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KANT'S THEORY OF COGNITION: AN INTERPRETATION OF THE
ARGUMENT OF THE TRANSCEDENTAL DEDUCTION

BY

TODD ANTHONY KUKLA

DISSERTATION

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Doctoral Committee:

Professor Arthur Melnick, Chair
Professor Emeritus Richard Schacht
Professor William Schroeder
Assistant Professor Shelley Weinberg

ABSTRACT

The purpose of Kant's transcendental deduction in the *Critique of Pure Reason* is to prove that certain concepts not derived from experience (called categories) apply to and govern the objects of our experience. Kant seeks to dispel Hume's skeptical assertion that concepts such as cause and substance fail to identify features of reality. His proof appeals to our cognitive abilities, and he argues that, if the application of these concepts to experience makes cognition of objects possible, then these concepts must apply to any object that we can cognize. However, there is extensive disagreement in the secondary literature on the nature of the ability named by the term "cognition." What is this capacity that the categories make possible?

My dissertation provides an answer to this question. First, I argue that "cognition" refers to the phenomenon of intentionality. This means that the capacity for mental representations to refer to, or be about, objects is made possible by the application of the categories to experience. Second, I argue that cognition is the capacity to intend the full scope of objects in space and time – including the past, the future, and remote space. Many commentators focus only on Kant's theory of perception, according to which rudimentary sensory information is synthesized into the perception of an object. Although the categories do play a role in synthesizing perceptions, I argue that more importantly they play a role in enabling the representation of objects that are not given in perception. On the reading I defend, the categories ground our ability to represent the wider spatio-temporal world. I term this ability "global intentionality."

In the first part of the dissertation, I argue against epistemological interpretations of the nature of cognition. According to this reading, the categories make empirical

knowledge possible. This reading situates Kant within a philosophical tradition that is concerned with knowing whether our representations are accurate or correct portrayals of the world, and commentators have sought to find in Kant's project a refutation of empirical knowledge and external world skepticism. I argue that instead of ensuring correctness of representation, the application of the categories to experience is necessary for the more basic capacity for representations to be about the world in the first place. The first part concludes by showing that the scope of intentionality is global. I appeal to the Postulates, Antinomies, and Analogies, as well as the Deduction, to support this claim.

In the second part of the dissertation, I develop Kant's theory of global intentionality. I argue that he offers a rule-based analysis, according to which intentional representations are simply rules for encountering objects. Since on Kant's view objects are spatio-temporal in nature, rules for encountering them take the form of instructions for repositioning oneself in space and time, such that, if obeyed, would put one in their perceptual vicinity. I claim that this view is in many respects similar to William James's understanding of cognition. Kant's position, however, raises a special problem for representation of the past, because it is not possible to formulate rules that would put one in the vicinity of a past object. I argue that Kant's proof of the category of substance is designed to solve this problem.

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CHAPTER 1

INTRODUCTION

The subject of this study is Kant's Transcendental Deduction in the A-edition of the *Critique of Pure Reason*. This text has long been regarded as a notoriously difficult piece of philosophical thinking.¹ In the A-edition Preface, Kant says that these "investigations have cost me the most, and I hope not unrewarded, effort" (A xvi), and presumably one reason for such strained attention is because the text is, arguably, the most important section of the entire *Critique*. For the purpose of introducing the Transcendental Deduction's role and significance, it will be helpful to situate it within a broader outline of the *Critique's* organization and goals.

The *Critique* has two major divisions, the Doctrine of Elements and the Doctrine of Method.² The Doctrine of Elements is by far the longer and more widely studied division of the book, and its purpose is to develop Kant's critical philosophy in the realm of theoretical reason. In the Introduction to the *Prolegomena to Any Future Metaphysics*, Kant famously states that Hume awoke him from his "dogmatic slumber."³ Speculative metaphysics, at least up to Kant's time, was primarily concerned with establishing conclusions about nature of the soul, God, and the world-totality. None of these objects,

¹ Patricia Kitcher mentions a rumor that a well-known Harvard Professor who was teaching the *Critique* for the first time cancelled classes for two weeks when he got to the Deduction Chapter because he didn't know what to say (See *Kant's Transcendental Psychology*, p. 61). She also humorously mentions H.J. Paton's memorable comparison of the difficulties involved in understanding the Deduction to crossing the Great Arabian desert on foot.

² Since the Transcendental Deduction is not part of the Doctrine of Method, and since this division is not necessary for understanding the main programme of the *Critique*, I set aside discussion of it. Essentially its function is not to develop the critical philosophy, but to spell out some of its consequences. Notably it contains a helpful account of the difference between the methodology of philosophy and mathematics. It also concludes with an interesting and influential recasting of the history of philosophy in terms of the history of pure reason. Similar to Aristotle and Hegel, Kant surveys the history of philosophy and shows how it can be understood from the perspective of the problems of his own work.

³ Kant, *Prolegomena to Any Future Metaphysics*, p. 8 [Ak 260].

however, can be given in experience. Part of Hume's importance was his recognition that the same was true of the concept of cause. He persuasively argued in the *Treatise of Human Nature* that the relation of cause and effect was one of necessitation, and that no matter how hard one might look, experience reveals only observable conjunctions.⁴ But the true significance of his contribution, judged from Kant's perspective, was his attack on the idea that there was any rational basis for establishing the principle that every event must have a cause. Hume's criterion for determining when a belief is rationally justified was straightforward enough: such beliefs, when denied, yield a contradiction. Thus, all he needed to show was that the principle of causality could be denied without absurdity, which he accomplished by arguing that there is no inconsistency in imagining an event without a preceding cause.⁵ As simple as this point may sound, Kant saw in it a profound skepticism. He understood Hume as having proved that an analysis of the *concept* of cause was insufficient for establishing that causes must have necessitating effects, and Kant insightfully extended this result to the entire field of metaphysics. Granted that metaphysics cannot be conducted by examining experience (since its objects can never be given in it), the scholastics and rationalists thought that it could at least be conducted by an analysis of concepts. For Kant, Hume's skeptical inquiry regarding cause was the nail

⁴ Hume expresses this result as follows: "Here again I turn the object on all sides, in order to discover the nature of this necessary connection, and find the impression, or impressions, from which its idea may be deriv'd. When I cast my eye on the *known qualities* of objects, I immediately discover that the relation of cause and effect depends not in the least upon *them*. When I consider their *relations*, I can find none but those of contiguity and succession; which I have already regarded as imperfect and unsatisfactory" (*Treatise*, Book I, Part III, Section II, p. 77).

⁵ He says, "as the ideas of cause and effect are evidently distinct, 'twill be easy for us to conceive any object to be non-existent this moment, and existent the next, without conjoining to it the distinct idea of a cause or productive principle. The separation, therefore, of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination; and consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity; and is therefore incapable of being refuted by any reasoning from mere ideas; without which 'tis impossible to demonstrate the necessity of a cause" (*Treatise*, Book I, Part III, Section III, pp. 79-80).

in the coffin for the belief that substantive conclusions can be produced from conceptual analysis alone.⁶ A careful reading of the *Treatise* demanded that a *critical* question be raised: Can human knowledge be extended beyond the bounds of possible experience? Alternatively formulated: Is metaphysics as a science at all possible? This is the question of the critical philosophy, the answer to which is called a critique of pure reason.

Kant, however, was not satisfied with a thoroughly negative answer to this question precisely because of the high stakes Hume exposed. The principle that every event has a cause is employed all throughout the sciences and daily life, and yet it stands in the same position as the principles of traditional metaphysics: its proof can be given neither in experience nor conceptual analysis. Although Hume was willing to accept causality as “a bastard of imagination” (to use Kant’s terms),⁷ along with the far-reaching consequence that human conduct in science, morality, and religion is not at all rational, Kant was not. In due time, he had come to conceive the difference between a legitimate and an illegitimate metaphysics. He called the former transcendental metaphysics, and he

⁶ Kant had formulated this issue with scholastic precision in terms of the difference between analytic and synthetic judgments. Hume had effectively shown that the principle of causality was not an analytic proposition provable by conceptual analysis alone. It was synthetic – yet *a priori*. Thus, Kant articulated the problem of metaphysics in terms of whether and how synthetic *a priori* propositions were possible.

⁷ I quote a somewhat lengthy passage from the *Prolegomena* that summarizes Kant’s understanding of Hume’s arguments nicely: “Hume started chiefly from a single but important concept in metaphysics, namely, that of the connection of cause and effect (including its derivatives force and action, and so on). He challenged reason, which pretends to have given birth to this concept of herself, to answer him by what right she thinks anything could be so constituted that if that thing be posited, something else must also necessarily be posited; for this is the meaning of the concept of cause. He demonstrated irrefutably that it was perfectly impossible for reason to think *a priori* and by means of concepts such a combination, for it implies necessity [i.e., conceptual analysis alone cannot establish the principle that every event necessarily has a cause]. We cannot at all see why, in consequence of the existence of one thing, another must necessarily exist or how the concept of such a combination can arise *a priori*. Hence he inferred that reason was altogether deluded with reference to this concept, which she erroneously considered as one of her own children, whereas in reality it was nothing but a bastard of imagination, impregnated by experience, which subsumed certain representations under the law of association and mistook a subjective necessity (habit) for an objective necessity arising from insight. Hence he inferred that reason had no power to think such combinations, even in general, because her concepts would then be purely fictitious and all her pretended *a priori* cognitions nothing but common experience marked with a false stamp. In plain language, this means that there is not and cannot be any such thing as metaphysics at all” (*Prolegomena to Any Future Metaphysics*, pp. 5-6 [Ak. 257-259]).

distinguished it from the impossible science of speculative metaphysics. In the Doctrine of Elements, he assigned the development of the former to a section called the Transcendental Analytic, and he assigned the demolition of the latter to the Transcendental Dialectic. Thus, the main division of the Doctrine of Elements had come to reflect the two-fold project of a critique of pure reason: first was the positive task of constructing a lasting and certain metaphysical system, and second was the negative task of laying bare the unfounded pretensions of speculative metaphysics. Such, then, was the critical philosophy to which he was awoken.

The Transcendental Analytic is Kant's attempt to prove that there are certain *a priori* concepts, which he calls categories, that are necessarily exemplified in the world of our experience. He aims to establish that any object we could ever experience must be part of a system of causally interacting substances standing in community with one another.⁸ This task involves two parts. First, it requires justifying a *method* for proving that the categories govern experience before, secondly, that method can be put into action by developing the actual proofs. The first task belongs to Book I of the Transcendental Analytic, called the Analytic of Concepts, and the second task belongs to Book II of the Transcendental Analytic, called the Analytic of Principles. What Kant and all subsequent commentators refer to as the *Transcendental Deduction* is the second chapter of the Analytic of Concepts, entitled "On the deduction of the pure concepts of the understanding." Thus, it concerns Kant's attempt to work out the correct methodology for doing metaphysics. The first chapter is known as the Metaphysical Deduction.

⁸ This is a reference to the categories of relation, i.e., the analogies of experience, which are by far the most important categories: substance, cause, and community. Kant's categories also involve quantity, quality, and modality.

Historically the first chapter has received relatively little attention, and perhaps justifiably so. It is entitled, “On the clue to the discovery of all pure concepts of the understanding.” Kant takes his clue from the logical table of judgments. This table is simply a catalogue of the basic judgment-forms found in the logic textbooks of his day, and he attempts to “derive” each of the categories from each of the judgment-forms. The overwhelming consensus is that it is an utter failure, reflective of Kant’s architectonic obsession. For my part, I believe that the difficulty lies in the glaring fact that the Metaphysical Deduction isn’t at all methodological in character. Effectively, Kant attempts to derive a list of categories *before and apart from* his development of a method for proving that certain *a priori* concepts govern experience. The proper procedure, I believe, is to work out a method for metaphysics in order subsequently to determine what metaphysical concepts satisfy the constraints of that method through a kind of trial and error. That is, the development of the list of categories should result from an application of whatever methodological constraints are placed on metaphysics, such that any attempt to project that list before and without reference to those constraints is bound to be saddled with severe difficulties. As a result, the Transcendental Deduction is where all of the action is; it provides the official statement of how a legitimate metaphysics can be done. Since it sets out the guardrails for metaphysics and consequently guides the rest of the *Critique*, it is arguably the most important section of the book.

We are now left with a question central to the programme of the *Critique*: What is Kant’s proposed method for doing metaphysics? My study defends an answer to this historically and philosophically important question. In terms of the big picture, I attribute to Kant the unique attempt to do metaphysics by reflecting upon the nature of

intentionality. Representations possess the property of referring to something else, and Kant's master idea is that the very possibility of representation depends upon reality being structured in a certain way. Specifically, Kant is interested in how perceptions and thoughts can refer to outer objects, and in addressing this issue, he makes the surprising claim that they would lack this property (i.e., reference) if reality were not a system of causally interacting substances. My study explains Kant's theory of intentionality along with his goal of developing a metaphysics on the basis of analyzing the requirements for this phenomenon. One point of value in my reading is that even if one rejects his attempt to do metaphysics in this way, his discussion of intentionality remains philosophically significant. Indeed, Kant develops a rule-based theory which is altogether different from the causal-based accounts popular today.

By way of introduction, I first present the topic or theme with respect to which my interpretation of the Transcendental Deduction is based. I claim that, according to Kant, the categories are necessary and sufficient requirements for the possibility of the global scope of intentionality. Second, I explain how the interpretation I defend differs from the common reading of Kant, according to which the categories are involved in synthesizing elementary sense-data and thereby constructing objects of experience from rudimentary components. Third, I outline the structure of the chapters of this study, and I discuss in what respects it shares and departs from Arthur Melnick's views on the first *Critique*. His work has influenced the reading I here defend.

1 The Topic: Intentionality

One of the most important aims of the Transcendental Analytic is to prove that the world of experience consists of substances standing in community with one another, whose transformations and interactions are governed by causal laws. This proof is given in the Analogies of Experience, and it concerns the key categories of substance, cause, and community. Since Kant intends to establish that all objects of experience must have this ontological structure, his conclusion is clearly metaphysical; it establishes what experienced reality must be like. But Hume raises the following problem: since the metaphysical concepts of substance, cause, and community do not originate from experience, and since their mere conceptual analysis fails to prove anything about what reality is like, it appears that there can be no basis for establishing that these concepts (or any other set of concepts) form the correct metaphysics of the world. Hume leaves us with the result that metaphysical concepts are nothing more than mental projections or bastards of the imagination. In response to this skeptical outcome, Kant offers a method for proving that, despite the undeniable *a priori* status of metaphysical concepts, objects of experience must exhibit a specific ontological structure. Recognizing that neither a study of reality nor concepts suffices to meet Hume's challenge, Kant proposes that reason turn inward and examine its own powers of cognition. He devises the following methodological principle: if it can be proved that there are certain features that reality must possess in order to be cognizable by us, then it can be proved that those features must apply to any reality that we can cognize. Reason is now required to "take on anew the most difficult of all its tasks, namely, that of self-knowledge..." (A xii), by investigating the nature of cognition and its own requirements. Although the results of

such an inquiry are limited in scope, since they apply only to cognizable reality and not reality *tout court*, it does yield the genuine metaphysical claim that any reality we could ever cognize must possess certain basic structural features. Of course in developing the argument, Kant aims to prove that these structural features are the categories.

But this method leaves the interpreter with a question: What does Kant mean by cognition? What is this capacity that the operation of the categories in experience makes possible? Kant's term is "*Erkenntnis*," which is variously translated as knowledge, cognition, and even judgment. The interpretation I defend is that the ability enabled by the categories, which is named by the term "*Erkenntnis*," is intentionality. Intentionality is that property of representations by which they are *about* or *of* something, and it therefore constitutes the very essence of representation as that which is representative of something. This means that the operation of the categories in experience is what first makes possible our ability to form representations that *refer to objects*. This phenomenon is related to, but distinct from, knowledge. All knowledge presupposes a relation to the object known, but not all intentional relations to objects are cases of knowledge.⁹

My interpretative view that the topic of the Transcendental Deduction, and the Transcendental Analytic as a whole, concerns the conditions for the possibility of intentionality, rather than empirical knowledge, is shared by a minority camp of interpreters.¹⁰ Robert Brandom in *Tales of the Mighty Dead* describes this basic Kantian

⁹ In Chapter 1, I will argue that cases of misrepresentation (such as when we experience an illusion or make an incorrect judgment about something) are intentional in character, and indeed must be intentional in character in order to qualify as *misrepresentation*. But given the standard view in epistemology that one cannot know that 'P' if 'P' is false or incorrect, misrepresentation falls short of knowledge. For example, the judgment that the earth is flat is about the earth precisely because it misrepresents how the earth is; but since the earth is not flat, we can't know that it is flat.

¹⁰ See Melnick, *Space, Time, and Thought in Kant*; Brandom, *Tales of the Mighty Dead*; McDowell, "Having the World in View"; George, "Kant's Sensationism"; Pereboom "Kant on Intentionality"; Aquila,

problematic with respect to the historical tradition quite well. Distinguishing Kant's concerns from Descartes', he says:

Kant digs deeper. He sees that the epistemological issue presupposes a semantic one. The Cartesian skeptic asks what reason we have to suppose that the world is as we represent it to be in thought. An inquiry into the conditions of *successful* representation is accordingly an appropriate road to a response. Kant takes as his initial focus *intentionality* rather than *knowledge*. He asks about the conditions of even *purported* representation. What makes it that our ideas so much as *seem* to point beyond themselves, to something that they are *about*? The threat that sets the criteria of adequacy for accounts addressing this topic is *semantic* skepticism: a worry about the intelligibility of the very idea of representation.¹¹

According to Brandom, Descartes' *Meditations* are framed as a response to an epistemological skepticism threatening to undermine the rational legitimacy of the modern science, along with the conception of ourselves as knowers capable of fulfilling the responsibility of justifying our beliefs with reasons. Kant's *Critique*, on the other hand, is framed as a response to an ever deeper, more fundamental threat of semantic skepticism. The problem shaping Kant's inquiries is not whether representation can be successful or accurate (and thus potentially a source of knowledge), but whether we can even make sense of representation in the first place: How can a cognitive state so much as acquire the property of referring beyond itself to something else? This problem is often raised with regard to language: How can the term-sign, "J-o-h-n," which is nothing more than arbitrary marks or scribbles on a page, designate anything at all? But the same difficulty applies to mental phenomena when ask how thoughts, desires, and perceptions are about what transpires in the world. Wittgenstein captures the perplexity attending the phenomenon of intentionality when he writes, "This queer thing, thought ... How was it

"Intentionality and Kantian Appearances"; Sellars, *Empiricism and the Philosophy of Mind*; and Kemp Smith, *A Commentary to Kant's Critique of Pure Reason*.

¹¹ Brandom, *Tales of the Mighty Dead*, pp. 22-23.

possible for thought to deal with the very object *itself*? We feel as if by means of it we had caught reality in our net.”¹² Kant’s concern with the possibility of intentionality is more fundamental than Descartes’ epistemological interests, since truth and falsity in representation presupposes that we are capable of having representations of a world – whether accurate or inaccurate – to begin with. Thus, Brandom says that Kant backs up to a very basic question regarding how representations can even seem, or purport, to be about something. He claims that the type of skepticism facing Kant threatens not so much our conception of ourselves as knowers, but as *agents responsible to a world* with which we are intentionality related.¹³ Throughout this study, I will follow Brandom’s use of the adjective “semantic” to describe a concern with intentionality; it is meant to contrast with the epistemological concerns attending the concepts of truth, falsity, and justification.

Perhaps, however, Brandom’s explication of the Kantian problematic doesn’t go far enough. Although he correctly hones in on intentionality, he fails at least to explicitly draw a distinction between perception and representation *in absentia*. The former involves a relation to a perceived object; the intentional object is given in experience. But intentionality need not be – and should not be – restricted to perceived objects. We are capable of forming representations of the larger world around us, something hardly exhausted by our current perceptions. We can recall past events and places, and even think about a distant past in which we never existed; we can ponder the future, as well as reflect on what exists, or may exist, in remote regions of space. Our ability to form

¹² See, *Philosophical Investigations*, p. 108e, §428.

¹³ With respect to this point, Brandom says: “For Kant, the aboutness characteristic of representings is a normative achievement. Representings answer for their correctness to how it is with what (thereby) counts as represented. To take one thing as representing another is to accord to the latter a certain kind of *authority* over the former, to see the representing as in a distinctive way *responsible* to what is represented. (On the practical side, the normative approach can be extended to intendings and what is intended.)” (*Tales of the Mighty Dead*, p. 23).

representations is not limited to what is given in the present moment, but encompasses a broader spatio-temporal reality. Via sensation and perception we are made aware of objects in our immediate vicinity; via thought we are enabled to represent what lies outside the reach of immediate perception.

So, for example, when I think that Socrates lived in Athens, my thought is presumably about the historical person who once lived. But how can my thought reach out and capture Socrates “in its net”? How can present thoughts be about spatially and temporally remote objects, representing them *in absentia*? Following Melnick’s terminology, I call the capacity to form thoughts that refer to spatially and temporally remote objects global representation.¹⁴ I defend the claim that global representation is the cognitive ability that the categories are claimed to make possible: if the objects of experience weren’t governed by them, then we would not be able to form representations referring to the past, remote space, and the future. Although I do not deny that the categories are also necessary for the possibility of perception, I do argue that perception is only a peripheral issue in the Deduction and Analytic as a whole. The reason is because any given perception is represented as occurring within the context of a larger world – in which case, the kind of perceptual awareness that we have is bound up with our ability to represent the world around us.¹⁵

¹⁴ See Melnick, *Space, Time, and Thought in Kant*. He provides a systematic treatment of global representation in chapters 2, 3, and 4.

¹⁵ Intentionality is also central to a field of philosophical inquiry that in some respects has grown out of Kant: phenomenology. Sartre, in his short 1939 essay on Husserlian phenomenology, describes consciousness as exposed to and “bursting toward” a world outside itself. Similarly Heidegger characterizes human reality as “being here” or *Dasein* – an expression that intends to convey that we are not trapped within a sphere of private, subjective consciousness, but stand out (*ex-sistere*) within a world with which we engage and disclose. Both thinkers tend to emphasize the practical or lived component of intentionality by discussing the ways in which we are related to things in, for example, pursuing projects or emotional flight. Kant, for the most part, does not touch upon this dimension of intentionality since his analyses focus on our *cognition*, and in this way, phenomenology provides a valuable fleshing out of

2 The Picture: Rejecting Data-Sensualism

There is a reading of Kant – which can be called the standard reading – that has circulated around Anglo-American philosophical circles for some time. Since the interpretation I defend is opposed to it, it will be worthwhile to articulate this reading for the purpose of presenting an alternative picture to the basic problems shaping the *Critique*.

In *Kant's Metaphysics of Experience* (1939), H.J. Paton first introduced the analogy of blue-glasses in order to explain the transcendental ideality of space and time.¹⁶ Kant claims that space and time are mere forms of intuition, which Paton likened to blue-glasses that must perpetually be worn. The world seen through the glasses is bound to appear bluish to the experiencing subject, and yet the world itself is not blue. The glasses determine prior to experience, or *a priori*, what experience must be like, and they derive not from the world but from the subject's own sensory apparatus. Paton claimed that, likewise, space and time are but formal components of the subject's sensory system, and therefore everything experienced will necessarily appear to the subject as spatio-temporal.

Kant's insights into the broader dimensions of human existence. But even so, this is no reason to ignore the *Critique* given that the subject of intentional representation is one of the two central, and hardest, problems in contemporary philosophy of mind. Although Heidegger claims that cognition (*Erkenntnis*) is a derivative mode of being in the world, he has little to say about this derivative mode. And whether he is correct or not, the subject deserves philosophical scrutiny. Given that Kant's interests aim to explain how we can be intentionally related to larger world around us – or in other words, to any possible spatial-temporal object (including past and spatially remote objects) – we can say that Kant provides an analysis of our *cognitive being in the world*.

¹⁶ See *Kant's Metaphysics of Experience*, p. 143. In a footnote he says, "A rough analogy may help to make this clearer. If we are wearing blue spectacles, the blueness of things is imposed by our spectacles, but differences in the shades of blue are due, not to the nature of our spectacles, but to the influence of the things."

This analogy has given rise to a standard interpretation. In the opening pages of the highly influential *Bounds of Sense* (1966), P.F. Strawson in fact attributes to Kant the very analogy that Paton said was only rough. He claims that Kant conceived his project on the basis of a “kind of strained analogy.”¹⁷ After the rise of the new science, it has become commonsense knowledge that experience of the world is in part fashioned by our physiology. Our five senses, central nervous system, and brain are all involved in processing sensory information from the external world, and the way in which that information is processed is integral to, or even determinative of, the character of our experience of the world.¹⁸ Strawson says that Kant was certainly aware that an investigation of the role of the sense organs in shaping experience was not a subject for philosophy, but empirical science. Nonetheless, his philosophical project could still be understood on analogy to this modern scientific idea. Kant’s interest concerned the articulation of the possibility of experience, and he found that this possibility rested upon our imposing certain features or structures upon the world. The possibility of experience was “to lie in our own cognitive constitution”:¹⁹ it is only by the mind’s imposing certain features upon the world that experience is possible. This sets the stage for the standard reading.

¹⁷ See the *Bounds of Sense*, pp. 15-17.

¹⁸ Thomas Nagel’s article, “What it is Like to be a Bat?,” provides a memorable explanation of this point. Bats lack vision; instead they possess the capacity for echolocation or sonar. In effect, they hear distance, texture, size, and spatial distribution. This, of course, is not a sensory capacity that we possess, and Nagel asks us to consider whether we could ever understand what it is like to be a bat. The character of their experience of the world, given differences in physiology, would seem to be very (and perhaps unimaginably) different for our own.

¹⁹ *The Bounds of Sense*, p. 15.

This reading attributes to Kant a view called data-sensualism. I take this term from Deiter Henrich's essay "Identity and Objectivity."²⁰ According to data-sensualism, the starting point of human cognition is a diversity of sensory states furnished by the receptivity of sensibility. These states can be characterized in three ways. First, they are mere sensations, which are attributable to the subject of experience only, not to objects of experience. Kant describes them as subjective modifications, inner determinations of the mind, or ways in which the subject is affected. Paradigmatic cases of sensations would be tickles and pains. Kant himself refers to taste and color (A28), sound and heat (B44), and weight (A169/B211). All such sensations are described as lacking relation to an object. For example, in tasting wine, one's sensation of sourness does not belong to the wine but only the way in which it affects one's organ of taste (A28). Second, sensory states are fleeting and vanishing. The sensory experience of red at one moment is numerically distinct from the sensory experience of red at another. It makes no sense to think of sense-states as enduring over interrupted periods of time, since the state just is the sensory presentation at that very moment.²¹ Third, sensory states are atomistic: they can be had and experienced separately and singly such that their occurrence in the subject does not depend upon their being bound up with other such states. We might find sensations juxtaposed with one another, but such juxtaposition is merely accidental and does not involve any necessary relations of sensory states to each other.

Since cognition begins with a multiplicity of discrete, vanishing, merely subjective sensory states, Kant's problem seems apparent: How do we represent enduring and

²⁰ This essay is translated and presented alongside a number of other essays in the book *The Unity of Reason*.

²¹ As Henrich puts it, "Once gone, they are replaced with others of the same kind" (*The Unity of Reason* p. 131.)

independent objects on the basis of these sense-states? In the Transcendental Deduction (A104-105) and Second Analogy (A197/B242-243), he says that representations acquire relation to an object by being brought under a rule of synthesis. On the data-sensualist reading, these rules govern the synthesis of sensory states. Thus, initially atomic sensations are subjected to rules of synthesis by being combined, connected, and arranged in rule-governed ways. The categories, consequently, turn out to be the *a priori* rules by means of which sensory states are synthesized into enduring, causally interacting objects. These rules, which are part of our cognitive constitution, are imposed upon experience, thereby constructing and making possible objects.

The data-sensualist reading can be summed up by the following claims. (1) Base-level experience begins with a multiplicity of sensory states. (2) Representation of objects is produced by subjecting such states to rules that synthesize them into enduring, causally interacting objects. (3) Thus, objects are constructed out of sensory states, as is the entire phenomenal realm. (4) The categories are the fundamental *a priori* rules of sensory-synthesis. Given these claims, data-sensualism is rather easily woven into the view that Kant's project involves the development of a transcendental psychology, the outcome of which is a sophisticated – or depending on one's interpretation, hopelessly inconsistent – Berkeleian phenomenalism.

Interpreters have long attributed a psychological component to Kant, with Strawson's formulation in of it being perhaps the most influential in the Anglo-American community. *The Bounds of Sense* begins with an identification of the "two faces" of the *Critique*.²² He says that, on the one hand, it presents a valuable project of attempting to identify the general features that experience must possess if it is to be intelligible to

²² See *The Bounds of Sense*, pp. 15-24.

ourselves. He characterizes this as Kant's analytical project, and he distinguishes it from what he calls the transcendental psychology with which Kant mistakenly entangled his analytical aim. Strawson claims that transcendental psychology is precisely the product of the strained analogy with physiology. It is the view that the faculties of the mind are involved in processing and generating the very world of experience.²³ But from here it is hardly difficult to take the step to phenomenalism. Phenomenalism is the view that the immediate objects of consciousness are private or subjective sense-data, and that external objects are nothing but concatenations and relations of them. This view fits data-sensualism with relative ease; transcendental psychology only adds the point that the *a priori* contributions of our cognitive faculties are responsible for their construction.

What I label the standard reading consists of various combinations of data-sensualism, transcendental psychology, and phenomenalism.²⁴ I summarize this reading by three general claims that can brought together in different ways by different interpreters:

- (1) The *Critique* is a study of the faculty processing that makes cognition possible (transcendental psychology).

²³ The difference between transcendental psychology and empirical psychology (or physiology) lies in the idea that the former is not a study of the sense organs, but of the special *a priori* contributions of our cognitive faculties.

²⁴ Patricia Kitcher, for example, attributes to Kant both a transcendental psychology and a data-sensualism, but she remains neutral on the issue of whether he is a phenomenalist. Her book, *Kant's Transcendental Psychology*, was written in part as a response to Strawson, and although both agree that Kant does have a transcendental psychology, she argues against Strawson that his psychology is philosophically significant and defensible in broad outline. On her reading, Kant should be understood as a kind of proto-cognitive scientist, contributing on a philosophical level to research on the mind, thereby potentially guiding and informing empirical work. Take, for instance, the binding problem. It is known that aspects of our perception of objects, such as color, shape, texture, etc., are represented in different parts of the brain, and so the problem is how information dispersed in these separate regions can come together to form the representation of a single object. Kant's doctrine of synthesis seems to answer just this sort of concern; she says that by examining the Deduction, researchers might find valuable insights or mistakes to work with.

- (2) Broadly described, faculty processing consists of acts of mental synthesis performed upon a manifold of given sensory states (data-sensualism), which produces:
- (3) cognition of a realm of appearances or phenomena, which is reducible to the contents of one's own consciousness and distinct from an external world of things in themselves (phenomenalism).

