjective concepts requires that we confirm our beliefs by appeal to experience. It seems, then, that Kant's skepticism cannot be fully explained by his budding empiricism. Nor does it seem likely that, at this point, Kant has already stumbled upon his argument from incongruent counterparts. In the fifty-six pages which make-up the *Dreams* essay, Kant never once mentions the metaphysical status of space. We are left, then, with a gap to fill. Sometime between 1764 and 1766 Kant's doubts about the possibility of metaphysics had increased dramatically. What I would like to suggest is that we can fill this gap by examining Kant's discussion of freedom and morality during this period.

#### **3. Freedom and Morality**

In Kant's lectures on ethics from around 1762-4, we get the first hint that something is troubling Kant about his *New Elucidation* theory of freedom. Though the bulk of these lectures are concerned with expounding Kant's nascent ethical theory, there is one key passage, early on in his course, where Kant turns his attention to the metaphysical implications of his views:

Morally good actions must be directed to a physical good, but not measured by this. Physically good actions are always indifferent; they may be free effects, or necessary ones, for the good lies in the effect, and is measured by the consequences; the good is no greater than the effect. But morally free actions have a goodness which is assessed, not by the effect, but by the (free) intent; otherwise, the morally good would be less than the physically good.<sup>173</sup>

Here, freedom is understood by contrast with necessity. Our actions are either free or necessitated, but not both.

It is especially important here to note the context of Kant's remarks. Kant's rejection of his earlier compatibilism is found in the midst of his discussion of the nature of morality. Kant is trying to answer the question of what makes our actions morally good. His answer is the same one he gives twenty-three years later in the *Groundwork of the Metaphysics of Morals*: morally good actions are those for which the agent had the right intention.<sup>174</sup> And to have the right intention, we must form it freely.

In his course on metaphysics during that same year, however, Kant's position is quite different. There he argues, reminiscent of one of his earlier arguments against incompatibilism, that there is no such thing as indeterminate freedom: there is a sufficient reason for every action since otherwise our actions would be the product of chance.<sup>175</sup> It seems, then, that Kant is of two minds. When he is discussing metaphysics, he falls back on the PSR and so rejects the possibility of an indeterminate freedom. Yet when he turns his attention to ethics, he finds that he can no longer accept that our actions are both free and necessitated. Morality requires that we be able to do otherwise than we do and this implies that our actions are not determined.<sup>176</sup> Kant's moral theory implies that, when we are morally obligated to perform an action, our actions are not part of a causal chain stretching into the distant past. And so the PSR is false. Metaphysically, however, this is not a consequence Kant is ready to accept.<sup>177</sup>

This inconsistency is out in the open in *The Only Possible Argument*. At times, Kant is willing to admit that indeterministic freedom is, at least, a possibility.<sup>178</sup> As a consequence, Kant is willing to admit that it is also possible that this is not the best of all possible worlds since our free actions may well deviate from what God would have us do

and what we would do in a perfect world.<sup>179</sup> At the same time, however, Kant continues to endorse the PSR and to argue, as he had before, that this principle implies that this is the best possible world after all.<sup>180</sup> Similarly, in the *Negative Magnitudes* essay, Kant claims that, when we fail to do what we should, it is not because our actions are not determined, but rather because our moral desire to do what is right is cancelled by some opposing desire. The struggle within ourselves over what to do is an internal conflict involving a real opposition of motives and not a moment of deliberation and hesitation awaiting our free and indeterministic choice.<sup>181</sup>

By the time of the *Prize Essay*, Kant has apparently come to recognize his own inconsistency and, consequently, to admit his inability to provide a plausible account of freedom.<sup>182</sup> Simultaneously, while he admits that he is only in the early stages of developing a moral theory, Kant also argues for what will be one of the defining features of his mature theory:

The fundamental principles of morality in their present state are not capable of all the certainty necessary to produce conviction. In order to make this claim clear I shall merely show how little even the fundamental concept of obligation is yet known, and how far practical philosophy must still be from furnishing the distinctness and the certainty of the fundamental concepts and the fundamental principles which are necessary for certainty in these matters. The formula by means of which every obligation is expressed is this: one ought to do this or that and abstain from doing the other. Now, every ought expresses a necessity of the action and is capable of two meanings. To be specific: either I ought to do something (as a means) if I want something else (as an end), or I ought immediately to do something else (as an end) and make it actual.<sup>183</sup>

From this Kant infers that our moral obligations cannot be based on our contingent desire to obtain some particular end. If they were, then our moral obligations would be contingent as well and the moral law would be reduced to "a formula of problematic skill," which tells us what we ought to do to fulfill our desires.<sup>184</sup>

Such remarks are clearly reminiscent of Kant's later discussion in the *Groundwork* of the nature of moral obligation and the distinction between hypothetical and categorical imperatives.<sup>185</sup> Granting that Kant is progressing towards the ethical theory of the *Groundwork*, then, we would expect to find him looking at his earlier metaphysical views with heightening suspicion. So long as Kant accepts AT' and the PSR, his moral theory, which rests on a firm incompatibilist foundation, will be inconsistent with his metaphysics. And so, to accept the critical ethics, Kant must reject his pre-critical metaphysics.

This is precisely what Kant does in the *Dreams* essay. And along with his metaphysical skepticism, we also find Kant's continued progression towards his critical ethics. Foreshadowing his later discussion of the kingdom of ends in the *Groundwork*, Kant speculates that, in addition to our physical communities, we all live within a spiritual community. As such, we are all subject to the general will of this community from which our moral obligations arise.<sup>186</sup> But again, to be moral, we must be free from prior determination or necessitation. Given the primitive status of the causal relation, however, Kant concludes that all we can positively say about our freedom is that we are able to cause things to happen: "I know, of course, that thinking and willing move my body, but I can never reduce this phenomenon by means of analysis; hence, I can recognize the phenomenon but I cannot understand it."<sup>187</sup> The exercise of a free will is, then, at bottom a mystery, yet no more so than any other instance of causation. But

despite the fact that my freedom can be understood as easily, and as poorly, as the connection between the most common physical events, the demands of morality require a new approach to metaphysics. Despite his general rationalist inclination towards an analytic theory of truth and the PSR, by 1766 Kant has come to realize that he cannot have it both ways. And it seems that in a clash between Kant's metaphysics and his ethics, the former must give way.

But why? The answer, it seems, lies in Kant's reassessment of his philosophical priorities. Kant's earliest works, from the *New Elucidation* through *The Only Possible Argument* and the essay on *Negative Magnitudes*, had focused almost exclusively on providing a metaphysical framework consistent with the basic premises of natural science. But in the *Prize Essay*, Kant was forced to begin to consider the proper method of metaphysics alongside fundamental questions about the nature and possibility of ethics as a discipline. As we have seen, in his initial response, Kant was torn, as he had been earlier in his separate lectures on the subjects. By the time of *Dreams of a Spirit-Seer*, however, Kant has made up his mind. But this does not indicate that Kant has come to see the error of his metaphysical commitments in particular, much less refute them. There is no discussion of his earlier analytic theory of truth.<sup>188</sup> There is no discussion of the PSR.<sup>189</sup> Instead, we find Kant stressing the importance of ethical over metaphysical considerations and urging us to make room in our metaphysical theories for moral faith:

... it seems more consonant with human nature and moral purity to base the expectation of a future world on the sentiments of a nobly constituted soul than, conversely, to base its noble conduct on the hope of another world. Such is also the character of the *moral faith*: its simplicity is able to dispense with many of the

subtleties of sophistry; it alone and uniquely is fitting to man in whatever situation he finds himself, for it leads him directly to his true purposes. Let us, therefore, leave all these clamourous theories about such remote objects [i.e. spirits] to the speculation and care of idle minds. These theories are, indeed, a matter of indifference to us. And although the fleeting illusion of reasons for or against may perhaps win the applause of the schools, it will scarcely decide anything relating to the future fate of people of honest character. Nor has human reason been endowed with the wings which would enable it to fly so high as to cleave the clouds which veil from our eyes the mysteries of the other world. And to those who are eager for knowledge of such things and who attempt to inform themselves with such importunity about mysteries of this kind, one can give this simple but very natural advice: that it would probably be best *if they had the good grace to wait with patience until they arrived there*.<sup>190</sup>

Though we cannot offer metaphysical proof, we know that we must obey the moral law. And so we can infer that our actions are the result of our own free will and that there is a future world where we will be justly rewarded or punished for our deeds in this life.<sup>191</sup>

# 4. Conclusion

The significance of this change in priority should not be underestimated. In the years to come, Kant consistently asserts this priority of practical over theoretical reasoning. Thus, for example, in his lectures on metaphysics from the mid-1770's Kant writes: "The main point is always morality: this is the holy and unassailable, what we must protect, and this is the ground and the purpose of all our speculations and investigations."<sup>192</sup> And it is this sentiment which leads Kant, in the *Critique of Pure Reason*, famously to declare that he "had to deny knowledge in order to make room for faith"<sup>193</sup> and, in the *Critique of Practical Reason*, to claim that we must accept all propositions which "belong inseparably to the practical interest," even if we can offer no theoretical argument in their support.<sup>194</sup> From this point on, the fundamental aim of philosophy, for Kant, is to secure
our faith in the moral law and to establish its demands. Thus, if there is any place for the PSR in Kant's critical philosophy, it must be within the confines which theoretical reason allows and which practical reason provides.

### **CHAPTER 5**

### The Principle of Sufficient Reason and the "Third Antinomy"

We are now, finally, ready to turn to Kant's discussion of the "Third Antinomy" in the *Critique of Pure Reason*. As I outlined in the introduction, there are two basic problems which any would-be interpreter must face. First, there is the surprisingly difficult question of just what Kant's argument for the antinomy is supposed to be. Given the conclusion reached in the "Second Analogy" that every event has a cause, it is clear why Kant is committed to this claim in the antithesis of the antinomy. Further, since the thesis claims that, to the contrary, there must be a first cause of everything that has happened, it seems more than likely that Kant is offering some version of the cosmological argument in support of the thesis. Yet, given the obscurity of Kant's statement of the argument, this seems to be nothing more than an educated guess, though one that is understandably common among interpreters.

Second, there is the clear gap between Kant's statement of the antinomy and the obvious moral focus of his solution. The antinomy consists in the supposed fact that we have equally compelling arguments for the contradictory claims of the thesis and antithesis. Here this does not appear to be the case. If the thesis argument is, in fact, some version of the cosmological argument, then Kant cannot expect us to take it too seriously. After all, he denounces this argument explicitly in section five of "The Ideal of Pure Reason."<sup>195</sup> But even if we take this argument to offer us some compelling reason to accept the existence of a first cause, it seems that Kant should adopt the modest solution that, since every phenomenal event must have a cause, we can only say for sure that such a first cause cannot be found in the phenomenal world. Since such an event would be necessarily beyond our experience, however, we cannot say for sure that there is such a

thing without engaging in transcendent metaphysics. This is what Kant should say. As often happens, though, we find that Kant does not offer the clear Kantian response. Instead, his discussion centers on the fact that we are the first causes of our actions and that this is why we are responsible for what we do. It is a deep mystery how, if at all, this discussion of morality is supposed to offer a solution to a cosmological antinomy.

To overcome these interpretive problems, I have proposed that we try to place this discussion within the context of Kant's pre-critical development. My hypothesis is that the "Third Antinomy" is no antinomy at all. To be sure, there have been repeated and impressive attempts to argue, separately, for both sides of this conflict. It is natural, then, that Kant thought of this issue as involving some sort of conflict of reason with itself. And this, perhaps, explains why Kant cast his discussion in this form. But, by the time of the *Critique of Pure Reason*, Kant could not have believed that there was any cogent argument for the existence of a first cause.

Instead, I contend that Kant's discussion of this supposed antinomy is an excuse for Kant to go back over his own changing views on the status of the PSR and its relation to his theory of freedom. As such, the thesis presents us with Kant's earliest view in which Kant accepted the PSR and, as we have seen, its rather implausible moral implications. With time, however, Kant came to reject this view and he did so, in no small part, as a consequence of his recognition of these implications. For Kant, then, the status of the PSR was always connected to his ethical theory. There was no doubt in Kant's mind that we are responsible for what we do. If this means that we must be free in some incompatibilist sense, as Kant came to believe in the 1760's, then the PSR must be false.

Yet Kant was not quite ready to give up on the PSR altogether. And so, in the *Inaugural Dissertation*, we find Kant offering a revised and downgraded version of the principle. The PSR is now treated as a principle of harmony, or what he would later call a

regulative principle of pure reason, which helps to guide us in our investigations and to provide our theories of the world with systematic unity. It is unclear, though, at this early date, what relation this regulative version of the PSR has to Kant's theory of freedom. For this, we need to look to Kant's solution in the "Third Antinomy." I am arguing that Kant's description of moral agents as first causes of their actions in this solution is intended to shed some light on this issue by showing that, though the PSR still has no legitimate role to play as a constitutive principle in our theoretical reasoning, we can be sure that its status as a regulative principle in our investigations is not jeopardized by our freedom. Understood in this way, Kant's solution to the antinomy presents a compromise between his long standing desire to find some legitimate role for the PSR and his, now, nearly two decade old commitment to an incompatibilist theory of freedom.

My argument is divided into five sections. In the first, I briefly discuss Kant's distinction between practical and transcendental freedom in order to get clear about the relevant sense of freedom at work in the "Third Antinomy." In the second and third, I discuss the two most prevalent interpretations of the thesis argument and I argue that each of these fails in important respects. In the fourth section, I turn to my own interpretation of this argument as a simple cosmological argument which, though shrouded in Kant's unique terminology, can be seen to rely, quite explicitly, on the PSR once this shroud is lifted. Finally, in the fifth section, I examine Kant's solution to the antinomy as a statement of his new critical position regarding the relation between human freedom and the PSR.

# 1. Practical and Transcendental Freedom

The key to understanding the critical development of Kant's theory of freedom is the distinction between practical and transcendental freedom.<sup>196</sup> Kant's discussion of the

former in the Critique clearly recalls his earlier compatibilist theory of freedom from the

# New Elucidation:

Practical freedom can be proved through experience. For it is not merely that which stimulates the senses, i.e., immediately affects them, that determines human choice, but we have a capacity to overcome impressions on our sensory faculty of desire by representations of that which is useful or injurious even in a more remote way; but these considerations about that which in regard to our whole condition is desirable, i.e., good and useful, depend on reason.<sup>197</sup>

It seems, then, that practical freedom consists of being able to overcome immediate desires in favor of long-range goals based on a general consideration of what is good or useful. We know that we are practically free because we know that many of our actions are motivated by just this sort of reasoning.

So far this is perfectly consistent with the *New Elucidation* account. We are free in this practical sense because we are not pushed around by our immediate desires. Instead we act based on reasons which reflect our values and goals. Further, this is compatible with the possibility that all of our actions are determined:

But whether in these actions, through which it prescribes laws, reason is not itself determined by further influences, and whether that which with respect to sensory impulses is called freedom might not in turn with regard to higher and more remote efficient causes be nature –in the practical sphere this does not concern us, since in the first instance we ask of reason only a precept for conduct; it is rather a merely speculative question, which we can set aside as long as our aim is directed to action or omission.<sup>198</sup>

And so the question concerning our practical freedom is an empirical question which can be answered by an investigation of our reasons for action regardless of whether these reasons themselves are determined according to natural laws.