Any substantial transformation of this picture requires criticism of the data-sensualist thesis because it is the thread running through both transcendental psychology and phenomenism. The view developed in this study, among other things, provides such a criticism. Let me begin by outlining the problem to which data-sensualism is a response before contrasting it with an alternate picture.

Data-sensualism is a theory of *perception*. There are any number of issues theories of perception are designed to address. In philosophy, the historically most central issue is the epistemological problem of whether and how perceptions can be assessed as providing reliable information about the world, and philosophers generally divide along the lines of skeptics, internalists, and externalists.²⁵ Data-sensualism, however, is not an epistemological thesis, and even if it has epistemological ramifications, it is designed to address the semantic problem of how a perception could so much as be about or refer to an object in the first place. Kant expresses this problem in the Second Analogy when he asks, “Now how do we come to posit an object for these representations [i.e., our conscious inner experiences occurring in time], or ascribe to their subjective reality, as modifications, some sort of objective reality?” (A197/B242). In asking how representations acquire objective reality – or what he also calls “relation to an object” (A104, A197/B242) – he raising the question of how representations can refer to the

²⁵ See Laurence Bonjour's article, “Epistemological Problems of Perception,” in the *Stanford Encyclopedia of Philosophy*.

objects which they purportedly represent. Data-sensualism correctly takes this problem to be semantic, not epistemological, in character.

However, this position is *only* potentially viable as a theory of perceptual intentionality. It makes some sense to interpret perception of a given object as consisting of the occurrence of various sensations that are in need of combination by some faculty. Kitcher makes her case for data-sensualism by citing the examples of the Necker cube and Anne Treisman's experiments.²⁶ The first example draws attention to the fact that, on the basis of the exact same sensory data, the Necker cube can be perceived in two different ways. This shows that there must be some type of processing of, or synthesis performed on, sensory data. In the second example, various experimental subjects are presented with a quick succession of items and are asked to recall certain combinations: was the E-card purple? Sometimes wrong answers are given, which she claims shows that the subjects are combining the information erroneously, and thus engaged in synthesizing perceptual information. However, if we change the kind of representation that is of interest, and ask questions about the nature of conceptual thought rather than perception, then data-sensualism no longer appears viable, let alone plausible. In forming the thought "Socrates lived in Athens," an object is represented conceptually or in the mind. A concept is predicated of the subject, Socrates, and the problem is how the thought can refer to a past state given that the subject of the thought is not present – and can never be present anymore – perception. It is simply not plausible to think that the problem can be solved by appeal to a synthesis of given sensory information, since *there is no* sensory information, or Socrates perceptions, to synthesize. We may think of walking around a

²⁶ See *Transcendental Psychology*, pp. 75-76 and 85.

given object and combining the information received, but surely we do not think the same when it comes to forming thoughts about Socrates, or more generally objects *in absentia*.

In Chapter 2, I discuss Kant's theory of perception at length. He develops this theory in the preliminary stages of the Transcendental Deduction at A98-110. My position is that Kant's views on perception are not data-sensualist, and I argue that the rules governing perception are not rules for synthesizing elementary sensations, but are rules for investigative behavior. This, however, is not the most important point. More significantly, I argue that perception is a peripheral issue in the Deduction and *Critique* as a whole. Kant's concern is focused around the following question: How is it possible to represent the full scope of spatio-temporal appearances?

It turns out that this question can be understood in a couple of different ways. Representing the full scope of space and time could mean either (1) being able to represent any particular appearance within space and time or (2) having a complete representation of all appearances comprising space and time. The former concerns the representation of any individual appearance, whereas the latter concerns the representation of a totality of appearances. Put more fully, we can distinguish between the capacity to form a full system of representations that cover any particular object within a domain, and the capacity to form a single representation that has as its content all of the objects of a domain. Either can be called global for the reason that one's representational ability is not restricted to some particular object, but extends to *any* object in a domain or *all* the objects of a domain.

This study aims to establish that the topic of the Transcendental Deduction (and the Analytic as a whole) is the former. Kant claims that the application of the categories to

experience makes cognition possible. The clue to understanding the argument of the Deduction, then, comes down to the following easily identifiable issue: What is cognition? As said above, I interpret cognition as the ability to represent/intend any possible spatio-temporal appearance, an ability which is not limited to perception but embraces the past, future, and remote space. This means that instead of focusing on how sensory states can be synthesized into perceptions of objects (data-sensualism), Kant focuses on the rather different question:

- (1) How can any possible appearance in space and time be represented?

But since appearances are represented as situated within the context of a unified, rule-governed world, this question is inextricably related to another:

- (2) How can we represent the situatedness or embeddedness of appearances, including ourselves, in a larger, on-going world?

Furthermore, the topic of the Mathematical Antinomies concerns the second sense of global representation. In this text, which is located in the Transcendental Dialectic, Kant addresses how it is possible to represent the world in its totality or completeness. The First Antinomy, for example, discusses the representation of the world-whole with respect to its extension. (The second antinomy addresses the representation of the world-whole with respect to its division.) Its thesis is that the world has a beginning in time and is limited in space, and therefore is a finite totality; its antithesis is that the world has no such beginning or limit, and therefore is an infinite totality. Arguments for the thesis and antithesis are both claimed to be sound, in which case reason has established the truth of two contradictory assertions. In the resolution, Kant argues that since the antinomy is

generated by transcendental realism, it can therefore be cleared away by appeal to transcendental idealism, which allows one to view the world as *neither* an infinite *nor* a finite totality. Thus, Kant asks how can we represent the world-whole from the standpoint of transcendental idealism: how do “I represent to myself all existing objects of the senses in all time and in all places...” (A495/B523)? His answer in brief is given by discussing the role of the regulative rule of reason in guiding our searching after appearances. We can now identify a third question shaping the basic programme of the *Critique*:

(3) How is it possible to represent the world as the sum of all appearances?

Although the Mathematical Antinomies are not discussed at length in this study, it is worth noting how they complement the question of the Deduction and Analytic. When all three questions are placed side by side, it is apparent that they provide an alternative picture to understanding the project-defining concerns of the *Critique*. And given that the *Critique* offers one of the most profound attacks on speculative metaphysics, it should not be surprising that these three questions form the heart of the book. It is true that we directly encounter the world in perceptual experience, but our thoughts are hardly bound down to our present perceptions. We can think about the full scope of the world of experience – a thought which is at least implicit in every perception we can have, for we situate all perceptions within the context of a world. So, it is only after investigating our ability to think the full scope of spatio-temporal appearances that Kant can ask whether it is possible to represent what is presumed to lie outside the scope of the spatio-temporal world.

3 The Text: The Transcendental Deduction

The first-edition Transcendental Deduction spans A84-130. I stray from Kant's own divisions, and break the text down thematically into four sections. The first section is A84-95, where Kant lays out his method for doing metaphysics. At A93 he summarizes the method in the surprisingly concise principle: "For they [the categories] then are related necessarily and *a priori* to objects of experience, since only by means of them can any object of experience be thought at all." Noting his reference to *thinking* objects of experience, this principle says that the categories must apply to objects of experience because their application is what grounds our ability to cognize or think them in the first place.²⁷ In the A-edition Introduction to the *Critique*, he even says that A92-93 provides a sufficient explanation of a proof of a category (A xvii), which is to say that the method in its entirety is here presented.

Naturally this raises the question of what the purpose of the rest of the Transcendental Deduction is if the method is so soon established. And the answer is plain enough: since the categories ground cognition, Kant needs a definition of cognition if the principle is to be at least preliminarily understood. The rest of the text carries out in stages this definitional enterprise.

A95-110²⁸ transitions into and develops in relative detail a discussion of perceptual cognition and its necessary elements. Commentators refer to A99-110 as the threefold synthesis. Kant examines the role of the synthesis of apprehension, imagination, and

²⁷ On Kant's view, expressed in many places, any object that we cannot think or cognize is as good as nothing to us. Experience without cognition isn't experience. This means that the claim that the categories must apply to experience because their application makes experience possible is equivalent to the claim that the categories must apply to experience because their application makes the thought or cognition of objects possible.

²⁸ A95-97 merely recapitulates the transcendental method for doing metaphysics.

apperception in generating perceptions of objects, and most importantly the fundamental concept of the transcendental unity of apperception is introduced.

A110-114 is a very important transitional section that recasts the topic with respect to which the proof of the categories is developed. It begins by a reference to “one experience, in which all perceptions are represented as in thoroughgoing and lawlike connection, just as there is only one space and time, in which all forms of appearance and all relation of being or non-being takes place” (A110). The theme of global representation is introduced, and the problem shifts from perception to representing objects as situated within the context of a single world of experience. This latter phenomenon can instructively be called representation of objects, including ourselves, *en media res*.²⁹ Here Kant introduces the categories for the first time. On the reading I defend, A110-114 is crucially important because it claims that the representational ability the categories make possible is global cognition.

Kant calls A99-114 “preparatory” (A98) since it sets the stage for the official proof of the categories at A115-130.³⁰ The preparations enable him to define cognition at A119 as the unity of apperception in relation to the imagination. This proof is then completed with the claim that the application of the categories to experience is what makes cognition, so defined and understood, possible. Coupled with my interpretive claim that cognition is the capacity for global cognition, Kant here asserts the categories as its necessary and sufficient conditions. After offering his proof in a single paragraph at

²⁹ In Chapter 4, I argue that what is involved in representing objects *en media res* turns out to be the same as what is involved in representing objects *in absentia*.

³⁰ Kant himself organizes A99-114 into four sections: A99-100 (“On the synthesis of apprehension in the intuition”) discusses the synthesis of apprehension, A100-102 (“On the synthesis of reproduction in the imagination”) discusses the synthesis of imagination, A103-110 (“On the synthesis of recognition in the concept”) discusses the unity of apprehension, and A110-114 (“Provisional explanation of the possibility of the categories as *a priori* cognition”) shifts to global cognition and introduces the categories as conditions for (global) cognition.

A119, he finishes with a discussion of the objective affinity of the manifold of experience: this affinity is claimed to ground the possibility of the subjective associations required for perception. In which case, the Transcendental Deduction is brought to a close by returning to the topic of perception and bringing it into relation with the capacity for global cognition that the categories effect.

The remaining chapters of this study are organized by these four thematic divisions:

Chapter 2

This chapter outlines Kant's transcendental method for metaphysics given at A84-95. It focuses on the theme of intentionality, and my principal argument is that the application of the categories to experience makes intentionality possible. I begin by outlining the standard epistemological interpretation according to which the categories are conditions for empirical knowledge, and I explain how this interpretation is different from my own. My aim is to establish, through careful textual analysis exploring the origin of the *Critique* and Kant's definitions of '*Erkenntnis*' and transcendental logic, that this reading is mistaken and that the semantic interpretation is the correct view on the deduction of the categories and Analytic as a whole. After doing so, I address a potential objection to my reading. I claim that Kant's proof of the categories does not provide significant epistemological results, and yet in the Refutation of Idealism, Kant attempts to refute empirical knowledge skepticism; so apparently epistemological results are implied. In response, I argue that his refutation fails. Given this failure, I believe that the real value of the *Critique* for contemporary philosophy lies in its theory of intentionality, not its theory of empirical knowledge and its answer to skepticism. I do this in part by examining Kant's view on perceptual illusions.

Chapter 3

This chapter provides a non data-sensualistic interpretation of the theory of perception at A95-110. Kant's analysis of perception involves three components: empirical concepts, apperception, and the transcendental object. Each section of the chapter discusses each component in turn, concluding with a definition of objective perception and a discussion of data-sensualism. One of my main goals is to demystify Kant's "transcendental talk" and to show that there actually is a sensible theory packaged in odd language. However, I will argue that since the categories are absent in this analysis, they are not deduced or justified by making perception possible.

Chapter 4

Chapter 4 focuses on A110-114. My argument is that the true topic for the proof of the categories is global intentionality. The chapter begins by presenting and criticizing Andrew Brook's definition of global cognition. He is one of the few commentators who discusses global cognition with respect to the Transcendental Deduction, and he defines it as the ability to represent various individuals as a collection or group; he compares global cognition to what cognitive scientists call chunking.³¹ I argue that this interpretation is mistaken, and that global cognition is correctly understood as the ability to represent all possible appearances within, and as belonging to, the on-going and rule-governed world around us. I then return to Kant's analysis of perception in order to claim that at A110-114 Kant himself rejects aspects of his account at A103-110. He recognizes that this theory is an inadequate view of cognition and thus an inadequate basis for justifying the

³¹ See Chapter 2 of *Kant and the Mind*.

categories. At the end of the chapter, I argue that Kant's two-faculty theory of cognition seems to make global intentionality impossible. My assertion that it is therefore incumbent upon Kant to adequately address how global intentionality can be possible, otherwise even his analysis of perception falters.

Chapter 5

Chapter 5 steps outside the text of the Transcendental Deduction to address the following question: If the categories make global cognition possible, then what is it? In developing this theory, my argument is that in broad outline Arthur Melnick provides the correct analysis of Kant's views on this issue. However, his own analysis rests on his rather controversial interpretation of transcendental idealism, which he calls 'constructivism.'³² After presenting his view, I provide an original defense of his basic claim that global representations are rules for the spatio-temporal repositioning by which we encounter appearances. I separate this thesis – which I call the global-positioning thesis – from transcendental idealism, and my argumentative strategy is to show that the global-positioning thesis logically follows from the two-faculty theory of cognition. This strategy is powerful because it rests solely upon a non-controversial aspect of Kant's philosophy. Since any interpreter must grant that he holds a two-faculty theory, there simply can be no ignoring my claim that the global-positioning thesis is straightforwardly implied by a view utterly definitive of the critical turn. The chapter concludes with an examination of the text of the Antinomies where he explicitly discusses the representation of the past and remote space, and I favorably compare his views with those given by William James in *The Meaning of Truth*.

³² See Chapter 1 of *Space, Time, and Thought in Kant*.

Chapter 6

Chapter 6 returns to the Transcendental Deduction, and it begins the analysis of the official proof at A115-130. In developing this proof, Kant defines cognition as the relation of apperception to the synthesis of imagination. The chapter focuses entirely on interpreting Kant's intriguing and provocative assertion that imagination is an indispensable component of human cognition. What is the faculty of imagination? Kant identifies both the *reproductive* and *productive* imagination. Most of the chapter is spent analyzing the unique and somewhat unusual faculty of productive imagination. First I present and criticize Wilfred Sellars', Patricia Kitcher's, and Michael Young's interpretation of it. Sellars and Kitcher claim that the productive imagination is involved in the ontologically significant act of constructing objects, and Young claims that it is involved in the hermeneutic act of interpreting or construing objects as being certain kinds of things, and ultimately as being objects. After arguing that both readings are incorrect, I conclude with the argument that the productive imagination is the ability to produce, and thereby intuitively represent, finite or determinate extents of space and time. This argument rests on an analysis of the figurative synthesis in the B-edition Deduction. In other words, this faculty concerns not the matter of intuition in generating representations of objects, but instead concerns the generation of the form in which all intuitions are presented.

Chapter 7

This chapter completes Kant's proof of the necessary applicability of the categories to objects of experience. Given the results of Chapter 6, I explain the meaning of Kant's

definition of the pure understanding as the relation of the unity of apperception to the productive imagination. My argument is that this faculty – called the pure understanding – is the ability for global cognition. Global cognition consists of bringing the production of spatio-temporal extents (the productive imagination) under rules (the unity of apperception). Since Kant claims that the categories enable apperception to be related to imagination, i.e., for imagination to be brought under rules, he is therefore asserting that the categories ground the capacity for global cognition.

The chapter concludes with a discussion of the final section of text at A120-130. Here Kant introduces the objective affinity of the manifold and claims that this affinity grounds the possibility of the subjective associations of perception. I defend the view that the affinity of the manifold is our system of global cognitions by which we represent appearances as part of a unified, rule-governed world, and this system grounds the possibility of perception. In other words, Kant concludes the Transcendental Deduction by relating global cognition to perception, so as to provide a unified and complete theory of cognition. Kant's goal in this text, therefore, has been to argue that there are certain *a priori* concepts necessary for effecting cognition so understood.

4 Melnick: *Space, Time and Thought in Kant*

Arthur Melnick's 1973 book, *Kant's Analogies of Experience*, is a classic of scholarship; it is listed in virtually every bibliography concerning the first *Critique*, and it is even referenced in the short and highly selective bibliography to the now universally adopted Cambridge translation of *The Critique of Pure Reason*. This book, however, no longer reflects his views on the *Critique*. In 1989 he published *Space, Time, and Thought*

in Kant – a detailed and complicated investigation of the content and development of the entire A-edition *Critique* that altered his interpretation of Kant’s seminal work.

My interpretation draws on some of the ideas worked out in this unjustly neglected (at least relative to his first book) scholarly contribution. Specifically, there are two theses that I share and defend: the global-cognition thesis and the global-positioning thesis. The former reflects his claim that the cognitive capacity that the categories enable is global representation. He defends this claim all throughout the book, with a systematic treatment given in Part I, Chapters 2-5. I believe that his reading is correct, and what I offer is an original defense of a controversial thesis. The latter reflects his claim that global cognitions come in the form of rules for spatio-temporal constructions. In brief, thoughts of objects *in absentia* are rules for how to spatially and temporally reorient oneself so as to be put in its intuitive vicinity. He would claim that the thought “Pluto is uninhabitable” takes the form of the following rule: it is legitimate to take n steps, be affected and react ‘Pluto is uninhabitable.’³³ This rule *is* the thought of Pluto as a distant appearance being in a certain way (and generally thoughts are rules for how to encounter objects). I likewise share this interpretation, and it is the subject of Chapter 5.

However, my study departs from his views in a number of significant ways. First, Melnick provides a variation on the so-called patchwork interpretation of the *Critique*, which was first presented to the English speaking world by Norman Kemp Smith in his well-known commentary.³⁴ Melnick argues that the *Critique* should not be read linearly because the book actually consists of three distinct theories of cognition confusingly laid over one another. He seeks to separate out these layers and to reconstruct three different

³³ See Part I, Chapter 2 of *Space, Time, and Thought in Kant*.

³⁴ See Chapter 1 of *A Commentary to Kant’s ‘Critique of Pure Reason’*.

texts within the *Critique* – an early, middle, and late text. Although he makes out a convincing case, I do not read the *Critique* this way. I work linearly through the Transcendental Deduction, and accordingly argue that it does present a unified and coherent line of thought from beginning to end. This is an important contribution because it shows that the correctness of the global-cognition and global-positioning thesis does not rest on the controversial layered-analysis that he calls the rework hypothesis.³⁵

Second, Melnick bases his whole interpretation of the *Critique* on his understanding of transcendental idealism. Transcendental idealism is the thesis that space and time are mere forms of intuition and that spatio-temporal objects are therefore mere appearances. On his reading, this means that space and time are literally constructed or produced in activities: it is not that we move through space, but instead our motions produce space itself. My study aims to establish the correctness of the global-cognition and global-positioning thesis *independently* his interpretation of transcendental idealism, and indeed of any interpretation of transcendental idealism. I provide a wholly original defense of both theses. The key strategy I employ is to rely on nothing more than Kant's two-faculty theory of cognition. In a certain way, my entire study can be viewed as a close and detailed analysis of this theory. Given that it is virtually definitive of Kant's critical turn, and that it lies at the foundation of his development of transcendental metaphysics and his critique of speculative metaphysics, it deserves its own special study. Yet, few commentators make the two-faculty theory the subject of protracted discussion; they mention it, of course, but then move on to other matters with no clear indication as to how they relate to this theory.³⁶ My study aims to make up for this deficiency: I put this

³⁵ See Chapter 5 of *Space, Time, and Thought in Kant*.

³⁶ An exception to this tendency is Beatrice Longuenesse's 1998 book, *Kant and the Capacity to Judge*.

theory under the microscope, so to speak, and argue that careful consideration reveals that it actually *implies* the global-positioning thesis and, with additional but disputable premises, the global-cognition thesis. Put otherwise, I aim to alter dramatically one's picture of what the *Critique* is about by studying the implications and requirements of Kant's view that cognition by finite beings is possible only by the combination of the faculties of understanding and sensibility.

Third, my interpretation departs not only methodologically from Melnick's, but also substantively. I give much more attention to the nature of perception in the Transcendental Deduction (Chapter 3), and my view on the relationship between global cognition and perception – i.e., on the objective affinity of the manifold – differs from his in important respects (Chapter 7). Here I provide the critical assessment that Kant's attempt to guarantee the regularity necessary for perception by appeal to the system of rules for global cognition enabled by the categories fails; his argument rests on a seductive equivocation. Furthermore, I present a different reading of the nature of schemata (Chapter 6), the failure of the Refutation of Idealism (Chapter 2), and the transcendental object (Chapter 2). One effect of my reading of the transcendental object is that it enables me to treat the text linearly and see in it the development of a coherent, even if changing, line of reasoning and position on finite, human cognition.

CHAPTER 2

THE NATURE OF COGNITION IN KANT'S *CRITIQUE OF PURE REASON*: A DEFENSE OF THE SEMANTIC INTERPRETATION

In the *Critique of Pure Reason*, Kant proposes a new method for doing metaphysics. He calls this method 'transcendental metaphysics,' and distinguishes it from what he considers to be the impossible science of speculative or transcendent metaphysics. The key characteristic of this new method is that it seeks to establish its conclusions not by way of directly examining reality, but rather by way of investigating human cognition. Kant proposes the following idea. He says, if one can prove that there are certain features reality must possess in order to be cognizable, then one can conclude that any reality we can cognize must possess those features. What is required, then, is an analysis of the nature of cognition. Only in this way can it be determined whether there are any conditions reality must meet if cognition is to be possible.

Any adequate understanding of Kant's transcendental metaphysics requires careful consideration of what he means by cognition. What *is* this phenomenon that is the object of study in his new metaphysics? The main goal of this chapter is to offer a convincing answer to this important question. I argue that the German term '*Erkenntnis*,' which in contemporary Anglo-American scholarship is typically translated as 'cognition,'³⁷ is really Kant's word for intentionality. If I am correct, then transcendental metaphysics is a study of the requirements for the possibility of representational aboutness. On my

³⁷ Norman Kemp Smith translates "*Erkenntnis*" as knowledge. His translation of the first *Critique* was considered to be the standard English version for many years, but the Cambridge edition has since supplanted it. In this edition, Paul Guyer and Allen Wood translate "*Erkenntnis*" more neutrally as "cognition."

reading, Kant's basic question is the following: Are there certain features reality must possess if our representations are to be able to refer to, or be about, it?

The chapter is divided into three sections. The first section focuses on A84-95/B116-129 of the Transcendental Deduction. This portion of text is introductory in nature, and its purpose is to explain Kant's conception of the task of metaphysics and his method for realizing it. It will be worthwhile to discuss this task and method in some detail. The second section begins by presenting what I call the epistemological interpretation of the Deduction. This reading says that 'cognition' refers to empirical knowledge. I argue against the historical accuracy of this reading, and in its place I propose a semantic interpretation according to which the argument of the Deduction concerns the possibility of intentionality, rather than empirical knowledge. Finally, the third section investigates the epistemological consequences of Kant's analysis of intentionality. I argue that the anti-skeptical ramifications are found not in the Deduction, but in the Refutation of Idealism, and they are limited in scope.

1 Kant's Transcendental Metaphysics: The Method for Deducing the Categories

According to Kant, metaphysical concepts cannot be derived from experience, and in this sense he often refers to them as *a priori* concepts or *a priori* cognitions. The task of metaphysics is to prove that, from among our storehouse of metaphysical concepts, there are certain ones that identify genuine features of reality and therefore constitute the correct metaphysics of the world. Metaphysicians, of course, have disagreed over what concepts constitute the correct set: Are objects substances, fleeting sense-data, or time-slice fusions? Kant's interest in the *Critique* is to prove that the categories are this

privileged set. The categories are twelve in number, and by far the most important are what he calls the “analogies of experience”: substance, causality, and community. Kant’s general worry is that it might be the case that the categories are nothing more than empty concepts, or, as he says more colorfully, a “mere fantasy of the brain” (A91/B124). Perhaps, then, the categories are in the same position as concepts of fictional entities: there simply are no objects satisfying them. To show that this is *not* the case, and that reality is structured by the categories, is to show that they have what Kant calls “objective validity.” Furthermore, the argument intended to establish this conclusion is called the “transcendental deduction of the categories” or “deduction” for short.

With this summary, we can now turn to the introduction to the Transcendental Deduction at A84-A95/B116-B129. Kant begins this section by explaining the task of metaphysics with an appeal to a legal distinction. He distinguishes questions of fact (*quid facti*) from questions of right (*quid juris*) (A84/B116-117). The former, in their legal context, are concerned with the historical circumstances by which a person has come to claim entitlement to something, whereas the latter are concerned with whether the claim is lawful or legally supported. Kant says that jurists call the establishment of the latter the “deduction.” He then applies this distinction to concepts. Given any concept, one can ask either about the history of its origin (which is a descriptive inquiry) or about the legitimacy of its use (which is a normative inquiry). Kant’s initial examples are that of fortune and fate (A84/B117).³⁸ Both concepts are often utilized as forms of explanation. It is one thing to ask how we have come to possess them as part of our conceptual

³⁸ Regarding these concepts, Kant says: “But there are also concepts that have been usurped, such as fortune and fate, which circulate with almost universal indulgence, but that are occasionally called upon to establish their claim by the question *quid juris*, and then there is not a little embarrassment about their deduction because one can adduce no clear legal ground for an entitlement to their use either from experience or from reason” (A84-85/B117).

storehouse, but quite another to ask whether using them to explain the occurrence of events is legitimate. For instance, regarding the former, an appeal to fortune or luck fails to explain why someone has won the lottery since the appeal asserts no more than that a particular kind of event has occurred, i.e., one independent of planning, skill, or control. By challenging whether such a concept can function as an explanation, one raises the *quid juris* question.

It is this question to which the categories must be put; and of course Hume is the key figure whom Kant intends to address. Hume claims that all apparently *a priori* concepts, if they are to have any meaning, do not identify features of the world, but instead are merely subjective habits or customs. With respect to causality, he argues that the original impression from which the concept of necessary connection derives is nothing more than a felt movement of the mind. Upon witnessing a constant conjunction between two ideas, the mind automatically forms the lively idea of the effect when presented with an impression of the cause. But this does not indicate causal necessity in the objects themselves, only in the way in which the mind associates its ideas.³⁹ What Hume discovers by a *quid facti* analysis is a subjective custom or habit rooted in facts about human psychology. The question he answers is the following: How do we come to believe in the occurrence of the effect (i.e., the occurrence of some future event) when presented with the cause (i.e., some present impression)? Kant's *quid juris* analysis, by contrast, investigates whether we are justified or entitled in asserting that causal necessitation holds of objects of experience. To establish that we have such justification

³⁹ In the style of a detective solving a puzzle, Hume offers his full analysis of causality in Book I, Part III of the *Treatise*. Section XIV, entitled "Of the idea of necessary connection," brings together many of the results of his complete account. See also Chapters IV and V of *An Inquiry Concerning Human Understanding* for a shorter and more accessible treatment of causality.

is to prove that the concept is objectively valid, and the proof itself is called the concept's transcendental deduction.

Given Kant's task to prove the objective validity of the categories, the inevitable question is – how? He rejects any empiricist approach:

Among the many concepts, however, that constitute the very mixed fabric of human cognition, there are some that are also destined for pure use *a priori* (completely independently of all experience), and these always require a deduction of their entitlement, since proofs from experience are not sufficient for the lawfulness of such a use, and yet one must know how these concepts can be related to objects that they do not derive from any experience" (A85/B117).

The passage says that the categories require a special proof of their legitimacy, or a deduction, because appeal to experience is insufficient for justifying our use of them. The problem is that, as *a priori*, the categories do not refer to any observable features of the world, and therefore experience is useless in settling whether reality is governed by them. According to Kant, this is exactly what Hume's skeptical analyses rightfully and profoundly reveal. In the case of causality, experience only shows that one thing usually follows upon another, but not that the effect necessarily arises out of the cause. However, unlike Hume, Kant refrains from concluding that such *a priori* concepts are therefore "fictions" lacking objective validity. Instead, he devises a non-empirical method of proof that nonetheless is distinct from the empty or non-amplificatory method of analytical concept-dissection found in speculative metaphysics.

A good place to turn is the Preface to the Second Edition. Here he provides the principle of his new transcendental metaphysics, according to which cognition does not conform to objects but rather objects conform to cognition:

Up to now it has been assumed that all our cognition must conform to the objects; but all attempts to find out something about them *a priori* through concepts that would extend our cognition have, on this presupposition, come to nothing. Hence let us try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition ... (Bxvi).

Speculative metaphysics seeks knowledge of what lies beyond possible experience, and consequently cannot be conducted by examining experience but rather relies on an *a priori* analysis of its concepts. Since this attempt has “come to nothing,” the critical question as to the very possibility of metaphysics must be raised. Kant’s proposal is in fact the perfectly commonsensical point that the faculty of cognition must itself be investigated before any decision as to the possibility of cognition of supersensible reality can be made. Or, that is to say, only by investigating what is required to cognize reality in the first place is it possible to determine whether supersensible reality can be cognized. As a result, the question to consider is whether there are conditions that objects must satisfy in order to be cognizable, and only after conducting this inquiry can it be decided whether supersensible reality meets, or fails to meet, those conditions. The principle of Kant’s transcendental metaphysics therefore reads as follows: whatever conditions objects must satisfy in order to be cognized by us, those conditions must apply to any object that can be cognized. Objects, therefore, ‘conform’ to our cognition in the sense that, insofar as they can be cognized, they must conform to those conditions required for cognizing them in the first place.

The reason why the investigation into the conditions for the possibility of cognition is not merely a study of human faculties, but yields something legitimately entitled metaphysics is because it provides *a priori* knowledge of the basic constitution or structure of objects. In the Introduction to the B-edition, Kant provides two criteria by which to distinguish *a priori* from empirical knowledge: what is known *a priori* is both

necessary and strictly universal (B3-4). Thus, the inquiry yields genuine *a priori* knowledge of objects, because in proving that there are conditions objects must meet in order to be cognized, it establishes that those conditions *must* apply to *any* object that can be cognized. But admittedly, there is a restriction. The results of transcendental metaphysics do not apply to reality *tout court* since they say nothing about the nature of objects that cannot be cognized (what Kant calls things in themselves). But this restriction is still consistent with its yielding metaphysical knowledge about objects of cognition (what Kant calls appearances).

Kant uses the principle of the conformity of objects to our cognition in answering the *quid juris* challenge of the Deduction. To repeat, the concern is to establish that the categories apply to and govern the objects of experience. He indicates two ways in which representations can “meet” or achieve “connection” with their objects: either the object makes the representation possible, or the representation makes the object possible (A92/B124-125). The former option is not available for the categories. In this case, cognition would be made to conform to objects, which this is something that must be rejected because as *a priori* the categories cannot be grounded in experience. But the latter option does remain. Kant however cautions that this does not mean that the categories literally create objects or bring them into existence.⁴⁰ Instead, the categories are conditions for *cognizing* (not creating) something as an object. He states his principle in the following way: “if it is the second [manner in which representations can be related to objects], then since representation in itself...does not produce its object as far as its existence is concerned, the representation is still determinate of the object *a priori* if it is

⁴⁰ The capacity to create objects is not a function of theoretical cognition at all. Kant reserves this capacity to practical cognition (which produces the ends it desires by means of the will) and divine cognition (which produces objects by the sheer act of thinking them).

possible through it alone to cognize something as an object” (A92/B125). However awkward this statement might be, it simply asserts what has been said above. To say that the categories “*a priori* determine the object” is to say that they are non-empirically detectable features that objects actually possess. But if such features are non-empirically detectable, how do we know objects possess them? Kant answers: because if they did not, we would not be able to cognize them. In this way, he can say that any object we can cognize must possess those features required for our cognition of objects. And, once again, objects conform to our cognition.

In presenting the strategy of the deduction, it is helpful to keep in mind that the deduction is only a method for justifying the objective validity of the categories. The method states that if it can be shown that there are concepts necessary for cognizing objects, then it can be shown that those concepts must apply to any object that can be cognized by us. But it is only in “The System of All Principles of Pure Understanding” that Kant actually applies his method by showing that specific concepts are in fact necessary for cognition. In other words, it is only later in the *Critique* that he attempts to establish the truth of the antecedent of his principle for doing metaphysics.

2 Kant’s Conception of Cognition: Defending the Semantical Reading

Given that Kant’s method for deducing the categories consists of showing that they are necessary for cognition, the next interpretive issue is to explain what Kant means by “cognition.” “*Erkenntnis*” is something a term of art and commentators have disagreed over its proper interpretation. In this section, I provide an answer to this crucial issue, and in doing so I reject the oft-presented epistemological interpretation.

According to the epistemological reading, the categories make knowledge, in the sense of justified true claims about objects of experience, possible. There are two ways in which to understand this statement. First, it can be interpreted as *regressive* in nature. On this view, the deduction presumes that we possess empirical knowledge, and the objective validity of the categories is established as a necessary condition for the possibility of the knowledge we are presumed to have. Karl Ameriks, for example, defends this reading, and he models the transcendental deduction of the categories on the deduction of space and time in the Aesthetic.⁴¹ In this text, he says that Kant is intent upon establishing that space and time are forms of intuition. His argument for space presumes the existence of a body of knowledge, namely, geometry, and it proceeds to show that the only way to account for the unquestioned validity of geometrical knowledge is if space is a form of intuition.⁴²

Second, the claim can be understood as *progressive* in nature. The difficulty with the regressive reading is that if Kant's argument is to have any chance at refuting skepticism, it cannot assume that we have empirical knowledge. Our possession of knowledge,

⁴¹ See "Kant's Transcendental Deduction as a Regressive Argument." Ameriks identifies his regressive epistemological interpretation in the introduction: "Whereas their interpretations [Strawson, Bennett, and Wolff] see Kant's deduction as aiming to provide a proof of objectivity which will answer scepticism, I will argue that on the contrary it is necessary and profitable to understand the deduction as moving from the assumption that there is empirical knowledge to a proof of the preconditions of that knowledge" (p. 273). The regressive aspect of his interpretation rests on his claim that Kant *assumes we do have empirical knowledge* of objects of experience. He then says that Kant's strategy is to argue that the objective validity of the categories is a necessary precondition for having empirical knowledge. On the other hand, he attributes to Strawson, Bennett and Wolff the epistemological interpretation in its progressive form. He claims that they interpret Kant's deduction as engaged in the enterprise of refuting skepticism. On their reading, according to Ameriks, Kant does not assume that we have empirical knowledge; rather he attempts to prove that we do. The "proof of objectivity" is this attempt to establish that we have empirical knowledge of a world of external objects.

⁴² Regarding the Aesthetic, Ameriks says: "In its most skeletal form the central argument of the Aesthetic (with respect to space) has this structure: The science of geometry (*A*) requires synthetic a priori propositions which in turn require pure intuitions (*B*), and these are possible only if transcendental idealism is true. In this way the Aesthetic gives a transcendental explanation of how a body of knowledge (*A*) [i.e., geometry] is possible only if a particular representation (*B*) has a certain nature" (Ibid., p. 276). Kant then assumes that we have geometrical knowledge, and argues back to its necessary presuppositions.

rather, must be established as the conclusion of an argument beginning from a minimal premise that even a skeptic such as Hume would grant. Interpreters who hold the progressive reading typically identify this premise as the capacity for self-consciousness.⁴³ It is argued that Kant, on the basis of assuming we have this capacity, establishes the objective validity of the categories as an intermediate step in the course of an argument that eventually proves, not merely assumes, that we possess empirical knowledge. The skeptic is trapped into this conclusion by granting the apparently undeniable first premise. Strawson, Bennett, Van Cleve, Guyer, and Wolff are a few of the high-profile interpreters who take this line.⁴⁴ Thus, whether progressively or regressively argued, the categories are conditions of empirical knowledge.

I do not think that the epistemological interpretation is historically accurate. On the reading I defend, the categories are conditions for the *intentionality* of mental representation, rather than knowledge. Kant's problem, then, concerns the semantical issue of how representations can so much as represent or be about the world. However, criticism of either version of the epistemological reading cannot be offered in a direct, multi-premise argument. As discussed in Section I, Kant's principle of the deduction states that the categories necessarily apply to objects of cognition because "it is possible through [them] alone to cognize something as an object" (A92/B125). The German verb

⁴³ Ameriks says of Strawson, Bennett, and Wolff that, "They all represent the transcendental deduction as basically aiming to *establish* objectivity...and to do this from the minimal premise that one is self-conscious" (Ibid., pp. 276-277). Paul Guyer also finds in the transcendental deduction (among other strategies) a proof of empirical knowledge based on the premise that we are self-conscious; see "Kant's Tactics in the Transcendental Deduction." See also Pierre Keller, *Kant and the Demands of Self-Consciousness*, for the same basic view.

⁴⁴ See Strawson's *The Bounds of Sense* (Chapter II), Bennett's *Kant's Analytic* (Chapters 8 and 9), Guyer's *Kant and the Claims of Knowledge* (Chapter 4, Section IB), and Van Cleve's *Problems from Kant* (Chapter 7). As succinctly stated by Wolff: "The task which Kant sets himself in the *Critique* is to prove rigorously that we have genuine empirical knowledge, assuming as his only premise the fact of the unity of consciousness," where genuine knowledge means, "the judgment is true, not just idle fancy," (*Kant's Theory of Mental Activity*, pp. 111 and 114).

that is translated as “to cognize” is “*erkennen*.” The problem is that both a semantic and an epistemological reading will appeal to the exact same passage for support, since it is simply a matter of textual fact that the categories make *Erkenntnis* possible.

Consequently what is required is an analysis of the basic concept of *Erkenntnis*, and this can be accomplished only by an interpretive or hermeneutic investigation of some of the fundamental problems of the book.

This section is the heart of the chapter. I will begin my interpretive investigation by looking at the circumstances surrounding the origin of the *Critique*. Nine years before Kant published the first edition, he wrote a letter to his friend Marcus Herz in which he explains that the *Critique* was born out of a problem involving the intentionality of mental representation. I will then turn to the *Critique* itself. I will argue that Kant’s understanding of the ‘relation of cognition to its object,’ his official definition of *Erkenntnis*, and his description of the task of the Transcendental Analytic all show that the cognitive capacity the categories make possible is intentionality.

2.1 The Herz Letter and the Inaugural Dissertation

One of the first indications of Kant’s interest in semantics can be found in the letter to Marcus Herz written in 1772. Here he claims to have discovered the “whole secret of hitherto still obscure metaphysics,” which is: “What is the ground of the relation of that in us which we call ‘representation’ to the object?”⁴⁵ The secret to metaphysics is therefore the problem of intentionality or the object-directedness characteristic of thought. Kant proceeds to answer his question by claiming that, first, such a relation is possible if the subject is affected by the object, as in the case of perception, because the

⁴⁵ *Kant’s Philosophical Correspondence*, p. 71.

object and representation stand in the relation of *cause and effect* which accounts for how “this modification of our mind can *represent* something, that is, have an object.”⁴⁶

Second, such a relation is possible if the mind’s representations actually create the object of representation, as in the case of either action (which realizes an end) or divine cognition (which produces objects by the sheer act of thought). Once again, it is the causal tie that accounts for the relation between representation and object, except that in this situation the order is reversed: the representation causes the object (*intellectus archetypi*) rather than being caused by the object (*intellectus ectypi*). The Herz letter provides a causal analysis of intentionality.

But Kant immediately presents a difficulty with a certain class of representation. He says that unlike sensuous or perceptual representation, intellectual representation is neither caused by nor the cause of its object. The causal tie is broken, and Kant is left wondering how intellectual representation can be related to its object. As a result, we must consider the question of what these intellectual representations are. This question is important because it refers back to the theory of representation of noumenal reality that was given in the Inaugural Dissertation published two years earlier in 1770. In the Herz letter, Kant identifies a fatal problem with his previous theory, the realization of which was the very origin of the *Critique*. So it is important to digress somewhat by explaining the Inaugural Dissertation, since the theory presented here serves as a useful foil to the rule-based theory of intentionality eventually worked out in the *Critique*.

The dissertation is entitled *On the Form and Principles of the Sensible World*. It is divided into five sections. The second section, which is called “On the Distinction between Sensible Things and Intelligible Things in General,” presents the difference

⁴⁶ Ibid.

between the sensibility and the understanding. Although both faculties are familiar to anyone who has read the *Critique*, the dissertation does not offer a two-faculty theory according to which the sensibility and understanding must cooperate in making cognition possible. Rather, Kant argues that each faculty is capable of functioning apart from the other, and each has its own sphere of objects proper to it.

The sensibility is defined as the capacity to be affected by the presence of an object, which produces the representation of things as they appear (phenomena). This is quite simply the ability to perceive. Kant's restriction of perception to appearances is based on the claim that "whatever in cognition is sensitive is dependent upon the special character of the subject in so far as the subject is capable of this or that modification by the presence of objects: these modifications may differ in different cases, according to variations in the subjects" (§4).⁴⁷ The point seems to involve the familiar one that sensory experiences, like the taste of an apple, depend upon features peculiar to the subject (physiology, current bodily states, etc.) and therefore can vary from subject to subject, except that the point is extended to any sensory experience, not merely secondary qualities. The objects of sensible representation belong to the sensible world.

The intellect or understanding, on the other hand, is defined negatively as the capacity to represent objects independently of the sensibility, which produces the representation of things as they are (noumena). Since the intellect is free of any subjective conditions (unlike perception), it can represent objects as they are in themselves. Kant refers to these objects as substances, and they constitute the matter of the intelligible world. It is not so clear, however, what is involved in intellectual representation of noumenal substances.

⁴⁷ Kant, *Theoretical Philosophy 1755-1770*, p. 384 [Ak. 2:393].

Kant addresses this concern in §10:

There is (for man) no *intuition* of what belongs to the understanding, but only a *symbolic cognition*; and thinking is only possible for us by means of universal concepts in the abstract, not by means of a singular concept in the concrete. For all our intuition is bound to a certain principle of form, and it is only under this form that anything can be *apprehended* by the mind as immediate or as *singular*, and not merely conceived discursively by means of general concepts. But this formal principle of our intuition (space and time) is the condition under which something can be the objects of our senses. Accordingly, this formal principle, as the condition of sensitive cognition, is not a means to intellectual intuition ... (§10).⁴⁸

The purpose of this passage is to draw a distinction between intuitive or sensible representation and conceptual or discursive representation. The former is the immediate, singular representation of an object, where “immediate” means that the object is perceptually given to the subject and “singular” means that a particular or determinate object is given. But the intellect or understanding, by distinction, cannot intuit or make objects immediately present. We, in other words, don’t have the power of intellectual intuition by which objects are produced through the sheer act of thinking alone. Consequently, Kant says that the intellect can only think objects via “universal concepts in the abstract” or “discursively by means of general concepts.” Melnick suggests that Kant’s view on intellectual representation is similar to what in contemporary terminology would be called definite descriptions.⁴⁹ I agree with Melnick’s interpretation to an extent. Although noumenal objects are not objects of perception, they nonetheless possess properties since they are not nothing. Intellectual representations of them therefore specify their properties. The form of such representation is simply as follows: the entity

⁴⁸ Ibid., p. 389 [Ak. 2:396].

⁴⁹ He says, “However he [Kant] still agreed with Leibniz that thought *by itself* was adequate for representation of objects (which objects constituted the intelligible world). The principle of this representation by thought was most likely some sort of isomorphism. The thought in its structure and in its component concepts was isomorphic to one and only one object and thus represented that object. Modern Leibnizians would be those for whom definite description understood attributively provides an adequate account of reference to objects” (*Space, Time, and Thought in Kant*, p. 1).

that is a, b, c, d, etc. But since the predicates of the description are just various concepts that we have, then one can easily understand what Kant means by representing noumena by general or abstract concepts. Furthermore, the intellectual representation is a conceptual description of the noumenal object, and provided that the description is precise enough it will characterize just that individual object and no other. Consequently, the relation of intellectual representation to noumenal object is explained by *isomorphism*: the object that the representation is about is whatever object it is that satisfies or matches the description.

But the issue with Melnick's interpretation concerns the kinds of concepts that can form the description. He seems to hold that empirical concepts can legitimately compose part of the description, as is the case with Russellian definite descriptions. However there is reason to suppose that on Kant's view they cannot. Kant says that empirical concepts are abstracted from experience, and the logical use of the understanding involves employing empirical concepts to subordinate appearances in the relation of species and genus (§5). This ordering of appearances by the understanding is a form of *sensible* cognition: "Thus empirical concepts do not, in virtue of being raised to greater universality, become intellectual ... nor do they pass beyond the species of sensitive cognition; no matter how high they ascend by abstracting, they always remain sensitive" (§6).⁵⁰ After making this point, Kant then distinguishes empirical concepts from concepts of the understanding, and he says of the latter that they "*abstract* from everything sensitive, but [are] *not abstracted* from what is sensitive" (ibid.). He provides some examples: "To this genus belong possibility, existence, necessity, substance, cause, *etc.*,

⁵⁰ *Theoretical Philosophy*, p. 386 [Ak. 2:394].

together with their opposites or correlates” (§8).⁵¹ Thus, since the understanding’s use of empirical concepts is always a species of sensible cognition, then the description of a noumenal entity can only employ *a priori* concepts as predicates. How this would work is admittedly something of a puzzle.⁵² In any matter, Kant leaves off his analysis and does not explain the details.

Thus, at the time of the Inaugural Dissertation, Kant believed that noumenal objects could be represented purely conceptually, without reference to the sensibility. But, as I said above, the Herz letter presents what Kant takes to be a fatal problem with this view. First, the formation of the description does not depend or wait upon sensory affectation. That is, one can form the description without being affected by the object, and for this reason the representation is intellectual, not sensuous. Second, the description does not produce or make the object present, and for this reason it is discursive, not intuitive. Given these two points, intellectual representations are neither caused by nor the causes of their objects. As a result, Kant complains in the Herz letter that the Inaugural Dissertation altogether failed to see the problem of how thought can represent noumena or things as they are, given the lack of any causal connection between them. He came to recognize a deep difficulty concerning the possibility of non-sensible representation.

After realizing the inadequacy of the Inaugural Dissertation, Kant says in the letter that he then set to work:

While I was searching in such ways for the sources of intellectual knowledge, without which one cannot determine the nature and limits of metaphysics, I divided this science

⁵¹ Ibid., p. 388 [Ak. 2:395].

⁵² One possibility is that the concepts of the understanding – i.e., cause, substance, existence, possibility, etc. – could be used in representing noumenal entities correspondent to our perceptions and their order. A noumenal entity, in this case, could perhaps be represented as the entity that is the substantial cause of the actuality of the perceptual experience, etc.

into its naturally distinct parts, and I sought to reduce the transcendental philosophy (that is to say, all concepts belonging to completely pure reason) to a certain number of categories, but unlike Aristotle, who, in his ten predicaments, placed them side by side as he found them in a purely chance juxtaposition.⁵³

Keeping in mind a very similar reference in the Metaphysical Deduction, we can infer that he is here speaking not of the intellectual representations of the Inaugural Dissertation, but the newly discovered categories, or at least their prototypes.⁵⁴

The letter of 1772 clearly identifies Kant's interest in the intentionality or semantics of thought. The difficulty concerns the possibility of how non-sensible representations and concepts can be about anything, or relate to an object. But when we turn to the *Critique*, or rather to the period leading up to its publication, problems are further complicated. In 1772 Kant was content with an account of sensuous representation that based the relation of representation to object on the relation of cause and effect. This position is rejected by the time of the first-edition of the *Critique*. The opening pages of the Transcendental Aesthetic claim that sensations are non-intentional.⁵⁵ Only *intuitions*

⁵³ Ibid., p. 73.

⁵⁴ There is a debate as to whether Kant's letter points forward to the problem of the objective validity of the categories or whether it merely points backward to the perceived problem with intellectual representation in the Inaugural Dissertation. Lewis White Beck argues that when Kant refers to "The Limits of Sense and Reason," which he claims to publish in three months, he is really referring to a revised version of the Inaugural Dissertation that will address the latter problem. The reason he gives is that, "I cannot see any clear evidence that in 1772 Kant's problem was how a priori concepts must be applicable to sensible objects (the problem of the *Critique*) rather than the problem of how there can be a priori knowledge of *intelligibilia* without intellectual intuition ..." However this evidence can be found. Kant refers to the problem of how the understanding can produce "*real* principles concerning the possibility of such [*a priori*] concepts, with which principles *experience* [my emphasis] must be in exact agreement and which nonetheless are independent of experience." So Kant states the problem that Beck claims is missing: how can principles derived from *a priori* concepts apply to experience or sensible objects when those principles are not derived from experience. As Guyer argues, this is an early formulation of the problem of objective validity, and I find reason to agree. The letter, then, seems to point both forward and backward, recognizing the inadequacy of the Inaugural Dissertation position on intellectual representation of noumena, while sensing the new problem of how *a priori* concepts and their principles can apply to experience or phenomena.

⁵⁵ At A19-20/B34, Kant defines sensation as follows: "The effect of an object on the capacity for representation, insofar as we are affected by it, is sensation." Kant's qualification, "insofar as we are affected by it," is meant to indicate that sensations are merely inner states, or affectations in the subject,

have direct relations to objects; sensations are mere affections or purely inner states of the subject failing to refer beyond themselves. This implies that cause and effect relations are insufficient for grounding intentional relations, because sensations are, after all, the effects of causes (A19-20/B34). Since the Herz letter relies on cause and effect to sufficiently ground sensuous representation (also *intellectus archetypi*), this rejection leaves Kant with the difficulty of accounting for any form of representational aboutness, whether it be empirical or intellectual.

This only highlights the importance of underlying semantic questions, for in rejecting causality the problem is not that empirical representations may be false but that they may not even be representations. We might say that in the absence of an alternate position, Kant leaves himself open to the threat of *semantic skepticism*: perhaps the relation of representation to object is simply a mystery that cannot be explained. What is at stake then isn't knowledge, but the very intelligibility of representation itself.

I turn now to key sections of the *Critique* for the purpose of arguing that intentionality is one of the basic topics of the book, and that it is the cognitive capacity made possible by the categories.

that do not pertain to outer objects. The Cambridge edition translation of the *Critique* notes that in Kant's own text he provided the clarification that "Intuition is related to an object, sensation merely to the subject" (p. 155). And later in the *Aesthetic*, Kant returns to this point when he discusses the manner in which the ideality of space is different from the ideality of sensations. Sensations are empirically ideal: "The pleasant taste of a wine does not belong to the objective determinations of the wine, thus of an object, even considered as an appearance, but rather to the particular constitution of the sense of sight, which is affected by light in a certain way" (A28). In the B-edition *Aesthetic* he makes the same point: they [sensations] belong only to the subjective constitution of the kind of sense, e.g., of sight, hearing, and feeling, through the sensations of colors, sounds, and warmth, which, however, since they are merely sensations and not intuitions, do not in themselves allow any object to be cognized" (B44). These passages all express the idea that sensations, as inner states of the subject, do not refer to outer objects; they lack what Kant calls relation to an object.

2.2 Relation to an Object in the Deduction

In the Herz letter, Kant speaks often of the “relation of representation to its object.”

This phrase is also found throughout the Transcendental Deduction. For instance, at A104-105 he says:

We find, however, that our thought of *the relation of all cognition to its object* carries something of necessity with it, since namely the latter is regarded as that which is opposed to our cognitions being determined at pleasure or arbitrarily rather than being determined *a priori*, since insofar as they are to relate to an object our cognitions must also necessarily agree with each other in relation to it, i.e., they must have that unity that constitutes the concept of an object (A104-105, my emphasis).

Kant claims that representations, “insofar as they are to relate to an object,” must come under rules of synthesis or “unity.” I here set Kant’s theory of synthesis aside in order to investigate the meaning of the phrase, “the relation of cognition to its object.” In a passage at A111, Kant states that without the necessary unity of experience supplied by the application of the categories, then cognition would lose all relation to an object.⁵⁶ Understanding the meaning of this phrase is therefore quite important, since relation to an object is what the categories are claimed to ground. Not surprisingly I claim that this phrase is simply Kant’s way of speaking of intentionality.

However, not all commentators agree. Interpreters who defend the epistemological reading argue that the phrase refers to veridical representation only, not intentionality in general. Van Cleve, for example, presents this position. As he puts it, “I have been assuming so far that Kant’s concern with ‘relation to an object’ is a concern with what

⁵⁶ “Unity of synthesis in accordance with empirical concepts would be entirely contingent, and were it not grounded on a transcendental ground of unity [i.e., the unity brought about by the application of the categories to experience], it would be possible for a swarm of appearances to fill our soul without experience ever being able to arise from it. But in that case *all relation of cognition to objects* would also disappear, since the appearances would lack connection in accordance with necessary and universal laws [i.e., the categories] ...” (A111, my emphasis).

one would call objectivity or veridicality – with the difference that is between ‘there being a sun merely in one’s mind and there being a sun in the sky.’”⁵⁷ So, on his view, the phrase “relation to an object” is understood to identify veridical representations of, say, the sun. He explicitly rejects Rolf George’s claim that Kant’s interest is intentionality or aboutness.⁵⁸

But Van Cleve’s position contains a significant oversight. He incorrectly conflates objectivity and veridicality, and in doing so assumes that the act of representing the sun in the sky is a case of veridical representation (as opposed to hallucinating a sun in the mind). However, objective representations are not always veridical. What is overlooked is that false judgments relate to an object, and indeed must relate to an object if they are to misrepresent that object. In observing the setting sun I might judge that it has swollen in size and changed in color. This, of course, is an example of a perceptual illusion. Perhaps the illusionary experience can be said to be merely in my mind, but insofar as I am taken in or fooled by the illusion my claim purports to be about the sun. It asserts how the sun is, but nonetheless is false. Thus, it is clear that the topic of the judgment is *not* the sun “merely in my mind,” but the sun in the sky. If the judgment were about the sun in my mind, it would be veridical insofar as it would be an accurate report on how the sun is being presented to me in private experience. The falsity of the judgment depends upon relation to some reality beyond private experience with respect to which it is incorrect. In this sense, then, the representation is objective or related to an object. The same point can be made to apply to hallucinations and judgments about them.

But my analysis leaves a question to consider. As stated at A111, “relation to an

⁵⁷ *Problems from Kant*, p. 95.

⁵⁸ *Ibid*, p. 96.

object” is what the categories are claimed to ground. But since the categories are also claimed to ground cognition (A92-93/B125-126), then it is clear enough that the two are simply different ways of talking about the same thing. That being said, one is bound to wonder whether non-veridical representations, since they are related to an object, are therefore genuine instances of cognition. Can false, inaccurate, or mistaken representations be called cognitions? In the next section, I argue that Kant answers this question in the affirmative.

2.3 Kant’s Definition of Erkenntnis

We find Kant’s affirmative answer in the only explicit definition of “*Erkenntnis*” given in the *Critique*. In the context of a discussion of the proper meaning of the term “idea,” where Kant attempts to show the incorrectness of its use in British empiricism and modern philosophy in general, he provides a “serial arrangement” of different kinds of representation and their appropriate appellations. The passage reads:

The genus is representation in general (*repraesentatio*). Under it stands the representation with consciousness (*perceptio*). A perception that refers to the subject as a modification of its state is *sensation (sensatio)*; an objective perception is a cognition (*cognitio*). The latter is either an intuition or concept (*intuitus vel conceptus*). The former is immediately related to the object and is singular; the latter is mediate, by means of a mark, which can be common to several things ... (A320/B376-377).

Representation is the genus; but not all representations represent something. In particular sensations relate only to the subject. *Erkenntnisse*, on the other hand, are defined as objective perceptions.

In the Aesthetic, as discussed above (see footnote 20), sensations are characterized as subjective modifications, inner determinations of the mind, or ways in which the subject

is affected. Paradigmatic cases of sensations would be tickles and pains. Kant himself refers to taste and color (A28), sound and heat (B44), and weight (A169/B211). Sensations lack relation to an object in the sense that, for example, in tasting wine one's sensation of sourness does not belong to the wine but only to the way in which it affects one's organ of taste (A28). Sensations are "happenings" or presentations in the subject, and for this reason they are also fleeting and vanishing. The sensory experience of red at one moment is numerically distinct from the sensory experience of red at another. It makes no sense to think of sense-states as enduring over interrupted periods of time, since the state just is the sensory presentation at that very moment. As Henrich puts it, "Once gone, they are replaced by others of the same kind."⁵⁹ Further, sensations are atomistic: they can be had and experienced separately and singly such that their occurrence in the subject does not depend upon their being bound up with other such states. We might find sensations juxtaposed with one another, but such juxtaposition is merely accidental and does not involve any necessary relations of sensory states to one another. In short, if Kant had chosen to use grammatical characterizations, he would likely have treated sensations adverbially ("I am being affected redly," rather than "I am having the experience *of* red"), which seems to be precisely what he means by describing sensations as modifications of the subject.

Objects are distinguished from sensory states in two ways: (a) they endure over interrupted periods of time (i.e., they are substances) and (b) are represented as existing independently of the subject of experience (i.e., they are outer or spatial). Consequently, to cognize is to have representations of objects of the outer, spatial world – things beyond

⁵⁹ "Identity and Objectivity," p. 131.

the merely temporally unfolding physiological happenings within the subject. Kant calls this “objective perception.”

However, it is quite important to note that perception (*perceptio*) is broadly defined as representation with consciousness, and so *Erkenntnisse* are simply conscious representations of objects. Intuitions involve perceptual situations where an object is actually given to the subject, but not all *Erkenntnisse* are perceptual representations. This is shown by Kant’s claim in the above passage that *cognitio* is either an intuition or concept, where the latter of course are conceptual representations that relate to intuitions either directly or indirectly (A19/B33). *Erkenntnis*, then, by Kant’s own definition consists of the conscious representation of outer objects, either perceptually (i.e., in intuition) or conceptually (i.e., in thought).⁶⁰

It turns out, then, that false judgments of the sort discussed in the subsection above are conscious representations of objects and therefore examples of cognition. For example, the misjudgment or illusory perception that the sun has swollen in size is still a conscious representation of the sun in the sky. At A58 Kant says, “for a cognition is false if it does not agree with the object to which it is related even if it contains something that could well be valid of other objects” (A58/B82-83). This plainly identifies cases of *Erkenntnis* that are false, and further highlights that false judgments are related to an object. Norman Kemp Smith’s translation of this passage – “knowledge is false, if it does not agree with the object to which it is related ...”⁶¹ – yields an oxymoron. This is one of

⁶⁰ This definition can be understood in either of two ways: it can refer to an ability (act) or the outcome of an ability (object). This is because, since faculties are abilities of various sorts, when Kant speaks of the faculty of *Erkenntnis* he is referring to the capacity to form representations of objects; but when he speaks simply of *Erkenntnis* he is referring either to the representations themselves that refer to objects, or sometimes the capacity depending on the context.

⁶¹ *Critique of Pure Reason* translated by Norman Kemp Smith, p. 97.

the reasons why it is best to translate “*Erkenntnis*” as “cognition,” rather than “knowledge,” since knowledge is essentially tied to truth: what is false cannot be known.⁶²

So I conclude that cognition includes cases of non-veridical representation, it should be clear enough that cognition is not empirical knowledge, but rather the phenomenon common to both veridical and non-veridical representation alike. Namely, it identifies that property by which they represent, or are about, objects in the first place.

2.4 The Introduction to the Transcendental Logic

My discussions of “relation to an object” and Kant’s definition of “*Erkenntnis*” are, I think, sufficient for establishing that the phenomenon the categories make possible is intentionality. However, I wish to make my claim more convincing.

In the Transcendental Logic, Kant carries his new metaphysics out to completion and criticizes the whole of speculative metaphysics. It is by far the most important and dense part of the book. But in a short section of text at A50-64/B74-88, Kant provides a very useful introduction. Since the Transcendental Logic is where most of the action is, the purpose of the introduction is essentially to provide a précis of the overall project of the *Critique*. I will examine this introduction for the purpose of further supporting my interpretation and for addressing a remaining question. The question is, if the categories ground intentionality, then what kind of relation do they have to truth or veridicality?

The Introduction contains four brief sections, topically grouped into two sets. The first section discusses the nature of general logic, and the third section divides general

⁶² This is rejected by contemporary forms of fallibilism, but was firmly accepted by Kant and his philosophical heritage (Locke, Descartes, Hume, etc.).

logic into an analytic and dialectic portion. The second section discusses transcendental logic, and the fourth section also divides it into analytic and dialectic. I will discuss these groupings.

The first section begins by presenting Kant's two-faculty theory of cognition, according to which cognition requires the cooperation of the sensibility and understanding. I will elaborate on the full significance of this theory in Chapter 4, so for present purposes all that is important is that Kant identifies the understanding with the faculty of thinking, and claims that there is a science concerned with the rules of thinking: logic. Logic, in turn, is either general or transcendental. General logic investigates the necessary *a priori*, rather than merely contingent *a posteriori*, rules of thought that abstract from any specific subject matter (A52/B76). For example, whether one's object of study is physical motion, evolution, or human psychology, one's thinking is governed by the law of non-contradiction, rules for valid syllogistic forms, inference rules, etc. These are not the rules of some specific subject matter, but rules that any activity of thinking ought to obey. After saying that these rules concern only the form of thinking (A54/B78), Kant then adds the not particularly important point that general logic can be applied, in which case empirical principles might be added. What he has in mind is not the application of general logic to specific subject matters, but rather its use in the light of our various psychological hindrances and the mistakes to which we are prone.⁶³

In any case, this is most of what Kant says in the first section.