In fact, in the *Critique*, Kant subscribes to a full-blooded psychological determinism according to which every mental event of which we could have any knowledge is determined by some prior mental event(s):

Thus every human being has an empirical character for his power of choice, which is nothing other than a certain causality of his reason, insofar as in its effects in appearance this reason exhibits a rule, in accordance with which one could derive the rational grounds and the actions themselves according to their kind and degree, and estimate the subjective principles of his power of choice. Because this empirical character itself must be drawn from appearances as effect, and from the rule which experience provides, all of the actions of the human being in appearance are determined in accord with the order of nature by his empirical character and the other cooperating causes; and if we could investigate all the appearances of his power of choice down to their basis, then there would be no human action that we could not predict with certainty, and recognize as necessary given its preceding conditions.<sup>199</sup>

We are practically free because we can act on the appropriate kinds of reasons and this is compatible with the supposed fact that all of our actions are determined, as is the whole of our mental lives.<sup>200</sup>

Contrary to his discussion in the *New Elucidation*, however, Kant now rejects practical freedom as a sufficient condition for free agency.<sup>201</sup> Instead moral responsibility requires the existence of transcendental freedom:

The transcendental idea of freedom is far from constituting the whole content of the psychological concept of that name, which is for the most part empirical, but constitutes only that of the absolute spontaneity of an action, as the real ground of its imputability...<sup>202</sup>

Transcendental freedom differs from practical freedom, then, insofar as it consists of an "absolute spontaneity" which is incompatible with a thoroughgoing determinism. Hence Kant's commitment to phenomenal determinism implies that, if such an absolute spontaneity exists at all, it is a type of noumenal causality.<sup>203</sup>

As this passage makes clear, the difference between Kant's early pre-critical and critical theory of freedom is that the latter recognizes transcendental freedom as a necessary condition for accountability. We are responsible for our actions only insofar as we are transcendentally free. This shift, as we have seen, is a necessary consequence of Kant's rejection of compatibilism. If freedom requires the ability to do otherwise and all of our actions are determined, at least as far as we are aware, then we can only be free if we have some ability to act of which we are not aware. This noumenal ability must involve an absolute spontaneity which cannot exist among phenomenal events, i.e. it must involve transcendental freedom.

#### 2. The Thesis Argument and the Schopenhauer Interpretation

In the thesis of the 'Third Antinomy,' Kant argues that there are at least two types of causality, a causality in accordance with the laws of nature and a causality of freedom. The former Kant identifies as the causality between events such that "everything that happens presupposes a previous state, upon which it follows without exception according to a rule."<sup>204</sup> That this state must itself be an event, Kant concludes from the following argument:

But now the previous state itself must be something that has happened (come to be in a time when it previously was not), since if it had been at every time, then its consequences could not have just arisen, but would always have been. Thus the causality of the cause through which something happens is always something that has happened...<sup>205</sup>

Kant is here assuming that if A causes B, then the existence of A is sufficient for the existence of B. Hence it follows that if A has always existed, then, likewise, B has always existed and so would not be something that happens at some given time, i.e. an event. And so if B is an event, then A is as well.

In contrast, Kant describes the causality of freedom as "an absolute causal

spontaneity beginning from itself a series of appearances", i.e. transcendental freedom.<sup>206</sup>

Bearing this in mind, we can state the argument of the thesis as a reductio ad absurdum

in favor of the existence of such causality:

1) Assume that every event is caused by some previous event according to a rule.

2) This implies that there is an infinite regress of such causally related events.

3) But this is impossible since "the law of nature consists just in this, that nothing happens without a cause sufficiently determined *a priori*."<sup>207</sup>

4) Hence there must be another causality that satisfies the law of nature.

5) This can only be a causality of freedom.

The greatest obstacle to understanding this argument is finding a suitable interpretation of "the law of nature." What could it possibly mean for a cause to be sufficiently determined a priori? And why do the events in this regress fail to satisfy this criterion?

Arthur Schopenhauer, in *The World as Will and Representation*, was the first to offer what is perhaps the most common interpretation of this argument. It is worth quoting his response in full:

The argument for the third thesis is a very subtle sophism, and is really Kant's pretended principle of pure reason itself entirely unadulterated and unchanged. It attempts to prove the finiteness of the series of causes by saying that, to be *sufficient*, a cause must contain the complete sum of the conditions from which the following state, the effect, results. For this completeness of the determinations *simultaneously* in the state or condition that is the cause, the argument now substitutes the completeness of the *series* of causes by which that state itself first arrived at actuality; and because completeness presupposes a state of being closed in, and this again presupposes finiteness, the argument infers from this a first cause closing the series and therefore unconditioned. But the juggling is obvious. In order to conceive state A as a sufficient cause of state B, I assume that it contains the completeness of the determinations necessary for this, from whose existence state B inevitably ensues. In this way my demand on it as a *sufficient* cause is entirely satisfied, and that demand has no direct connexion with the question how state A itself arrived at actuality.<sup>208</sup>

The argument here proceeds as follows. Let us assume that state A causes state B. There is a principle of pure reason that tells us that if A, by itself, causes B, the existence of A must be sufficient to cause the existence of B.<sup>209</sup> Kant's mistake is to infer from this that

A cannot cause B unless it either does so spontaneously or A itself is the result of a causal series which, because it must be complete, has a first member. But A might be a sufficient cause of B even if A is itself uncaused. Hence there is no reason to assume that there is such a series of events which result in A, and *a fortiori* there is no reason to assume that this series must be finite. If Schopenhauer's interpretation is correct, then Kant's argument depends on a confusion between the supposed tautology that A by itself can only cause B if A is sufficient to cause B and the dubious principle that A can only cause B if A is itself uncaused or is the result of a causal series which has an uncaused first member.<sup>210</sup> On this reading, then, 'the law of nature' stands for two distinct principles and Kant is guilty of equivocating between them.<sup>211</sup>

Fortunately for Kant, there are two severe deficiencies in Schopenhauer's interpretation. First, it is not consistent with the problem as Kant states it. According to Schopenhauer, Kant's mistake is the result of a confusion between a legitimate principle concerning what it takes for one state to be sufficient to cause another and an illegitimate one. Both principles, then, are supposedly concerned with the conditions necessary for a cause to determine its effect sufficiently. But, as Jonathan Bennett has noted, Kant does not claim that such an infinite regress leads to an insufficiently determined effect. Instead, it is the cause which is not sufficiently determined a priori.<sup>212</sup> Thus, unless Kant is simply confused as to where the purported problem lies, neither of these principles is equivalent to the law of nature.

Second, though Kant would indeed be making a mistake if he thinks that such an infinite causal series violates the "principle of pure reason" as Schopenhauer formulates it, this is not the principle Kant has in mind. Instead, the function of pure reason, as Kant discusses it in "The Antinomy of Pure Reason," is to seek an explanation for every fact:

... a speculative interest of reason is expressed on [the side of the thesis in the antinomies] too. For if one assumes and employs the transcendental ideas in such a way, then one can grasp the whole chain of conditions fully *a priori* and comprehend the derivation of the conditioned, starting with the unconditioned, which the antithesis cannot do; this gives [the antithesis] a bad recommendation, since it can give no answers to questions about the conditions of their synthesis that do not leave something out, and with its answers further questions without any end are always left over.<sup>213</sup>

Thus reason has an interest in the conclusion of the theses precisely because each of them posits such an unconditioned in terms of which every further fact can be explained. In terms of causal explanations, it is Kant's contention that reason can only be satisfied if there is a first cause that requires no further explanation. Leaving aside for the moment what leads Kant to this conclusion, it should be noted that reason can only expect to fulfill this function if it assumes the principle that "if the conditioned is given, then the whole sum of conditions, and hence the absolutely unconditioned, is also given, through which alone the conditioned was possible."<sup>214</sup> But, according to Kant, it is this principle that motivates each of the theses in the antinomies.

Now it remains to demonstrate the connection between this principle and the law of nature in the thesis. But it should be apparent that this principle of pure reason regarded in terms of its function is not the same as the principle of pure reason as Schopenhauer understands it. That these two principles are distinct can be seen from the following. Let us assume that a state A causes another state B where i) the existence of A entails, given the relevant laws of nature, the existence of B and where ii) there is no explanation for the fact that A occurs. In this case, Schopenhauer's principle is satisfied by (i). Obviously, however, (ii) would be unsatisfactory for a reason that assumes and seeks an explanation for every fact.

To sum up, the Schopenhauerian interpretation is unsatisfactory on two counts. First, it confuses the problem of an insufficiently determined cause with that of an

insufficiently determined effect. Hence a satisfactory interpretation of "the law of nature" must explain why a cause which is itself a member of an infinite series of causes violates this law. Second, Schopenhauer identifies the law of nature with a principle of pure reason which has no connection with the function of pure reason as Kant understands it in the chapter on the antinomies. Hence a satisfactory interpretation must also shed some light on the connection between a sufficient determination a priori and a complete explanation of every fact.

#### 3. The Al-Azm Interpretation

In *The Origin's of Kant's Arguments in the Antinomies*, Sadik J. Al-Azm articulates another popular interpretation of the thesis argument.<sup>215</sup> Though Al-Azm does not offer any explicit interpretation of "the law of nature," it is apparent from his analysis that he distinguishes this law into two distinct propositions:

(P1) A state C can cause another state E only if it "contain[s] in itself, a priori, the complete and sufficient explanation" of  $E^{216}$ 

and

(P2) A complete explanation is "one in which the enumeration of the explanatory conditions can be 'brought to a conclusion in a finite and assignable time'."<sup>217</sup>

Unfortunately, this interpretation can only help us if we can understand what it would mean for state C to contain in itself, a priori, the complete and sufficient explanation of E. At first, this only appears to replace one obscure phrase with another.

If we examine Al-Azm's use of these two principles, however, his meaning becomes clear enough. According to Al-Azm, if we assume that this is the correct interpretation of "the law of nature," then the rest of the thesis argument follows without much fanfare. If

every event is caused by some prior event, then, as we have seen, there must be an infinite series of causally related events. So let us assume that there is some event E that is caused by some event C where C itself is caused by some further event and so on ad infinitum (assuming of course that we can follow Kant's lead and replace 'states' with 'events' in our argument). According to Al-Azm, the key assumption of the thesis is that such a causal series is impossible since we could no longer give a complete and sufficient explanation of E. This is because a sufficient explanation of E must include all of the events that played some role in bringing E about. Thus such an explanation must mention the event C that caused E and the event that caused C and so on ad infinitum. But such an explanation obviously cannot be complete since completeness requires that the explanation can be stated in some finite amount of time.<sup>218</sup>

Apparently, then, C contains in itself, a priori, the complete and sufficient explanation of E if and only if we can give an explanation of E in some finite amount of time that includes every event, such as C, which played some role in bringing E about. Since such an explanation can only be given if there are a finite number of such events in the series of events which constitute the causal history of E, this series must have a first member which is itself uncaused, i.e. there must be an event which spontaneously gives rise to the series of events culminating in E. But this is the thesis of the antinomy. Thus, according to Al-Azm, Kant establishes this thesis by assuming that an event C cannot cause an event E unless there is such a complete and sufficient explanation of E.

It must be acknowledged that there is some textual support for Al-Azm's interpretation. For example, Kant concludes his argument for the thesis with the claim that, in addition to the causality of nature, there must be an absolute spontaneity "without which even in the course of nature the series of appearances is never complete on the side of the causes."<sup>219</sup> In his solution to the "Third Antinomy," Kant claims that reason posits such a spontaneous first cause since otherwise the causal series would lack "totality":

... it is a universal law - even of the possibility of all experience - that everything that happens must have a cause, and hence that the causality of the cause, as itself having happened or arisen, must in turn have a cause; through this law, then, the entire field of experience, however far it may reach, is transformed into the sum total of mere nature. But since in such a way no absolute totality of conditions in causal relations is forthcoming, reason creates the idea of spontaneity...<sup>220</sup>

Now by a totality of conditions, Kant means the complete set of causes for some given effect, where this set includes the immediate cause of the effect, the cause of the immediate cause, the cause of the cause of the immediate cause, and so on.<sup>221</sup> Hence, according to this passage, reason assumes that there must be a first cause since otherwise this causal series would somehow lack completeness.

In order to understand why such a series would lack completeness, we should note that Kant's point here about the incompleteness of the infinite causal series bears remarkable resemblance to an earlier claim he made in the thesis argument of the "First Antinomy." According to that argument, space and time, each of which is the product of a synthesis of spatial and temporal parts respectively, cannot be infinite since a synthetic series requires completeness.<sup>222</sup> Clearly, this argument depends on the premise that the product of an act of synthesis must be a finite whole and hence complete in the Kantian sense. Granted that Kant makes this assumption in the thesis of that antinomy, it seems reasonable to assume, along with Al-Azm, that Kant is pursuing a similar line of argument in the thesis here. Indeed, in the remarks above, Kant does appear to conceive of the argument of the thesis as making just this point concerning the incompleteness of

an infinite series. On this interpretation, then, the argument of the thesis expresses a demand of reason for completeness that Kant assumes cannot be satisfied by an infinite series of any kind.

I do not doubt that Kant rejects the possibility of an infinite series because of its inherent incompleteness. Nor do I doubt that the thesis argument, motivated by the principle of pure reason, is concerned with the type of explanation that we can expect from such a series. Yet I cannot conclude, along with Al-Azm, that Kant dismisses such a series simply because it would not allow us to give a finite explanation. This is tantamount to claiming that an infinite series is not possible merely because it is not finite. Such an argument begs the question. Instead, if there is an argument to be found, we must discover why Kant holds that every explanation must be complete and hence finite.

The similarities between the thesis arguments of the two antinomies may lead us to think that there is a similar problem involved in the incompleteness of the causal series and the incompleteness of an infinite space and time discussed in the "First Antinomy." The thesis argument here, however, cannot be analogous to that of the earlier antinomy. In the "First Antinomy," the conclusion that space and time cannot be infinite is apparently motivated by the fact that Kant regards both space and time as the product of a synthesis that we perform. This is obviously connected with the conclusion from the "Transcendental Aesthetic" that space and time are merely the forms of our intuition. As such, the argument for this thesis assumes Kant's distinction between the phenomena which occur in space and time and the noumenal objects considered apart from our forms of intuition.<sup>223</sup> Without going into the details of either this view or this distinction, though, we can nevertheless see that the thesis argument of the "First Antinomy" just amounts to the claim that space and time, as the product of a synthesis which we perform, cannot be infinite since we cannot synthesize an infinite number of spatial and temporal parts into a complete whole.

Regardless of the merits of this claim, however, we cannot accept an analogous argument in support of the thesis of the "Third Antinomy." According to such an argument, the causal series which lies behind any event would be the product of a synthesis which we perform. And so, before we perform this synthesis, these causes simply do not exist. They do not exist now nor have they existed at some point in the past. Thus, for example, when I see a baseball break a window and I begin to wonder what caused this to happen, I begin a process, according to this interpretation, that creates the very causes I am attempting to discover. But this makes no sense. It cannot be true that events are caused by prior events where these causes do not exist until after the effect. The breaking of the window cannot be caused by an event that has yet to occur.<sup>224</sup>

Al-Azm, however, does not claim that Kant rests his argument on the synthetic nature of the causal series. Instead, as was observed above, he claims that Kant simply regards an infinite causal series as prohibiting a sufficient causal explanation. Presumably, then, a sufficient causal explanation of some event E must cite every event that had any role in bringing E about regardless of how indirect or temporally remote. Hence it must cite the cause of E, the cause of the cause of E, and so on. Now if E is the result of an infinite causal series and each citation takes some reasonable amount of time, then this explanation will take forever. According to Al-Azm, however, Kant holds, perhaps for practical reasons, that such an infinitely long explanation is insufficient.

But this leaves us with two questions. First, why should we think that the argument of the thesis concerns an insufficient explanation? Al-Azm seems simply to assume that a cause sufficiently determined a priori is one that allows us to provide a causal history of the effect in some finite amount of time. Given Kant's earlier discussion of totality and completeness with regard to the synthesis of space and time, why should we think that he is here referring to the incompleteness of the causal explanation and not the incompleteness of the causal series? If he is referring to the latter, then the argument, flawed as it might be, can proceed based on the supposedly necessary incompleteness of an infinite series regardless of what kind of causal explanations we may be able to offer. Al-Azm, however, offers us no reason to think that Kant is here referring to the former, and there is certainly no prima facie reason for thinking that a sufficient determination has anything to do with a sufficient explanation in this sense.

In this regard, then, Al-Azm's interpretation suffers from the same defect that we discovered in Schopenhauer's account. Presumably the law of nature is connected in some way with the principle of pure reason that Kant claims is the principle at work in each of the thesis arguments. Schopenhauer and Al-Azm, though offering us different interpretations of this law, both fail to explain what this connection is. In addition we can see that, as Al-Azm understands the law of nature, it does not follow from this principle of pure reason. Even if reason must assume that there is some unconditioned event or first cause which gives rise to every causal series, we cannot infer from this that there can

only be a finite number of events between this first cause and some later effect. And so, the connection between this principle and the need for a sufficient explanation as Al-Azm describes it remains a mystery.

Second, why should we think that the causal history of some event has anything to do with whether we could give an explanation of this event in some finite amount of time? Let us assume that every event is caused by some prior event ad infinitum. If Al-Azm's interpretation is correct, then Kant's argument amounts to the claim that such a state of affairs is impossible simply because we could not list each of these events in some finite amount of time. But this is just to say that such-and-such could not have happened because it would take me too long to tell you about it. Few would believe such an argument. This interpretation again provides us with too easy a solution to the antinomy. If we accept the Al-Azm interpretation, then Kant's argument rests on an equivocation between causation and explanation and should be dismissed without much ado. Though I am willing to admit that Kant is unclear, at best, about what his argument is, I am not ready to concede that he really has no argument at all.

### 4. The Law of Nature and the Principle of Sufficient Reason

From the discussion above, it is clear that a satisfactory interpretation of "the law of nature" must meet two conditions. First it must explain the connection between the principle of pure reason understood in terms of its speculative function and the law of nature in Kant's argument. As the speculative function of reason is to seek an explanation for every fact, this law of nature must be concerned with explanation. Yet as we saw above, it is far from clear that we can draw any legitimate inferences about infinite causal

series and sufficient determination from an argument based on the incomplete explanation such a series offers. This problem leads us to the second condition. Granted that this law must have something to do with explanation, a satisfactory interpretation of this law must explain why a cause that belongs to an infinite causal series violates this law and how this leads reason to judge that such a series is impossible.

The key to solving both of these problems lies in Kant's formulation of the PSR in the *New Elucidation.* It is my contention that the argument of the thesis relies on this principle and hence that it is the law of nature to which Kant is appealing. My argument here is twofold. First, I argue that there is significant textual support for this interpretation once the argument of the thesis is placed in the context of Kant's earlier discussions of the PSR. Though this does give us good reason for interpreting the thesis argument along these lines, it is, perhaps, not conclusive evidence that this is the argument which Kant was making. I have already noted that, at various points in his discussion, Kant himself conceives of his argument as simply relying on the fact that an infinite series lacks completeness or totality. Understood this way, the argument merely claims that every series must be complete and that, since completeness implies finiteness, there cannot be an infinite series of any kind. Such an argument is far from compelling. Fortunately for Kant, however, it is not the thesis argument. Instead, I argue that we can make sense of the thesis argument if we assume that the PSR and the law of nature are, in fact, the same. My full defense of this interpretation, then, relies on both textual support and its ability to make sense of Kant's discussion.

The law of nature is just the PSR in disguise. And the thesis argument is just another version of the familiar cosmological argument which begins with the premise that there is a contingent a posteriori fact which can only be explained by appeal to the existence of a first cause. To see this, let us start with the linguistic evidence. The problem with the

infinite causal series discussed in the thesis is that it leaves the final cause insufficiently determined a priori. Now this is reminiscent of Kant's talk in the New Elucidation of determining reasons. Of course, this choice of words may be completely unrelated. As we have seen, for example, Schopenhauer and many others since have assumed that determination here refers to causation. But this leaves us with the problem of explaining what Kant could possibly mean by a priori causation. Bennett, following Heinz Heimsoeth, suggests that "the phrase 'a priori,' seems not to carry the Kantian technical sense of 'independently of all experience,' but rather the pre-Kantian sense of 'in advance' or 'independently'."<sup>225</sup> Bennett's suggestion, then, is that we can make sense of Kant's use of the phrase 'a priori' here only if we assume that he has in mind a non-Kantian sense of the phrase. But we need not resort to such drastic measures. 'Determination' is a translation of 'determinante' in the Latin of the New Elucidation and of 'bestimmte' in the German of the *Critique*. If we assume that this translation reflects a consistent meaning in both works, then a sufficient determination a priori for some event is simply a proposition that implies the further proposition concerning the occurrence of this event. Such an explanation is a priori in the typical Kantian sense of 'independently of all experience' insofar as the truth of the one proposition follows analytically from the truth of the other.<sup>226</sup>

This is suggestive, but hardly conclusive. There is further evidence in favor of this reading, though, in Kant's reference to the law of nature which requires such sufficient a priori determination. In Kant's pre-critical lectures, he associates the principles of sound reasoning with laws of nature.<sup>227</sup> More tellingly, in the *Inaugural Dissertation*, Kant specifically claims that the PSR is the first principle of harmony "in virtue of which we suppose that *all things in the universe take place in accordance with the order of nature*."<sup>228</sup> Since the order of nature is presumably a consequence of the laws of nature,

this description seems to indicate that the PSR is the basic law of nature which guarantees that such an order is there to be found. It is, in this sense, the law of nature. If we assume that the law of nature in the thesis argument is the PSR, then we find that Kant's choice of words here connects to his earlier discussions of the PSR. Thus Kant's terminology is strong evidence in favor of this interpretation.

This interpretation gains more plausibility from the fact that it allows us to make sense of the thesis argument. We have already seen that, if the argument of the thesis is connected with the function of reason in Kant's discussion of the antinomies, it must have something to do with reason's dissatisfaction with the explanatory power such an infinite causal series affords. On the assumption that the law of nature is the PSR we can make sense of this connection. Interpreted this way, Kant is claiming that every event cannot be caused by some prior event since this implies an infinite causal series, which violates the PSR. To understand how such a series violates this principle, we need only find some proposition concerning this infinite series which cannot be explained. But this is not difficult to do. In fact, on this interpretation, the argument is a version of the familiar cosmological argument. For the sake of the reductio, Kant assumes that there is some infinite causal series of events. Now each of these events has a cause, and so there is an explanation for the existence of every event in the series. But, ex hypothesi, it is also true that there is an infinite causal series of these events. We cannot, however, explain this fact by reference to any member of the series since it is the fact that there are such members of a series which needs explanation. Hence, according to the PSR, either such an infinite series is impossible or it can be explained by something outside of the series. But, as Kant points out in his preamble to the solution of the antinomy, it is an implicit assumption of the thesis argument that there is nothing outside of this series of events in

time.<sup>229</sup> Thus the thesis argument concludes that such an infinite causal series is impossible and, accordingly, there must be a first member of every causal series.

On this interpretation, the thesis argument rests on two claims, viz. the PSR and the implicit assumption that the explanation for the causal series must lie within the causal series. As noted, Kant takes issue with the latter claim in his solution. But what are we to make of his use of the PSR? It is problematic insofar as it is clear that Kant no longer endorses such a transcendent use of reason by the time of the *Critique*. Simply put, Kant no longer thinks that we can draw any ontological conclusions from reason's need to find explanations. Putting aside this problem until we look at Kant's solution, however, it should be clear that the PSR is a premise that, at least in Kant's mind, lies behind each of the thesis arguments.

The principle of pure reason that, according to Kant, is assumed by each of the thesis arguments, requires that there is an explanation for every fact up to the unconditioned which forms the ultimate basis for every explanation. Yet this principle of pure reason just is the PSR advanced in the *New Elucidation* carried to its logical conclusion. Reason seeks explanations and so it assumes the PSR which says that there is always an explanation to be found. But this assumption leaves open two possibilities. Either there is some ultimate explanation which reason can find or the search must go on endlessly. But the latter leaves reason with no hope of fulfilling its function precisely because the series of explanations lacks completeness. And so reason assumes, again for the sake of fulfilling its function, that every series of explanations culminates in an ultimate explanation, i.e. the unconditioned. Reason does not reject the infinite causal series simply because it is incomplete, as Al-Azm contends, but rather its incompleteness is problematic because it does not satisfy the PSR which reason assumes for the sake of fulfilling its function.

Finally, we should note that this does meet both of the conditions for a satisfactory interpretation. First, there is the obvious connection between the law of nature, here identified with the PSR, and the principle of pure reason. The principle of pure reason simply makes clear what must be true according to the PSR. Second, any cause which belongs to an infinite causal series is "insufficiently determined a priori" and so violates the law of nature insofar as there is no explanation for this entire series of events and, consequently, no ultimate explanation for any of its members.

#### 5. Kant's Practical Solution

In his solution to the "Third Antinomy," Kant's statement of the apparent conflict undergoes a radical transformation:

... thus the difficulty we encounter in the question about nature and freedom is only whether freedom is possible anywhere at all, and if it is, whether it can exist together with the universality of the natural law of causality, hence whether it is a correct disjunctive proposition that every effect in the world must arise either from nature or freedom, or whether instead both, each in a different relation, might be able to take place simultaneously in one and the same occurrence.<sup>230</sup>

Whereas before, the antinomy consisted of the fact that we had equally compelling reasons both to believe and to deny the existence of a first cause, the problem as Kant sees it now is to show that, despite the fact that there is a cause for every phenomenal event, we might still be free in an incompatibilist sense. Kant now wants to show that transcendental freedom is compatible with phenomenal determinism.

To do so, he argues that one and the same event can have two different causes, one phenomenal and one noumenal. We need not concern ourselves with the success of this argument. Kant clearly believes that he has made a compelling case for transcendental idealism and the phenomenal/noumenal distinction it implies. This distinction may or may not allow him to make plausible the *prima facie* inconsistent claim that phenomenal

determinism is consistent with an incompatibilist sense of freedom.<sup>231</sup> Our problem, though, is to explain this transformation in Kant's conception of the antinomy.

My answer to this problem is to suggest that Kant was never really interested in the original problem of the antinomy at all. Since he did not accept either the PSR as a constitutive principle nor the cosmological argument to which it led, his argument in favor of the thesis is, at best, a rehearsal of his pre-critical position for an audience which he knew would be sympathetic to its rationalist underpinnings and, at worst, an attempt to force a loosely related critical problem into the structure of an antinomy in order to satisfy Kant's clear architectonic concerns. I believe that he is doing both. Kant clearly did have architectonic concerns. He wanted to show that there were three different mistakes to which reason might fall prey which corresponded to the three basic types of syllogisms which he recognized and that this second mistake, involving hypothetical judgments, gave rise to four different antinomies involving four of the categories, one each from the general classes of categories presented in Kant's table.<sup>232</sup> But it is also easy to understand why Kant felt the need to discuss this critical problem in the context of this antinomy. Kant knew there were fairly weighty reasons for the existence of a first cause. He had himself argued for the existence of such a first cause in his pre-critical writings. It led him, as we have seen, to accept a compatibilist theory of freedom. But he also knew that others were sympathetic to this line of argument. Kant's early pre-critical compatibilism, though certainly unique, grew out of the Leibnizian-Wolffian tradition which clearly still had a strong influence. But, by the time of the Critique of Pure *Reason*, Kant had become convinced by the argument of the "Second Analogy" that no such first cause could be found in the world of experience. Given his commitment to incompatibilism, Kant also realized that this ruled out the possibility of free and responsible actions so long as we restricted our attention to phenomenal agency. If we are

responsible for what we do, we must be such first causes of our actions. Thus, to show that we could be morally responsible, to make room for faith, Kant needed to show that transcendental freedom was possible despite his conclusion in the "Second Analogy."

It is no great puzzle, then, that Kant connected the two problems in his mind. Architectonically, he could not present the problem as he understood it.<sup>233</sup> Antinomies are supposed to involve conflicts of reason that have occurred throughout the history of philosophy. It is their great history which shows that reason is truly at war with itself. But Kant's critical problem of transcendental freedom was peculiar to his theory of transcendental idealism. Kant believed that we are justified in believing in the existence of first causes, but his reasons are certainly removed from the classical argument for an unmoved mover. Theoretically, Kant argued that we are, in some sense, aware of ourselves as noumenal agents and that, qua noumenal, our actions could not be determined by some prior event since noumena are, according to the "Transcendental Aesthetic," atemporal.<sup>234</sup> But more convincingly, Kant now has at his disposal a powerful practical argument for our own ability to act as original causes in the world.<sup>235</sup> We have seen this argument before. Earlier it led Kant to reject the PSR. Here, however, Kant's commitment to phenomenal determinism adds a new complication. By providing a solution to his own problem, though, Kant realized that he could show that both sides in the classical debate were, in some sense, right. Determinism is true, but only with regard to the world of appearances. This, if we are to believe Kant, opens the door for absolute spontaneity in the world of things in themselves. Presenting his problem in this familiar light, though, afforded Kant a clear advantage insofar as it provided his contemporary readers strong motivation to take his solution seriously.

Beyond its obvious rhetorical use, however, connecting this critical problem with the cosmological argument also allowed Kant to highlight the changes in his own position.

The thesis presents his pre-critical view. But the solution discusses, in-depth, the proper status of the PSR as a constitutive causal principle with regard to phenomena and, in general, as a regulative principle of pure reason. We know that every phenomenal event must have a cause. And so, there is a clear sense in which the PSR has a legitimate application to the world of appearances: since every event must have a cause, there must be a causal explanation for every event. At the same time, however, Kant believed that the PSR could serve another purpose. By the time of the *Inaugural Dissertation*, Kant had come to believe that this principle had a legitimate, though subjective, use, viz. as a regulative principle. To understand the role of the PSR in the "Third Antinomy," then, let us turn briefly to Kant's discussion of the regulative use of reason in the *Critique*.

In this discussion, Kant focuses on reason's role in regulating our empirical investigations. In this role, a regulative principle of reason assists us in our empirical investigations insofar as it "points the way toward systematic unity,"<sup>236</sup> i.e. reason seeks a single principle which somehow organizes all of our knowledge of a given field into a whole.<sup>237</sup> Kant illustrates this by way of an example from physics.<sup>238</sup> Nature appears to present us with a great variety of causal powers. I have the power to move chairs, rivers have the power to wash away their banks, etc. It is a basic assumption of physics, however, that all of these sundry powers can be explained in terms of certain basic physical powers. This assumption leads us to look for ever more fundamental causal powers in the hope of finding one such power from which all of the others are somehow derived. This is an example of the regulative use of reason insofar as we are searching for a principle concerning a fundamental power from which we can derive an explanation for the variety we find in nature. Thus we assume that there is a unity to be found and this assumption allows us to find evidence that corroborates our assumption.

We can do the same with regard to human actions. In order to explain why it is that someone did something, we assume that there is some explanation to be found. Kant's point in the solution, however, is that despite our application of this regulative principle to our actions, we still are first causes of our actions since we are responsible for what we

do:

In order to clarify the regulative principle of reason through an example of its empirical use -not in order to confirm it (for such proofs are unworkable for transcendental propositions)- one may take a voluntary action, e.g. a malicious lie, through which a person has brought about a certain confusion in society; and one may first investigate its moving causes, through which it arose, judging on that basis how the lie and its consequences could be imputed to the person. With this first intent one goes into the sources of the person's empirical character, seeking them in a bad upbringing, bad company, and also finding them in the wickedness of a natural temper insensitive to shame, partly in carelessness and thoughtlessness; in so doing one does not leave out of account the occasioning causes. In all of this one proceeds as with any investigation in the series of determining causes for a given natural effect. Now even if one believes the action to be determined by these causes, one nonetheless blames the agent, and not on account of his unhappy natural temperament, not on account of the circumstances influencing him, not even on account of the life he has led previously; for one presupposes that it can be entirely set aside how that life was constituted, and that the series of conditions that transpired might not have been, but rather that this deed could be regarded as entirely unconditioned in regard to the previous state, as though with that act the agent had started a series of consequences entirely from himself.<sup>239</sup>

Kant's incompatibilism forced him to downgrade the PSR to a regulative principle. The mistake of the thesis argument, and Kant's own earlier mistake, was to treat it, instead, as a constitutive principle.<sup>240</sup> But to show that the PSR could still serve some regulative purpose, as Kant insisted it did, he needed to show that we could still investigate the causal factors which explain our actions and be justified in believing that we could have done otherwise. Regulative principles can be neither demonstratively true nor false.<sup>241</sup> And so, if transcendental freedom conflicts with the PSR as a regulative principle, then

we can only conclude that the PSR cannot be used in this way. Hence Kant needs to show that we can consistently search for the causes of our actions and try to organize our explanations into a unified science while, also, regarding ourselves as free from causal determination so that we can do otherwise than we do. Kant's solution to the "Third Antinomy" is to insist that this is precisely what we do and that, given the demands of theoretical and practical reasoning, we are justified in doing so.