⁶³ For example, as Descartes recognized in the Fourth Meditation, we are prone to jump to the conclusion of an argument before going through all of the steps with sufficient carefulness. Applied logic might develop various rules we can follow in the effort to resist this tendency and insure validity in thinking. The way Kant puts it: "[Applied logic] deals with attention, its hindrance and consequences, the cause of error, the condition of doubt, of reservation, of conviction, etc ..." (A54/B79).

However, in section three Kant makes some peculiar but rather important claims about general logic. Specifically, he says:

But concerning the mere form of cognition (setting aside all content), it is equally clear that a logic, so far as it expounds the general and necessary rules of understanding, must present criteria of truth in these very rules. For that which contradicts these rules is false, since the understanding thereby contradicts its general rules of thinking and thus contradicts itself. But these criteria concern only the form of truth, i.e., of thinking in general, and are to that extent entirely correct but not sufficient. For although a cognition may be in complete accord with logical form, i.e., not contradict itself, yet it can still always contradict the object (A59/B84).

The passage asserts that general logic provides *formal* criteria for truth. This means that any true cognition must be in accordance with the rules of general logic. These rules are a *conditio sine qua non* or a merely negative requirement of truth (A59-60/B84). That is, agreement with these rules is necessary but not sufficient for truth, and this is all Kant means by saying, rather awkwardly, that they “concern only the form of truth, i.e., of thinking in general, and are to that extent entirely correct but not sufficient.” General logic, to stress, does not provide material criteria that would establish the conditions under which cognitions can be determined as true. I will shortly discuss why such criteria are not even possible. But presently this point can be used to explain the odd claim that whatever “contradicts these rules is false.” This is odd because what violates a valid syllogistic form is not false, but invalid. For this reason, I believe that what Kant really means in this context is the normative notion of *correctness* (and incorrectness) in thinking. He says that these rules “are quite correct but not sufficient” conditions for the truth of a cognition. The idea is that general logic is the science of correct or good thinking, the principles of which are required for, but not a guarantee of, truth.

As it turns out, the division of general logic into analytic and dialectic is a direct consequence of its being merely a formal criterion of truth. General logic as analytic

dissects the faculty of the understanding in order to determine and systematize the general logical rules governing all good thinking. However, Kant says that this science has a seductive power that tempts philosophers to extend it beyond its negative use, in which case substantive conclusions are drawn from it (A60-61/B85-86). In this function it purports to be an organon or tool for acquiring knowledge, and it thereby falls into what Kant calls dialectical illusion. Precisely because general logic is only a formal inquiry, and says nothing about what objects themselves are like, this attempt to extend its use is necessarily in error. The critique of this sophistical art constitutes the dialectic portion of general logic.

In section two, Kant distinguishes general from transcendental logic. Transcendental Logic (as any logic) investigates necessary *a priori* rules of thought, but unlike general logic, this science does not totally abstract from objects. He draws a parallel to the science of transcendental aesthetic: just as there are empirical and pure intuitions, so there are empirical and pure modes of thinking about objects. He says:

In this case there would be a logic in which one did not abstract from all content of cognition; for that logic that contained merely the rules of the pure thinking of an object would exclude all those cognitions that were of empirical content. It would therefore concern the origin of our cognitions of objects insofar as that cannot be ascribed to objects... (A55-56/B80).

Transcendental logic contains the “rules of the pure thinking of an object.” Later Kant says that in this science “we think objects completely *a priori*” (A57/B81). Both expressions are simply meant to identify Kant’s task of deducing the categories. Recall that the categories are *a priori* concepts, and Kant faces the problem of showing how we can know independently of any experience that all objects of cognition are governed by them. Transcendental logic is the science that aims to prove that we can and do have this

knowledge, and it thereby establishes the *a priori* rules to which all objects of cognition are subject. For example, causality is a rule for the so-called pure thinking of an object in the sense that any object we can cognize will necessarily be subject to causal laws. This is “pure” because it is not something we can know by experience, but rather requires a transcendental proof.

But only in section four does Kant identify the capacity made possible by the application of the categories to experience. In the context of distinguishing transcendental analytic from dialectic, he says:

That part of transcendental logic, therefore, that expounds the elements of the pure cognition of the understanding and the principles without which no object can be thought at all, is the transcendental analytic, and at the same time a logic of truth. For no cognition can contradict it without at the same time losing all content, i.e., all relation to any object, hence all truth (A62-63/B87).

Kant begins by claiming that transcendental analytic “expounds the elements of the pure cognition of the understanding,” which means that it establishes the *a priori* concepts (i.e., the categories) necessarily involved in our capacity to cognize objects. In short, Kant’s proof of the categories is carried out in the analytic. He then says that the categories are the principles “without which no object can be thought at all,” and that without them cognition would lose “all relation to an object.” Thus, it would seem clear enough, given my previous analysis of “relation to an object,” that the categories ground intentionality or the capacity for representations to have objects. However, Kant does add the puzzling description of transcendental analytic as a “logic of truth,” and further says that in losing relation to an object, representations lose “all truth.” Does this suggest that the epistemological interpretation is correct? Is Kant asserting that the cognitive capacity the categories make possible is the possession of truth or empirical knowledge? In fact, at

the beginning of the chapter on phenomena and noumena, Kant says that the land of the pure understanding is the land of truth (A235/B294-295), which suggests that the *a priori* concepts of the understanding ground truth.

However unexpected these statements might be (at least given the view that I have attributed to Kant), the Introduction to the Transcendental Logic provides the means for adequately understanding them. Both general and transcendental logic provide formal, but not material, criteria for truth. This means that the categories likewise are a *conditio sine qua non*, or a negative condition that is necessary but not sufficient for truth. First, they are necessary because no representation can be in agreement with an object unless it has reference to a determinate object in the first place. And thus, Kant provides the addendum, “hence all truth.” I do not believe that at A63/B87 Kant equates “relation to an object” with truth, but only that the former is necessary for the latter. Second, they are not sufficient because the truth of a representation depends upon whether it corresponds to experience, not simply whether it is governed by categories. Consequently, to call it “a logic of truth” is *not* to say that the categories are material conditions for truth.

Furthermore, representations that violate the rules that ground intentionality aren’t false, but rather empty, or as Kant says “without content.” Everything said, then, is consistent with and supports my claim that the science of transcendental analytic is a study of the *a priori* conditions for intentionality. Just as general logic provides rules for correct thinking, so transcendental analytic supplies rules for a correct semantics of thought.

At this point, we have an answer to the question of the relation between the categories and truth: the objective validity of the categories is required (a formal criterion) but not sufficient for truth (a material criterion). But furthermore Kant provides

an argument for why it is in fact *impossible* for their to be general material conditions for truth. At the beginning of section three, he defines truth as “the agreement of cognition with its object” and asks “what is the general and certain criterion of the truth of any cognition” (A58/B82). What is offered is a correspondence theory, and the question raised is whether there can be general criteria for determining when cognitions or judgments actually correspond to their objects. The answer Kant gives is *no*, since distinguishing true from false judgments is an empirical matter that depends upon the testimony of experience. He says:

Now a general criterion of truth would be that which was valid of all cognitions without any distinction among their objects. But it is clear that since with such a criterion one abstracts from all content of cognition (relation to its object), yet truth concerns precisely this content, it would be completely impossible and absurd to ask for a mark of the truth of this content of cognition, and thus it is clear that a sufficient and yet at the same time general sign of truth cannot possibly be provided...because it is self-contradictory(A58-59/B83).

The point is that the truth of a judgment depends upon the object to which it is claimed to correspond, and so we must look to the objects themselves to check for truth or correctness in representation. The “test” or “mark” for truth, then, is found in the varying empirical objects, not in a general criterion that abstracts from all specificity and variation in subject matter. Since distinguishing truth from falsity is an empirical issue, it cannot be part of a transcendental inquiry, and the categories cannot play the role of general material criteria of truth since such criteria are not even possible. These criteria are self-contradictory because they both abstract from specific empirical objects (i.e., general) while taking into account variation in specific empirical objects (i.e., material). This passage is therefore quite important, as is the whole Introduction to the Transcendental Logic, for it effectively states that determining whether our

representations are true or false is not a concern of transcendental philosophy since this is an issue that can only be settled by appeal to experience. It is therefore left to the empirical sciences to devise methods and tests for arriving at correct propositions about the world.

3 The Anti-Skeptical Results of Kant's Deduction of the Categories

The interpretation of the basic concept "*Erkenntnis*" has been conducted by (a) looking at circumstances surrounding the origin of the *Critique*, (b) explaining what is meant by the phrase "the relation of representation to object," (c) examining Kant's explicit definition of *Erkenntnis*, and (d) discussing his definition of transcendental logic and analytic. These analyses have all converged on the statement that the fundamental task of the Transcendental Analytic as a whole is to provide a theory of intentionality. The categories are argued to be conditions for the possibility of this phenomenon.

But there remains an issue. My claim that the categories ground the possibility of intentionality would seem to imply that there are no significant epistemological results. From the fact that we can represent objects, it follows only that the capacity to make true judgments about experience is representationally possible or consistent. It does not imply the existence of bodies of empirical knowledge. All of our experiential judgments may, as a matter of historical and empirical fact, be false or unjustified. But this flies in the face of the epistemological reading in its progressive form. According to this reading, the transcendental deduction aims to prove that we have empirical knowledge of objects. The idea is that any skeptic would at least grant that we are sometimes self-consciousness. But if it can be shown that the bare possibility of self-consciousness requires knowledge

of a world of external objects, then one can trap the skeptic into denying his own position. Strawson, Bennett, and Wolf all take this line, and Ameriks summarizes their position: “They all represent the transcendental deduction as basically aiming to *establish* objectivity, i.e., to prove that there is an external and at least partially lawful world, as a set of items distinct from one’s awareness, and to do this from the minimal premise that one is self-conscious.”⁶⁴ One can also add Stroud,⁶⁵ Guyer,⁶⁶ and Edwin McCann⁶⁷ to this list of well-received interpreters.

My purpose is to explore the nexus of issues surrounding the purported anti-skeptical implications of the Deduction chapter.⁶⁸ First, I will examine the Deduction chapter itself, and will argue that the structure of its argument does not enable anti-skeptical conclusions to be drawn. Second, I will examine the Refutation of Idealism which Kant inserted into the second edition of the *Critique*. In this short text, Kant claims to answer one of the great scandals of philosophy by showing that the existence of the external world need not be accepted on mere faith, but can be given a rigorous proof. I will argue, first, that this is not an argument that can be found in the Deduction, and second, that it at

⁶⁴ Ameriks, “Kant’s Transcendental Deduction as a Regressive Argument,” pp. 276-277.

⁶⁵ Stroud, “Transcendental Arguments.” Stroud criticizes Strawson’s reconstruction of the deduction, but he still takes the aim of the deduction to be a refutation of idealism.

⁶⁶ Guyer, *Kant and the Claims of Knowledge* and “The Failure of the B-Deduction.” Guyer claims that Kant constructed various approaches to deducing the categories, and that those various approaches can all be found in the text of the first *Critique*. One approach that he claims is unmistakably in the text is to show that “knowledge of objects external to the self is itself a necessary condition of the possibility of some feature of mere self-consciousness which not even a coherent skeptic can deny,” (“The Failure of the B-Deduction,” p. 67.)

⁶⁷ See McCann, “Skepticism and Kant’s B Deduction.”

⁶⁸ For the remainder of the chapter, it is important for the reader to be cognizant of the difference between the Deduction (i.e., the text or chapter itself) and the deduction (i.e., the proof of the objective validity of the categories). The reason is because I claim that the Deduction doesn’t provide a deduction of the categories. Rather, the deduction of the categories is supplied in the Analytic of Principles, whereas the Deduction only presents Kant’s method or procedure for deducing a category.

best only establishes *that* there is an external world, but not that we can know anything about what it is *like*.

3.1 Assessing Anti-Skeptical Results: The Deduction

Earlier, at the end of Section 1, I claimed that the Deduction only supplies a method or procedure for deducing the categories, and that the actual deduction of specific categories is carried out later in the Analytic of Principles. This is not a mere side point, but is quite important because if it is correct then the Deduction itself has no anti-skeptical results. I will first provide support for my claim that the argument in the Deduction is methodological in nature before discussing why this implies that it isn't anti-skeptical.

The Preface to the Second Edition is helpful in understanding the purpose of the Deduction. Kant introduces his principle of metaphysics – that objects conform to cognition – in the context of a discussion of scientific method. He argues that the *a priori* sciences of mathematics and physics were made possible by a revolution in thinking, which consisted of recognizing that we can have *a priori* knowledge only of what we put into the object of representation (Bxi-xii). Mathematicians do not study particular experienced figures, for then their results would only have comparative universality. For example, one could only conclude that, of the triangles so far examined, they all possess interior angles summing 180 degrees. Mathematicians, rather, aim to show that all possible triangles must possess this property. According to Kant, the revolution in thinking is the recognition that figures are the product of acts of construction in accordance with *a priori* concepts, and given that we build the properties of the figure

into the construction, we can know *a priori* that any figure satisfying the construction must possess the properties that we have built into it (Bxii). Setting further details aside, the main point is that Kant's concern is about method, and he suggests applying to metaphysics a method that has been so successful in the sciences. Thus, he proposes to "let us once try whether we do not get farther with the problems of metaphysics by assuming that the object must conform to our cognition ... " (Bxvi).

The Deduction, I claim, states in systematic form what Kant mentions in the Preface. As I explained in Section 1, Kant's principle that objects must conform to cognition is repeated in more precise language at A92-93/B124-126. Moreover, in the Preface to the A-edition, Kant actually says that A92-93 is sufficient for understanding the essentials of the whole Deduction chapter. He states his principle in the following way: "the representation is still determinate of the object *a priori* if it is possible through it alone to cognize something as an object (A92/B125). Let me lay stress on the word "*if*." Kant retains the hypothetical language of the Preface, and says that *if* there are certain features an object must possess in order to be cognizable, then we can have *a priori* knowledge that any cognizable object must possess those features. This states not a proof, but the procedure for justifying the objective validity of the categories.

But why then do so many commentators take Kant to prove the objective validity of the categories in the Deduction itself? I take the reason to be the following. Kant divides the Deduction chapter into two parts, an introduction and a body. He presents his principle or method of the deduction in the introductory section. One would then expect that the body of the Deduction would actually establish what was only stated hypothetically in the introduction. In effect, Kant begins by saying "if it can be shown"

and then proceeds to show just that. This seems perfectly reasonable and obvious, but I nonetheless disagree. It is true that after stating the method of the deduction, the chapter then goes on to do extra work. Over the next three chapters, I will argue that the extra work is not a proof that our experience is governed by the categories, but rather Kant works out a theory of cognition – which on my reading is a theory of intentionality. The reason he proceeds in this fashion is because the categories are claimed to ground cognition, and therefore he is unable to take a single step forward without an account of the nature of the capacity that the categories are claimed to ground. After presenting the principle of the deduction, his most pressing concern is not to prove the objective validity of the categories but to answer the question: what is cognition? In this case, the argument retains its hypothetical form, and all Kant does in the body of the Deduction is fill out what is meant by cognition. He says, if it can be shown that there are certain concepts necessary for cognition – defined as the ability to formulate rules for all possible spatio-temporal productions and thereby all possible spatio-temporal appearances encountered in those productions⁶⁹ – then they must apply to any object that can be cognized. In the *Analytic of Principles*, Kant advances his metaphysics by showing that specific concepts are required to bring about cognition *so understood*. As I said, I will discuss Kant theory of cognition/intentionality in subsequent chapters, so a complete defense of this reading will wait.

On my methodological reading, the Deduction itself contains no anti-skeptical results. Commentators who defend the epistemological interpretation claim that the chapter is supposed to “establish objectivity,” as Ameriks puts the issue. This in turn involves proving either or both of two substantive claims: (more weakly) we can know

⁶⁹ Kant’s analysis of cognition will be completed over the course of Chapters 3, 4, and 5.

that there is an external world to which we are related and/or (more strongly) we can have knowledge about the external objects to which we are related. But on my reading Kant seeks to establish neither claim. I begin by noting that if Kant's regressive argument simply assumes that we stand in intentional relations to external objects in order to argue that the objective validity of the categories is required for this, then of course the argument would contain no anti-skeptical proof. The regressive argument would simply beg the question by presuming the premise that the skeptic challenges. But I disagree with this take because it structures the Deduction in terms of an argument, rather than a method.⁷⁰ I claim that Kant has no need or intention to assume that we stand in intentional relations to external objects because his only concern is to show that if intentional relations are to occur, then the categories must be objective features of experience. In the body of the Deduction, Kant only needs to *analyze*, not assume the reality of, the phenomenon of intentionality.⁷¹ Given this, one can easily see why the analysis provides no valid line of proof for the existence of the external world. Kant seeks to establish the truth of the antecedent of the hypothetical statement, "if the possibility of intentionality rests upon the objective validity of certain concepts, then those concepts can be known *a priori* to apply to any object that can be intended." But when unpacked one sees that the antecedent itself is a conditional statement which asserts that if

⁷⁰ It structures Kant's Deduction chapter in terms of an argument for the following reason. On the assumption that we *do* stand in intentional relations to external objects, and given that the objective validity of the categories is required for this, it follows that the categories are objectively valid.

⁷¹ What I mean by the "reality" of intentionality is not just that we have representations that merely purport to be about objects, but more robustly that we have representations that *successfully* refer to objects. In such a case, intentional relations to objects would be fulfilled or realized (not merely purported). In other words, I am referring to the existence of an external world of objects to which we are (sometimes) intentionally related. My claim is that Kant is neither assuming nor establishing the existence of the external world. Rather, he is analyzing what would be required for being intentionally related to an external world, and whether there is one is a separate matter.

intentionality is to be possible, then the categories must be objectively valid.⁷²

Establishing this statement cannot provide a valid proof of the reality of intentionality because it only shows that the categories are necessary conditions for the possibility of intentional relations to external objects. The demonstration that there are external objects requires a separate argument which is given in the B-edition's Refutation of Idealism.

My interpretation has the value of retaining the advantages of the progressive approach while avoiding its pitfalls. The progressive reading claims that Kant offers a non-question begging proof of the reality of the external world, and I have structured Kant's project in a way that leaves this possibility open. The non-questioning begging argument is given in the Refutation of Idealism. However, the progressive reading gets saddled with the burden of showing that the Deduction also presents this proof, in which case the Refutation is only an explicit or more refined statement of what is already found in the Deduction. The problem is that many authors who hold this reading end up arguing that the Deduction is a complete failure. From my perspective, this result is not surprising because the Deduction is not designed to offer such a proof, and accordingly I can avoid asserting, as so many others do, that it is a disastrous botch.

My reading, moreover, accords with the value of Ameriks's regressive strategy, since for the same reason his strategy saves the Deduction from failure. But it is worth noting that my version of the regressive strategy is different from Ameriks's in two ways. First, according to Ameriks, the cognitive capacity that the categories make possible is the possession of empirical knowledge, whereas on my view it is intentionality. Second,

⁷² The hypothetical statement in the Deduction has the form: $(A \rightarrow B) \rightarrow C$. Clearly this statement is synthetic, and it explains why Kant needs a deduction that goes beyond merely analyzing concepts, but involves an appeal to the possibility of cognition. Also, given that only in the Refutation does Kant establish A, it shows that the Refutation is needed to complete fully the overall argument of the Analytic.

Ameriks treats the Deduction as an argument proving the objective validity of the categories. He says that Kant proves, on the basis of assuming we are in possession of empirical knowledge, the objective validity of the categories as conditions necessary for possessing knowledge in the first place. By distinction I claim that in this text Kant does not offer a regressive argument, only a regressive *method*. This method consists of analyzing the nature of intentionality for the purpose of showing (or regressing back to) the conditions necessary for its possibility. One need not assume the reality of a phenomenon in order to analyze what it is. Moreover, this analysis itself in no way proves the reality of the phenomenon analyzed.

3.2 Assessing Anti-Skeptical Results: The Refutation of Idealism

Kant's Refutation of Idealism was inserted in the middle of the Postulates of Empirical Thought in the B-edition.⁷³ I argued above that this is a separate argument not found in the Deduction. The Deduction presents a method for deducing a category. The proposed method only goes so far as to say that *if* we are to be intentionally related to external objects, then the categories must be exemplified in experience. It does not prove that there are external objects to which we are intentionally related. Having removed any anti-skeptical results from the Deduction, what I now wish to explore is the extent to the which the Refutation provides the sought after results. I will argue that Kant's argument at best proves that there is an external world, but not that we can know anything about it over and above its mere existence.

The first issue to consider is the basic structure of the refutation. What does Kant seek to establish and how? He identifies the "theorem" of the argument as follows: "The

⁷³ I explain the significance of this placement in Chapter 4.

mere, but empirically determined, consciousness of my own existence proves the existence of objects in space outside me.” (B275). The theorem is a statement of the argument’s basic strategy. Kant begins with a minimal premise that any consistent skeptic will at the very least grant – namely, that we are conscious of our own existence. He then argues that since the possibility of such consciousness depends upon the existence of external objects, external objects must therefore exist. So, the argument is designed to be a refutation of external-world skepticism. Kant himself characterizes it as a refutation of what he calls Descartes’s problematic idealism, according to which the existence of external objects is doubtful and indemonstrable (B274).⁷⁴

There are, however, two important features to the argument. First, Kant aims to prove that substances exist. This means that the external objects grounding the possibility of consciousness of one’s own existence are entities that persist or retain their identity across time.⁷⁵ Secondly, Kant provides a proof of direct realism. The relation between a self-conscious subject and an external object is not mediated by a representation that is in the subject and distinct from the object, but rather the representation is the immediate perception of the object itself.⁷⁶ He states this result in note 1 to the argument, “Yet here it is proved that outer experience is really immediate ...” (B276), as well as in a footnote to the main argument, “The immediate consciousness of the existence of outer things is

⁷⁴ Kant provides an epistemological characterization of Descartes’ idealism. He distinguishes this brand of idealism from what he calls Berkeley’s dogmatic idealism, according to which external objects are asserted not to exist. The latter is clearly given an ontological definition. Kant claims that dogmatic idealism has been sufficiently “undercut” by the Transcendental Aesthetic (B274), so in the Refutation he focuses his efforts on refuting problematic idealism.

⁷⁵ Because my purpose is only to explain the basic structure of the proof, I have here set aside the additional, and highly compact and complicated reasoning for this claim. This reasoning is based on the proof of the objective validity of the category of substance given in the First Analogy.

⁷⁶ In this context the act/object distinction is important. The representation is the act of directly perceiving the external object. The representation is not an intermediary object that is distinct from what is perceived (what the moderns call an “idea”).

not presupposed but proved in the preceding theorem, whether we have insight into the possibility of this consciousness or not” (B276f). The argument, then, proves a specific kind of *perceptual* relation to external objects.

My purpose is not to evaluate the soundness of the refutation. I grant the soundness of the proof in order to assess whether Kant has an adequate response to Descartes’s version of empirical-knowledge skepticism. I ask, assuming *that* there are substances we are at least sometimes in immediate perceptual relation to, does Kant supply further argumentative resources for proving that we can know anything *about* such substances over and above the mere fact that they exist? Otherwise put, do we ever have adequate *justification* for our various claims about the properties and characteristics of external substances?

I formulate the argument for Cartesian empirical-knowledge skepticism in the following way (where *p* is restricted to any empirical-knowledge claim):

1. If I know that *p*, then I must know that my justification for *p* is not based merely on dreaming experience.
2. I do not know that my justification for *p* is not based merely on dreaming experience.
3. Therefore, I do not know that *p*.

I have two explanatory points to make about the argument. First, the reason why I identify it as Cartesian empirical-knowledge skepticism is because it based on the principle that one’s justification for *p* must be sufficiently strong to entail the truth of *p*. Although this principle is denied by contemporary fallibilists and contextualists, it is firmly accepted by Descartes and virtually everyone else in the modern period. The rationalists and empiricists alike believe that knowledge comes in two forms: intuition

and demonstration. The former consists of the clear and distinct apprehension of the relation between two or more ideas. Given Descartes' principle that anything clearly and distinctly apprehended is true,⁷⁷ it follows that the justification provided by intuition entails the truth of what one apprehends. The latter, then, serves to connect ideas whose relations are not immediately intuitable. The demonstration, if properly constructed, proceeds in a series of sufficiently small, intuitively grasped steps. Demonstrations, given their deductive nature, are truth-preserving, and consequently they provide a form of justification that entails the truth of what one believes (the conclusion).

This principle is at the basis of the skeptical problem. It requires that one be able to rule out the obtaining of any scenario in which the justification provided by that scenario is not sufficient for establishing the truth of what one believes. Dreaming experience is such a case. For example, if I am only dreaming that I am in the House of Lords, then my belief that I am in the House of Lords might well be false. And even if it should turn out that I am *both* dreaming *and* actually present in the House of Lords, there is nothing in the dreaming experience that provides sufficient evidence of my actual presence. As Descartes argues,⁷⁸ there are no definitive signs by which to distinguish waking from dreaming since whatever can be experienced in waking life can also be dreamt. Thus, the possibility that one might be dreaming on particular occasions seemingly can't be ruled out.

Second, the argument is designed to undermine one's justification for believing in the truth of any empirical-knowledge claim. It is controversial whether the skeptical argument can be extended to *a priori* knowledge, because it is not obvious that dreaming

⁷⁷ Descartes identifies this principle in the second paragraph of the Third Meditation. He says that the basis for knowing with certainty that he is a thinking thing is nothing but a clear and distinct apprehension.

⁷⁸ Descartes makes this claim in Meditation One.

a proof of the Pythagorean theorem is inconsistent with having sufficient justification for knowing it. For this reason, the argument does not have global scope. Although dreaming fails to provide an adequate empirical basis for justifying claims about reality, the truths of mathematics are established by rational demonstration, not experience. And, as it turns out, the conclusion of Kant's refutation of idealism is intended to be known *a priori* since it is based on an investigation into the necessary and universal requirements for consciousness of one's own existence.⁷⁹ For this reason, we can treat the conclusion of the refutation as outside the intended scope of the skeptical argument presented above. "P," then, is a variable standing for any claim purportedly known on the basis of *experience*, e.g., that acid turns litmus paper red. The question I raise is whether Kant has the resources for addressing a type of skepticism restricted to claims about the characteristics and properties of empirical objects. I call this Cartesian empirical-knowledge skepticism and distinguish it from external-world skepticism.

Of course it is no fault of Kant's if he fails to adequately address something that he never intends to address. The argument of the refutation itself only concerns external-world skepticism. However, I claim that in the third note to the argument Kant does address the further skeptical problem that I have identified. I quote the full note:

Note 3. From the fact that the existence of outer objects is required for the possibility of a determinate consciousness of our self it does not follow that every intuitive representation of outer things includes at the same time their existence, for that may well be the mere effect of the imagination (in dreams as well as in delusions); but this is possible merely through the reproduction of previous outer perceptions, which, as has been shown, are possible only through the actuality of outer objects. Here it had to be proved only that inner experience in general is possible only through outer experience in general. Whether this or that putative experience is not mere imagination must be ascertained according to

⁷⁹ In the B-edition Introduction to the first *Critique*, Kant provides two criteria of distinguishing empirical from *a priori* knowledge. He says at B3-4 that *a priori* knowledge is knowledge of what is necessarily and universally the case. Since it is necessarily and universally the case that consciousness of one's own existence presupposes the existence of external substances, this claim is known *a priori*.

its particular determinations and through its coherence with the criteria of all actual experience (B278-279).

In this passage, Kant changes his previous language of “consciousness of one’s own existence” and refers instead to “inner experience.” He takes both to identify one and the same thing. The heart of the argument is Kant’s establishing that the possibility of inner experience in general (which at B275 he says was undoubted even by Descartes) depends upon the existence outer experience in general. The expression “in general” is significant for it indicates that not every seeming perception of external objects involves their existence, as is the case with dreams and delusions (B278). When this point is coupled with Kant’s direct realism, the conclusion in its most precise form is that the possibility of inner experience requires that we must at least sometimes be in immediate relation to external objects, or negatively described, that it cannot always be the case that we are hallucinating or dreaming. However, this still leaves open the question of whether and how we can know that any *particular* experience is not hallucinatory or dreaming. Kant recognizes that the refutation leaves open this further concern, and at the end of the note he states his proposed solution: “Whether this or that putative experience is not mere imagination must be ascertained according to its particular determinations and through its congruence with the criteria of all actual experience” (B279). I claim that this is Kant’s failed attempt to respond to Cartesian empirical-knowledge skepticism.

The Cartesian skeptic lays down the principle that knowing the truth of any empirical-knowledge claim requires knowing that one’s justification for the claim is not based on dreaming experience. Kant’s answer to this principle consists of identifying two criteria by which one can determine whether or not one is currently dreaming or, as he says, only imagining. He says that non-imaginary experience can be ascertained

according to an experience's "particular determinations" and its "coherence with criteria of all actual experience." Let me begin with the second criteria before proceeding to the first.

The Refutation of Idealism is embedded in the Postulates of Empirical Thought, which concern the categories of modality. In the context of Kant's discussion of actuality, he presents the criteria of real or actual experience. He says that the actual is connectible with a current perception in accordance with the analogies of experience (A225/B272). Specifically, he seems to have causality in mind, in which case the actual is what can be causally connected with a current perceptual experience. This does not require that the unperceived object actually stands in causal connection with a current perception, but only that we could advance or progress "in accordance with empirical laws" (A226/B273) from a current perception to the unperceived appearance in question. Consequently, the second criterion refers to the causal connectability of current perceptions with unperceived appearances, except that in the text of the Refutation the direction of connectability is reversed. In the Postulates, he is concerned with the connectability of unperceived appearances with presently given perceptions, whereas in the Refutation he is concerned with the connectability of current perceptions with the rest of the causally ordered world. In short, according to this criterion, waking experience causally coheres with the rest of one's experience.

It is important to recognize that this is only a necessary, not a sufficient, criterion for determining whether one's experience is dreaming or only imaginary. The reason for this is found in the Introduction to the Transcendental Logic. Here he says that the criteria of

all actual experience are merely *conditio sine qua non* for veridical representation.⁸⁰ This means that congruence with them is required but not sufficient for an experience to be related to actual external objects. In fact, Kant claims that general material criteria for veridicality are self-contradictory.⁸¹ Thus, what is additionally required is a criterion that is not general, but takes into account the specific characteristics of objects of representation. In the Refutation, he identifies this criterion as the appeal to the “particular or special determinations” of objects (the first criterion identified above). Although Kant does not elaborate on this at all, I believe that he is referring to various kinds of fact-checking procedures that can be brought into play in assessing whether one is having dreaming experience or not. For example, one might attempt to turn on the lights and adjust lighting levels, or one might pinch oneself to see if pain can be felt, or one might walk around an object to see whether its various faces change. Unlike the second criterion, such procedures are directed at the content rather than the form of experience. Even though Kant doesn’t explicitly say so, I think that the context makes clear that he is putting forward both criteria as individually necessary and jointly sufficient for distinguishing real from purely imaginary experience.