And so, if we ignore the specific context of Kant's discussion within his chapter on the antinomies and look, instead, at the general context of Kant's developing views on the PSR and freedom, we find that Kant was keenly aware of some of the difficulties which had arisen as a consequence of this development. The argument for the thesis lays out Kant's initial position. We must accept the PSR and so, though the causal chain of events must have begun with an initial act of creation, our actions are still a part of this causal chain. Since we are free, however, we must reject the PSR as a constitutive principle. Nevertheless, as Kant points out in the antithesis and in his solution to the antinomy, the PSR has a constitutive use as a causal principle governing phenomena and a regulative use in our empirical investigations. This left Kant with two problems. He needed to show that we could be free in such a deterministic world and that there was not some fundamental incoherency involved in our attempts to provide systematic causal explanations of our actions while at the same time regarding each as the result of a free and hence undetermined choice.<sup>242</sup> His answer to both problems is to insist that, so long as we reserve both uses of the PSR to the world of appearances, there is no problem in recognizing our noumenal freedom.

## 6. Conclusion

This interpretation is a mixed bag. Placing the "Third Antinomy" within the context of Kant's pre-critical discussions of the PSR and human freedom allows a very natural and straightforward interpretation of the argument of the thesis. Appealing to Kant's earlier writings and lectures allows us to strip away Kant's obfuscating terminology to reveal the familiar, dogmatic argument which lies beneath. At the same time, however, this solution to our first interpretive problem only seems to exacerbate the second. If the argument in support of the thesis is just Kant's idiosyncratic way of stating the cosmological argument, then it seems that Kant's attention in the solution to the demands of moral responsibility is out of place. And this charge is, strictly speaking, correct. Nevertheless, as we have seen, Kant had long been concerned with the status of the PSR and its implications for morality and freedom. Discussing these issues together, then, allowed Kant to clarify his own changing views and to solve the new problems which these changes engendered. The cosmological argument may fail, but its failure was, for Kant, tied up with questions about our moral responsibility and freedom. Understood as I have suggested, the "Third Antinomy" presents us with Kant's first critical response to all of these issues

#### CONCLUSION

We have seen how Kant's theory of freedom develops alongside his commitment, in one form or another, to the PSR. In 1755, Kant held, much like Leibniz, an analytic theory of truth. He believed that he could prove that God necessarily existed and that, as a consequence, this was the best of all possible worlds. But, at the same time, Kant believed, as he would continue to believe, that we are morally responsible for what we do and so free. The result was his compatibilist theory of freedom in the New Elucidation according to which we are free despite the fact that our actions are causally determined and, more bizarrely, despite the fact that they are logically necessitated. This was an unhappy compromise. In the early 1760's, as Kant became increasingly interested in working out the details of his ethics, the compromise could not hold. Moral obligation, according to Kant, implies that we can do otherwise than we do and this, in turn, requires that we be free in an incompatibilist sense. This view pitted Kant's ethics against his metaphysics and, though he was unsure early on, Kant eventually decided in favor of the former. And so he committed himself to the priority of practical over theoretical reasoning, a staple of his critical approach. This new priority forced his metaphysics into doubt. During this same period, Kant was intent on connecting his metaphysical views with experience. In 1768, Kant did so by appealing to the concrete example of left and right hands to decide between competing views of space. His decision, that Leibniz's relation theory could not account for the difference between the hands, gave Kant a good theoretical reason, in addition to his practical commitments, to reject the PSR and AT'. At

this point, Kant's ethics was still in its early stages and his metaphysics was in shambles. In 1770, Kant began the project of reconstructing the latter to meet the demands of the former. This meant that the PSR could no longer play a constitutive role; we could no longer depend on the PSR to tell us about things in themselves. In the Inaugural *Dissertation*, however, Kant already realized that the PSR might, nevertheless, play a regulative role in guiding our empirical inquiries. By the time of the *Critique*, Kant also thought that he could prove that every phenomenal event had a phenomenal cause. This meant that determinism reigned in the phenomenal world and that a causal version of the PSR was true so long as we restricted its application to things as they appear to us. Both of these uses of the PSR, however, seemed to threaten Kant's incompatibilist theory. How can we coherently search for the empirical causes of our actions and believe that our actions are uncaused? And how can we be free in an incompatibilist sense if all of our actions are, at least as far as we can see, determined? Kant's answer to these questions is that both uses of the PSR only apply to phenomena. As such, though we can look for and find the phenomenal causes of our actions, these same actions might still be the result of our own free choices, so long as this choice is not a phenomenal event. Kant's solution, then, is that we are transcendentally free in the noumenal world and this sort of freedom is perfectly compatible with any causal facts about phenomena.

All of this allows us to understand where Kant is coming from in the "Third Antinomy." He had long sought some sort of reconciliation between his rationalist inclinations toward the PSR and his belief that we are free and responsible for what we do. In 1755, he accomplished this by simply insisting on a compatibilist approach regardless of its consequences. As he matured and realized the importance of these consequences, he attempted to reconcile the two by downgrading the application of the PSR and placing freedom outside of the world of experience. In so doing, Kant thought that he could preserve our freedom in a deterministic world. Kant's theory of transcendental freedom, then, might fairly be called a compatibilist theory of incompatibilist freedom!

Obviously, this leaves more questions than it answers. Perhaps most perplexing is Kant's appeal to noumenal freedom in order to account for ordinary moral responsibility. This appeal clearly brings along with it all of the attendant problems of Kant's phenomenal/noumenal distinction. Beyond this, however, there are further features of Kant's theory which, at this point, remain a complete mystery. Kant clearly believes, for example, that free agency involves a "causality of reason." It seems that this is most likely just an odd way of saying that we are rational agents. But he has yet to provide any positive account of what this means. One obvious way of reading this is that it implies that reasons play some role in bringing about our actions. For Kant, this will be somewhat embarrassing, since reasons are normally things which we can consider and hence things of which we can be aware. Thus rational agency seems to run directly counter to Kant's theory of transcendental freedom, since it is a key tenet of this theory that the only things that matter for moral attribution occur in the noumenal realm beyond all possible experience. Putting this problem aside, however, Kant must still provide some account of how our reasons explain our actions.

Kant appears to take up these issues in his *Groundwork*. And so this is the most natural place to start if we want to fill out these details in Kant's account. I believe that Kant struggled with these issues throughout the remainder of his philosophical career. The fundamental problem he faced, aside from the inherent implausibility of the transcendental idealism to which he was, for better or worse, committed, was the *prima facie* inconsistency between rational action and absolute spontaneity. We can explain rational actions since, obviously enough, they occur for reasons. But we cannot explain, or so it seems, an absolutely spontaneous choice. Since they are uncaused, absolutely spontaneous choices appear to be mere happenings, random and, hence, unexplainable. To understand Kant's attempt to avoid this contradiction, we must turn to Kant's account of rational agency in the *Groundwork* and beyond.

#### NOTES

#### Chapter 1

<sup>1</sup> In "Kant's Deconstruction of the Principle of Sufficient Reason," Beatrice Longuenesse argues that Kant is "faithfully Leibnizian" (74) in the *New Elucidation*. Her argument is based on Kant's rejection of Crusius's incompatibilist account of freedom. This, however, is not enough to conclude that Kant accepted a Leibnizian compatibilism. A similar assumption is made by J.B. Schneewind in his introduction to Kant's *Lectures on Ethics*, where he suggests without argument that the *New Elucidation* "shows [Kant] thinking about freedom along the lines worked out by Christian Wolff" (xiv).

<sup>2</sup> With regard to Leibniz's theory of freedom, I have found the following to be very helpful: G. H. R. Parkinson, *Leibniz on Human Freedom* and Reginald Osburn Savage, *Real Alternatives: Leibniz's Metaphysics of Choice*. I am greatly indebted to these authors for the discussion of Leibniz's theory of freedom provided below, though, of course, I accept all the blame for any mistakes found there.

One drawback to focusing on Leibniz's account is that it ignores the period of philosophical development in Germany between Leibniz and Kant. (For an excellent discussion of this development, see Lewis White Beck, *Early German Philosophy: Kant and His Predecessors*). Further, as I discuss below, Kant's precritical theory of freedom directly addresses the problems with the compatibilist position that were raised by Crusius. Since Crusius's attack was directed against the compatibilist approach offered by Wolff, it might seem more appropriate to discuss Kant's pre-critical theory of freedom in light of the Wolffian compatibilism which both he and Crusius rejected. I have not done so for two reasons. First, though there are differences between Leibniz and Wolff in their general accounts of causality (see Martin Schönfeld, *The Philosophy of the Young Kant*, 138-146), I cannot detect any significant difference between them on the issue of the compatibility of freedom and determinism. Hence Kant's criticisms of this variety of compatibilism should be equally applicable to both. Second, I find Leibniz's discussion to be a clearer and more penetrating presentation of the compatibilist position to which Kant is trying to respond. Thus I feel there is more to be gained by an examination of Leibniz's theory of freedom. <sup>3</sup> The general features of Leibniz's theory of truth outlined here are drawn from the following: Christia Mercer and Robert Sleigh, "Metaphysics: The Early Period to the *Discourse on Metaphysics*;" Robert Sleigh, "Truth and Sufficient Reason in the Philosophy of Leibniz;" and Parkinson, "Philosophy and Logic" as well as his *Logic and Reality in Leibniz's Metaphysics*, 123-181. Again, I accept full responsibility for any mistakes in this discussion.

It should be noted that Kant accepts a similar theory of truth in the *New Elucidation*. See, especially, *New Elucidation* 1: 391 as well as 1: 396-7. Kant advocates the same view later in *The False Subtlety of the Four Syllogistic Figures* (1762) as well as in his *Inquiry Concerning the Distinctness of Natural Theology and Morality* (1764), better known as the *Prize Essay*. See, especially, *False Subtlety*, 2: 60 and *Prize Essay*, 2: 294. Kant's pre-critical reliance on such an analytic theory of truth and the reasons which led to his later critical rejection of this theory have been well-documented by Charles Nussbaum in "Critical and Pre-Critical Phases in Kant's Philosophy of Logic." (On the first page of his *Kant and the Claims of Knowledge*, Paul Guyer claims, to the contrary, that Kant rejected this Leibnizian account of truth even at this early date. His reasons for doing so, however, are not clear.)

<sup>4</sup> Leibniz's acceptance of C1 and C2 as necessary and sufficient conditions for freedom is supported by the following passages: *Theodicy*, 43, 380-382; *Die Philosophischen Schriften*, 7:108; and *Leibniz: Textes Inédits*, 2: 14.

<sup>5</sup> See *Theodicy*, 147. For a discussion of the role of motives in Leibniz's account of the will see Parkinson, *Leibniz on Human Freedom*, 18-45. Kant offers a similar account in *An Attempt at some Reflections on Optimism* (1759). There Kant argues that a choice to perform a given action is the result of a judgment that that act would be the best thing to do or, equivalently according to Kant, that it seems to the agent to be the most pleasing (2: 33-34).

<sup>6</sup> Leibniz accounts for the logical possibility of counterfactual motives by appeal to his distinction between finite and infinite analysis. Without going into the details of this distinction, a claim is contingently false, according to Leibniz, if it would take an infinite analysis of the proposition to reveal that it entails a contradiction. For a discussion of the problem with this account see note 12 below. The details of Leibniz's analytic theory of truth are discussed in chapter 2.

<sup>7</sup> Entwurf der nothwendigen Vernunft Wahrheiten, 2: 203-8.

<sup>8</sup> New Elucidation, 1: 399.

<sup>9</sup> *New Elucidation*, 1: 399. In *Kant's Compatibilism*, Hud Hudson contends (15-17) that Kant's argument here rests on a modal mistake. According to Hudson, Kant's objection is of the following well-known fallacious form:

- (i)  $\Box$  (P  $\rightarrow$  Q)
- (ii) P

and therefore

(iii) **Q**.

Thus Kant mistakenly argues "from actuality to necessity" when he claims that the actuality of P combined with the fact that P is a sufficient reason for Q implies the necessity of Q.

In support of this interpretation, Hudson cites the following from Kant's argument:

If it is the case that whatever happens can only happen if it has an antecedently determining ground, it follows that *whatever does not happen could not happen either*, for obviously no ground is present, and without a ground it could not happen at all. (*New Elucidation*, 1: 399).

Kant's argument here is actually of the following form. Letting 'P' be the proposition that some particular

event occurs and 'R(P)' be the proposition that there is a sufficient reason for P, i.e. some further

proposition Q such that  $Q \rightarrow P$ , then Kant's argument can be more accurately formalized as

(iv)  $\Box$  (P  $\rightarrow$  R(P)) [from the PSR],

(v)  $\square$  (P  $\rightarrow \sim R(\sim P)$ ) [from the definition of a sufficient reason],

 $\therefore$  (vi)  $P \rightarrow \Box$  (~P)

where (iv) is equivalent to "whatever happens can only happen if it has an antecedently determining

ground" as well as "without a ground it could not happen at all," (v) is equivalent to "obviously no ground

is present [for what does not happen]," and (vi) is equivalent to "whatever does not happen could not

happen." Unfortunately for Kant, this is a similarly fallacious inference since (iv), (v), and P merely imply R(P) and  $\sim R(\sim P)$ . See, however, note 12 below.

<sup>10</sup> For an insightful discussion of Leibniz's various proofs of God's necessary existence, see Robert Merrihew Adams, *Leibniz: Determinist, Theist, Idealist*, 113-213. Kant's proof is unique insofar as it relies on the rather bizarre assumption, identified by John A. Reuscher in his "A Clarification of Kant's *Principiorum Primorum Cognitionis Metaphysicae Nova Dilucidatio*," that concepts of objects are themselves composed of concepts and that a concept is not possible unless each of its constitutive parts is or has been instantiated. Kant reasons from this, quite poorly, that all positive concepts which compose the complex concepts of objects must be instantiated to the highest degree in a unique being. Assuming, for example, that there is a positive concept of goodness, there must a being which is perfectly good. Likewise for all other supposedly positive concepts. This same proof is offered in greater detail in *The Only Possible Argument in Support of a Demonstration of the Existence of God* (1763) and is briefly sketched in "Reflection 3704" (79).

<sup>11</sup> New Elucidation, 1: 399.

<sup>12</sup> Kant's argument here is thus of the valid form

(vii) $\Box$ (P $\rightarrow$ Q)	[Necessarily, if God exists, then this world exists],
(viii) 🗆 P	[Necessarily God exists],

and therefore

(ix)  $\Box Q$  [Necessarily this world exists].

This conclusion cannot be avoided by Leibniz's attempt to define contingent propositions as those whose truth can only be known a priori through an infinite analysis of the subject. This definition allows Leibniz to reject the claim that, necessarily, if God exists, then this world exists since, presumably, it would take an infinite analysis of the concept of God to see that his creation of the world is somehow contained in this concept. Thus, according to Leibniz's definition, it is a contingent fact that God would create this world. Alternatively, Leibniz might argue that, though it is necessarily true that God created the best of all possible worlds, it is a contingent fact that this is the best of all possible worlds since it cannot be demonstrated by a
finite analysis. (Leibniz, in fact, makes both of these arguments. See David Blumenfield, "Leibniz on Contingency and Infinite Analysis.") So much the worse for Leibniz's definition. If it is an analytic truth that I will have eggs for breakfast tomorrow, then I cannot do otherwise regardless of the type of analysis that would be required to demonstrate the truth of this proposition. For discussion of Leibniz's appeal to this distinction and the merits of this appeal, see Blumenfield; John Carriero, "Leibniz on Infinite Resolution and Intra-mundane Contingency;" Patrick Maher, "Leibniz and Contingency;" and Sleigh. <sup>13</sup> Leibniz argues that, given God's perfect goodness, he wanted to create and did create the best of all possible worlds. Since this is an act of God's free will, however, Leibniz concludes that it was not in fact necessary. Kant, however, challenges this claim, and, indeed, it is difficult to see how it would be possible for a necessary being, which is also necessarily both omni-benevolent and omnipotent, to fail to create the best of all possible worlds, if such a thing exists, or even all worlds which are good enough to be worth creating.