We can now assess whether Kant provides an adequate response to Cartesian empirical-knowledge skepticism. The difficulty concerns premise 2 of the skeptical

⁸⁰ In this context, I define veridical representations as those that stand in relation to an actual object. For example, my perception of a desk is veridical if there is an actual desk to which my perception refers. Hallucinations are in this sense non-veridical. Kant claims at A58-59/B83 that congruence with the categories, i.e., being subject to causal laws, is necessary but not sufficient for a representation to be related to an actual object, i.e., be veridical. He begins by defining truth, or what I call veridicality, as “the agreement of a cognition with its object,” and he proceeds to say that “it would be completely impossible and absurd to ask for a mark of truth of this content of cognition, and thus it is clear that *a sufficient and yet at the same time general* sign of truth cannot be provided” (my emphasis).

⁸¹ He makes this claim at A59/B83: “Since above we have called the content of cognition its matter, one must therefore say that no general sign of the truth of the matter of cognition can be demanded, because it is self-contradictory.”

argument from above, which denies that we ever have justification for believing that we are currently not dreaming. Kant must show that this premise is false, yet I don't think he has the resources to do so. The reason is that whatever criteria are devised for distinguishing waking from dreaming, those criteria could just as well be replicated in a dream, and therefore they fail sufficiently to establish that one is awake. On Kant's analysis, one is justified in believing that one is not dreaming if one's experience causally coheres with the rest of experience and if one's various fact-checking procedures all pan out. But one sees that dreaming experience could replicate both conditions, and therefore Kant does not rule out the possibility that needs ruling out if we are to have empirical knowledge. For example, suppose that one's dreaming experience picks up where waking experience has left off, and after replicating waking-like experience, it ends in a manner that seamlessly ties into the resumption of waking life. Of course, such a scenario might not be likely, but given the epistemic principle that justification must entail truth, the argument only requires its possibility. In this case, congruence with the criteria of actual experience, i.e., coherence with the category of causality, is not sufficient for distinguishing waking from dreaming. But how do things fare if the second criterion is added?

Suppose, then, that in addition to causal coherence, one performs some tests and discovers that lighting levels can be adjusted and that pain can be felt. Presumably these tests are supposed to show that one is awake, since they identify situations that cannot be experienced in a dream. But the problem is that reliance on them is question-begging. Given the first premise's requirement that one know one's justification is not based on dreaming experience, fact-checking procedures are justifiable guides only if one knows

that the data for developing the procedures were not collected during dreaming experience. But since this is exactly what premise 2 denies, then the “refutation” of premise 2 is based on the assumption that it is false. That is, one must presume that we can sometimes know we are awake, for only if this is so can it be known that the test-data were not collected during a dream. For these reasons, I claim that even if Kant proves that we must sometimes be in immediate relation to actual external objects, he fails to offer adequate criteria for determining when particular occasions of experience are not dreaming or purely imaginary. Or, in other words, he fails to establish criteria that are sufficient for determining that we are *now* in immediate relation to actual objects.

It is helpful to compare Kant’s anti-skeptical discussions to Descartes’s. Both provide a purely rational demonstration of the existence of the external world. Kant investigates the conditions for the possibility of inner sense, and Descartes appeals to God’s omni-benevolence.⁸² Furthermore, both recognize that the proof of the external world fails to settle the additional problem of knowing whether particular occasions of experience are waking or dreaming. Kant deals with this further concern in much the same way as Descartes. Both claim that dreams fail to causally cohere with the rest of experience, and both recognize that this criterion is in need of supplementation. Descartes’s supplementation consists of a rational demonstration that serves to justify the criterion. He argues that God must have provided us with trustworthy self-correcting mechanisms for distinguishing waking from dreaming experience, for otherwise he

⁸²Descartes claims that God created us with an irresistible tendency to regard ideas that are experienced as produced against our will as caused by external objects. He argues that for this reason God would be malevolent if it were the case that external objects did not exist. He makes this point in the Sixth Meditation. He says that since God “has given me a great inclination to believe that these ideas issue from corporeal things, I fail to see how God could be understood not to be a deceiver, if these ideas were to issue from a source other than corporeal things. And consequently corporeal things exist” (*Meditations on First Philosophy*, p. 52).

would be malevolent.⁸³ Kant's supplementation, on the other hand, is merely an appeal to the empirical criterion of engaging in fact-checking procedures. By dropping an appeal to a divine guarantor, this criterion becomes subject to the very problem that it attempts to solve. Kant provides no basis for justifying our trust in the procedures used to distinguish waking from dreaming because he fails to provide a basis for ruling out the possibility that the data collected in developing them were dreamt. His treatment of epistemic justification is perfunctory and flippant, and given that the solution to Cartesian empirical-knowledge skepticism centers on issues of justification, I doubt that any interesting insights into this problem can be gleaned from the first *Critique*.

So far I have discussed the problem of distinguishing dreaming from waking experience because that is the problem Kant addresses. In both note 3 to the Refutation and the Refutation itself, Kant is interested specifically in the contrast between purely imaginary experience and experience that contains (immediate) relation to an actual external object. The former involves dreams and delusions (B278), as well as hallucinations. But what does the latter involve? It is important to see that relation to an actual object is *not* co-extensive with *veridical* experience, since perceptual illusions also involve relation to an actual object. I will conclude this subsection, then, with a discussion of the representational status of perceptual illusions, and will argue that the

⁸³ In the last paragraph of the Sixth Meditation, he says that “the hyperbolic doubts of the last few days ought to be rejected as ludicrous. This goes especially for the chief reason for doubting, which dealt with my failure to distinguish being asleep from being awake. For now I notice that there is a considerable difference between the two; dreams are never joined by the memory with all the other actions of life, as is the case with those actions that occur when one is awake.” After identifying the criterion of causal coherence with the rest of experience, he proceeds to justify it by appeal to God's benevolence. He says: “For surely, if, while I am awake, someone were suddenly to appear to me and then immediately disappear, as occurs in dreams, so that I see neither where he came from nor where he went, it is not without reason that I would judge him to be a ghost or a phantom conjured up in my brain, rather than a true man ... For from the fact that God is no deceiver, it follows that I am in no way mistaken in these matters” (*Meditations on First Philosophy*, p. 59).

conclusion of the refutation is consistent with the result of all of our perceptual experience being illusory. In doing so, I set aside empirical-knowledge skepticism and ask the different question of whether our perceptual experience might be illusory.

In the history of philosophy, there can be found an exchange between Hume and Thomas Reid on the legitimacy of the theory of ideas. Hume, in response to one of Reid's letters requesting evidence for the view, says in *An Inquiry Concerning Human Understanding* that, "The table which we see seems to diminish as we remove further from it; but the real table, which exists independent of us, suffers no alteration. It was, therefore, nothing but its image which was present to the mind. These are the obvious dictates of reason ..."⁸⁴ Hume's evidence for a representationalist or idea theory of perception is an appeal to the fact that an object's appearance changes with shifts in spatial perspective. Reid provides the following response: "Let us suppose for a moment, that it is the real table we see: Must not this real table seem to diminish as we remove farther from it? It is demonstrable that it must. How then can this apparent diminution be an argument that it is not a real table?"⁸⁵ Reid's point is that changes in appearance based on perspectival shifts are exactly the consequences that would result from it being the case that we directly perceive the real table, and thus they are not evidence for a theory of ideas.

Given Kant's claim to prove direct realism and his firm opposition to empirical idealism (which is simply his term for a representationalist theory of perception), I believe that he would have to agree with Reid's position on perceptual illusions. Such illusions – e.g., the appearance of railroad tracks converging in the distance, the

⁸⁴ Hume, *Inquiry*, p. 161.

⁸⁵ Quoted from *Inquiry and Essays*, edited by Ronald Beanblossom and Keith Lehrer, p. xiv.

appearance of a bent stick in water, or the appearance of the swollen sun on the horizon – are not purely imaginary, delusions, or products of dreams. In all of these cases, we are in immediate relation to external things – railroad tracks, a stick in water, and the sun – even though our perception contains a non-veridical component. Furthermore, the illusory component is deducible by various laws from our immediate relation to the object. Given some specific spatial orientation, coupled with an understanding of the physiology of our visual system and the physical laws of optics and light refraction, scientists can determine how the object will appear to the subject and the kind of changes to expect under altered conditions. This means that perceptual illusions are objective perceptions in the sense that they are *of* external objects and in congruence with the categories, i.e., causal laws. From a philosophical perspective, it is certainly necessary to acknowledge a distinction between perceptual illusions and hallucinations, delusions, and dreams. One’s observation of the swelling of the sun on the horizon is very different from the hallucination of a sun in the sky at night, since the latter case does not have the actual sun as part of its content and it lacks the causal coherence and regularity involved with the former.

This idea can be expressed in another way. Both hallucinations and illusions can be correctly described as purportedly objective, but the term ‘purported’ has two different senses. It could either mean that the representation is non-veridical in the sense that the fact-checking procedure does not pan out, or it could mean that there is no object to which the representation pertains, even though the representation seems to refer beyond itself. Perceptual illusions, it seems to me, are purportedly objective in the first sense but not the second, whereas hallucinations are purportedly objective in both senses. So, for

instance, when checking to see if the stick is really bent, my procedure is directed to an outer object, and while inspecting *it* I discover that the stick is not bent. The perceptual experience contains, as part of its content, the external object against which the perception is checked as to its veridicality. But in the case of a hallucination, one finds that there is no object to be checked. The representation merely *seems* to contain reference to an actual object, and the rule accordingly fails to pan out in a different sense.

Although Kant doesn't explicitly say so, there are at least a couple of reasons for thinking that he holds this view on perceptual illusions. First, perceptual illusions do not fit Kant's characterization of hallucinations as merely the product of an imagined experience, and second, in the Refutation Kant does not contrast objective experience or relatedness to an actual object with perceptual illusions, but only with dreams and delusions.

But if it is correct that Kant classifies perceptual illusions as objective perceptions, then one's understanding of the Refutation of Idealism is bound to change. Kant claims that immediate perception of external objects is required for the determination of inner states in time. But if perceptual illusions are genuine perceptions of external objects, albeit non-veridical ones, then they are sufficient for determining one's inner states in time. In which case, the refutation does not prove that there must be veridical perception of external objects (or true content), but only their immediate perception (or real content).⁸⁶ In consequence, the proof is fully consistent with it being the case that objects of perception are always other than they seem or are judged to be.

⁸⁶ By "real content" I mean simply that the representation is immediately related to an actual object, and by "true content" I mean of course that the representation is veridical.

4 Conclusion

The chapter has defended a semantic reading of the Transcendental Deduction, according to which the objective validity of the categories is required for the possibility of the intentionality of representation. I argued against the interpretive accuracy of epistemological readings which attribute to the Deduction an attempted proof of objectivity, or in other words, the attempt to establish knowledge of external objects. On my reading, Kant's task in this text is not to ground knowledge of objects, but to address the question: how is it possible for representations to so much as *be representations* of objects? I claimed that the principle of the deduction of the categories is in the form of the hypothetical statement: if it can be proved that the objective validity of the categories is required for intentionality, then it can be known *a priori* that they must apply to any object that can be intended or represented. Further, I claimed that after presenting this basic principle, Kant spends the rest of the Deduction analyzing the nature of intentionality. This is required because he cannot argue that certain concepts are required for effecting intentionality unless he has an analysis of the phenomenon that these concepts are supposed to ground. The chapter therefore leaves off with the question: what is Kant's analysis of intentionality? I take this question up in the next three chapters. Chapter 3 investigates Kant's analysis of the intentionality of perception, and Chapters 4 and 5 argue that his treatment of intentionality is not restricted to perception but also accounts for how we can conceptually or non-intuitively represent the full scope of appearances in space and time.

CHAPTER 3

KANT'S RULE-GROUNDED THEORY OF OBJECTIVE PERCEPTION

Having established the topic of the Transcendental Deduction in Chapter 2, I now develop Kant's substantive views on the nature and possibility of intentional relations. How does he define intentionality, and how does this definition explain the reference that representations have to objects? The subject of this chapter is the account of perception found at A98-110 of the Deduction. Although I focus mostly on A103-110 where the heart of the view is presented, I also discuss A98-102 in Section 3.3. In the chapter, I claim that Kant has a rule-based theory, according to which perceptions acquire relation to an object by being synthesizable by rules. This is more or less undisputed. The originality and significance of the reading, then, consists of the manner in which I explicate the nature and function of these rules. My basic position is that the rules which ground perception are rules for investigative behavior, rather than rules for combining inner states or sensations. This will allow me to ascribe to Kant a version of direct realism and thus to steer clear of indirect realism and phenomenalism.

The chapter is divided into five sections. The first three sections each focus on one aspect of Kant's analysis. In the first section, I discuss his views on empirical concepts at A103-106. Here Kant says that intuitions, if they are to have any cognitive significance, must be brought under empirical concepts. In the second section, I discuss Kant's puzzling references to the transcendental unity of apperception at A105-108. He claims that empirical concepts, in addition to synthesizing the manifold of perceptual experience, also unify one's consciousness in the perception of an object. One of my main goals in this section is to demystify Kant's "transcendental talk" and to show that he

presents an intelligible and coherent view packaged in odd language. In the third section, I explain Kant's reference to the transcendental object at A108-110. Again, I attempt to demystify what this means, and I argue that it is his designation for the adventitiousness that is the characteristic mark of perceptions that are not imaginary but related to external objects. In this way, the first three sections proceed linearly through the text. In the fourth section, I will pull together all of the elements of the preceding sections in order to provide an official definition of perceptual intentionality. Finally, in the fifth section, I will distinguish my reading from the data-sensualist interpretation of perception. According to this interpretation, the rules governing perception are rules for combining sensations. I believe that this interpretation is either philosophically untenable or exegetically unfaithful depending upon how it is treated. In its place, I offer a view according to which perceptual rules guide investigative behavior.

In developing Kant's views on perception, I will set aside discussion of the categories. The reason is because Kant describes his task at A98-110 as one of "preparing" rather than "instructing" the reader (A98). The deduction of the categories is not his concern in this section. But nonetheless this chapter is significant for two reasons. First, it investigates Kant's views on perception which are interesting in their own right as contributions to understanding how perceptions are related to objects. Second, it provides elements that are necessary for understanding the official deduction at A115-130. This is of course what Kant means by calling the section preparatory, and specifically I believe that it is most crucial for understanding the transcendental unity of apperception.

1 Empirical Concepts (A103-106)

Before proceeding to Kant's views on empirical concepts, it will be helpful to say some introductory words about the problem to which his discussion of perception is a response. Kant asks in the Second Analogy: "Now how do we come to posit an object for these representations, or ascribe to their subjective reality, as modifications, some sort of objective reality?" (A197/B242). Perception is distinguished from other forms of representation, such as memory and imagination, in that it involves affectation by objects. But as easily recognized, similar perceptual situations may produce different perceptual experiences depending upon the constitution of the subject's sense organs: whereas one person might experience sourness when tasting a glass of wine, another might experience a jam-like sweetness. Kant refers to such effects as sensations. Sensations are purely inner states or ways in which the subject is affected, and as such they lack intentional relation to objects. The sweetness, as he says, is not in the wine but is only the manner in which the wine has affected the organ of taste (A28/B44).⁸⁷ But despite its sensation component, perception still involves the immediate consciousness of external objects. We saw in Chapter 2 that Kant supplies a proof of direct realism. Consequently, since Kant does not hold a representationalist theory of perception, the problem he faces is not the epistemological one of determining, from behind the veil of ideas, which perceptions are veridical. Rather, he is interested in the semantical difficulty of how perception can "go beyond itself" (A197/B242) and can acquire immediate relation to external objects.

⁸⁷ At the beginning of the Transcendental Aesthetic, Kant contrasts sensation from intuition. He says, "The effect of an object on the capacity for representation, insofar as we are affected by it, is sensation. That intuition which is related to the object through sensation is called empirical" (A19-20/B34). This contrast is made clearer later in the Aesthetic during an important discussion distinguishing the ideality of space from the ideality of sensation. He says, "things like colors, taste, etc. are correctly considered not as qualities as things but as mere alterations of our subject, which can even be different in different people." Putting these points together, Kant is saying that perception contains sensations, and yet somehow through our sensations we can become conscious of external objects.

This is the same issue addressed in the Deduction at A103-110. This section of text is usually referred to as Kant's discussion of objectivity, or what I will call the objectivity passage. But the term "objectivity" is not univocal. We saw in the last chapter that some commentators use the term to refer to the possession of knowledge of external objects, in which case Kant's "proof of objectivity" is understood as a refutation of skepticism. I, however, do not use the word in this way. Although Kant himself does not provide a definition, it is evident that the purpose of the discussion is to "make clear to ourselves what we mean by the expression 'an object of representations'" (A104). It is characteristic of representations, as things that represent, that they are about or *of* something; that is, they have objects. I will argue that Kant's analysis of objectivity is an account of what it means for perceptions to pertain to external objects, and thus in this sense be objective. Keeping in mind the arguments of the last chapter, I note that the term "objectivity" refers not to accuracy or correctness in perception, but instead the property of having an object at all. In what follows, I use the phrase "objective perception" to denote this phenomenon, and I distinguish it from the occurrence of mere sensation-experience which has no reference to things. In other words, assign to the term "objective" a semantic, not an epistemological, meaning.

With this thematic background, I turn now to A103-106. In Chapter 2, I argued that Kant's transcendental logic aims to provide a correct semantical theory. But this of course raises the question of what theories Kant rejects. It turns out that the objectivity passage begins with a rejection of the theory of intellectual representation presented in the Inaugural Dissertation:

And here then it is necessary to make understood what is meant by the expression an "object of representations." We have said above that appearances themselves are nothing

but sensible representations, which must not be regarded in themselves, in the same way, as objects (outside the power of representation). What does it mean, then, if one speaks of an object corresponding to and therefore also distinct from the cognition? It is easy to see that this object must be thought of only as something in general = x , since outside our cognition we have nothing that we could set over against this cognition as corresponding to it (A104).

The position of the dissertation is that things in themselves can be represented purely conceptually, apart from any contribution of the sensibility. Furthermore, things in themselves have the role of causing or producing our sensible experiences in space and time. But in this passage Kant raises the critical question as to what is *meant* by objects existing “outside our knowledge” or as ontologically distinct from our sensible experiences. His answer is that we can only think “something in general” that serves to ground or constrain our representations, and this is straightforwardly a denial of our capacity to conceptually represent a plurality of things in themselves corresponding to empirical representations. And the Herz letter provides the reason: purely conceptual representation, which is the only manner in which things in themselves can be represented, is empty since it neither produces nor is produced by its object.⁸⁸ The consequence, then, *seems* to be (I note the stress) that if we could represent purely conceptually, then we would have an independent form of representation against which to check the *accuracy* of empirical representation. The passage denies the antecedent.

But the discussion continues:

We find, however, that our thought of the relation of all cognition to its object carries something of necessity with it, since namely the latter is regarded as that which is opposed to our cognitions being determined at pleasure or arbitrarily rather than being determined *a priori*, since insofar as they are to relate to an object our cognitions must also necessarily agree with one another in relation to it, i.e., they must have that unity that constitutes the concept of an object (A104-105).

⁸⁸ See Section 2.1 of Chapter 2 for a more complete discussion.

We should dwell on this for a moment. The first paragraph at A104, as I stressed, seems to treat the problem as one of determining whether our empirical representations are accurate. However, when we turn to the next paragraph at A104-105 we see that this is incorrect. The problem concerns our “thought of the relation of all cognition to its object.” This phrase has already undergone much scrutiny, and I have argued in the last chapter by appeal to the Herz letter, the definition of *Erkenntnis*, and Kant’s account of transcendental logic and analytic that it concerns the problem of intentionality. With this in mind, we see that Kant’s concern is not how we can check for accuracy in empirical representation, but how we can understand (“our thought of ...”) representations as relating to or presenting external objects.⁸⁹ One proposal is that if our representations are correlated with and caused by things in themselves, we can think of them as engaged with and answering to external objects, rather than fictions conjured by the mind. But this requires being able to represent things in themselves, and Kant denies that this can be done. Thus, the problem Kant is struggling with is how we can so much as understand or make sense of our representations as pertaining to external objects. What he needs is a way of accounting for this thought without appeal to his previous theory of intellectual representation.

Having properly identified the problem, one can now see the basic answer that is offered: Kant proposes a rule-based account of the relation of perception to its object.

The passage above begins by asserting that a chaos or arbitrary sequence of perceptions

⁸⁹ When Kant refers to “our thought of the relation” of a representation to an object, I think that this phrase is best construed in terms of the question – what do we *mean* by representation of outer objects? I agree with Bencivenga’s position that Kant’s revolution is not revisionary, but conceptual in nature. For his view see *Kant’s Copernican Revolution*, Chapter 1. In other words, Kant does not intend to deny our commonsense views about the world. As a matter of commonsense, we think of the world as consisting of external, enduring objects with which we interact. By distinction, Berkeley’s philosophy is revisionary, for he aims to deny that such objects exist; he reduces reality to ideas in the mind. Kant’s purpose, then, is not to deny that there are external, enduring objects, but to *re-conceptualize* what is *meant* by that claim.

would never amount to the perception of external objects, but rather would be regarded as something more like a dream. Objectivity involves the idea of some constraint or coherence placed upon our perceptions, and as we have seen this cannot be accounted for by appeal to things in themselves as the non-empirical ground of empirical representation. So instead Kant appeals to rules, in which case the constraint that things in themselves are supposed to supply can be accounted for by rules that serve to connect or govern perceptions. The term that Kant uses repeatedly in the remainder of the discussion, and which is central throughout the rest of the *Analytic*, is ‘necessity’ (*Notwendigkeit*). What this term serves to indicate is that rules of representation are not merely descriptive characterizations of how we do connect perceptions, but how we *ought* to. That is, rules are (a) *normative*, and it is this dimension that is key to understanding Kant’s theory of cognition as well as his puzzling claims about transcendental apperception. But in addition to normativity rules also (b) *unify* representation by means of synthesizing what would otherwise be a “haphazard or arbitrary” occurrence of experiences. Kant’s numerous references to necessary unity should therefore be understood as appeals to the rule-governedness of perception.

It is best to explain these points by appeal to the examples Kant offers. He gives two examples, both of which involve *non-categorical concepts*: the concept of a triangle (A105) and the concept of body (106).⁹⁰ The former concept is not a given picture or image,⁹¹ but is a rule for constructing a figure in space, and as a rule it fits the above

⁹⁰ He also gives the example of number in the first paragraph of the section, but the discussion is more of a summary of the previous section.

⁹¹ The British empiricists had difficulties in addressing how we can form abstract ideas. Given their claim that the immediate objects of conscious are mental images, they were left with the problem of how an abstract image could be formed. Locke memorably described this issue with respect to the abstract idea of a triangle. The mental image, if abstract, should be neither of a scalene nor an isosceles triangle and so forth.

characterization: (a) in order to construct a triangle one ought to connect three sides as the rule specifies for otherwise one would be constructing a different figure, and (b) the rule unifies one's activity of drawing by providing the appropriate steps to follow. The concept of a triangle is, however, a mathematical concept, and in the Transcendental Doctrine of Method Kant explains that what is peculiar to mathematical concepts is that their objects can always be produced *a priori* (A714/B742). All this means is that actual triangles can be constructed anytime on paper or in the imagination, whereas the object of an empirical concept, e.g., an actual dog, cannot.

But the account is not limited to mathematical concepts, for in the next paragraph the view is applied to the empirical concept of body: "Thus in the case of the perception of something outside of us the concept of body makes necessary the representation of extension, and with it that of impenetrability, of shape, etc." (A106). The expression "makes necessary" does not indicate that the concept somehow ontologically forces bodies to be extensive. Rather, the necessity is found in a rule for what properties appropriately belong to bodies at the exclusion of others. What the rule states is that in the perception of a body one *ought* to be representing extension, impenetrability, etc., such that any perception lacking these properties cannot be considered the perception of a body.

Furthermore this normative dimension imparts unity to experience by providing rules for connecting representations. It is worth noting that the actual sequence of experience we have is due to how we orient our body in the environment: turning one's head,

Yet, if it isn't the image of any particular type of triangle, what kind of image is it supposed to be? Kant efficiently solves this problem. Since a concept is a rule and not an image, there is no need to explain how we could form an abstract, or non-specific, image. It is simply a rule for constructing a three-sided figure that is general enough so as to avoid specifying instructions that would restrict it to the construction of some specific type of triangle.

shifting one's body, and otherwise moving within one's environment.⁹² But since this bodily orientation is arbitrary, or subject to personal whim, the sequence of our experiences is itself arbitrary or haphazard. For example I might experience impenetrability after stumbling into an object, but then turn around and experience oiliness (a property of liquids). Although the one experience (oiliness) immediately follows the other (impenetrability), the empirical concept of body does not license one to connect the representations into a single object. The sequence of perceptions may be haphazard, but the concept of body serves to organize what properties belong to bodies.

These points can be further clarified by examining another example discussed in the Second Analogy at A190-191/B235-236, namely, the concept of a house. Here Kant describes what he calls "apprehension" as being successive. When scanning a house, one perceives successively its various sides, roof, windows, garage, etc. But of course these parts co-exist in space and do not actually follow upon one another in time in the way, for instance, a ship is first upstream and then downstream. The order of perceptual experiences does not reflect any temporal order in the object; it is merely the arbitrary order of our apprehension of co-existent parts. But as indicated this order is grounded in how we choose to orient ourselves in our environment. In the case of a house, whether we perceive roof first and then garage, or garage first and then roof, depends simply upon where we choose to look or walk. But it is not necessary for one's perceptions to involve only what we take to be the parts of the house. Upon seeing the roof one might then look

⁹² Hume's metaphor of the mind as a theater of ideas is profoundly misleading in a certain respect. This metaphor casts the mind as a wholly passive receptor of ideas that enter and exist the stage of their own volition. It is as if the mind were a mere spectator of perceptions that happen to come its way. However, this is completely false. The perceptions we have are due to an *activity of the subject or mind*. The variety and order of our perceptual experiences are due to how we move around and shift our attention. We are active in searching out, acquiring, and investigating our experiences. Kant calls the activity of moving and shifting attention the "form" in which our perceptions (or the materials of experience) come to us.

up and see smoke, or upon seeing the sides one might then look down and see the ground. The point is that both smoke and ground are spatio-temporally contiguous with the house, but yet we do not unite them into the concept of the house (i.e., treat them as parts of the house). As Kitcher phrases it, spatio-temporal contiguity is “too promiscuous”⁹³ for connecting representations into objects.

This last point allows one to see the role of normativity. Association based on spatio-temporal contiguity is *descriptive*, not normative, in that it involves reporting what representations we do or happen to experience as contiguous. But according to Kant what is needed is to bring the order of apprehension under a rule or norm for privileging the connecting of certain representations over others. The concept of a house, as any other empirical concept, is nothing more than this rule. We can therefore say that even if, *throughout the entire history of the house*, its sides are spatio-temporally contiguous with the ground upon which it stands, they should not be united in the representation of a single object.⁹⁴

The possibility of objective perception rests upon the application of empirical concepts to perceptual experiences. Although Kant does introduce mathematical

⁹³ Kitcher says, “The law of association operates in the same way in all cases, however, and so could not explain how we achieve different types of representations. Kant concludes that we need a rule that connects a cognitive state with another particular cognitive state in preference to others (A121). Spatio-temporal contiguity is too promiscuous,” (*Kant’s Transcendental Psychology*, p. 79). The example she provides to illustrate this point involves striking matches and flames. Even though the one regularly follows the other, we do not connect the two into a single object of representation.

⁹⁴ This can be further explained by appeal to an example that Kant does not in this passage discuss. Hume listed causality as one of three rules of association. Smoke and fire, for example, are judged to be causally associated on the basis of an experienced constant conjunction. However the point above should be noted: upon witnessing fire there is no necessity that one’s next perception will involve smoke. Due to the arbitrariness of bodily orientation, one may experience birds or clouds next. Kant believes that a rule is needed for privileging certain sequences of representations over others. The rule asserts that smoke appropriately stands in causal connection to fire, not birds or clouds, no matter how often we may experience them after fire. It introduces unity, then, in the sense that it governs what representations ought to be connected in preference to others.

concepts, they play little role and serve mostly as a means for clarifying the rule-nature of concepts. But the account of objective perception is still incomplete.

2 Apperception (A105-108)

So far I have discussed only the object-side of representation; but there is a subject-side as well. In the perception of a house I am also conscious that the perception is mine; representations, that is, represent something *to* the subject.⁹⁵ Kant first introduces this cognitive component at A105 when he makes reference to the “unity of apperception.” Leibniz used the term “apperception” in the following way: “The passing condition which involves and represents multiplicity in the unity, or in the simple substance, is nothing else than what is called Perception. This should be carefully distinguished from Apperception or Consciousness ...”⁹⁶ Leibniz *contra* Descartes allows for the existence of petite perceptions which are perceptual states in the monad that fall below that radar of conscious recognition. The monad has the state, but is not conscious of having the state. He distinguishes such states from the conscious awareness involved in apperception. Kant seems to deny the existence of petite perceptions when claiming that “Intuitions are nothing to us, and do not in the least concern us if they cannot be taken up into consciousness” (A116), or perhaps he is simply making the weaker claim that representations must be capable of being apperceived.⁹⁷ In any case, the self-conscious component of apperception, i.e., awareness that I am in such and such a state, is quickly dropped as a topic of discussion, and the account is dominated by two concerns: the *unity* of apperception and its *transcendental* status. I will discuss each in turn. It should be

⁹⁵ See Robert Hanna, *Kant and the Foundations of Analytic Philosophy*, pp. 17-18.

⁹⁶ *The Monadology* from *The Rationalists*, pp. 456-457.

⁹⁷ This weaker claim, I believe, is Kant’s considered position.

noted that in what follows there is no significant difference between the terms “apperception” and “consciousness.” They are equivalent for Kant’s purposes.

2.1 Unity of Apperception

As we have seen in Section 1, perceptual manifolds are unified by means of rules, which are in the form of either empirical or mathematical concepts. The additional point is simply that consciousness is also unified by means of rules.

In the *Groundwork* Kant says, “Everything in nature works according to laws. Only a rational being has the capacity of acting according to the *conception* of laws”⁹⁸ The law of gravity, for example, can govern what happens in the world quite apart from whether anyone is conscious of it, or even whether there are conscious beings at all (as in the case of the early formation of the universe). But what Kant draws attention to is that activities such as drawing a triangle or perceiving a body are typically conscious activities. Perhaps an ant might trace out a triangle in the sand on a beach, but Kant is interested in situations where one is conscious of one’s activity. His claim is that the unity of a conscious activity is the product of the rule that one is following. Kant adheres to the Leibnizian position that consciousness involves a unity in multiplicity, and he characterizes this as “the formal unity of consciousness in the synthesis of the manifold of representations” (A105).

When related to his example of constructing a triangle, the point is simple enough. Drawing a triangle involves a number of steps, but nonetheless these steps are all components of a single or unified conscious activity. But what unifies the activity? The answer: the rule that one is following. The individual steps are but various stages of a

⁹⁸ *Foundations of the Metaphysics of Morals*, trans. By Lewis White Beck, p. 29.

single rule. Suppose that I begin to draw a triangle on a sheet of paper by first drawing a right angle. Someone then asks, “what are you doing?” and I answer, “I am drawing a triangle.” Kant’s idea is that what enables me to be aware that I am in the process of drawing a triangle rather than a square – and indeed, that I am in the course of an activity at all – is awareness of the rule that is guiding the activity from start to completion.

The same point is made regarding empirical concepts. Because these concepts are involved in the perception of objects, the question to ask here is what it means for perceptual awareness to be unified. Kant’s Second Analogy example will be helpful. A manifold of representations is nothing more than a sequence of perceptions based on bodily orientation, and in the case of a house it would involve the various perceptions of roof, sides, windows, and so on. The question is: given the variety of experiences, what unifies one’s perception of the house? The answer: the multiplicity involved in perceptual awareness is unified when the various representations are understood as temporally unfolding elements in a single, conscious activity of perceiving a house. What is required for this unification is a *rule* for what properties appropriately belong to houses. The activity of perceiving the house is guided by a rule informing us of what we should or ought to detect in the course of scanning it.

The term “scan” is important. Perceptions are not taken in all at once, but unfold in time, and it is this temporally extended activity of perceiving, in the sense of *looking over*, that is unified by guidance by a rule. Kant makes this point somewhat awkwardly at A104:

The word “concept” itself could already lead us to this remark. For it is this one consciousness that unifies the manifold that has been successively united, and the also reproduced, into one representation. This consciousness may often only be weak, so that we connect it with the generation of the representation only in the effect, but not in the

act itself, i.e., immediately; but regardless of these differences one consciousness must always be found, even if it lacks conspicuous clarity, and without that concepts, and with them cognition of objects, would be entirely impossible (A104).

Essentially he is commenting on the act/object ambiguity characteristic of the term “perception,” which can refer either to the activity of perceiving or the object perceived. Typically we consider only the latter, e.g., the house, and we speak of the unity of the object as the belonging together of its parts. Yet, what underlies our recognition that we are perceiving a house is a prior process of scanning, whereby we check whether the sequence of perceptions given is consistent with the rule for perceiving a house. It seems to me that this conscious process is characterized in this passage as “weak” and “lacking in conspicuous clarity” (in the Kemp Smith translation, “faint” and “indistinct”) because we have no need to carefully look objects over due to our familiarity with most of them. Nonetheless this process “must always be found,” and I take this to indicate that our perceptions are at least accompanied by an exceedingly quick scan of a limited part of the object for the purpose of making sure that nothing is unusual. Of course occasionally we might encounter something out of place or an object that is highly peculiar. In such a situation, the ordinarily faint or indistinct process now comes to the forefront as we attempt to bring the perception under an appropriate rule or concept. But in either case, the argument I am making is that the conscious process that is guided by rules is the temporally unfolding act of perceiving, or what Kant describes in this passage as the “generation of the representation.”

Kant says that the “this unity of rule ... make[s] the unity of apperception possible” (A105). It should now be clear what this statement means. Conscious activity or apperception is unified when its multifarious components are conceived as being parts of

one and the same temporally extended activity. But what makes an activity one and the same is that it is guided by one and the same rule throughout.

2.2 Is the Self the Combiner?

In this subsection and the next, I will take a little detour. Kant's talk of unifying experiences inevitably gives rise to the question of who or what is performing the acts of synthesis. In the *Transcendence of the Ego*, Sartre succinctly poses this issue: "is the *I* that we encounter in our consciousness made possible by the synthetic unity of our representations, or is it the *I* which in fact unites the representations to one another."⁹⁹ Put in terms of apperception: is the apperceptive self produced by synthesis or is it presupposed for synthesis? In this subsection, I will argue that the former is the case. In the next subsection, I will respond to Kitcher's reading, according to which these acts of synthesis are *unconscious* processes. Both are side-topics, for Kant's account of objective perception could be understood without them, but nonetheless they will be worthwhile for the sake of further clarifying what is meant by the unity of apperception.

Kant seems to assert both that the self is produced by and presupposed for synthesis. His first mention of the unity of apperception, already quoted, occurs at A105 when he says, "Now this unity of rule determines every manifold, and limits it to conditions that make unity of apperception possible." His first mention of apperception states that concepts (i.e., rules) make the unity of apperception possible. But at A107 Kant claims that "The numerical unity of this apperception therefore grounds all concepts *a priori*," which suggests that the unity of apperception, as ground, makes possible concept employment. So we need to untangle this seeming contradiction.

⁹⁹ *The Transcendence of the Ego*, trans. by Williams and Kirkpatrick, p. 34.

I begin by examining passages where Kant asserts that the unity of apperception is produced. He says at A108:

For this unity of consciousness would be impossible if in the cognition of the manifold the mind could not become conscious of the identity of the function by means of which this manifold is synthetically combined into one cognition. Thus the original and necessary consciousness of the identity of oneself is *at the same time* a consciousness of an equally necessary unity of the synthesis of all appearances in accordance with concepts, i.e., in accordance with rules... (A108, my emphasis).

In this passage, Kant introduces some new terminology when he speaks of the identity of the self, and he alternates between this terminology and the previous terminology of the unity of consciousness. There is no need to be thrown off by this. The reason he alternates is because they refer to one and the same phenomenon: the identity/unity of the self/consciousness are the same thing. Given this, his concern is to explain what it means for the subject to be identical or unified throughout a temporally extended episode, such as drawing a triangle or perceiving a body. But how can this identity or unity be brought about? The passage asserts that the identity/unity of self/consciousness is made possible by an identity of function, i.e. a rule, that connects representational episodes. So far nothing is new. But the passage goes on to state that the identity/unity of the self/consciousness is *concurrent with* (“at the same time”) the unity of representations brought about by the application of rules. Thus, the identical or unified self is not what performs the unification, but what is produced in the act of unification insofar as it is concurrent or comes into being with that act. Attention to the preposition is important: it is not so much that the unity of consciousness is produced *by* concept employment, but rather that it is produced *in* or *along with* concept employment.

This view also can be found in the B-edition. In one place Kant refers to the mathematical concept of a line and says:

But in order to cognize something in space, e.g., a line, I must draw it, and thus synthetically bring about a determinate combination of the given manifold, so that the unity of this action is *at the same time* the unity of consciousness (in the concept of a line)... (B137-138, my emphasis).

He also says of any concept:

But this is as much as to say that I am conscious *a priori* of their necessary synthesis [i.e., the rule-governed synthesis of the manifold], which *is called* the original synthetic unity of apperception, under which all representations given to me stand, but under which they must also be brought by means of a synthesis (B135, my emphasis).

Both passages assert that the unity of consciousness is produced along with acts of synthesis. The first appeals again to concurrence, and says that the unity involved in the activity of drawing a line¹⁰⁰ is “at the same time” the unity of one’s consciousness in the drawing of the line. The second says that consciousness of the rule-governed or necessary synthesis of the manifold of representations is “called” the unity of apperception. In which case, the unity of apperception is just another name for consciousness of the synthesis of the manifold of experience, and so again is concurrent with that synthesis. Otherwise put, if the unity of apperception is consciousness of a unified manifold, then it cannot obtain without a unified manifold of which it is conscious.

But how can the other passages be explained? Kant does seem to assert that the self is presupposed for synthesis, when he says that the “numerical unity of this apperception therefore grounds all concepts *a priori*,” and that unity of consciousness “must be a condition which precedes all experience and makes the latter itself possible” (A107). I

¹⁰⁰ This unity is supplied by the concept of a line. This concept is a rule for how to draw a line, as opposed to, say, a circle.

believe that the concurrence reading sufficiently reconciles his apparently contradictory claims. To put the solution in logical terms, his assertion that the unity of consciousness is at the same time the unity of representations in accordance with concepts implies a biconditional of the form, “for any property P, A has P if and only if B has P.” With the appropriate substitutions, the statement reads that the unity of consciousness obtains if and only if the synthesis of concepts obtains. But Kant now has a choice as to which side of the biconditional he can emphasize for the sake of his clarifications. At times he asserts (in terms of the contrapositive) that without the synthesis involved in concept employment there would be no unity of apperception, and at other times he emphasizes (again, in terms of the contrapositive) that without the unity of apperception there would be no concepts to employ. As a result, the passages aren’t actually contradictory when the unity of consciousness and concepts are viewed as concurrent with each other.

2.3 Conscious or Unconscious Synthesis?

The next issue to consider is whether the acts of synthesis in which the unity of consciousness is produced are conscious or unconscious processes. In *Kant’s Transcendental Psychology*, Patricia Kitcher argues for the latter, and I think that her argument is mistaken. She presents her argument in a single paragraph that unfortunately is enthymematic:

While tempting [the view of self as combiner], this approach does not lead to a coherent position. The self cannot be identified with acts of spontaneity, since these are distinct events. It could only be the agent that performs these acts. But acts or processes of synthesis could not be performed by agents. They are unconscious activities within agents that enable them to have cognitive capacities required for agency. In Daniel Dennett’s useful terminology, they are “subpersonal” processes, not acts performed by persons.¹⁰¹

¹⁰¹ *Kant’s Transcendental Psychology*, p. 122.

The fourth sentence asserts that processes of synthesis are *not* the products of conscious agency, and the fifth sentence seems to provide the reason. She seems to say that the only option available for explaining conscious agency are unconscious processes that enable one to be a conscious agent. I represent her argument as follows:

1. The unity of apperception must be explained, not assumed.
2. To explain the unity of apperception is to identify the syntheses by which it arises.
3. The unity of apperception is a form conscious agency.
4. But if the unity of apperception were explained by appeal to conscious syntheses performed by agents, then conscious agency would be explained by conscious agency, which is either circular or regressive.
5. Therefore, in order to avoid a circle or regress, the unity of apperception can be explained by the only other alternative, i.e., unconscious or subpersonal processes.

I do not think that the argument is sound. Premise 4 contains the assumption that all forms of conscious activity are performed by agents, and from this she can identify the circularity or threat of regressiveness involved in explaining the unity of apperception by appeal to conscious processes. But I claim that there can be *non-agential* conscious activity.¹⁰² I will argue for this by examining the larger section of text in which the objectivity passage is contained. This larger section is commonly called the threefold synthesis (A98-110), and it is divided into three sections corresponding to each synthesis. The first section addresses the synthesis of apprehension (A98-A101), the second the synthesis of imagination (A101-102), and the last discusses the unity of apperception (A103-110). The argument that I defend is the following. Since the unity of apperception involves the synthesis of apprehension and the synthesis of imagination, and since both

¹⁰² By the admittedly odd phrase “non-agential conscious activity” I mean to indicate a type of conscious activity that is not performed by, or attributable to the activity of, an agent.

forms of synthesis are non-agential conscious activities, then the unity of apperception involves non-agential conscious activities. Premise 4 of Kitcher's argument presents a problem only if the same type of conscious activity is explained by itself. After outlining the threefold synthesis, I will then explain how my proposal avoids both circularity and regressiveness.

The synthesis of apprehension is the capacity to represent a manifold of experience *as* a manifold. Kant contrasts it with the "synopsis of sense." He says,

If every individual representation were entirely foreign to the other...then there would never arise cognition, which is a whole of compared and connected representations. If therefore I ascribe a synopsis to sense, because it contains a manifold in its intuition, a synthesis must always correspond to this, and receptivity can make cognitions possible only if combined with spontaneity (A97).

This passage offers problems for the data-sensualist reading according to which rudimentary experience begins with discrete sensations that stand in need of combination. A synopsis of sense initially presents a whole, but the subject fails to discriminate the parts or elements comprising the experientially received whole. Thus the first action that the understanding, or "spontaneity," takes with respect to experience is the synthesis of apprehension:

Now in order for unity of intuition to come from this manifold...it is necessary first to run through and then to take together this manifoldness, which action I call the synthesis of apprehension, since it is aimed directly at the intuition, which to be sure provides a manifold [i.e., the synopsis of sense] but can never effect this as such, and indeed as contained in one representation, without the occurrence of such a synthesis (A99).

Let me use Kant's example of a house. The synopsis of sense presents a complex whole or manifold, but the synthesis of apprehension "runs through and takes together" the roof, sides, windows, shingles, etc., and by discriminating its parts one after another in time it

apprehends them as components of the whole or as “contained in one representation.”

This is not a process performed unconsciously for the reason that unconscious apprehension is not any kind of *apprehension*. What is accomplished is the bringing to consciousness, or the apprehension, of what is not represented in the synopsis of sense.

Next Kant claims that the synthesis of apprehension “is inseparably combined with the synthesis of imagination” (A102). Imagination is described elsewhere as the faculty for representing what is not present (B151), and its role in this context is to recall, anticipate, and associate representations. As I walk around the house and perceive its various sides, I recall or reproduce in imagination the sides that I had just perceived but am no longer perceiving, and I anticipate the sides that I will go on to perceive. In this sense, I form an “image” of the entire house, even though the house in its entirety can never be given in a single or momentary perception. But furthermore the faculty of imagination forms long term associations, such that given past observed connections one can project those same connections as holding in the future. This is straightforward Humean associative unity. Upon experiencing the conjunction of smoke and fire, the imagination associates the perception (or even just the thought) of fire with the presence (or thought) of smoke. As a result, the synthesis of imagination serves to unify both the apprehension of an object and the subject’s larger perceptual field and environment. But, again, this is not an unconscious process. Kant does not characterize the synthesis of imagination as unconsciously underlying and making possible the synthesis of apprehension, but rather as contemporaneous or “bound up” (A102) with it. Consequently, in similar fashion, it produces the conscious apprehension of what is not represented in the mere synopsis of sense.

Kant caps off the threefold synthesis with what he calls the “synthesis of recognition in the concept.” This is the synthesis discussed at A103-110, which is the subject of this chapter, and involves empirical concepts, apperception, and (to be discussed) the transcendental object. The reason he introduces this synthesis is because neither of the previous two, when taken just on their own, are rule-governed. They involve the awareness, recollection, and anticipation of whatever spatio-temporal juxtapositions we *happen* to encounter. So, when looking over a house, one might discern the following juxtapositions: roof, sides, ground, shingles, chimney, smoke. But as argued in Section 1, spatio-temporal juxtaposition is too promiscuous for uniting representations into an object, since neither the smoke rising from the chimney nor the ground upon which it stands are parts of the house. What is needed is the application of a concept to the synthesis of imagination and apprehension, where the concept is a rule for what representations ought to be combined in preference to others. Concepts, then, provide the required normative dimension (necessity) and thereby unify consciousness. Unity of consciousness arises concurrently with rule governed unity.

I can now respond to Kitcher. She is drawing on an intuitive problem. If experience is unified by rules, then one is seemingly left with the residual issue of *who or what* is performing the unification, employing and constructing the concepts? Kitcher claims to eliminate this antecedent or transcendently given “who” by an appeal to more basic unconscious processes out of which it emerges. This allows her to avoid circularity and to end the regress. But I believe that Kitcher is wrong to hold that apprehension and imagination are unconscious. My analyses show that they are activities that involve the conscious discernment of aspects of the manifold of experience that are left

unrepresented in the synopsis of sense. In which case, the unity of apperception does not arise out of unconscious processes, but rather involves other types of conscious activity.

That being said, how does my claim avoid the problems of circularity and regressiveness?

What Kitcher means by “agent” is a self or subject that retains its identity over time or throughout a process.¹⁰³ I explained in 2.2 that the identity of the self and the unity of apperception are one and the same thing. But given that the unity of apperception is produced in rule governed synthesis, then all agential activity is constituted by rule governed synthesis. As a result, since the syntheses of apprehension and imagination lack rules, they are non-agential forms of conscious activity. Kant’s position is that there can be conscious activity even if it is not attributable to an identical self or agent performing that activity. On my reading, then, circularity is avoided because I have not sought to explain the conscious activity of an agent by appeal to the conscious activity of an agent. My solution in this respect is similar to Kitcher’s in that I deny there is an antecedent self or “who” carrying out the syntheses of apprehension and imagination, and accordingly we are in agreement that the self is produced in acts of synthesis. But the difference is in my claim that apprehension and imagination are conscious rather than unconscious activities, and for this reason my account seems subject to the regress problem.

Apprehension and imagination, although non-agential, are nonetheless *conscious*, and so a complete explanation would require an appeal to unconscious processes out of which all types of conscious processes emerge.

¹⁰³ See Chapter 5, entitled “A Cognitive Criterion of Mental Unity,” of *Kant’s Transcendental Psychology*. The point of the chapter is to argue that Kant’s discussions of the unity of apperception in the Transcendental Deduction are really about the topic of personal identity (or what she prefers to call mental unity). She describes the problem that Kant addresses as follows: “What relation between the two different temporal stages of a person, the gallant young officer and the aging general, makes them stages of the same individual?” p. 123. An agent or person is what possesses this mental unity or identity over time (and at a time).

I do not think that Kant actually faces a regress problem. This would be a difficulty if his concern were to explain the origin of consciousness, or how consciousness arises in biological-cognitive systems such as ourselves. In this case, I concur that there would have to be some appeal to unconscious physiological processes from which higher-order conscious experience emerges. But Kant's project is *definitional* in nature. What he needs is an analysis of the nature of perception in order to answer his question of how it can acquire "some sort of objective reality" (A197/B242). The unity of apperception is the key component in his analysis, and he eventually defines objective perception as the unity of consciousness concurrent with the application of empirical concepts to the synthesis of apprehension and imagination. In Section 2.2, I stated this point by indicating that Kant's concurrence claim is in the form of the biconditional statement, "the unity of apperception obtains if and only if the synthesis of concepts obtains." Biconditionals are not used establish relations of *explanans* and *explanandum*, but to provide definitions in terms of necessary and sufficient conditions.¹⁰⁴ This means that the scope of Kant's problem does not include the need to give a complete account of the operations by which the conscious activities of agents arise. Empirical study of how apprehension and imagination, as conscious, emerge from more basic processes would be a valuable project for cognitive scientists and psychologists. And the reason Kitcher tends in the direction of attributing to Kant this type of project is because she believes that he is engaged in a proto cognitive science called transcendental psychology.

¹⁰⁴ To more spell this out more fully, the synthesis of concepts is a rule governed synthesis involving the application of a concept to imagination and apperception. Since the latter two are contained in the unity of apperception, one might think (as Kitcher does) that their role is to explain how it is that apperception arises in biological-cognitive systems. In which case, they would function as *explanans*. But on my account, they are components of the definition of apperception.

2.4 Transcendental Apperception

Subsections 2.2 and 2.3 are something of a detour from the main line of thought, but they do address issues necessary for getting a complete understanding of apperception. They argue that apperception does not refer to some antecedently given self, but rather is (a) produced in acts of (b) conscious synthesis. However, I now return to the main line of thought. Kant argues that objective perception is not a haphazard or arbitrary play of experiences, but involves empirical concepts that are rules for synthesizing the manifold of perceptions and unifying consciousness. What I now need to explain are Kant's puzzling claims about transcendental apperception.

The term "transcendental" might suggest that Kant is discussing a conscious or thinking self that is metaphysically distinct from the empirical self: it is outside time, noumenal, and therefore quite strange. But this is not the case. First, it confuses the difference between the meanings of "transcendental" and "transcendent." I will return to this in a moment. Secondly, in the B-edition Kant explicitly states that apperception is not noumenal: "in the original synthetic unity of apperception, I am conscious of myself, not as I appear to myself [i.e. phenomenally], nor as I am in myself [i.e. noumenally], but only that I am" (B157).

Sartre, in the *Transcendence of the Ego*, provides a useful starting point for demystifying Kantian transcendental talk.¹⁰⁵ Kant is concerned with establishing the conditions for the possibility of experience, and Sartre says that it is a mistake to reify – in the sense of turn into a being or entity – what are simply conditions. On his reading, transcendental apperception refers to the set of conditions that are necessary for ordinary, empirical apperception. It does not refer to some separate "I" or higher consciousness

¹⁰⁵ *Transcendence of the Ego*, pp. 32-34.

somehow constituting empirical consciousness. So to return to the first point above, Sartre's claim is that apperception is a transcendental condition, not a transcendent reality. I will now follow up his suggestion by arguing that transcendental apperception refers to the rule-governed aspect of ordinary perceptions (e.g., the perceiving of a house), as that which makes possible or is a condition for the intentionality of perception. Consequently, given that the rule-governed character of consciousness has already been discussed above, this subsection for the most part does not introduce any new elements to Kant's analysis. Its purpose to explain the use of the term 'transcendental' by appeal to elements that have already been discussed.

In the middle of A106 Kant draws a distinction between transcendental and empirical apperception:

Now this original and transcendental condition is nothing other than the transcendental apperception. The consciousness of oneself in accordance with the determinations of our state in internal perception is merely empirical, forever variable; it can provide no standing or abiding self in this stream of inner appearances, and is customarily called inner sense or empirical apperception. That which should necessarily be represented as numerically identical cannot be thought of as such through empirical data. There must be a condition that precedes all experience and makes the latter itself possible, which should make such a transcendental presupposition valid (A107).

Empirical apperception is characterized as a "stream," or in the Kemp Smith version "flux," of inner states.¹⁰⁶ By contrast transcendental apperception is characterized as something numerically identical, distinguished from empirical apperception that presents "no standing or abiding self." However, as argued in 2.2, what it means for the subject to

¹⁰⁶ Kant alters his position in the B-edition Deduction. Here inner sense isn't a mere flux, but involves rule-governedness as well. The reason he changes his view, I believe, is because of his recognition that inner states, as sensations, are bodily. From this perspective, they are objective states of the body and therefore subject to rules. But even so, they still lack intentional relation to anything beyond or outside the body. Kant's view, however, seems downright wrong, since sensations are indicative of what happens *to* the body *from* something outside. Whether right or wrong, though, it is the view he holds.

be identical through a conscious activity just is for it to abide by or keep to one and the same rule. Thus, transcendental apperception is rule-governed conscious experience, something more than a mere flux. But nonetheless why not interpret it as an identical self that is separate from the ever changing empirical self? The passage begins by describing transcendental apperception as an “original and transcendental *condition*”; the passage ends by calling it “a *condition* that precedes all experience and makes the latter itself possible.” The phenomenon under discussion is objective perception, and transcendental apperception simply names that condition that makes this phenomenon possible, i.e., rule-governedness. Recall that at A104 the objectivity passage begins by making the point that relation to an object is grounded on rules. But relation to an object is what merely empirical apperception lacks: inner states (which are in time, not space) are characterized as lacking relation to outer objects. Thus in this context “empirical apperception” refers to the conscious activity involved in the synthesis of apprehension and imagination. It is not until the third form of synthesis – the synthesis of recognition in a concept – that rules are introduced, and only then does Kant begin to discuss transcendental apperception and relation to an object.

At A106 Kant begins his discussion of transcendental apperception by asserting that “Every necessity has a transcendental condition as its ground.” This sentence refers back to the immediately preceding sentence where he says that the concept of body necessitates the representations of extension, impenetrability, shape, etc. We have seen that what is meant by necessitation is a rule-governed connection. Empirical concepts necessitate in the sense that they are rules for combining perceptions; they do not ontologically force perceptions to turn out a certain way. Kant’s assertion, then, is that

rule-governed connections must be grounded in a transcendental condition. Certainly the claim that such connections are grounded in a noumenal or transcendental self outside space and time would make little explanatory sense and would be flat out obscurantist.

Perhaps then we can address the issue by first asking what it would mean to ground rules on an *empirical* condition. And the answer seems plain: it would be to ground rules on experience. In this case, rules of representation would be factual reports or descriptions of what we do perceive, and spatio-temporal contiguity is a good example of such a rule. But it is one of Kant's basic positions that what we merely happen to experience is haphazard, such that rules of representation do not arise out of inherent connections already present in experience but are brought to bear to establish connections.

Since, however, if representations reproduced one another without distinction, *just as they fell together*, there would in turn be no determinate connection but merely unruly heaps of them, and no cognition at all would arise, their reproduction must thus have a rule...(A121, my emphasis).

Furthermore in the B-edition Deduction Kant makes this plain enough in stating:

Yet the combination (*conjunctio*) of a manifold in general can never come to us through the senses, and therefore cannot already be contained in the pure form of sensible intuition; for it is an act of the spontaneity of the power of representation, and, since one must call the latter understanding, in distinction from sensibility, all combination...is an action of the understanding...(B129-130).

If rules of representation cannot be based on experience or what is given in sensibility, then by elimination they must have their origin "in us," or in the understanding, and in this sense they are *a priori*. Normativity, that is, cannot be empirically grounded or discovered in the senses. Take for example moral evaluation. The universal performance

of an act, either within a culture or even throughout the whole of humanity, does not imply that such conduct is permissible or ought to be performed. An empirical principle of moral conduct is a record of how humans do behave, but a normative principle legislates how we ought to behave.¹⁰⁷ The same point applies to rules of representation: since they assert how we ought to connect representations, they cannot be grounded in reports on what representations we happen to experience together. So in this context a transcendental condition is an *a priori* condition. The transcendental unity of apperception is no more or less than the unity of consciousness produced in the application of *a priori* rules to perceptual manifolds. This is stated at A108: “all synthesis of apprehension (which is empirical)” must be subordinated to “a transcendental unity, and first makes possible their connection in accordance with *a priori* rules.” One difficulty is that Kant’s language of making possible suggests that somehow transcendental unity is given prior to connection by *a priori* rules. But I have argued that this is not the case, and that more precisely transcendental unity is concurrent with a synthesis in accordance with concepts. This is one of those passages in which Kant emphasizes the side of the biconditional that identifies the unity of apperception as a necessary condition for the synthesis of concepts.

Thus, the reference to transcendental apperception in Kant’s theory of perception indicates simply the following. The synthesis of apprehension and imagination are not themselves sufficient for objective perception, and so an extra condition must be added. This extra condition is called “transcendental” because it makes objective perception

¹⁰⁷ Kant’s deontological ethics adopts this position by grounding moral judgment upon the categorical imperative, which proceeds *a priori* from the nature of practical agency. In general it is quite helpful to recognize the parity between Kant’s practical and theoretical philosophy in respect to the utter centrality of normativity.

possible. The condition is simply the introduction of rules of combination to perceptual awareness. All of this has already been discussed, except that the only additional piece of information is Kant's insistence that these rules must originate from the understanding, or come "from us," and in this sense be *a priori*.

But the view does offer a mild puzzle. So far Kant has only discussed empirical (and mathematical concepts), and the rule-governed unity that they achieve. But if the rules must be *a priori*, then how can Kant be speaking of empirical concepts?¹⁰⁸ The solution is not too difficult to see. At this stage, Kant proposes a theory where empirical concepts contain necessity, and necessity must have its origin in the understanding rather than the sensibility. The rule, in this sense, doesn't come from experience.¹⁰⁹ Thus, *a priori* is equivalent to necessity, and there are numerous places where Kant uses the awkward phrase "*a priori* necessary" or "necessary *a priori*." There is nothing inconsistent or even problematic about saying that empirical concepts assert necessary combinations; and this is just Kant's point that, for example, the empirical concept of a body identifies extension and impenetrability as necessarily belonging to bodies.

¹⁰⁸ In his commentary on the *Critique*, Norman Kemp Smith identifies four distinct stages in Kant's gradual development of the text of the Transcendental Deduction (see pp. 202-231). In doing so, he follows the work of Vaihinger, whom he claims had basically proved this thesis. Kemp Smith dates A103-110 to Kant's first stage (which he believes to be pre-Critical), and he claims that this stage dispenses with the categories in favor of the transcendental object. Although I do not treat the text as a patchwork, I am in agreement with Kemp Smith's assertion that A103-110 does not contain a discussion of the categories.

¹⁰⁹ My resolution to this interpretive issue is more or less the same as Kemp Smith's. He recognizes that any interpretation denying that A103-110 involves a discussion of the categories would seem to conflict with Kant's references to *a priori* rules at A108. In response, he claims that "contrary to his usual teaching he speaks of the concept of body as a source of necessity. If so, it may well, with equal looseness, be spoken of as *a priori*" (p. 211). In essence, my solution follows this point by rooting necessity in the understanding, not the sensibility (and by extension, not in experience).

3 The Transcendental Object (A108-A110)

The analysis so far has established that objective perception involves rules of the understanding synthesizing the manifold of perceptions and unifying consciousness. Kant summarizes: “This relation [to an object], however, is nothing other than the necessary unity of consciousness, thus also of the synthesis of the manifold through a common function of the mind [i.e., a rule] for combining it in one representation.” (A109). But at A109 he then introduces an additional and final component to his account of objective perception: the transcendental object.

Kant’s introduction of the transcendental object is a response to a specific problem. Recall the B-edition passage (B129-130) quoted above: whether empirical or non-empirical, rules come from “us,” from the understanding. Hume also recognized this, but was content with explaining rules in terms of subjective habits or customs. Kant, however, is not. Kant inquires into how it is possible for rules that come from the understanding to nonetheless have objective validity, or to be such that objects of experience actually fall under them. Take for example the concept of demonic possession. Since demonic possession does not exist, this concept is not satisfied by anything and therefore lacks objective validity. The definition of the concept is self-consistent, and the phenomenon is logically possible, but it isn’t real. Presumably, by contrast, the concept of house is objectively valid. Here is the problem. Our empirical concept asserts a necessary connection of perceptions, but since the rules come from us, or the understanding, how do we know that they are not merely made up?¹¹⁰ They could

¹¹⁰ Melnick raises this same question, although not in regard to empirical concepts but rather sequences of reactions. He says that if the sequence of reacting α and β is to be an objective representation, then it requires that “the rule or constraint not be something we conjure up at our whim. Otherwise I could make

be arbitrary or contrived ways of connecting representations, and there is no need for objects to fall under or satisfy merely made up modes of representation. For example, I could stipulate that houses, in addition to roof and sides, must be capable of detaching and floating in times of flooding; or I could say that liquidity is also a necessary feature of bodies. In such cases, the altered concept would no longer be satisfied by any of the objects that once satisfied the original, and it would be questionable whether any object would satisfy them. The transcendental object, then, is introduced to explain the possibility of the objective validity of – I should stress – *empirical* concepts: “The pure concept of this transcendental object (which in all of our cognitions is really always one and the same) is that which in all of our empirical concepts in general can provide [or in Kemp Smith’s translation, “confer on them”] relation to an object, i.e., objective reality” (A109).