It is noteworthy that, during this period, Kant accepted a similar theory of creation. See *Optimism* and *Reflections 3703-5* (c. 1753) as well as *New Elucidation*, 1: 404. This theory does not, however, pose a similar problem for Kant since, as I argue below, he is willing to accept that we are free despite our inability to do otherwise. In fact, in these writings, Kant is remarkably up front about the necessity of God's choice (*Optimism* 2: 33-34 and *Reflections* 3704 and 3705).

<sup>14</sup> *New Elucidation*, 1: 400. See also *New Elucidation*, 1: 399. Assuming that we can safely substitute "what is implied by the conjunction of the laws of nature and events in the distant past" for "that which is posited by the chain of grounds which hypothetically determine each other," this is a version of what Peter Van Inwagen has dubbed the "Consequence Argument" (*Essay on Free Will*, 16).

<sup>15</sup> New Elucidation, 1: 399.

<sup>16</sup> Critique of Practical Reason, 5: 31.

<sup>17</sup> New Elucidation, 1: 400.

<sup>18</sup> This argument received a good deal of attention in the last century. See, for example, A. J. Ayer's "Freedom and Necessity" and, more recently, Bernard Berofsky's *Determinism*. The earliest version of this argument, to my knowledge, is given by David Hume in his *Enquiries Concerning Human Understanding* and Concerning the Principles of Morals, 80-103.

<sup>19</sup> Critique of Practical Reason, 5: 96.

<sup>20</sup> *New Elucidation*, 1: 404. See also *New Elucidation*, 1:400 where Kant argues that, if our actions were caused by a "vague and uncertain reason," i.e. one insufficient to determine a unique effect, "they would be little worthy of being held to be the prerogative of intelligent beings." Leibniz offers a similar argument. See, for example, his *Discourse on Metaphysics*, 37.

<sup>21</sup> Daniel Dennett, *Elbow Room: The Varieties of Free Will Worth Wanting*. In chapter six of this work, Dennett offers an argument along these same lines. This argument has been labeled the "*Mind* Argument" by Van Inwagen (*Essay*, 16) given its frequent occurrence in the pages of that journal.

<sup>22</sup> This interpretation of Kant's theory of freedom in the *New Elucidation* is challenged by Schönfeld (154-60). He argues instead that the free will of the *New Elucidation* is a will which "causes itself" (159) and whose choices are not merely determined by the motives of the agent. His interpretation relies on Kant's use of phrases such as "power of self-determination" and "inner principle" (Schönfeld's translation p. 159). I can see no reason, however, to assume that an agent who possesses the power of self-determination and who acts according to an inner principle has a will which causes itself. Further, it is highly unlikely that Kant intended such a connection given his argument under "Proposition VI" that nothing can cause itself (*New Elucidation*, 1: 394). See also *New Elucidation*, 1: 400 where Kant speaks of actions being determined by motives and *New Elucidation*, 1: 402 where action in accordance with "an inner principle" is called free when it is determined "in conformity with the representation of what is best" and that freedom increases with the increased determination of the will by motives.

<sup>23</sup> *New Elucidation*, 1: 404. Here Kant appears to equate an "inner principle" with a "conscious impulse." I am not certain what is meant by the latter. Given the context, however, it appears to be a motive of which the agent is aware and which the agent decides to act to satisfy. Again, *pace* Schönfeld, this does not imply that the will which acts upon such a motive is *causa sui*.

### Chapter 2

# <sup>24</sup> New Elucidation, 1: 393-94.

<sup>25</sup> See, for instances, *The Employment in Natural Philosophy of Metaphysics Combined with Geometry, of which Sample I Contains the Physical Monadology* (1756), in which Kant refers unquestioningly to the existence of "first causes" (1: 475) and remarks that he has omitted appeals to the principle in his proofs for those, presumably unlike himself, who do not accept it (1: 477); *Reflections on Optimism* (1759), where Kant assumes that there must be some reason why this world exists and, in particular, why there is evil in it; *Only Possible Argument* (1763), where Kant notes that he has not employed the principle in his proof of God's existence though he endorses it (2: 158); and the *Metaphysik Herder* (1762-1764), where Kant argues that absolute chaos is impossible since "God himself determined everything from sufficient grounds" (28: 41).

<sup>26</sup> To my knowledge, the only other discussion of this transformation is provided by Beatrice Longuenesse in "Kant's Deconstruction of the Principle of Sufficient Reason." Her discussion, however, focuses on Kant's later distinction between real and merely logical possibility and its role in the structural reversal of Kant's argument for the PSR from the *New Elucidation* to the "Second Analogy of Experience" in the *Critique of Pure Reason*. I believe the picture is more complicated, as I argue over the next few chapters. More specifically, with regard to my argument in this chapter, I believe Longuenesse misrepresents Kant's argument for the PSR from the *New Elucidation*. See note 56 below.

<sup>27</sup> New Elucidation, 1:391. See also New Elucidation, 1: 396-7 (discussed below). Kant advocates the same view later in *The False Subtlety of the Four Syllogistic Figures* (1762) as well as in his *Inquiry Concerning the Distinctness of Natural Theology and Morality* (1764), better known as the *Prize Essay*. See, especially, *False Subtlety*, 2: 60 and *Prize Essay*, 2: 294.

<sup>28</sup> Kant offers a similar account of analysis in *The Blomberg Logic* (early 1770's) where he claims that analysis makes clear and distinct what is implicitly given in the concept (24: 130-134, 268-272).

<sup>29</sup> The distinction between the sentences of a particular language and the propositions they express is implicit in Leibniz's attempt to develop a universal system of writing. This system would replace the words

of our natural languages with a set of symbols representing primitive concepts. For example, if we assume that 'rational' and 'animal' are primitive concepts, then we could let 'a' stand for the concept of rational and 'b' stand for the concept of animal. The concept of man, then, could be expressed as 'ab.' The proposition that man is rational could be expressed as 'ab is a.' However, in devising such a system to replace natural languages, it is clear that Leibniz distinguished between the sentences of these natural languages and the propositions which they express. For an excellent discussion of Leibniz's attempts to develop such an ideal language as well as his views on natural language, see Donald Rutherford's "Philosophy and Language in Leibniz."

<sup>30</sup> See note 27 above as well as *New Elucidation*, 1: 396 where Kant claims that all truths can be established through identity between the subject and the predicate rather than by appeal to a sufficient reason. In addition, Kant's argument in support of the claim that the principle of identity is the first principle of all truths appears to rely on AT. There Kant argues that, since there are only two methods for demonstrating the truth of a proposition and since both of these methods rely on analysis and hence the principle of identity (whatever is, is and whatever is not, is not), the principle of identity is the fundamental principle of all truths. Of course, this conclusion suggests that all truths follow from the principle of identity and so are analytic. The argument, though, appears to presuppose AT. Otherwise, it is unclear how the conclusion is supposed to follow since Kant's argument amounts to the claim that the principle of identity is involved in all analytic judgments. If, however, we assume that all truths are analytic and that all analysis relies on the principle of identity, we arrive at the desired conclusion.

In *Kant and the Claims of Knowledge*, Paul Guyer argues instead that the *New Elucidation* "first express[es] Kant's most fundamental claim that all analysis presupposes syntheses...and therefore that analysis alone can never be the basis of knowledge, metaphysical or otherwise" (11). He concludes from this that "Kant was arguing that the principle of sufficient reason is a principle logically independent of the principle of analysis-the laws of identity and noncontradiction" (12). The basis for this argument is Guyer's claim that, even at this early date, Kant recognized the distinction between real and merely logical

possibility. Whereas it seems clear to me, however, that Kant explicitly endorsed an analytic theory of truth in the *New Elucidation*, I can find no evidence that he accepted this distinction in 1755.

<sup>31</sup> See, for example, *Only Possible Argument*, 2: 73.

<sup>32</sup> Kant seems willing to admit that there may be infinitely many concepts, though he does not go so far as to claim that this is the case. See, for example, the *Metaphysik Herder*, 28: 51. In the *Prize Essay*, however, Kant concludes, reminiscent of Leibniz's argument, that there must be "uncommonly many" primitive concepts in order to explain the complexity of the world (2: 280). A couple of pages later, Kant argues that there are infinitely many qualities which are of interest to philosophy (2: 282). This probably indicates that Kant thought that there were an infinite number of primitives as well since he likely assumed that infinitely many predicates require infinitely many primitives.

<sup>33</sup> Kant's preferred locution is 'determining reason.' At *New Elucidation*, 1: 393, Kant argues that 'determining' is less ambiguous than 'sufficient' as it is often unclear what sufficiency requires. This, however, does not imply that 'sufficient' is an ambiguous term, or any more so than 'determining.' And so, given its greater familiarity, I shall continue to refer to sufficient reasons and shall paraphrase Kant whenever necessary.

<sup>34</sup> New Elucidation, 1: 392-3.

<sup>35</sup> In a footnote, Kant adds a third type, viz. identical reasons (*New Elucidation*, 1: 392). An identical reason is the reason behind tautological truths. Thus, for example, he claims that it is true that a triangle has three sides because the predicate is in "perfect identity" with the subject. Antecedent and identical reasons, however, do not appear to belong to exclusive classes. Instead, both appear to be characterized by their role as explanans. Identical reasons, then, are best understood as belonging to a subclass of the class of antecedent reasons where the explandum is a tautology rather than, say, some physical fact about the world. <sup>36</sup> *New Elucidation*, 1: 396-7.

<sup>38</sup> See note 27.

<sup>39</sup> New Elucidation, 1: 393.

<sup>&</sup>lt;sup>37</sup> New Elucidation, 1: 396.

<sup>40</sup> *New Elucidation*, 1:392. Kant here seems to equivocate between talk of antecedent and consequent reasons. It seems most likely to me, however, that he simply accepted that both types of reason are required: nothing would be true without an antecedent reason and we could know nothing without appeal to consequent reasons.

<sup>41</sup> New Elucidation, 1: 392.

<sup>42</sup> Kant explicitly endorses this correspondence theory of truth in *The Blomberg Logic*: "When I cognize the thing as it actually is, then my cognition is true" (24: 56). See also *Blomberg Logic*, 24: 80-88. The ever growing importance of CO and consequent diminishing status of AT in the fifteen or so years between the *New Elucidation* and *The Blomberg Logic* is the topic of Chapter 4.

<sup>43</sup> New Elucidation, 1: 391.

<sup>44</sup> This problem is identified by Reuscher. Reuscher contends that Kant's discussion of the various types of reason is so confused that, given the overall consistency of the rest of the text, we should conclude that this section was a later addition (26). I do not think that such a drastic interpretation is necessary. First, the rest of the text is not as consistent as Reuscher would have us believe. For example, he claims that Kant maintains a single theory of truth throughout the text (25). As I have argued, this is simply not true. Moreover, as I argue below, recognizing Kant's acceptance of CO allows for a far more conservative resolution to Kant's apparent confusion.

<sup>45</sup> New Elucidation, 1: 396.

<sup>46</sup> Critique of Pure Reason, A598/B626.

<sup>47</sup> Only Possible Argument, 2: 72.

<sup>48</sup>Only Possible Argument, 2: 72.

<sup>49</sup> New Elucidation, 1: 394.

<sup>50</sup> *New Elucidation*, 1: 395. Kant's proof relies on the somewhat bizarre assumption that a concept is not possible unless each of its constitutive parts is instantiated. He reasons from this that all positive predicate concepts which compose the complex concepts of objects must be instantiated to the highest degree in a unique being. Assuming, for example, that there is a positive concept of goodness, whereas badness is

simply the lack of goodness, there must a being which is perfectly good. Likewise for all the other supposedly positive concepts. This same proof is offered in greater detail in *The Only Possible Argument*. This argument is briefly sketched in *Reflection 3704*.

<sup>51</sup> See note 13 above.

<sup>52</sup> At least, such a view can be found in Leibniz's writings prior to 1677. Sometime around that year he seems to have begun to have growing suspicions about the claim that existence is a simple property which substances may possess and which may be contained in the concepts of those substances. For an excellent discussion of Leibniz's developing thoughts on existence as will as his later attempts to advance a version of the ontological argument free from this claim, see Adams, 158-176.

<sup>53</sup> New Elucidation, 1: 393.

<sup>54</sup> New Elucidation, 1: 394.

<sup>55</sup> I have omitted Kant's qualified re-phrasal: "it can easily be seen that there is always an antecedently determining ground, or if you prefer, a genetic or at least an identical ground." This qualification presents a more accurate statement of the conclusion since, after all, some truths are ordinary tautologies and so do not have an antecedent reason in the sense of a genetic or causal reason. See, however, note 33 above. The conclusion is still problematic, though, since the proposition that God exists does not appear to have an antecedent or an identical reason, as Kant himself observes (*New Elucidation*, 1: 394). Nevertheless, according to Kant, there is a reason why God exists. Thus it seems the problem lies with Kant's classification of reasons and not with his argument.

<sup>56</sup> Longuenesse argues, instead, that Kant's argument here rests on an equivocation between antecedent and consequent reasons. His argument, then, amounts to a confusion between the apparently innocuous claim that we cannot know that a proposition is true unless we have some reason to believe it is true and the ambitious, and hence more interesting, claim that there is a reason why true propositions are true. The motivation for this interpretation lies in Kant's conviction that nothing would be true without a reason. According to Longuenesse, "the force of his statement that there must always be a reason for determining a subject with respect to a predicate clearly rests on the common intuition that we need a reason for holding a

proposition to be true" (70). If we assume that Kant simply confuses consequent and antecedent reasons, then his confidence in the PSR can be explained by the plausibility of this intuition. I do not see the need, however, to resort to such an uncharitable interpretation, especially as there is no compelling evidence that Kant is confused at this point about a distinction which he has made just a few pages earlier. Instead, Kant's proof is best viewed as a consequence of his unified theory of truth, the elements of which Kant explicitly espouses in the *New Elucidation* and which, as I discuss in the conclusion, appropriately places Kant's arguments in the *New Elucidation* within the transition from the rationalism which Kant inherited to his own critical philosophy.

#### Chapter 3

<sup>57</sup> "Directions" in the title is a translation of *Gegenden* in Kant's original German. This is also the translation adopted by Stephan Körner (*Kant: Selected Pre-Critical Writings*, 36 and in *Kant*, 33). Traditionally, however, "Regions" is by far the most common translation. This translation has led to a great deal of confusion, however, as it makes nonsense of Kant's arguments and examples. For a compelling defense of their translation, see Walford's and Meerbote's note to the text (456-7n1). A similar defense is offered by Paul Rusnock and Rolf George in "Snails Rolled Up Contrary to All Sense" (459-61) and "A Last Shot at Kant and Incongruent Counterparts" (269-70). To my knowledge, the only criticism of this translation is offered by A. T. Winterbourne in "Incongurent Counterparts and the Intuitive Nature of Space" (96n2). Winterbourne takes Körner to task for his translation, though he neglects to mention his reasons for doing so.

<sup>58</sup> This description is offered by John Earman in "On the Other Hand … A Reconsideration of Kant, Incongruent Counterparts, and Absolute Space" (234-55), though he is certainly not the only one to be puzzled by Kant's brief and sometimes enigmatic remarks on incongruent counterparts.

<sup>59</sup> See, for example, the sundry essays collected in *The Philosophy of Left and Right*.

<sup>60</sup> This is not to say that Newton presents us with a pure empiricist theory of space. See, for example, his reference to space as "an emanative effect of the primarily existing being [God]" (*De gravitatione*, 136).