The transcendental object is “one and the same” throughout our cognition. Since things in themselves can be many, the transcendental object should not be mistaken for things in themselves.¹¹¹ But what can be one and same and serve to ground empirical representation? The answer is, reality. This should hardly be surprising. If our modes of connection are based on reality, then they are not arbitrary and have objective validity: the objects of experience are insured to satisfy them because the connections are in accord with the way reality actually is.

up any rules I please and thus constrain my reactions in any way I please, and this would not be an expression of objectivity,” *Space, Time, and Thought in Kant*, p. 156.

¹¹¹ Norman Kemp Smith mistakenly identifies the two. In discussing the passage at A108-110, where Kant presents the transcendental object, he says: “This is the one passage in the *Critique* in which Kant explicitly defines his doctrine of the ‘transcendental object’; and careful examination of the text shows that by it he means the *thing in itself*, conceived as being the object of our representations,” *Commentary to Kant’s Critique of Pure Reason*, p. 204. I note that Kemp Smith has to drop Kant’s use of the plural in regard to things in themselves.

There are, however, two importantly different ways of understanding the transcendental object or the appeal to reality, and Kant himself does not seem to be altogether clear on this difference. I think that he shifts back and forth between the two conceptions. In the first case, Kant expresses a teaching that is by and large inconsistent with his critical philosophy, and so a remnant of his pre-critical heritage. The representationalist theory of perception as developed by Locke and Descartes presents a certain way of thinking about objective perception. Let us suppose that the world is populated by substances possessed of primary qualities that, due to the veil of perception, cannot be directly experienced or perceived by us. Let us suppose moreover that some of our perceptions are causally produced by the impact of such external objects on our sensory apparatus. In such a case, objective perceptions would constitute that class of perceptions that stand in causal relation to an external world of substances, whereas subjective perceptions would be those that are fabricated by the mind in the absence of a causal connection (hallucinations, for example). Kant, however, is forced to modify this picture since things in themselves cannot be represented. So he alters it by dropping reference to a plurality of substances causing perceptions, and he puts in its place a blanket reference to reality. All we can say is that reality must be the basis of our perceptions and of our ways of connecting them. When we try to conceive what lies outside experience, all we can think is “something in general = x” (A104) or the “transcendental object = x” (A109). The transcendental object, on the first reading, indicates whatever reality it is that stands outside sensible representations. It is the non-empirical, and as such non-cognizable, ground of appearances (“x”). Many commentators have noted the inconsistency in claiming that causality applies only to appearances and

that non-sensible reality is the cause of our perceptions of appearances. But much more importantly, the mark of Kant's uncritical, early theory of representation is his willingness to hold onto the idea that uncognizable reality must be referenced in making sense of cognition. Uncognizable reality, or the transcendental object, is in fact a component of this analysis of cognition.

But there remains another way of understanding the transcendental object that is more consistent with the critical view. The first conception provides no help in determining what types of connections are appropriate or proper to make. Obviously, the object = x provides no content that can be used in identifying correct and incorrect modes of connection. However, it is worth noting that Kant's theory of intellectual representation in the Inaugural Dissertation *would* provide an answer to this type of concern. Since intellectual representation of things as they are is an altogether different form of representation, we could utilize it as a means for checking our empirical representations. We could simply ask and answer the question, "do our empirical representations match or correspond to our representations of things as they are in themselves"? But of course intellectual representation is not available in the critical period. Consequently, the transcendental object has absolutely no epistemological role. What then is the point of introducing it at all?

At A104 Kant raises the question of, "what does one *mean*, then, if one speaks of an object corresponding to and therefore also distinct from the cognition" (my emphasis). The transcendental object, on the second reading, is just Kant's device for defining *what it means* for perceptions to be objective or pertaining to the world. Let me further explain. In *Individuals*, Strawson distinguishes between descriptive and revisionary metaphysics.

Kant's metaphysics is not revisionary in the Strawsonian sense of postulating entities and structures very different from those that correspond to our commonsense outlook on the world. In fact, Kant's world of appearances is the more or less ordinary world of causally interacting substances that mutually influence one another and are responsible for the perceptions we have. Kant seeks to hold onto the distinction between inner experiences and outer objects, and after the publication of the first edition of the *Critique*, he took great pains to emphasize that he had no interest in reducing the world to the mind, banishing matter, and offering a form of Berkeleian idealism. In this regard, Kant's metaphysics is similar to his ethics. He does not seek to provide a new moral theory that yields new results, but to backtrack to the foundations of our ordinary moral understanding; the non-philosopher knows just as well what he ought to do, and perhaps has grasped this even better than the philosopher. But Kant's metaphysics is, in a different sense, revisionary. Bencivenga aptly calls it a *conceptual* revolution.¹¹² At A104, Kant is not challenging whether there are external objects, but raises the critical question of what it means to represent an external object. This question is fundamental, and it undercuts both the representationalist theory of perception and his own position at the time of the Inaugural Dissertation. He wonders whether these two ways of thinking about objectivity rest on mistaken assumptions; what is necessary then is first to clarify what is *meant* by "relation to an object."

At the risk of tedium, it will be beneficial to comment on the final paragraph of the section of text that has been under discussion in this chapter. I claim that in this text, admittedly a mouthful, Kant presents the second sense of the transcendental object:

¹¹² See *Kant's Copernican Revolution*.

The pure concept of this transcendental object (which in all of our cognitions is really always one and the same = X) is that which in all of our empirical concepts in general relation can provide relation to an object, i.e., objective reality. Now this concept cannot contain any determinate intuition at all, and therefore concerns nothing but that unity which must be encountered in a manifold of cognition insofar as it stands in relation to an object. This relation, however, is nothing other than the necessary unity of consciousness, and thus also of the synthesis of the manifold through a common function of the mind for combining it in one representation. Now since this unity must be regarded as necessary *a priori* (since cognition would otherwise be without an object), the relation to a transcendental object, i.e., the objective reality of our empirical cognition, rests on the transcendental law that all appearances, insofar as objects are to be given to us through them, must stand under *a priori* rules of synthetic unity, in accordance with which their relation in empirical intuition is alone possible, i.e., that in experience they must stand under conditions of the necessary unity of apperception just as in mere intuition they must stand under the formal conditions of space and time; indeed, it is through those conditions that every cognition is first made possible (A109-110).

The second sentence says that, since the transcendental object = x cannot intuited, or has no determinate intuitive content, it therefore *concerns nothing but* the rule-governed unity of perceptions that stand in relation to an object. It is, in other words, another way of designating the rule-governed character of objective perceptions. The text then continues by identifying relation to an object as *nothing other than* the unity of consciousness and the synthesis of the manifold of experience. If the transcendental object is nothing but the unity required for relation to an object, and if this relation is nothing but the unity of consciousness and concepts, then by hypothetical syllogism the transcendental object is nothing but this twofold unity. Kant continues, “the relation to a transcendental object, *i.e.*, the objective reality of our empirical cognition ...” This identification is somewhat confusing, but it seems to equate the transcendental object with reality as such. Objective reality/validity concerns the relation that a concept has to reality, and so the sentence identifies (“*i.e.*”) this relation with the relation *to* the transcendental object. But now what is needed is an explication of what it means for a representation to be related to reality. So Kant says, this relation “rests on the transcendental law that all appearances, insofar as

objects are to be given to us through them, must stand under *a priori* rules of synthetical unity ... i.e., that in experience they must stand under conditions of the necessary unity of apperception ...” The text therefore comes right back to the point that relation to an object is to be understood as the rule-governed unity of both the perceptual manifold and consciousness.

It would seem, then, that nothing new has been introduced since the unity of consciousness and the manifold by means of concepts has already been discussed in Section 1 and 2 above. This analysis of the transcendental object faces the same sort of question asked about transcendental apperception: what, if anything, is *added* to what has already been discussed? The answer, I argue, is that both transcendental apperception and the transcendental object contribute to understanding the nature of the rules that govern perception. If Kant’s account of transcendental apperception shows that rules of perception originate in the understanding and in this sense are *a priori*, then what does the reference to the transcendental object add? My answer: simply that the rules of the understanding cannot be arbitrary or invented, nothing more. Thus, the phrase “necessary *a priori*” indicates not only that they come from the understanding (rather than experience), but that in being necessary they are not invented. At times Kant wants to explain *why* they are non-arbitrary, and this is where the first sense of the transcendental object is given: they are non-arbitrary *because* they are grounded in some non-empirically given reality. Yet this is inconsistent with the critical teaching, and so in moments where Kant is more careful he sticks to the second conception.

But it should be noted that this move still leaves unaddressed the problem of how to make sense of the non-arbitrary character of empirical concepts. One cannot make sense

of this by appeal to uncognizable reality, if the critical teaching is to be preserved, and yet no other option is here provided. In Chapter 4 I will argue that A103-110 presents a theory of cognition that falters on some points and which is actually corrected and changed in the next section at A110-114.

4 Defining Objective Perception

The purpose of this section is to provide a definition of objective perception by pulling together all three aspects discussed: empirical concepts, transcendental apperception, and the transcendental object.

Kant's analysis of objective perception is best understood in contrast to the view he rejects. According to Descartes and Locke, there is an external world of individual, material substances that cannot be directly perceived by us but that nonetheless are the cause of our ideas or internal representational states. Both provide two criteria by which to distinguish perceptions that are produced by external objects from those that are not – namely, coherence and adventitiousness. Although on their view all conscious states are ideas in the mind, Descartes¹¹³ and Locke¹¹⁴ still distinguish perceptions that pertain to

¹¹³ In Meditation Six, Descartes appeals to the criterion of adventitiousness in the following passage: “Now there clearly is in me a passive faculty of sensing, that is, a faculty for receiving and knowing the ideas of sensible things; but I could not use it unless there also existed, either in me or in something else, a certain active faculty of producing or bringing about these ideas. But this faculty surely cannot be in me ...” (p. 52 [79]). Descartes identifies a *passive* faculty of perceiving, which indicates that our perceptions are caused by something. Having denied that we are the causes of our passive perceptions, Descartes then denies that God can be their cause. The only remaining option is that external, corporeal things are their cause. His argument is that that God is not a deceiver, and yet since we have been created with an irresistible tendency to regard our perceptions as caused by external, corporeal things, God would be a deceiver if they were not so caused.

Recognizing that dreams also come to us involuntarily, Descartes ends the Sixth Meditation with the additional criterion of cross-coherence. In the attempt to distinguish dreaming from waking, he says: “For now I notice a considerable difference between these two [i.e., being asleep and being awake]; dreams are never joined by the memory with all the other actions of life, as is the case with those actions that occur when one is awake. For surely, if, while I am awake, someone were to suddenly appear to me and then immediately disappear as occurs in dreams ... it is not without reason that I would judge him to be a ghost

external objects from those that are merely conjured up. Since we cannot step outside our representations to assess whether they relate, or fail to relate, to an external object, we can only look to features of our representations themselves. For a perception to pertain to an external object is for it to be *caused by* that object, and *coherence and*

or a phantom conjured up by the brain, rather than a true man. But when these things happen, and I notice distinctly where they come from, where they are now, and when they come to me, and when I connect my perception of them without interruption with the rest of my whole life, I am clearly certain that these perceptions have happened to me not while I was dreaming but while I was awake” (pp. 58-59 [89-90]). When Descartes refers to connecting one’s perception, without interruption, with the rest of one’s life, he is identifying cross-coherence as the mark for waking experience, and thus for when our perceptions are caused by and related to external, corporeal things. The idea is that waking perceptions pick up where they last left off. Dreams, by distinction, although they might be internally coherent, are temporary interruptions in the cross-coherence of one’s perceptions. When, for example, I fall asleep on the couch, my waking experience picks up with me lying on the couch in the morning. The dreams I might have while sleeping, however, do not tie in with the rest of my life.

¹¹⁴ Locke seems to focus mostly on adventitious, or the property of representations forming involuntarily, although he does give hints to coherency. In Book IV, Chapter IV of the *Essay Concerning Human Understanding*, Locke raises the general problem of how to distinguish what he calls real from fantastical ideas: “*Our Knowledge* therefore is *real*, only so far as there is a conformity between our *Ideas* and the reality of Things. But what shall be here the Criterion? How shall the Mind, when it perceived nothing but its own *Ideas*, know that they agree with Things themselves?” (p. 563). Thus, since we cannot step outside our minds to distinguish ideas that are real from those that are fantastical, we need to look for *criteria* in our own representations.

In Book II, Chapter XXX (as well as Book IV, Chapter IV), Locke analyzes the difference between real and fantastical ideas. Real ideas “have Conformity with the real Being, and Existence of Things, or with their Archetypes” (p. 372). Here Locke discusses simple ideas, mixed modes and relations, and complex ideas of substances. Simple ideas and ideas of complex substances are both real in the sense that they relate to external objects. Mixed modes and relations are real in the different sense that they cannot fail to correspond to their archetypes since they are their own archetypes

Simple ideas, such as our ideas of white, heat, or light, are real insofar as they “agree with the reality of things” (ibid.). Such ideas are the “Effects of Powers in Things without us” (ibid.). Their conformity to reality consists of their being caused by external objects. But since we cannot step outside our mind, we have to find a feature within representation for assessing when causal influence obtains. Locke identifies this feature as the passivity or adventitiousness of our simple ideas. We are incapable of creating or fabricating simple ideas ourselves, and the “Mind be wholly passive, in respect of its simple ideas” (p. 373). The fact that they come to us against our will, and cannot be fabricated by us, is the mark that they are caused by external things. Moreover, Locke says that they are the “constant” (ibid.) or “natural and regular productions of Things without us” (p. 564), which indicates a coherency in their occurrence.

Complex ideas of substances, such as the idea of a horse or person, are also claimed to have “reference to Things existing outside us” (p. 374). Locke’s basic point is that so long as experience regularly presents certain combinations of simple ideas, we can take those combinations as referring to external things. Fantastical ideas of complex substances are those whose combinations of simple ideas are not presented in experience, such as a Centaur. Since complex ideas of substances are nothing but combinations of simple ideas, the representational criteria for relatedness to an external object is the same as in the case of simple ideas: we involuntarily find certain combinations regularly occurring.

Mixed modes and relations, however, have a different status. Our ideas of justice (mixed mode) and parent (relation), for example, are real in the sense that they conform perfectly to their archetypes. Their archetypes are not found, however, in the external world. Locke says that since mixed modes and relations have “no other *reality*, but what they have in the Minds of Men” (p. 373), they cannot fail to refer to their archetypes since they are themselves archetypes.

adventitiousness are the representational criteria or internal marks for assessing when external, causal influence obtains. At the time of the Inaugural Dissertation, Kant seemed to hold elements of this general picture, except that he added to it the Leibnizian-Wolffian position that the external world of substances can be directly represented – not in perception, but purely intellectually or conceptually.

Kant's first step in challenging this picture is his denial that causal influence is alone sufficient for grounding objective perception. This is found in the Transcendental Aesthetic, where sensations are characterized as affections in the subject. Since sensations are typically caused by objects, the implication is that causality is insufficient (although still necessary) for perceptual intentionality. What is required in addition to the merely passive phenomenon of receptivity is an activity of the understanding, or "spontaneity," that involves synthesizing the manifold of perceptions in accordance with empirical concepts.

But now Kant raises the critical question of what we mean when we speak of perceiving external objects, and he begins with the criteria of objectivity found in the old framework: coherence and adventitiousness. His most important move is not to reject them, but to (radically) alter what it means for them to be satisfied. In other words, as discussed above, Kant's metaphysics isn't revisionary in a Strawsonian sense, but rather it effects a conceptual revolution in our understanding of certain basic phenomena. Thus, the criteria of objectivity are satisfied by *rules for combining perceptions*, rather than non-empirically given substances.

The criterion of coherence can, without much difficulty, be met by rules or norms that serve to unify or connect perceptions. Transcendental apperception is best

understood as that component of Kant's analysis that is intended to address this criterion. Although empirical apperception is a flux or stream (A107), transcendental apperception is the unity of conscious representations in accordance with rules that originate in the understanding. On the other hand, I claim that the criterion of adventitiousness is met by the transcendental object. Representations are adventitious when they are produced against one's will; or to put the point negatively, when they are not arbitrarily contrived or the product of one's fancy. Consequently, what is needed is a way of understanding what it means for the unity of representations to be grounded in reality, as opposed to arbitrarily contrived, and Kant's critical suggestion is that the expression "to be grounded in reality" should be conceptually explicated in terms of the non-arbitrariness of the rules themselves, rather than by appeal to some non-empirical, uncognizable reality (the object = x).

Putting these points together, I can now define objective perception. Generally put, Kant's critical analysis reveals that objective perceptions are a class of representations that are synthesizable in a certain way, rather than a class of representations caused in a certain way. More specifically, I define the manner of synthesis as follows: *For a subject to be perceptually related to an external object is for that subject to be capable of applying to the synthesis of apprehension and imagination an empirical concept whose rule non-arbitrarily involves connecting in consciousness a manifold of perceptions in X-way rather than Y-way.*

This formula incorporates all of the elements discussed in a manner that is consistent with the critical period: rules for the unity of the manifold (empirical concepts), necessary or *a priori* unity in consciousness (the transcendental unity of apperception), and non-

arbitrary connection (the transcendental object). Thus, objective perceptions constitute that class of perceptions that satisfy this formula or definition. I note, again, that Kant has not denied the reality of external objects, but has sought to radically re-conceptualize what it means to be in relation to them. Namely, to be perceptually related to an external object *just is* for the deliverances of sensibility to be synthesizable by the understanding in the right way.

Let me return to Kant's house example. Recall that the presentation of a house unfolds in time, so that in the course of scanning it, one would expect to encounter roof and sides, windows and shingles. But suppose one discovers that one's experiences simply are not synthesizable by any rule because they exhibit no consistency: what once was the roof, now is the side, and the material components of the house suddenly display properties belonging to liquids or gases. Strange as this may be, these are the characteristic marks of a hallucination. Surely one would immediately begin to wonder whether one is dealing with an external object at all, for as Kant says: "since insofar as they are to relate to an object our cognitions must also necessarily agree with each other in relation to it, i.e., they must have that unity that constitutes the concept of an object" (A104-105). Presumably, in such a situation, one would then search for some other rule besides the concept of a house by which the perceptual unfolding might be found to be synthesizable. If the search is successful, one could legitimately conclude that the entity in question is indeed an external object, just of another and unexpected sort. But on the failure to find any rule, one's representations would have to be taken as no more than a mere subjective play or flux of empirical apperception lacking relation to an object.

Yet one should be careful with this example. I have attempted to explicate the difference between objective perceptions and purely inner states, *not* the difference between veridical and non-veridical perception. It is tempting to take hallucinations as paradigmatic cases of non-veridical perceptions, as they are, and therefore to contrast them with, e.g., the veridical perception of a house. Van Cleve does exactly this when contrasting a sun merely in one's mind with a sun in the sky.¹¹⁵ In similar fashion, Strawson remarks that "any particular 'unruly' perception, which fails to cohere with the general course of experience ... is rated as merely subjective, an illusion or a 'seeming,' not a true representation of how the world objectively is."¹¹⁶ But objective perceptions are not always veridical, as in the case of perceptual illusions, and the decision as to whether a given perception is veridical or not is an empirical matter. As emphasized in the Chapter 1, the perception of a bent stick in water is different from a hallucination. Illusions are misperceptions *of* actual objects, rather than mental fabrications of unreal objects. Strawson's quote therefore contains a serious mistake by conflating hallucinations, which are "merely subjective," with perceptual illusions. According to Kant's analysis, the perception of the bent stick in water meets the criteria of objectivity, for in being appropriately synthesizable by a rule it exhibits both coherence and adventitiousness. We know what conditions regularly produce the illusion, and we cannot help but experience it, although we may resist being fooled by it. Kant's transcendental inquiry provides an analysis of the meaning of external-object perception, and perceptual illusions meet the analysis. But the question as to whether a given perception of an object

¹¹⁵ *Problems from Kant*, p. 95. See the discussion in Chapter 1.

¹¹⁶ *Bounds of Sense*, p. 89.

is accurate is answered by the empirical studies of physiology, optics, physics, and so forth.

5 Avoiding Data-Sensualism

Data-sensualism is a position commonly ascribed to Kant, and the passage at A103-110 provides perhaps its strongest support.¹¹⁷ The purpose of this section is to distinguish my reading from data-sensualism, since I think that this view is untenable. My argument is that data-sensualism involves either an appeal to what I call “representational alchemy” or a commitment to phenomenalism. The former is philosophical untenable because it requires that rules of representation transform the content, not merely the form, of experience, and the latter is untrue to the text because it conflicts with Kant’s direct realism established in the Refutation of Idealism. I will begin the section by outlining data-sensualism for the purpose of showing why it is committed to either representational alchemy or phenomenalism. I will then conclude by explaining how my reading avoids representational alchemy while at the same time incorporating direct realism.

Any adequate interpretation must acknowledge Kant’s conceptual revolution according to which perception of external objects is explicated in terms of rules for synthesizing a manifold of perceptual experience. Therefore, any interpretation must answer the question: what are these rules and what do they govern? On the data-sensualist reading, the ground-floor or starting point of cognition is a diversity of sensations furnished by the receptivity of sensibility. Sensations are fleeting, atomistic,

¹¹⁷ I take the term “data-sensualism” from Dieter Henrich’s essay “Identity and Objectivity.” This article is found in English translation in *The Unity of Reason: Essays on Kant’s Philosophy*, edited by Richard L. Velkley.

internal representational states.¹¹⁸ Kant provides the examples of taste and color (A28), sound and heat (B44), and weight (A169/B211). Since cognition begins with a multiplicity of inner states, Kant faces the problem of accounting for how we can represent enduring, external objects on their basis. In which case, the answer is that sensations must be brought under rules of synthesis that combine, connect, and arrange them in various ways. Objects inevitably turn out to be constructions out of rudimentary sense-data, and consequently the intentional character of perception is explained by appeal to constructive processes. Perceptions acquire relatedness to an object because the object itself is produced in the activities that are generative of its representation.

This last point can be explained by modeling the function of empirical concepts on that of mathematical ones. Kant holds a constructivist view of mathematics according to which the representation of a geometrical figure consists of the activity of drawing it, either in imagination or on paper, in accordance with a rule. This involves two related points. First, geometrical figures are represented not in perception, but in the activity of construction, e.g., the representation of a triangle *is* the activity of drawing it. Second, since geometrical figures are represented in constructive acts, the representation produces or gives its own object. This is connected to the first point because it implies that the representation of such figures does not depend upon the object's presence in sensation. This is the meaning of Kant's claim that mathematical objects are produced *a priori* (A714/B742). With some modification, both of these points can be applied to the data-sensualist account of objective perception. The use of an empirical concept requires the presence of the right types of sensory information prompting its application, and in this sense empirical concepts are different from mathematical ones. But nonetheless objects

¹¹⁸ See 2.3 of Chapter 2 for a more complete discussion of sensations and their distinction from objects.

are not present in the initial data of perception and therefore must be constructed from combinatory processes. The representation creates its own object, which in this case is an enduring, external substance. Perceptions, then, are related to an object by virtue of the object's construction in the perceptual activity itself. This reading would seem to be readily confirmed by Kant's various statements to the effect that, "An object, however, is that in the concept of which the manifold of a given intuition is united" (B137).

This position is often enough attributed to Kant, and it has come to possess an air of reasonability through sheer repetition. But when one actually examines what the view says, it is hard to understand what it could mean and how it could be Kant's view. Sensations are inner states, and Kant gives the examples of sound, heat, color, and weight. For my part, I fail to understand how persistent, external objects could be constructed and thereby represented on the basis of combining fleeting, inner experiences of sound, heat, color, etc. To subject such states to rule-governed connections is to produce a *coherent and predictable system of ever-changing inner states*, which strikes me as required for representing them as *states of one's body* since the body is an integrated system of physiological happenings. But objective perception involves reference to what lies outside of the body, and I cannot find in data-sensualism any reasonable answer as to how this relation arises. In the Second Analogy, Kant expresses a sense of mystery when he asks how perceptions acquire "objective reality" in addition to their subjectivity as bodily modifications (A197/B242), and unfortunately instead of explaining this mystery away, which is really Kant's intent, data-sensualism only heightens it. This view is apparently saddled with the claim that rules of synthesis transform the very content or quiddity of one's representations. Sensation-experience and

object-cognition have distinct contents in the sense that the objects represented are different in kind and not just degree. It makes sense to assert that combinatory rules alter the form of experience, which I believe is required for representing sensations as bodily states, but how they could transform the content or quiddity of what is represented is rather mysterious. Such a position verges on appeal to magic or representational alchemy. As a philosophical thesis, data-sensualism is hardly convincing.

But it turns out that data-sensualism can avoid the damaging suspicion of representational alchemy by attributing to Kant phenomenalism about objects. Phenomenalism asserts that the only immediate items of consciousness are private sense-data, and that all meaningful talk of external objects must somehow be explicated in terms of them. Data-sensualism begins with this phenomenalist starting point and simply provides the explication by appeal to combinatory rules. Strawson puts the result well by characterizing represented objects as mere “surrogates” for the real and unknown object as thing in itself.¹¹⁹ This means that one is never aware of actual external objects, but only of their internal representational replacements. With this point, one can see how data-sensualism steers clear of representational alchemy. To do so, the position must be committed to the view that the object of representation is not an external substance, but only something that is experienced *as if* it were external and persistent even though it is not. So understood, the view is not committed to the claim that external objects themselves are constructed by combining sensations, but only that internal, mental surrogates for such objects are constructed.

Admittedly the issue of phenomenalism in the *Critique* is tricky since there are passages in the A-edition, especially the Fourth Paralogism, where it seems flatly

¹¹⁹ Strawson, *The Bounds of Sense*, pp. 90-91.

asserted. But after the first edition's publication, Kant was so bothered by the attribution of this view to him that in the B-edition he completely rewrote or excised all of the sections seemingly in its support. For present purposes, I only note that the considered or final position found in the Refutation of Idealism is unmistakably in direct opposition to the phenomenalist interpretation of objects of perception. The goal of the Refutation is to prove the existence of external objects by means of analyzing the requirements for consciousness of one's own existence in time. Kant argues that the latter is possible only if there are external, enduring objects to which we are perceptually related. More fully, "this persistent thing, however, cannot be something in me," but rather the "perception of this persistent thing is possible only through a thing outside me and not through the mere representation of a thing outside me ..." (B275). Furthermore, in a footnote at B277, he contrasts genuine outer sense, in which we have unmediated awareness of external objects, with outer imagination. The point in both cases is to deny the phenomenalist claim that external-object representation involves an internal surrogate that is experienced *as if* it were external. That is, we do not merely have thing-like representations or imaginings, but rather we are in direct perceptual relation to external, enduring things.

I believe that a successful interpretation of Kant's theory of objective perception must meet the goal of avoiding both phenomenism and what I have called representational alchemy. Data-sensualism fails in this regard, because in the interest of steering clear of the latter it gets bogged down in the former. I have proposed a reading that accomplishes this aim. The key characteristic of my reading is that the rules governing perception are not rules for combining sensations, but rules for interactive

behavior that encompass the immediate consciousness of external objects as part of their content. Let me explain.

Kant's house example is instructive. In the A-edition preface, he apologizes for the overall lack of examples and explains that their omission was necessary for presenting his complete system in a length not overly burdensome to the reader. But he does indicate that examples are valuable, and given how few he provides, one should expect them to be very carefully chosen. So, in the only example relating to perceptual synthesis, it is instructive to note that Kant does not speak of the representation of a house as built up out of sensations of weight, color, heat, and so on. Rather, he says:

In the previous example of a house my perceptions could have begun at its rooftop and ended at the ground, but could also have begun below and ended above; likewise I could have apprehended the manifold of empirical intuition from the right or the left. In the series of perceptions there was therefore no determinate order that made it necessary when I had to begin in the apprehension in order to combine the manifold empirically (A192-193/B237-238).

The example is offered in the context of a discussion of the rule of irreversibility, and for present purposes I can set this topic aside. What is important is how Kant characterizes the manifold of empirical intuition. He refers to his previous example given at A190/B235, and here he only says that the "apprehension of the manifold in the appearance of a house that stands before me is successive." This leaves open the data-sensualist reading according to which the manifold consists of inner modifications of the subject. But this reading is virtually stretched to its breaking point in the longer passage at A192-193/B237-238, for when Kant finally gives an example of an empirical manifold he describes it as the representation of the various parts of the object encountered in one's spatial (e.g., right to left, top to bottom) scanning of it. Let me stress that no one would

ordinarily take Kant's mention of the house's rooftop and foundation to be a reference to modifications of color and weight found only in the subject. Rather, it is more naturally taken as referencing the components of the *object* that are encountered in the act of perceiving it. Evidence that this is the case is found in the important recognition that the rooftop and foundation have *spatial* properties and therefore, given that space is the form of outer intuition, are represented as external to oneself and as belonging to the object.

Given this analysis, one sees that a data-sensualist reading of the example requires correcting what it actually says. One would have to say that what Kant really means to speak about are the various sensations produced in looking at the rooftop and foundation, and it is these sensations to which the rooftop and foundation are ultimately reduced. Of course, it is possible to reconstruct Kant's meaning in this way, but for my part I take the example at face value. The empirical manifold consists of the spatially distributed parts of the object. One's experience may certainly be accompanied by sensations, but there is no indication in the example that the encountered parts are nothing but constructions out of them. In fact, if the rooftop and sides were just sensations combined in a certain way, then given that sensations are inner states, it is hard to see how they could acquire the spatial properties that are basically definitive of them. Data-sensualism would have to appeal to a mental surrogate that is represented *as if* it were spatial.

Consequently, the first point I take from the example is that an empirical manifold contains objective spatial components and not merely subjective inner states. But there is one more key point: the rules that govern perceptual experience do not combine sensations, but rather unify the temporally extended activity of perceiving the object. As I walk around the house, I take in perceptual information over an extended period of time,

and the empirical concept of a house is a rule for what should be encountered in the course of looking it over. The concept, then, guides and regulates *investigative behavior* and serves to inform the subject's procedure for determining whether the object of representation is a house or something else. In this respect, my reading is opposed to Kitcher's since she claims that Kant's *explanandum* is the unity of a representation and not the unity of an act.¹²⁰ As evidence she cites the various passages where Kant speaks of generating unity in the manifold. Now I certainly agree that he is interested in explaining how this unity is achieved. However, scrutiny of the house example reveals that in addition Kant is interested in explaining the unity of the temporally unfolding activity of perceiving. This is simply to say that he appeals to rules to illuminate the unity involved in both the act and object senses of perception. Furthermore, I claim that the former is more fundamental because it is by means of unifying the activity of perceiving that the unity of the object of perception is produced.

The point that empirical concepts govern investigative behavior is significant for it allows the incorporation of direct realism into Kant's analysis. According to data-sensualism, perception is governed by rules for combining sensations. But since sensations are modifications of subjective states, then perceptual rules can only directly encompass inner content, and therefore outer object representations must be constructed on their basis. This leads to either phenomenalism or representational alchemy. Behavior, however, is ontologically neutral as to what it is capable of encompassing. In this case, one can simply grant Kant's claim in the Refutation of Idealism that perception involves the "immediate consciousness of outer things" (B276n). The problem is not *how* such consciousness is possible, for he goes on to say that

¹²⁰ Kitcher, *Kant's Transcendental Psychology*, p. 82-83.