For an extensive discussion of Newton's more metaphysical views on space, see Steffen Dusheyne's "Isaac Newton on Space and Time: Metaphysician or Not?"

<sup>61</sup> I am not suggesting that Newton did not attempt to prove the existence of absolute space directly. See, for example, Ronald Laymon, "Newton's Bucket Experiment," (411-12).

<sup>62</sup> A similar interpretation of the structure of Newton's argument is offered by Hugh M. Lacy (317-342) and Laymon. Though Laymon repeatedly remarks that Newton did not intend to prove the existence of absolute space by appeal to the experiments discussed below, he seems to mean that Newton did not intend to offer these experiments as direct proof. Instead, they are intended to demonstrate both that, within the framework of Newton's theory, we can detect certain absolute motions and that, as a consequence, we can infer the existence of absolute space from the truth of the theory. Thus any evidence in support of this theory is, likewise, evidence in support of absolute space.

#### <sup>63</sup> *Principia*, 408.

## <sup>64</sup> Principia, 410.

<sup>65</sup> It has been argued, to the contrary, that Newton was merely a representationalist about absolute space, i.e. he held that absolute space is merely a convenient mathematical construct and not an existing entity. See, for example, I. Bernard Cohen's *The Newtonian Revolution*. I do not wish here to weigh in on this debate besides to say that, on the most straightforward reading, which seems to be the reading preferred by his contemporaries, the passages we have examined clearly refer to an absolute space which exists independently of our conceptions of it. For a defense of this reading, see Ducheyne.

<sup>66</sup> Principia, 409-10.

<sup>67</sup> Julian B. Barbour uses a similar line of reasoning to reach the conclusion that we should reject the existence of such absolute motions. See his "Relational Concepts of Space and Time," where he argues that, since all perceived motion is motion relative to some ordinary object, we should adopt a relational theory of motion (253). As Lacy has noted (321), such arguments ignore the fact that unobservable entities may nevertheless cause observable effects. It is this fact which Newton exploits in his indirect proofs of the existence of absolute space.

## <sup>68</sup> *Principia*, 412-13.

# <sup>69</sup> Principia, 414-15.

 $^{70}$  This accords with Newton's dictum that "absolute rest and motion are distinguished from each other by their properties, causes, and effects" (Principia, 411); however, I must point out that, though these experiments have traditionally been thought to bear the weight of Newton's argument for absolute space, Robert Rynasiewicz has recently provided a plausible challenge to this reading of Newton's argument in "By Their Properties, Causes, and Effects: Newton's Scholium on Time, Space, Place and Motion." Nevertheless, as Rynasiewicz concedes (137), the bucket experiment and the two globes experiment do show how we can distinguish absolute and relative motions. Thus they still serve as important evidence of the existence of absolute space, even if these experiments are not Newton's only evidence for this conclusion in the Scholium. It is also the argument which has received the greatest attention. For a history and evaluation of the responses to Newton's argument, see John Earman's World Enough and Space-Time (61-90) as well as Lacy (324-42). The most successful of these replies is typically attributed to Ernst Mach; see, however, John D. Norton's discussion of the vagueness of Mach's remarks (9-10). According to this reply, Newton fails to recognize that the noticeable effects in the bucket experiment might be due to the relative motion of the water to some other set of bodies such as the stars while the relative acceleration of the water to the bucket may, in turn, give rise to some small and hence unnoticed effect. As Norton has observed, however, this response does not offer very much incentive to reject Newtonian mechanics: "The idea is not so much a proposal of a definite, new physical theory, rather it is the prescription that such a law should be found" (9-10). And so if we read Newton's argument as an inference to the best explanation, then Mach's reply is hardly convincing insofar as it is no explanation at all. To my knowledge, no one has worked out this sort of Machian explanation in any complete form. The beginnings of such a project can be found in the collection Mach's Principle: From Newton's Bucket to Quantum Gravity.

<sup>71</sup> This is indicated by Newton's comment that his description of the results of this experiment are "as experience has shown me" (*Principia*, 413).

<sup>72</sup> Jill Vance Buroker has argued, in her extensive study of Kant's various arguments from incongruent counterparts (*Space and Incongruence*, 13), that Newton's description of the water-bucket experiment is not sufficient to justify his conclusion unless we also consider what happens to the water if the bucket is suddenly stopped. In support, she cites Max Jammer's discussion of the experiment (107-8), and, indeed, he does include this stage in his description of the experiment, as do Ernest Nagel (208) and Hans Reichenbach (213). None of these authors, however, justifies this contention, and I can see no clear reason to amend Newton's original description of the experiment. See, also, Lacy (325) and Laymon (405) who both note that, though such considerations may help illuminate Newton's point, they are not essential to his argument.

<sup>73</sup> This is not to say that the two experiments are perfectly analogous. Laymon (408-9) has made a compelling case that, whereas the bucket experiment shows how to detect absolute motion by its effects, the thought experiment was intended to demonstrate how to detect absolute motions by their properties and causes as well.

<sup>74</sup> Assuming that Newton is right and that these experiments demonstrate the existence of absolute acceleration and so support the existence of an absolute space with enough structure to support such accelerations, this is not sufficient to establish Newton's claim that absolute motion exists. Absolute motion requires that there be a definite answer as to whether a given object occupies the same position in space at different times. Absolute acceleration, however, does not, a point, perhaps, appreciated already by Huygens. See Stein, 7-10. For an excellent and accessible introduction to the issues involved, see Robert Geroch's *General Relativity from A to B* (1-63). Earman's discussion is also superb, though it requires a much greater expertise in mathematics. See Earman, 27-40.

<sup>75</sup> For a statement and evaluation of the extant evidence of this collaboration, see Domenico Bertoloni Meli's, "Newton and the Leibniz-Clarke Correspondence" (459-60).

<sup>76</sup> In his correspondence with Samuel Clarke, Leibniz also argues against absolute space on the grounds that space could be neither a substance nor a property of a substance (66-72). In addition, Leibniz may also

be contending that absolute motion does not exist on the grounds that it violates a verificationist theory of meaning:

There is no motion, when there is no change that can be observed. And when there is no change that can be observed, there is no change at all (*Correspondence*, 74).

Alternatively, however, he may simply be pointing out that, since absolute motion presupposes the existence of an impossible entity, only relative motion is possible. As Leibniz remarks in the very next sentence:

The contrary opinion is grounded upon the supposition of a real absolute space, which I have demonstratively confuted by the principle of the want of a sufficient reason of things.

Since all relative motion seems to be observable, at least in principle, then only possible motions are observable motions.

<sup>77</sup> See *Correspondence* (60-61) where Leibniz argues that if God chose to create two indiscernible objects and place them at two distinct positions in the universe, His choice of which one to place in each position would be arbitrary and so would violate the PSR.

<sup>78</sup> See also Barbour (254-55) who notes that these principles can be interchanged in Leibniz's arguments.

<sup>79</sup> Correspondence, 26.

<sup>80</sup> See Correspondence, 20.

<sup>81</sup> Robert Paul Wolff, for example, simply assumes that "changing East into West" implies a mirror reflection and that this was how Kant understood it (10). As Earman observes (139), however, the latest German edition of the *Correspondence* during this period does not favor such an interpretation. The German translation reads "durch eine Verwechselung des Aufgangs der Sonnen mit irhem Niedergangs" which translates as "through the confusion of the rising of the sun with its setting." I have to agree that this wording favors neither interpretation.

<sup>82</sup> For example, see Kant's praise of Newton's method in the *Prize Essay* (2: 275) and his endorsement of Newton's theory of universal gravitation in the *New Elucidation* (1: 415) and the *Universal Natural History and Theory of the Heavens* (1: 308). In fact, Michael Friedman has argued convincingly that one of the central goals of Kant's pre-critical project was to reconcile in some fashion Leibnizian metaphysics with

Newtonian physics. See his *Kant and the Exact Sciences* (1-52) as well as Jaakko Hintikka's "On Kant's Background."

<sup>83</sup> This same point is made by Earman (139) who notes that there were two available editions. The first edition of the correspondence was published in 1720. A later edition was published in 1740. Both had forewords by Wolff.

<sup>84</sup> Further evidence that Kant had read the *Correspondence* can be found in the *New Elucidation* (1: 409) where Kant appears to argue directly against Leibniz's argument for the Principle of the Identity of Indiscernibles based on the PSR. Given the likelihood that Kant was deliberately entering into the debate between Leibniz and Clarke, we can reject Peter Alexander's contention that the absolute space of the *Directions in Space* essay should be interpreted as a featureless void rather than the more structured space of Newton's *Principia*. There is no direct evidence to support such a view, and it seems highly implausible in light of the historical context. It is clear from Kant's references to the absolute space of the geometers (*Directions*, 2: 378 and 381) that he is offering support for Newton's theory. (See the *Physical Monadology* (1: 475) where Kant clearly identifies geometry with Newtonian mechanics and the *Inaugural Dissertation* (2: 403-4) where Kant is seeking to distinguish his theory of space as the pure form of intuition from the relational theory of Leibniz and the absolute theory of the English geometers.)

Nevertheless, a similar view is defended by David Walford in "The Aims and Method of Kant's 1768 *Gegenden In Raume* Essay in the Light of Euler's 1748 *Réflexions Sur L'Espace.*" According to Walford, the *Directions in Space* essay represents a departure from Kant's earlier compatibilist view of space. This view supposedly asserted that there are many different relational spaces of varying dimensions which exist in an infinite absolute space of indeterminate dimension (Walford, 307-8). Walford's supports this claim by appeal to Kant's 1747 essay, *Thoughts on the True Estimation of Living Forces*, where Kant writes: "If it is possible that there should extensions with other dimensions, then it is also highly probable that God has actually accommodated them somewhere [*Walford's translation*]" (1: 25). It is true that, during this early period, Kant was willing to countenance the existence of separate worlds. (It seems, however, that Kant had called this possibility into doubt by 1759 and rejected it by 1763. See his *Optimism*, 2: 30-33; *Only* 

*Possible Argument*, 2: 153; and the *Inaugural Dissertation*, 2: 408.) Kant's reference to the existence of such worlds "somewhere" could imply that there is some general space inside of which these separate worlds exist. But this seems unlikely. Such a view is bizarre, if not incoherent. In addition, Kant makes it clear elsewhere that such distinct worlds would be independent of each other in the sense that the objects which occupy any such world would be in no relation, spatial or otherwise, to any object in another. (See, for example, *Metaphysik Herder*, 28: 40) Further, as Buroker has argued (*Incongruent Counterparts and Idealism*, 319-20), there is overwhelming evidence that Kant held a relational theory of space at least until 1758. See, on this point, *Physical Monadology*, 1: 479-81 and *Metaphysik Herder*, 28: 45. It seems more probable, then, that Kant was simply unable to find a way to express adequately the independent coexistence of such relational spaces. But even if we do saddle Kant with the view that there are separate relational spaces which exist within a surrounding absolute space, there is no reason to infer that this surrounding space is a featureless void lacking any determinate dimension.

<sup>85</sup> Interestingly, Earman makes the same point but draws a quite different conclusion (*World Enough and Space-Time*, 139). He contends that Kant would surely have noticed that Leibniz's argument against such translations works equally well against mirror reflections. To Earman, however, this suggests that Kant likely made some distinction between the cases of translation and mirror reflection. He suggests, for example, that Kant may have argued that the latter gives rise to perceptible differences whereas the former does not and that, somehow, this provides an adequate response to Leibniz. This suggestion certainly does not benefit Kant. There may very well be no perceptible differences between an object and its mirror reflection, as Earman himself notes (145-7). Nor is it obvious how this supposed fact helps. Leibniz's argument rules out such translations and reflections on the grounds that they violate the PSR. If Kant is willing to allow that such reflections exist, then he should be prepared to dismiss the PSR. But then he has no reason to accept Leibniz's argument against translations and so no reason to distinguish these cases, except insofar as it may be more intuitively clear that mirror reflections are possible.

<sup>86</sup> Directions 2: 378.

<sup>87</sup> Kant refers to this as the "gleichsam a posteriori" method (*Directions*, 2: 378). I am here adopting David Walford's translation from *The Aims and Method* rather than his earlier translation.

<sup>88</sup> Walford makes the same point. I believe he is right for two reasons. First, Walford's analysis of the paragraph in question is, at least in this regard, unimpeachable (312-322). His reading is based on Kant's praise of Euler's 1748 essay, *Reflections on Space*. According to Walford, the point of this commendation is to announce Kant's intention to pursue a similar style of proof. Euler had argued, as had Newton himself, that Newton's laws implied the existence of absolute space. Thus he concluded that we have sufficient empirical evidence for its existence. Kant is announcing, then, that he will be offering an analogous argument. Kant's praise for Euler notwithstanding, however, other commentators have called great attention to the fact that Kant's remarks fall short of a full endorsement. (See, for example, Earman, 138.) This is true, but it is not because Kant rejects the "so to speak a posteriori" method. Instead, as Walford observes (317-320), Kant is criticizing Euler for failing to show that one could apply the concept of absolute space, as Kant says, "in concreto" (Directions, 2:378). Euler had claimed that we could not employ a relational account of space in order to specify the positions of bodies at rest (118-21) or the velocities of bodies in motion (122-23). This position is in strong contrast to that of Newton, who claimed that we can only specify the relative positions and velocities of bodies (Principia, 410-11). Nor does Euler explain how we are to utilize the concept of absolute space in making such measurements. Kant, then, is rightly pointing out that, even if the laws of physics require an absolute theory of space, this does not mean that we can use this concept in practice. Kant's praise for Euler was sincere. The question of the existence of space could only be settled *a posteriori*. Euler's mistake was that he drew the wrong conclusion. Second, this interpretation of Kant's announced method accords perfectly with the method Kant actually employed. It would be unreasonable to assume that this was merely a coincidence.

<sup>89</sup> *Directions*, 2: 382.

<sup>90</sup> Buroker makes a similar claim. See *Incongruent Counterparts and Idealism*, 321-22 and *Space and Incongruence*, 55-56. Unfortunately, like Kant, she does not tell us why.

<sup>91</sup> See §3.2 for a discussion of Kant's use of these terms.

 $^{92}$  This restriction is of little importance since any pair of n-dimensional incongruent counterparts can be made to coincide if we are allowed to move them in n+1 dimensions. For more on this point and its impact on Kant's argument, see section 4 of this chapter.

<sup>93</sup> Directions, 2: 382.

<sup>94</sup> Kant calls our attention to this fact by observing that it would take a "different action of the creative cause" to create one of these universes than it would take to create the other (*Directions*, 2: 383). In "A Last Shot at Kant and Incongruent Counterparts," Paul Rusnock and Rolf George deny that there is such a difference unless we assume that the orientation of a hand is a primitive, monadic property. They contend that, otherwise, we can only specify the orientation of a hand by reference to some other object. Thus, for example, we might arbitrarily designate a given hand as left and then say, of some other hand, that, if the two hands can be made to coincide, it is left and, if not, it is right. Since in our thought experiment, there is only one hand, and since the orientation of a hand is not likely to be a primitive, monadic property (see §4 below), they conclude that such a hand is neither left nor right. Peter Remnant makes a similar argument. According to Remnant, we would have no way of distinguishing a universe with a single left hand from one with a single right. Thus, he concludes, it is meaningless to speak of a difference between them. See, also, Ishiguro, 114-17. Though they are right to conclude that there is little point in designating either hand as left or right, all of these authors make the mistake of concluding that there is no difference between our imagined universes simply because we could not tell the difference. Unless we adopt a verificationist theory of meaning, there is no support for such an inference.

<sup>95</sup> This, of course, is contrary to Kant's assertion (Directions, 2: 382) that there is an "inner difference" between the two hands (*Directions*, 2: 382). See §3.2 below.

<sup>96</sup> As Lawrence Sklar has pointed out (*Space, Time, and Spacetime*, 168-73 and *Incongruous Counterparts*, 176-77), Kant may well have been wrong about the resources of Leibniz's theory. It seems Leibniz was also willing to include relations with possible as well as actual objects. (See, for example, *Correspondence*, 25-26.) The impact of this addition on Kant's argument is discussed in §4 below.

<sup>97</sup> Directions, 2: 383. This interpretation of Kant's argument is similar to the ones proposed by William Harper. There are, however, some notable discrepancies. Harper views the Directions essay as already containing or pointing the way towards Kant's critical view of space as the pure form of our intuition. In support he cites Kant's claim that the reality of space "is intuitive enough for inner sense" and that space "is a fundamental concept which first of all makes possible all such outer sensation" (2: 383). In addition, he claims that Kant's discussion of our ability to fix a coordinate system relative to our bodies (2: 378-79) requires an appeal to intuition. Thus we are led quite naturally to conclude that space has something to do with intuition and we are off down the road to the Transcendental Aesthetic. I think Harper is simply wrong here. Kant's reference to "inner sense" should not lead us to conclude that he thinks the differences between left and right are grounded in human sensibility. If he intended this, surely he would have said "outer sense." And though Kant does say that absolute space is a fundamental concept, this does not obviously correspond to Kant's later theory that space is the pure form of outer sense. A more natural and charitable way to read Kant here is to assume that he is saying that we have a concept of absolute space and that, though we cannot experience absolute space and confirm its existence directly, we can infer its existence from certain features of objects. This fits in well with the next paragraph in which Kant says that the concept of space employed by geometers and in natural science should not be dismissed despite the fact that it is difficult to understand. On this reading, when Kant says that this concept "makes all these sensations possible in the first place" he is not saying that space makes sensations possible insofar as it is the form of outer sense. Instead he is saying, quite awkwardly, that our concept of absolute space refers to an existing thing whose relations to objects can be detected. Finally, Harper's claim that our ability to orient ourselves in terms of our bodies leads naturally to Kant's critical view of space is, at best, a stretch. <sup>98</sup> See, for example, Rusnock and George (A Last Shot, 268-69) and James Van Cleve (Right, Left, and the Fourth Dimension, 204). Walford argues that the Directions essay also contains a non-apagogic argument (327), but, as he admits in a footnote, this argument can be quite easily given an apagogic form (327n46). <sup>99</sup> This would, of course, be Kant's theory of space as the pure form of outer intuition which he first defends in the Inaugural Dissertation (2: 402-6).

<sup>100</sup> See, for instance, Kant's admitted difficulties in understanding the reality of space (*Directions* 2: 378). Kant does not claim that he has some insight to overcome these difficulties. Instead, he merely points out that his argument has shown the alternative, Leibniz's relational theory, to be false.

<sup>101</sup> See note 84 above.

<sup>102</sup> See Walford (328) and Graham Nerlich (*Hands, Knees, and Absolute Space*). Buroker makes a similar claim (*Space and Incongruence*, 55-57), though she recognizes that it is unlikely that Kant had a clear conception of the difference between orientable and non-orientable spaces (57).

<sup>103</sup> Directions 2: 383 and 378 respectively.

<sup>104</sup> I am indebted to Rusnock and George for references to Leibniz's discussion of an *analysis situs*.

<sup>105</sup> Philosophical Papers and Letters, 251.

<sup>106</sup> See *Die Philosophischen Schriften*, 2: 248n and 5:178-79; *Philosophical Papers and Letters*, 248-58; as well as *Leibnizens Mathematische Schriften*, 5: 29, 263, and 265.

<sup>107</sup> See Rusnock's and George's *A Last Shot* (262).

<sup>108</sup> It should be noted that Kant does not, as Remnant and others have suggested, make the further claim that our ability to do so depends in any way on the asymmetries of our bodies. Indeed, Kant specifically notes that the left and right halves of our bodies are "externally similar," and yet we are nevertheless able to distinguish between our left and right sides (*Directions*, 2: 379). Rusnock and George (*A Last Shot*, 266n39) make the same mistake.

<sup>109</sup> Directions, 2: 379.

<sup>110</sup> Directions, 2:382.

<sup>111</sup> On this point, see Rusnock and George's *A Last Shot*, where they offer a similar analysis, to which I am greatly indebted. There is, however, an important difference in our overall interpretation on this point. In addition to the claims I have defended here, Rusnock and George also contend (263) that Kant had discovered incongruent counterparts by the time of the *Herder Metaphysik* where Kant says that equal and similar figures are not congruent "unless they lie in a plane" (28: 15). Given this brief remark, they conclude that it is likely that Kant's discussion of the proper method of mathematics in the *Prize Essay* 

(1762) was motivated by his discovery of incongruent counterparts (264). Briefly, Kant saw that we could not prove the generally accepted theorem that similar and equal figures are congruent. If math proceeded by analysis of concepts, then it seems we should be able to offer a proof by analyzing the concepts involved. Instead, Kant is taken to claim that we can just ignore the theorem by insisting that there are no such concepts. Rather, there are a number of concepts of similarity, equality, and congruence which the mathematician generates by considering various figures and which bear a family resemblance to each other. I find this far too conjectural. It seems to me we ought to employ, what we might call, a principle of noncharity and not attribute deep insights or arguments to Kant on the basis of such flimsy evidence. All that we have here is a brief and unclear comment about congruency and Kant's claim that math proceeds synthetically. This does not justify the inference that the latter represents an attempted solution to a problem supposedly expressed in the former, particularly given the difficulty of the problem.

<sup>112</sup> On this point see Leibniz's *Mathematische Schriften* (5: 154, 179, 275) and Kant's *Herder Metaphysik* (28: 15) and *Prize Essay* (2: 277).

<sup>113</sup> Directions, 2: 382.

<sup>114</sup> A Last Shot, 268.

<sup>115</sup> In Kant's defense, one might argue that, on the assumption that we can only consider an isolated object in the context of an ambient space, the relations between an object and absolute space would be inner characteristics; this argument suffers from the fact that this assumption is false. We can contemplate the properties of a triangle, for example, without worrying about the dimensionality of the space in which it is embedded.

<sup>116</sup> Directions, 2: 383.

<sup>117</sup> Inaugural Dissertation, 2: 403.

<sup>118</sup> For an interesting discussion of the relation between Leibniz's analysis situs and contemporary topology and for references to the secondary literature on this issue, see Graham Solomon's "Leibniz and Topological Equivalence." <sup>19</sup> Nerlich provides his reconstruction of Kant's argument in Chapter 2 of that work. This chapter is reprinted as "Hands, Knees, and Absolute Space," in *The Philosophy of Left and Right*.

<sup>120</sup> See his "Kant, Incongruous Counterparts, and the Nature of Space and Space-Time." It seems, however, that he has since recanted. See, for example, his "On the Other Hand ... : A Reconsideration of Kant, Incongruent Counterparts, and Absolute Space."

<sup>121</sup> Incongruous Counterparts, 174.

<sup>123</sup> Even if we do not, however, this is of little help to the relationalist. First, it is clear that, at least locally, space is three-dimensional and orientable, and so the relationalist must explain this fact. Second, whatever the topological properties of space are, it seems the relationalist strategy must remain the same. Thus, for example, if it turned out that space was four-dimensional and non-orientable, the relationalist would account for this by appealing to the same sorts of facts as he would in the case of the three-dimensional, orientable space with which we are familiar.

<sup>124</sup> Such an invocation is made by James Van Cleeve in his "Right, Left, and the Fourth Dimension" (223 and 225-27). He there refers to this as spatial possibility. According to Van Cleve, we might be able to legitimately infer that only three dimensions are spatially possible from the fact that we cannot picture more than three dimensions. Leibniz seems to have made the same argument (*Theodicy*, 335). Though I have great respect for both of these philosophers, I must admit that I am baffled by this argument. Kant offers a similar argument in the *Prologomena to Any Future Metaphysics* (4: 285), though this is perhaps more defensible given his intuitionist approach to mathematics there.

<sup>125</sup> Another possibility is to follow Kant's lead from the *Thoughts on the True Estimation of Living Forces*. There he argued that Newton's law of gravity implied that space was three dimensional (1: 23-25). Likewise, we might argue that the laws of nature imply that space is three-dimensional and orientable. But this gets things backwards. If we assume an absolute space, then we might be able to explain some features of nature, such as the fact that gravity obeys the inverse square law. If, however, we try to explain the

<sup>&</sup>lt;sup>122</sup> See note 96.

dimensionality and orientability by appeal to the laws of nature, then we end up explaining spatial possibility by appeal to contingent and unexplained laws of nature. That isn't much of an explanation.

### Chapter 4

<sup>126</sup> See, for example, Ameriks, 3-4 and 11-17 and Beiser, 26-61 (though Beiser places the beginning of Kant's skeptical period around 1760).

<sup>127</sup> See, for example, Martin Schönfeld's *The Philosophy of the Young Kant*. That Kant was committed to such a reconciliation project during this early pre-critical period is clear. See Chapter 3, note 82 above. I only take issue with the claim that Kant's increasingly skeptical view of metaphysics was, for the most part, a consequence of his lack of faith in this project.

<sup>128</sup> For a more thorough discussion of Leibniz's theory of space and his views on physics, see Garber.

<sup>129</sup> This does not mean, of course, that we can ignore the problem of reduction altogether. A convincing relational theory of space will still have to explain how it is that talk of space can be reduced to talk of spatial relations even if all such talk is, ultimately, confused.

<sup>130</sup> New Elucidation, 1: 410-16.

<sup>131</sup> For a history of the debate over pre-established harmony versus physical influx in early 18<sup>th</sup> century German philosophy, see Eric Watkins' "From Pre-Established Harmony to Physical Influx."

<sup>132</sup> *Physical Monadology*, 1: 1: 479. For Aristotle's version of the argument, see *On Generation and Corruption*, 316a26-33.

<sup>133</sup> Physical Monadology, 1: 481. On virtual location, see Kant's Inaugural Dissertation, 2: 414.
 <sup>134</sup> Physical Monadology, 1: 483-5.

<sup>135</sup> *Physical Monadology*, 2: 286-7, *Dreams* 2: 323. Eric Watkins discusses the sometimes subtle but important changes in Kant's pre-critical views in "Kant's Theory of Physical Influx."

<sup>136</sup> Metaphysical Foundations 9: 496-500.

<sup>137</sup> Metaphysik Herder, 28: 51-3 and Inaugural Dissertation, 2: 409 and 414. See, also, Metaphysik Herder
28: 59, a translation of which can be found in Watkin's "Kant's Theory of Physical Influx," 295-6, along

with references to the Mrongovius Lectures and the Metaphysical Foundations.

<sup>138</sup> Physical Monadology, 1: 475.

<sup>139</sup> Physical Monadology, 1: 475.

<sup>140</sup> False Subtlety, 2: 60.

<sup>141</sup> Only Possible Argument, 2: 76.

<sup>142</sup> Only Possible Argument, 2: 73.

<sup>143</sup> Only Possible Argument, 2: 77-8.

<sup>144</sup> *Only Possible Argument*, 2: 153-4. Kant also endorses this optimistic conclusion at 2: 91. It is perhaps noteworthy, however, that he backs off of this claim somewhat at 2: 109 and concludes only that this is the best world "for the most part." As I explain below, this is undoubtedly because of Kant's increasingly incompatibilist leanings.

<sup>145</sup> Negative Magnitudes, 2: 167-9.

<sup>146</sup> It is interesting that here Kant cites Euler's 1748 essay as an example of how our attempts to understand the nature of space should be guided by our knowledge of geometry, which is presumably used here in Kant's general sense so that it includes Newton's work in the *Principia*.

<sup>147</sup> Negative Magnitudes, 2: 189.

<sup>148</sup> Negative Magnitudes, 2: 201-3. See, also, Beiser, 41-2.

<sup>149</sup> *Negative Magnitudes*, 2: 202-4. See also the *Metaphysik Herder* where Kant suggests that real grounds cannot be understood by the law of identity (28: 43).

<sup>150</sup> See, on this point, Only Possible Argument, 2: 80-1.

<sup>151</sup> This terminology is mine and not Kant's. This distinction is later endorsed by Kant in the *Blomberg Logic*, 24: 116 and 132.

- <sup>152</sup> Only Possible Argument, 2: 76.
- <sup>153</sup> Only Possible Argument, 2: 118.
- <sup>154</sup> Only Possible Argument, 2: 139.

<sup>155</sup> Prize Essay, 2: 275.

# <sup>156</sup> Prize Essay, 2: 275.

<sup>157</sup> Oddly enough, this method just turns out to be the same analytic approach that we find in the *New Elucidation*, though Kant is insistent that, so long as our goals are appropriately modest, we do not need to start off with complete concepts or exhaustive definitions to be successful. This is especially curious since Kant does not offer any clear empirical support for this approach.

<sup>158</sup> See, for example, *Prize Essay*, 2: 289, 292, and 296.

<sup>159</sup> *Prize Essay*, 2: 283. It is interesting to note that this quote immediately follows Kant's discussion of the nature of space (2: 280-3). Perhaps Kant's skepticism about his own earlier metaphysical endeavors is, in part, a consequence of his growing empiricism and his interest in the metaphysical status of space. If so, the *Prize Essay* might signal the beginning of a line of thought which culminates in the *Directions'* argument from incongruent counterparts; however, Kant's mixed attitude towards his conclusions from the *New Elucidation*, which I discuss below, cannot be fully explained by such inchoate concerns about the nature of space.

<sup>160</sup> Prize Essay, 2: 276, 283-4, 289, and 292-3.

<sup>161</sup> *Prize Essay*, 2: 294. Though this quote begins with the claim that identity and contradiction are sufficient conditions for the truth of affirmative and negative propositions, respectively, the rest of the quote clearly indicates that he considers them to be necessary as well. Of course, Kant is here relegating the principles to a formal role, presumably because they do not cover existential claims or cases of material possibility. Nevertheless, this view is consistent with AT' since Kant continues to regard God as a necessary being and as the first cause of the world. See note 162 below.

<sup>162</sup> *Prize Essay*, 2: 296-7.

<sup>163</sup> Announcement, 2: 305.

<sup>164</sup> Announcement, 2: 308.

<sup>165</sup> This is not to say that there are not elements of Kant's earlier metaphysics in his later works. See, for example, the *Inaugural Dissertation* (1770) where Kant still seems to advocate an analytic theory of truth (2: 397, 411-12) and the existence of a first cause (2: 398, 408), as well as the *Blomberg Logic* from the

early 1770's where Kant continues to endorse the method of the *Prize Essay* (24: 153) and, perhaps, the PSR as a consequence of his theory of truth (24: 43), though Kant's remarks are admittedly obscure on this last point. This is most likely a consequence of the fact that, though by the time of the *Dissertation* Kant has come to distinguish between sensible and intelligible cognition, he has yet to give up hope that the latter might provide us with metaphysical knowledge of things in themselves. If this is the case, then it is only natural that Kant would continue to understand such intelligible cognition as he had in his earlier works.

<sup>166</sup> Dreams, 2: 349.

<sup>167</sup> See, for example, Kant's frank admissions concerning his inability to solve the mind/body problem (*Dreams*, 2: 327-8 and 350-1) and his own poorly justified belief in immaterialism (*Dreams*, 2: 328n). By the time of the *Blomberg Logic*, Kant has come to view the mind/body problem as beyond us (24: 68). Though Kant is predominantly concerned with these issues in this essay, his concerns with the status of metaphysics and his doubts concerning the possibility of metaphysical knowledge, though admittedly ambivalent, clearly pre-date his frustration with his failures in the philosophy of mind.

<sup>168</sup> Dreams, 2: 358-9.

<sup>169</sup> Dreams, 2: 367-8.

<sup>170</sup> *Dissertation*, 2: 392-8. See, as well, *Dreams*, 2: 332 which is also suggestive of the later phenomenal/noumenal distinction.

<sup>171</sup> See, for example, *Critique of Pure Reason*, B1.

<sup>172</sup> See, for an example, *Critique of Pure Reason*, B20-4. See, also, *Dreams*, 2: 351-2 where Kant claims that we can only know what the immaterial world of spirits is not since our experience is limited to material objects.

<sup>173</sup> *Herder Ethics*, 27: 4. See, also, *Herder Ethics*, 27: 58 where Kant remarks that we cannot be morally obligated to do what is impossible, i.e. ought implies can.

<sup>174</sup> See *Herder Ethics*, 27: 4 and *Groundwork*, 4: 394. Of course, this is not very helpful if you are interested in figuring out which actions are, in fact, morally good, and Kant is still far away from the

*Groundwork* theory that the right intent involves respect for the moral law. Instead, he claims that we can distinguish right from wrong actions by way of our moral sense, which gives us a feeling of pleasure and joy when we do what is right and displeasure and self-hatred when we do what is wrong. See *Herder Ethics*, 27: 5.

<sup>175</sup> *Metaphysik Herder*, 28: 41.

<sup>176</sup> There is, of course, a third option. Kant could accept that our actions are causally determined but not logically necessitated and that freedom and causal determinism are compatible. Kant, however, never seems to consider this garden variety compatibilism except in the *New Elucidation* where, as we discussed in Chapter 1, he lumped it together with his own compatibilist position. For Kant, we cannot do otherwise if we are either determined or necessitated. If morality requires the ability to do otherwise, then we are neither determined nor necessitated.

<sup>177</sup> Thus it seems that Kant has not completely rejected his compatibilist theory of freedom by the time of these lectures, as Karl Ameriks contends (13-14). See, also, *Metaphysik Herder*, 28: 42 where Kant seems to be trying to revive some sort of compatibilist account.

<sup>178</sup> Only Possible Argument, 2: 110.

<sup>179</sup> Only Possible Argument, 2: 110-11.See, also, 2: 109 where Kant claims that this is, almost, the best of all possible worlds.

<sup>180</sup> Only Possible Argument, 2: 153-4 and 157-8. In addition, in *The Only Possible Argument*, Kant claims that God has pre-ordained events to reward or punish us for our actions (2: 105) and that there is a first cause of the world which ordered the world necessarily towards perfection and which rules out indeterminacy (2: 148).

<sup>181</sup> Negative Magnitudes, 2: 182-3 and 196.

- <sup>182</sup> Prize Essay, 2: 282 and 297.
- <sup>183</sup> Prize Essay, 2: 298.
- <sup>184</sup> Prize Essay, 2: 299.
- <sup>185</sup> Groundwork, 4: 413.

<sup>186</sup> See *Dreams*, 2: 334-5 and *Groundwork*, 4: 433. Of course, Kant's comments in the early sections of the *Dreams* essay cannot be taken at face value since he later discounts these portions of the essay as being unsupported and, at some points, unnecessary (2: 347-8, 356, 368, 371). This falls in line with his general suspicion of all such metaphysical speculation. Nevertheless, this remark clearly indicates the way in which Kant was beginning to think of moral obligation and the moral relationships between individuals, even if he did not think he could support this view.

# <sup>187</sup> Dreams, 2: 370.

<sup>188</sup> There are times, however, when Kant does still seem to rely on it. See, for example, his discussion of the mysterious nature of freedom cited above where Kant argues that since all analysis relies on the principles of identity and contradiction and ends in conceptual primitives such as the notions of cause and effect, we cannot say anything more about our free will except that, through it, we are able to cause certain effects. This argument seems to assume that our knowledge of freedom is limited to what we can learn through analysis. Of course, this is far from Kant's earlier claims that all true propositions are analytically true, and, at most, it only supports the conclusion that Kant has not yet fully emancipated himself from his pre-critical views. It is interesting to note that Kant offers a similar argument against our ability to understand freedom in the Critique of Pure Reason in his remarks on the thesis of the "Third Antinomy" (A448/B476) <sup>189</sup> By itself, however, this does not mean that Kant did not have either of these issues in mind. As I argued in the last chapter, though Kant does not mention his analytic theory of truth or the PSR directly in the Directions essay, it seems more than likely that he was keenly ware of the implications of his argument from incongruent counterparts for the PSR. The difference here, though, is that Kant does not offer any compelling theoretical reasons to reject his earlier metaphysics. In Dreams of a Spirit-Seer, Kant is aware of the inconsistency of his metaphysical and ethical views, and he sides with the latter because he gives priority to practical over theoretical reasoning. In Directions in Space, Kant has found a compelling theoretical reason to reject his New Elucidation account. It seems, then, that the 1766 essay set the stage for Kant's argument from incongruent counterparts in the sense that, by 1766, Kant had what he took to be good practical reasons to reject the PSR and AT' but no cogent theoretical argument against either. And so,

though he knew something was wrong with his earlier position, it would take him two years to figure out what it was.

<sup>190</sup> *Dreams*, 2: 373. See, also, *Dreams*, 349-50 and 369. Though this is the first essay where we find Kant explicitly discussing the priority of practical over theoretical reasoning, there are places in earlier essays which indicate a similar tendency to downplay the significance of metaphysical argumentation. See, for example, *The Only Possible Argument* where Kant indicates that we do not need metaphysical proof of God's existence, though it certainly might be helpful (2: 65 and 163), and the *Metaphysik Herder* where Kant notes that, though we have no compelling argument against idealism, it should still be rejected as contrary to common sense (28: 43).

<sup>191</sup> It seems, then, that Kant is already laying the foundations for the later postulates of practical reason (*Critique of Practical Reason*, 5: 122-32) and the deduction of freedom (*Critique of Practical Reason*, 5: 42-50).

<sup>192</sup> Metaphysic L1, 28: 301.

<sup>193</sup> Critique of Pure Reason, Bxxx.

<sup>194</sup> Critique of Practical Reason, 5: 121.

#### Chapter 5

<sup>196</sup> For a discussion of the different senses of freedom in Kant's works, see Lewis White Beck, *Five Concepts of Freedom*. There he distinguishes between spontaneity and transcendental freedom insofar as the latter is a particular type of spontaneity, viz. noumenal spontaneity. As phenomenal spontaneity is not possible according to Kant, I do not bother to make this distinction here.

- <sup>197</sup> Critique of Pure Reason, A802/B830.
- <sup>198</sup> Critique of Pure Reason, A803/B831.
- <sup>199</sup> Critique of Pure Reason, A549-50/B577-8.

<sup>200</sup> This psychological determinism is notoriously prima facie inconsistent with Kant's claim that

<sup>&</sup>lt;sup>195</sup> Critique of Pure Reason, A603-20/B631-48.

psychology could never be a science (*Metaphysical Foundations of Natural Science*, 4:471). For a discussion of this issue see Allison's *Empirical and Intelligible Character in the First Critique*.

<sup>201</sup> Kant does not always appear to be consistent on this point. See, for example, his oft cited discussion of practical freedom in the first section of the "Canon of Pure Reason" (*Critique of Pure Reason*, A797-804/B825-32). Such passages suggest that even at this late date, Kant was not completely sure about his incompatibilist position; however, there are plausible interpretations of these remarks which remove the apparent inconsistency. For instance, see Beck's *Commentary*, 190n40. Regardless, it is clear that Kant's considered view is that moral responsibility requires more than practical freedom.

<sup>202</sup> Critique of Pure Reason, A448/B476.

<sup>203</sup> As Beck has pointed out (*Five Concepts*, 187-8), this concept of freedom would be more appropriately called transcendent in the technical Kantian sense of overstepping the legitimate bounds of theoretical knowledge. Nevertheless we shall follow traditional usage and designate such noumenal spontaneity as transcendental freedom.

<sup>204</sup> Critique of Pure Reason, A444/B472.

<sup>205</sup> Critique of Pure Reason, A444/B472.

<sup>206</sup> Critique of Pure Reason, A446/B474.

<sup>207</sup> Critique of Pure Reason, A446/B474.

<sup>208</sup> Schopenhauer, 1: 497-8.

<sup>209</sup> Schopenhauer actually argues that if A causes B, then the existence of A must be sufficient to cause B necessarily so that, if A exists, then B exists necessarily. But if this is supposed to be a logical necessity, it is clearly false. There is no reason to assume that if A causes B, it is logically impossible for A to exist without the existence of B following. If, however, he is merely talking about physical necessity, i.e. that the existence of B follows from the existence of A coupled with the laws of nature, then, at best, 'necessarily' here merely clarifies the principle in question without adding anything to it. Fortunately, nothing in the argument hinges on this point.

<sup>210</sup> Of course, this supposed tautology is not unquestionable. For example, if we admit indeterministic

causation, then A might cause B by itself without being a sufficient cause.

<sup>211</sup> Indeed, this interpretation has become so prevalent and this mistake appears so egregious, that some commentators have reacted by proposing that the argument of the thesis has nothing to do with "the law of nature." P. F. Strawson, for example, has suggested that the thesis here is simply a corollary of the thesis of the 'First Antinomy', namely that there must be a first beginning in time (208). But while it is a result of the argument here that there must be a first event in time, it is equally clear that Kant does not rest his argument on this earlier thesis.

<sup>212</sup> Jonathan Bennett, Kant's Dialectic, 185.

<sup>213</sup> Critique of Pure Reason, A466-7/B494-5.

<sup>214</sup> Critique of Pure Reason, A409/B436.

<sup>215</sup> As part of his overall argument, Al-Azm claims that the "Third Antinomy" is best understood as representing both sides in the debate between Leibniz and Clarke concerning free will and determination. I do not find his argument on this point convincing, but this claim is not essential to his interpretation as it is discussed here.

<sup>216</sup> Al-Azm, 92.

<sup>217</sup> Al-Azm, 93.

<sup>218</sup> Al-Azm, 93.

<sup>219</sup> Critique of Pure Reason, A446/B474.

<sup>220</sup> Critique of Pure Reason, A533/B561.

<sup>221</sup> Critique of Pure Reason, A322/B379.

<sup>222</sup> Critique of Pure Reason, A426-9/B454-8.

<sup>223</sup> Kant would apparently disagree with this claim. See, example, pp. xx-xxi of the preface to the second edition of the *Critique* where Kant claims that, instead of assuming the phenomenal/noumenal distinction and the accompanying doctrine of transcendental idealism, the contradictory arguments of the antinomies provide us with their proof. For a compelling refutation of this claim, see Paul Guyer, 385-415.

<sup>224</sup> Kant does, however, appear to make something like this argument when he claims that the problem with

all the thesis arguments is that they assume that the various series described in each are given in their entirety whereas they are really only given indeterminately as the result of a process of synthesis (*Critique of Pure Reason*, A497-501, B525-9). He even goes on to say that the causal series of events is not itself finite or infinite insofar as it is the result of some indefinitely long process, a "dynamical regress," which, presumably, we perform (A505-6/B533-4). This is clearly a result, in part, of Kant's need to show that there is some common problem and hence some common solution to all the antinomies. The entire point of this section is to show that all the antinomies suffer from the common defect of assuming that "[i]f the conditioned is given, then the whole series of all conditions for it is also given" (A497/B525). Kant then notes that this is not true of the parts of space or time since these are only given, synthetically, as the forms of our intuition. Kant's parallelism then requires him to give a similar response with regard to causal series. But this is clearly not Kant's considered view in the antinomies chapter since it conflicts with his persistent commitment to the conclusion of the "Second Analogy" which says that there is a cause for every event and not just that we could somehow produce one synthetically.

<sup>225</sup> Bennett, Kant's Dialectic, 185 and Heimsoeth, 1: 239n.

<sup>226</sup> This is, in fact, the very sense of a priori to which Kant appeals in his discussion of reason's interest in the antinomies at A466-7/B494-5.

<sup>227</sup> See, for example, *Blomberg Logic*, 24: 16 and 102. In the same set of lectures, Kant goes on to assert that it is a natural law to seek to understand the world better (*Blomberg Logic*, 24: 93). Since Kant quickly goes on to assert that we cannot prove that there was a beginning to the universe, this seems to indicate that Kant had already begun to think of the PSR as a regulative principle, as indicated in the *Inaugural Dissertation*, which guides us, naturally, to seek further explanations but which cannot guarantee the existence of an ultimate explanation.

<sup>228</sup> *Inaugural Dissertation*, 2: 418. In this passage, Kant merely refers to the PSR as the first principle of harmony. It is clear, however, from his reference to Epicurus as someone who professes this principle that he has the PSR in mind. See Walford's note 71 to the text.

<sup>229</sup> Critique of Pure Reason, A528-32/B556-60.

## <sup>230</sup> Critique of Pure Reason, A536/B564.

<sup>231</sup> For powerful criticisms of this solution, see Terence Irwin's "Morality and Personality: Kant and Green" and Jonathan Bennet's "Kant's Theory of Freedom." Partial defenses are offered by Ralf Meerbote in his response to Irwin, "Kant on Freedom and the Rational and Morally Good Will," and Allen W. Wood's "Kant's Compatibilism." I should note that Meerbote argues that Kant is, though he is sometimes reluctant to admit it, committed to compatibilism and some version of Davidson's anomalous monism with regard to rational actions. I cannot agree, since I believe it is clear that, at least from the mid-1760's onward, Kant strenuously endorses an incompatibilist theory of freedom. I must admit, however, that this endorsement is certainly strained by Kant's equally firm desire to show that we can be free in a deterministic phenomenal world.

<sup>232</sup> Critique of Pure Reason, A405-20/B432-48.

<sup>233</sup> As Ameriks has pointed out, when he was working on the *Critique*, Kant seemed to have some trouble deciding where to place his discussion of freedom, at times including it, in both his notes and lectures, within his discussion of the nature of the soul which would later become the chapter on paralogisms (189-90).

<sup>234</sup> This argument is a combination of Kant's notorious remark in the *Critique* that we are aware of our noumenal activity through apperception (A546-7/B574-5) and that noumenal causation is atemporal and hence free (A538-41/B566-9). This argument clearly appears to violate Kant's prohibition against knowledge of things in themselves. It is not surprising, then, that Kant concludes his discussion of this antinomy by observing that we cannot prove, theoretically, that we are free (A558/B586). For an excellent discussion of this inconsistency in Kant's attitude toward such proofs, see Ameriks, 189-233.

<sup>235</sup> Kant offers this argument in the *Critique* at A547-50/B575-8, though he ties it in to the theoretical argument at A551-2/B579-80.

<sup>237</sup> Critique of Pure Reason, A645/B673.

<sup>238</sup> Critique of Pure Reason, A648-50/B676-8.

<sup>&</sup>lt;sup>236</sup> Critique of Pure Reason, A668/B696.

## <sup>239</sup> Critique of Pure Reason, A554-5/B582-3.

<sup>240</sup> Kant himself is not only aware of this mistake, but actually goes so far as to insist that it is the fundamental mistake of all the antinomies (*Critique of Pure Reason*, A515-17/B543-5). If he is right about this, then Kant's typical definition of the antinomies is obviously off the mark. If all of the antinomies amount to an illegitimate use of the PSR, then surely they do not reveal some deep conflict of reason which involves "a natural and unavoidable illusion, which even if one is no longer fooled by it, still deceives though it does not defraud and which thus can be rendered harmless but never destroyed" (*Critique of Pure Reason*, A422/B449-50). Perhaps the best explanation of this later passage lies in Kant's need to associate the problem treated in the solution to the "Third Antinomy" with the antinomy. Kant makes a similar attempt to relate the solution back to the original antinomy at A450/B478 where he notes that our freedom is like the absolute spontaneity that would be exhibited by a first cause. Despite this similarity, though, the thesis concerns the existence of such a first cause and not the existence of our freedom. Allison's interpretation of the antinomy falls prey to the same difficulty since he understands the relation between the solution and the antinomy based on this similarity (*Kant's Theory of Freedom*, 11-28).

<sup>241</sup> On this point, see Bennett's helpful discussion of regulative principles in *Kant's Dialectic* (270-4). <sup>242</sup> There is a further potential problem with this account since, at times, Kant indicates that when we are using the PSR in its regulative function, we are assuming that, possibly, there is some causal explanation for phenomenal events. See, for example, A514/B542 in the *Critique*. Since the "Second Analogy" is supposed to guarantee that this is in fact such a causal explanation, it is unclear why we should adopt this more modest view in our investigations.

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