“whether we have insight into the possibility of this consciousness or not” its necessity has been proved. Empirical studies in physiology and physics may take on project of explaining the underlying physical mechanisms by which our sensory system produces direct awareness of the external world. Kant’s transcendental inquiry is only concerned with defining *what it means* to be in direct perceptual relation to objects. There is no doubt that causal impingements on our senses are necessary for this phenomenon, since otherwise no intuitions would be produced. But I have argued that since Kant denies the sufficiency of causal impingements for objective perception, he adds to his analysis a synthesis in accordance with rules of the understanding, i.e., empirical concepts. On my reading, the function of these rules is to guide the behavior by which we are in direct causal interaction with external objects.¹²¹ The result is that our behavior meets the definition of objective perception, and so can be taken as interactive with external reality only if its causal impingements are appropriately synthesizable by a rule guiding one’s investigation of the object. In situations where this is not the case, our causal impingements are accordingly reduced to the status of dreams or hallucinations. Direct realists of course acknowledge that not all causal impingements yield consciousness of external objects, and Kant has simply provided definitional criteria for when it does and does not obtain.

¹²¹ To identify the necessity of a causal impingement is not inconsistent with direct realism. This point should be obvious, except that it is rather tempting to think that because causal relations are mediating events they can produce only mediate relations. Now it is true that causal relations are mediating events: the perceptual effect is the product of the external cause. However, from this alone it does not follow that what is perceived as effect is ontologically distinct from the cause. If this were so, then a representationalist theory of perception would be immediately inferable from the simple fact that perceptions are caused. On the contrary, extra premises are needed to draw this conclusion, and the direct realist denies their truth. The direct realist says that what is perceived as effect *is* the cause itself.

6 Conclusion

The chapter has presented Kant's theory of perception. His theory is neither a version of phenomenalism nor indirect realism. According to these positions, the immediate objects of consciousness are not external objects, but internal representational states of the subject. Kant seeks to retain the commonsense belief that there are external objects and that perception involves the immediate awareness of them. Nonetheless, his views are conceptually revolutionary in that they radically alter what it means to be in immediate perceptual relations. On his analysis, to be immediately related to an external object is to be capable of synthesizing one's sensible experiences in the right way. This involves the application of empirical concepts to those experiences, where the produced connections non-arbitrarily unify one's consciousness in the awareness of the object.

Chapter 4 takes up the issue of global cognition. Perception is not the only type of representation that is intentional in nature. We can also represent, by means of concepts, objects that are not present in intuition due to their temporal or spatial distance. In the next chapter, I argue that Kant bases the deduction of the categories not on perception, but on the possibility of global cognition. If this is correct, then his discussions at A93-110 are somewhat misleading because their prominence lends the impression that the categories are deduced by making perception possible. But I will argue in the next chapter that when Kant states the principle of the deduction at A110-114, he in fact bases it on global cognition. Later, in Chapter 7, I will return back to the topic of perception for the purpose of showing how global cognition and perception are finally integrated into a unified analysis of cognition.

CHAPTER 4

ESTABLISHING THE PREMISE OF THE TRANSCEDENTAL DEDUCTION

In this chapter, I will examine A110-114. This is Kant's fourth and final preparatory section. In this section, Kant provides what commentators commonly refer to "the premise" of the deduction. This term is somewhat misleading for it incorrectly suggests that the argument contains only one premise, and that the objective validity of the categories is concluded as an immediate inference from that premise. However, when commentators speak of the so-called premise of the deduction they are not making a claim about the structure of the proof, but rather are referring to the representational ability that the categories make possible. As we saw in Chapter 2, Kant's basic strategy for deducing the categories is stated in the principle: if it can be proved that the objective validity of the categories is a necessary condition for cognition, then it can be proved that they must apply to any object that can be cognized. But this formulation leaves open the question, what is cognition? The main purpose of A110-114 is to identify this ability and thereby provide the final piece of information needed before carrying out the official deduction. In what follows I argue that the categories ground the ability to intend the full-scope of spatio-temporal appearances. Following Melnick, I call this ability "global cognition."¹²²

This chapter is largely programmatic in nature. My concern is not to develop Kant's account of global cognition, at least in detail. Although I touch upon the issue, I save the complete discussion of what the nature of thought must be in order to represent the full

¹²² In both *Space, Time, and Thought* and *Themes in Kant's Metaphysics and Ethics*, Melnick argues that the categories ground global cognition. Sometimes he prefers to call this capacity global representation. See Chapter 2 of *Space, Time and Thought in Kant* and Chapter 3 of *Themes in Kant's Metaphysics and Ethics*.

scope of spatio-temporal appearances for the next chapter. My present concern is only to establish that the premise of the deduction is the capacity for global cognition. I argue for this claim in Section 1. After doing so, I then explore in Section 2 an important correction that Kant makes to his previous discussion of empirical concepts. We saw that these texts deal with the phenomenon of perception, and that in them Kant sees no need to introduce *a priori* concepts since the application of empirical concepts to intuitive episodes seems sufficient for explaining how perceptions can have objects. But when the fourth preparatory section shifts the topic of discussion to global cognition, he finds occasion to insert a discussion of why empirical concepts are not capable of grounding cognition so understood. With this point, he finally introduces the categories. Sections 1 and 2, then, come together in the claim that the categories are the *a priori* concepts required for the ability to represent globally or beyond perception. I then conclude the chapter with Section 3. This section is an extended analysis of Kant's two-faculty theory of cognition, and its purpose is to explain why the possibility of global cognition poses a special difficulty for Kant. I argue that the two-faculty theory seems to make global cognition impossible or, more precisely, empty. But given that any adequate theory of cognition must be able to account for how we can represent objects that are not currently present in experience – in addition to those that are – then on pain of a \square *deduction* he must have some analysis of this representational ability. Section 3 serves as a segue to Chapter 4 in which I work out this analysis.

1 Defining Global Representation

The fourth preparatory section opens with the statement:

There is only one experience, in which all perceptions are represented as in thoroughgoing and lawlike connection, just as there is only one space and time, in which all forms of appearance and all relation of being or non-being take place. If one speaks of different experiences, they are only so many perceptions insofar as they belong to one and the same universal experience. This thoroughgoing and synthetic unity of perceptions is precisely what constitutes the form of experience, and it is nothing other than the synthetic unity of appearances in accordance with concepts (A110).

My purpose in this section is to provide an interpretation of this paragraph and to explain how it forms the premise of the deduction. Kant identifies one experience within which all perceptions are represented in law-like connection, and he compares it to one space and time within which all appearances exist. This comparison indicates a change in topic. We saw in the last chapter that A98-110 develops a theory of perception according to which rules of synthesis (empirical concepts) explain how a diversity of perceptual states can be represented as belonging together in the consciousness of a single object. So, for example, the perception of a house involves a rule of synthesis (the concept house) by which the roof, sides, windows, and shingles can be represented as the various spatial components of a single, spatial object. If one were to interpret A110 as merely summarizing Kant's previously developed views on perception, then one would have to interpret the "one experience" as the unity of a given perception. His opening sentence would be paraphrased as follows: "there is only one perceptual object (e.g., a house), in which all its components (e.g., roof, sides, etc.) are represented as in thoroughgoing and lawlike connection, just as there is only one space and time, in which all forms of appearance and all relation of being or non-being take place." But this interpretation makes nonsense out of Kant's comparison of the one experience to a single space and time. In this paragraph, Kant is interested not in the unity of an individual perception. But what then?

In unpacking the meaning of this key paragraph, I argue that he introduces two related representational abilities. First, he says that we can represent the unity of the entire spatio-temporal world (which he calls the form of experience), and second, he says that our current perceptions are represented as embedded within that world. This, I believe, is what the paragraph explicitly asserts. However, I will also inquire into the further question of how it is possible to represent perceptions as belonging to a unified, spatio-temporal world. By appealing to passages in the Postulates and Antinomies, I will argue that this ability *is* the capacity to formulate a system of representations covering any possible spatio-temporal appearance. Since I define global cognition as this very capacity, I can conclude that A110 shifts the concern to global cognition.

Before presenting my own reading, I will begin by criticizing Andrew Brook's interpretation of the A110 paragraph. He shares my view that A110 shifts the concern from perception to global cognition. But he defines global cognition differently by characterizing it as the capacity to represent global objects. Since Brook is one of the few interpreters who even discusses global cognition, it will be worthwhile to investigate his view. I will argue that his definition is mistaken, and that it fails to adequately explain the meaning of A110.

1.1 Brook and Global Objects

Patricia Kitcher's 1990 book, *Kant's Transcendental Psychology*, is an attempt to understand the contributions of the *Critique* from the perspective of cognitive science. For example, cognitive scientists have spent some time grappling with what is called the binding problem. It is known that aspects of our perception of objects, such as color,

shape, and texture, are represented in different parts of the brain, and so the difficulty is explaining how these disparate sensory modalities can form the representation of a single object. Kitcher argues that Kant's doctrine of synthesis as developed in the Deduction aims at answering this general sort of concern.

Brook accepts the value Kitcher's cognitive science orientation, but he criticizes her tendency to restrict Kant's concerns to perceptual phenomena. In Chapter 2 of *Kant and the Mind*, he cites A110 as clear evidence that Kant is concerned not just with the perception of individual objects, but with the phenomenon of global representation. Brook defines global representation as "a representation that has a number of particular representations and/or their objects or contents as its *single global object*."¹²³ He then defines "single global object" as

an intentional object that represents a number of intentional objects and/or the representations that represent them, such that to be aware of any of these objects and/or their representations is also to be aware of other objects and/or representations that make it up and of the collection of them as a single group.¹²⁴

On this conception, global representation is the awareness of a collection of elements such that the collection is represented as the single whole of which the elements are the various parts. This is not merely a matter of representing individual items one after another in time (or even at the same time), but of representing those individual items together as forming a group. The idea of representing collections of things is familiar enough with regards to perception. The roof and sides of the house are perceptually grouped together as belonging to the house, and as such they are set off from the birds in the sky, even though we may perceive the birds immediately after (or at the same time as)

¹²³ *Kant and the Mind*, p. 33.

¹²⁴ *Ibid.*

the roof. Brook says that although Kant does discuss perceptual synthesis, A110 introduces another and more important type of synthesis. In addition to synthesizing representations of individual objects, various representations of individual objects can themselves be synthesized into a higher order representation, which is termed a “global object.” Brook claims that a contemporary analogue from cognitive psychology is “chunking.”¹²⁵ Take, for example, the representation of a room.¹²⁶ Various objects are situated therein: table, desk, lamp, TV, couch. Brook’s claim is that the capacity to represent the larger room depends upon synthesis. The global representation of the room consists of its individual components as synthesized into a single, higher order object of representation, which enables one to cognize all of the representations together. Brook claims that the “one experience” introduced at A110 should be interpreted as the representation of a global object. Thus, on his view, the objective validity of the categories is required for the capacity to represent global objects.

I believe that his reading is a misinterpretation. According to Brook, the one experience is a current global object to which certain representations are cognized as belonging. He argues that at any given time there is one largest act of representing that one can be aware of, and this largest act of representing is one’s current global

¹²⁵ Ibid. p. 34. Chunking is a certain type of memory phenomenon. For example, we are good at remembering numbers in groups, or chunks, of 3 or 4. This is why we are fairly good at remembering 7 or 10 digit phone numbers in groups of 3 or 4 numerals. Furthermore, when representations get chunked in this way, the recollection of one may serve to call up all the others along with it.

¹²⁶ Brook gives the following initial example: “(1) I am puzzled by your comments. (2) I love my wife. (3) I am enjoying the music I hear outside. (4) I believe our agreement was to meet at 6:00. (5) Yesterday I thought I understood Kant’s notion of the object. (6) I wish the world was a fairer place” (Ibid., p. 31). Global objects, then, do not necessarily involve spatial/temporal contiguity, as in my room example. They also don’t necessarily have to do with objects of outer sense; they can incorporate representational contents of various types, such as enjoyments and wishes. But all global objects share the same feature: they are finite collections of objects represented as a group, whatever that collection may consist of.

representation.¹²⁷ It would seem, then, that the largest act of representing would be cognition of the world-totality, but this is not what he is talking about. Global objects can be various, and they are simply any largest collection of representations that one is currently entertaining, e.g., the objects comprising a room or a football stadium. But the A110 paragraph does not refer to a variety of possible global objects; there simply is no plurality here, only one experience within which *all possible* appearances are represented. Such appearances are said to belong to the one experience *just as* there is only one space and time within which “all relation of being and not being occur.” So I ask, how can the global representation of a room or football stadium be “just as” an all-embracing space and time? Brook’s global objects, therefore, are not the one experience referenced at A110, but instead are localized representations situated within the one, universal experience: when representing a room I represent it not as exhausting or encompassing all reality, but as itself embedded within a larger world.¹²⁸ The purpose of A110 is to introduce a representational capacity that was overlooked in the objectivity passage: perceptual episodes are not atomistic but represented as occurring in the context of a single, unified spatio-temporal world.

But if my reading is correct, and the one experience refers to the world, then why does Kant use the word “experience” rather than “world”? This can be easily cleared up by recalling his transcendental idealism according to which the world exists only in possible *experience*. On the commonsense or everyday conception, the world is simply

¹²⁷ He says: “At any one time, there will be one largest act of representing of which we can be aware by doing it. That is one’s current global representation. One can be aware of more than one act of representing by doing it. However, to become aware of any one of them is for it to join with all the other representations of which one is similarly aware in one’s current global representation.” He then cites Wittgenstein for clarification: “to use a phrase of Wittgenstein’s, it has no neighbor ...” (Ibid., p. 83).

¹²⁸ The same criticism applies to Brook’s initial example: (1) I am puzzled by your comments, (2) I love my wife, (3) I am enjoying the music I hear outside, etc. We recognize that these experiences do not exhaust reality but are part of a broader context of possible perceptions, feelings, and responses that we could have.

the sum total of all things. But for Kant the problem with this conception is that it is based on the transcendental realism that he opposes. Transcendental realism is the seemingly obvious view that space and time, and the entities that exist within them, do not depend upon the subject of experience but enjoy an intrinsic reality. We then think of surveying the whole extent of what lies in objective space and time, the complete inventory of which is the world. But Kant cautions that this is an inadequate conception:

If, accordingly, I represent all together all existing objects of sense in all time and all spaces, I do not posit them as being there in space and time prior to experience, but rather this representation is nothing other than the thought of a possible experience in its absolute completeness. In it alone are those objects (which are nothing but mere representations) given (A495-496/B523-524).

According to transcendental realism, objects are conceived as having an existence that does not in any manner depend upon possible experience and therefore are “set” in space and time prior to (or without reference to) experience. Of course we can encounter such objects, but their reality depends not in the least upon the possibility of being experienced. In contradistinction, Kant’s transcendental idealism asserts that spatio-temporal objects exist only within or in reference to possible experience. Transcendental idealism conceives of experience as a relational affair involving a possible transaction between subject and object. Objects, on this view, have no reality apart from the possibility of entering into experiential transactions with subjects. Setting aside the complexities of transcendental idealism and the questions that it inevitably raises, the main point for present purposes is simply to provide an explanation of Kant’s use of the word “experience.” He refers to one experience because the world is conceived as a sum of possible experiences.

1.2 Unity of Experience

A claim that anyone must grant when interpreting Kant is that the categories serve to unify experience. But of course the issue is how this should be understood. I believe that A110 identifies a unity of experience that is truly global in scope: it encompasses not merely a given perception or current global object, but the full spatio-temporal world. At times Kant helpfully speaks of the unity of nature. Toward the end of the Deduction, at A126-127, he describes the understanding as the legislator of the laws grounding the formal unity of nature, and in the *Prolegomena* he defines nature *materialiter* (i.e., the objects governed by the categories) as the “whole object of all possible experience.”¹²⁹ Furthermore, in the Analogies, he refers to the “unity of the world-whole, in which all appearances have to be connected” (A218/B265 footnote), and he attributes this unity to the categories of substance, cause, and community. On my reading, the “one experience, in which all perceptions are represented as in thoroughgoing and lawlike connection” is therefore the unity of the world. So interpreted, I can make good sense of why Kant says that it is “just as” the entire spatio-temporal framework. Both Kitcher and Brook’s readings are at fault for lacking broad enough scope and for presupposing what is to be explained: perceptions and global objects are themselves but part of the one experience.

Having established the global scope of the unity of experience, I now wish to explore two related questions: how is the unity of the world represented, and how do we represent current perceptions as embedded within it? My answer, in short, is that both are accomplished by means of our capacity to represent any possible spatio-temporal appearance. I will both explain and support this assertion by analyzing relevant passages in the Postulates of Empirical Thought and Antinomies of Pure Reason.

¹²⁹ *Prolegomena to Any Future Metaphysics*, pp. 44-45.

The passages I take are concerned with representing unperceived appearances. Kant's topic in these texts is not how perceptions of objects can be synthesized out of more elementary components, but how objects that lie outside current perceptual experience can be represented. Let me begin with the Postulates. This section presents the deduction of the categories of modality, i.e., possibility, actuality, and necessity. In the context of discussing actuality, Kant acknowledges the fairly obvious point that it encompasses more than just the objects of immediate, current perception:

The postulate for cognizing the actuality of things requires perception, thus sensation of which one is conscious – not immediate perception of the object itself the existence of which is to be cognized, but still its connection with some actual perception in accordance with the analogies of experience, which exhibit all real connection in an experience in general (A225/B272).

The passage asserts that we are capable of cognizing the reality of objects that lie outside immediate perception, so long as by means of the analogies we can think of a way of connecting or unifying the unperceived object with a current perception or sensation. The example offered is that of an all pervasive magnetic matter (A226/B273). Kant says that in cognizing such matter, we begin with the immediate perception of the attraction of iron filings, and by means of concepts such as cause, we can think of a series of perceptions (encountered, say, in the course of an experiment) that would eventually terminate in the perception of a magnetic matter pervading all bodies, even though it is unperceived. In his words: “with the guidance of the analogies we can get from our actual perceptions to the thing in the series of possible perceptions” (A225-226/B273). It is important to recognize that Kant is not asserting the existence of a universal magnetic matter, but rather is defining what it means to cognize the magnetic matter as actual. Whether it is actual concerns the epistemological issue of whether there is in fact a chain of

perceptions terminating in its immediate perception. Kant's point is semantic: *to represent* magnetic matter as actual is to think that there is such a sequence of possible experiences, and whether the thought is true or false will be determined by the evidence of experience. He concludes his discussion with this last point by mentioning the further aim of "discovering" or "researching" the existence of things (A226/B274).

Although the Postulates do not speak of a unity of the world, they do call attention to the idea that the categories, and specifically the analogies, are involved in representation of what is not immediately perceived. However, Section 6 of the Antinomies does explicitly reference the unity of the entire spatio-temporal world. Regarding the representation of appearances in remote space, Kant says:

That there could be inhabitants of the moon, even though no human being has ever perceived them, must of course be admitted; but this means only that in the possible progress of experience we could encounter them; for everything is actual that stands in one context with a perception in accordance with the laws of the empirical progression. Thus they are real when they stand in an empirical connection with my real consciousness, although they are not therefore real in themselves, i.e., outside this progress of experience (A493/B521).

And regarding the past:

so that all those events which have elapsed from an inconceivable past time prior to my own existence signify nothing but the possibility of prolonging the chain of experience, starting with the present perception, upward to the conditions that determine it in time (A495/B523).

The main point in both passages is the same as in the Postulates. The inhabitants on the moon (which could be perceived at some future time) and the immense periods of past time (which can no longer be perceived) are not objects of immediate perception.

However Kant says that they can be cognized with the aid of the "laws of empirical advance," or the analogies, by means of thinking a series of possible perceptions,

beginning from some present perception, that would eventually terminate in their immediate perception. So, for example, to call the inhabitants on the moon real is to say that there is a possible series of perceptions that, if followed through, would result in perceiving them. The past, of course, is different since it can no longer be immediately perceived, but nonetheless we can think of present perceptions as conditioned by, or arising from, a series of past events.¹³⁰ The first example should make it obvious that Kant is not saying that there are actual inhabitants on the moon, but only that if we cognize them as actual we do so in the manner explained. The point therefore is semantic, not epistemological, since it concerns what is involved in representing unperceived appearances.

But my semantic reading is open to an objection. One could argue that even if these passages are not epistemological, they nonetheless are not semantic, since instead they are ontological. Now, I concede that in these passages from the Postulates and Antinomies Kant seeks to define what it means for an object to be actual or real,¹³¹ and all the commentators of which I am aware read them in this way. My response is simply that Kant's discussion is both ontological and semantic. We should recall his Copernican revolution according to which questions in ontology are addressed by investigating conditions of cognition. Since on the theoretical plane the only reality that is of concern is *cognizable* reality, Kant first analyzes the requirements for cognition before providing an ontological definition of the real. In consequence, the real turns out to be whatever it is

¹³⁰ My concern is only to establish the premise of the Deduction and not to develop Kant's complete theory of cognition. In the next chapter, I will have much more to say about the representation of remote appearances in space and time.

¹³¹ The German adjective is *wirklich*. The Cambridge edition translates the term as "actual," and Norman Kemp Smith translates it as "real." I take there to be no significant difference between the translations, and I will use "real" and "actual" interchangeably. My choice of one or the other is based solely on stylistic reasons.

that satisfies our cognitive requirements. According to the two-faculty theory, cognition depends upon the cooperation of the understanding and sensibility. This, however, does not imply that the only objects cognizable are those currently given in experience (or sensibly present), for the Postulates and Antinomies plainly correct this potential misinterpretation. As he says in the Postulates, the cognition of actual things requires “not immediate perception of the object itself the existence of which is to be cognized” (A225/B272). Rather, the key cognitive restriction is that actual objects must be *encounterable* in the course of experience. So he continues: “but still [cognition of an actual, yet unperceived, object requires] its connection with some actual perception in accordance with the analogies of experience, which exhibit all real connection in an experience in general” (A225/B272). Thus, Kant provides a criterion for representation of actual objects not currently perceived: they are thought of as encounterable in the course of unfolding experience.¹³² This semantic criterion implies the ontological result that the real is whatever it is that is sensibly encounterable. But the further question of whether the object of a particular representation exists (e.g., the inhabitants on the moon) is an epistemological issue settled by empirical investigation or, as Kant says, research.

I now want to use this analysis to answer the question of how we can represent the unity of the world and embed our perceptions therein. The topic of the Postulates and

¹³² One should distinguish the representation of an entity as *possible* from the representation of an entity as *actual* (or real). In his discussion of the category of possibility, Kant says that the former only requires that the concept of the object be consistent. The latter, however, requires the additional thought that there is a chain of experience that would terminate in the object’s perception. For example, to represent moon inhabitants as possible entities is only to recognize that there is no inconsistency in the concept of moon inhabitants. But to represent them as actual requires, in addition, as part of the content of the representation, the thought that there is a sequence of experiences by which we would eventually encounter them. Furthermore, one should distinguish between representing an entity as possible and representing it as *possibly real*. The latter involves the thought that there *could be* a progress of experience terminating in the perception of the entity. In this case, one refrains from asserting that there is such a progress. I stress again that these are semantic points, for it remains to be seen whether any particular thought is true - whether, that is, the thought pans out in experience.

Antinomies is not restricted to perceptual phenomena, but concerns representation of any possible spatio-temporal appearance. Kant asks: how is it possible to represent the past, the future, and remote space?¹³³ He is interested in explaining how we can form a system of representations capable of intending the full range of appearances in space and time. His basic answer is that cognition of unperceived objects requires representation of a possible sequence of experiences connecting one's current perceptual states to the remote object. This representation takes the form of a procedure¹³⁴ for either advancing to the spatially distant object or for being up from a past state of the world.¹³⁵ Chapter 5 will develop this analysis in more detail, and for present purposes I only point out that the content of the representation is a procedure for connecting present experience with possible experience (of some remote object). I claim that it is by representing ways of connecting experiences that we are capable of representing the unity of the world. For example, I can think of a procedure by which I begin from my present experiences in Champaign, and after advancing to perceptions of the Nishitama district of Tokyo, I travel beyond the district to the Museum of Arts in Seoul. The representational connections are virtually endless. Similarly, this point applies to the past. I can think of my current experiences in Champaign, which inevitably proceed to future ones, as arising from a time-series beginning with my childhood experiences in my hometown. Or perhaps more interestingly, I can think of traveling to Tokyo, such that upon arrival I

¹³³ Although Kant doesn't explicitly mention the future, his points can be easily extended to it.

¹³⁴ I use the term "procedure" in a perfectly general sense. It designates any manner in which we may place ourselves in the vicinity of an object. This could involve walking, turning one's head, using a vehicle, or any number of other possibilities. In this case of the past, the term designates our ability to trace a series of events from the past up to the present. In the Antinomies Kant refers to "the course of the world, a regressive series of possible perceptions (whether under the guidance of history or in the footsteps of causes and effects" (A495/B523). In Chapter 5, I will argue that procedures take the form of rules for spatio-temporal positioning.

¹³⁵ Another way to put this result is that the cognition of remote spatio-temporal appearances is in the form of representations of possible experiential routes.

have experiences that are made possible only because of the past history of the region leading to the present reality of the city. In this case, I represent myself as coming in upon another on-going time-series. Again, the variety of ways in which past states can be represented as conditioning present ones is innumerable.

At this point, we have an answer to both questions. The unity of the spatio-temporal world is represented by means of a repertoire of procedures for either advancing to, or being up from, any possible appearance. Accordingly, current perceptions are represented as *belonging to the on-going world* because they are embedded within procedures for either advancing to, or being up from, other appearances. The procedure links current perceptions with possible perceptions, and therefore simultaneously enables one to represent remote reality while embedding proximal reality within it. For example, my representation of the Nishitama district in Tokyo is the thought of a possible procedure (or experiential route) by which I can advance to that distinct from my current perceptions, and thus my current perceptions are represented as belonging to a larger world that they fail to exhaust. In sum, the world, on Kant's view, just is the interconnectedness of possible experiences, and we represent the world-unity by representing possible ways of linking our experiences with each other.¹³⁶ One way to put this point is that the procedures by which any possible appearance can be represented are at the same time the procedures by which we represent the unity of the world.

¹³⁶ It is worth noting that the ability to formulate a repertoire of procedures for representing any possible appearance does not depend upon technological capabilities and limitations, since Kant is only interested in the phenomenon of representation. Even if a distant corner of the universe lies outside the reach of any technological device, including the most advanced space telescopes, we can still think of a possible procedure by which to be brought into its perceptual vicinity. Our cognitive capacity covers the full reach of space and time, even if our technological capacity does not.

1.3 The Premise of the Deduction

Due to the tendency to overlook that the Postulates and Antinomies contribute to Kant's semantics of global representation, commentators fail to incorporate these discussions into their understanding of the character of the "one experience" grounded by the categories. Typically the passages are seen as just analyses of the ontological issue of what counts as real. The passages are consequently separated from the Deduction and placed in a different context. But I hope that my discussions have revealed the faults with this move. At A110 Kant identifies a new cognitive capacity not discussed in his theory of perception: the capacity to represent the unity of the world and to embed perceptions therein. This capacity is reiterated at the end of the Deduction where Kant says that the categories ground the unity of nature (A125-127) and in the Analogies where he describes the unity of nature as the "world-whole, in which all appearances are to be connected" (A218n/B265n). I have argued that certain passages in the Postulates and Antinomies directly address what is involved in representing the world-whole, and therefore provide a fuller explication of the cognitive capacity that the objective validity of the categories ground. My key premise is that the ability to represent and embed perceptions within the unity of the world *just is* the capacity to represent any possible appearance. This in turn involves the formulation of a system of procedures for connecting present experiences with possible ones. From this, I can conclude that the cognitive capacity that the categories make possible is the ability to represent any possible appearance.

At this point, the premise of the deduction has been identified. When commentators speak of the "premise" they are referring to the basic representational capacity that the

categories are claimed to ground. I have identified this capacity as the ability to represent any possible appearance, and I have distinguished my reading from interpretations that appeal to perceptual synthesis (Kitcher, for example) or global objects (Brook).

Accordingly, I formulate the general argument for deducing the categories as follows:

1. If the objective validity of the categories makes cognition possible, then the categories must apply to any object that can be cognized by us.
2. Cognition is the capacity for global representation.
3. Global representation is the capacity to represent “one experience, in which all perceptions are represented as in thoroughgoing and law-like connection.”
4. The capacity to represent “one experience, in which all perceptions are represented as in thoroughgoing and law-like connection” is the capacity to represent any possible spatio-temporal appearance.
5. Therefore, if the objective validity of the categories grounds the capacity to represent any possible spatio-temporal appearance, then they must apply to any possible spatio-temporal appearance that can be represented.

This formulation fits the Chapter 1 outline of the organization of the Deduction. Premise 1 states Kant’s principle for deducing a category, and this principle is presented in the introductory text at A92-93. Premises 2-4 constitute the analysis of cognition that I claimed was necessary for understanding what the categories ground. The conclusion, then, simply applies this analysis to the principle of the deduction. I note that, due to its conditional formulation, the conclusion does not prove the objective validity of any particular category. Only in the Analogies of Experience does Kant aim to establish the antecedent of premise 1, thereby allowing him to prove that particular categories must be exemplified in experience.

But there does seem to be something odd about my reconstruction of the argument. Premises 2-4 are Kant’s analysis of cognition, which I claimed in Chapter 2 to be part of

the Deduction, and yet in working it out I mostly appealed to external texts. The reason is because A110-114 is only preparatory, and the analysis of cognition found in the Deduction isn't presented until A115-130. As it turns out, this section makes for very difficult reading. Since I don't want to rely on controversial text requiring extended analysis, I have used the Postulates and Antinomies to motivate my interpretation of the premise of the deduction. In Chapters 6 and 7, I will take up A115-130 and provide the complete analysis.

Nonetheless some evidence for the global representation interpretation here presented can be found in A110-114. After introducing the "one experience," Kant then formulates the principle of the deduction in the following way: "Now I assert that the categories that have just been adduced are nothing other than the conditions of thinking in a possible experience, just as space and time contain the conditions of the intuition for the very same thing" (A111). It is important to recognize the difference between claiming that the categories are conditions of thought in a *possible* experience and that they are conditions of thought in an *actual* (or presently given) experience. Data-sensualism, and in general theories of perception, are based on the latter formulation, where the categories are applied to given sense-data in the synthesis of perceptual objects. Brook in essence just extends this approach by claiming that presently represented objects can be further synthesized into higher order global objects. But here we see Kant formulate the deduction in a different fashion. By claiming that the categories are conditions for thinking *a possible experience*, he is arguing that they enable cognition of possible experiences (such as the possible inhabitants on the moon or the immense periods of the

past) not presently given in intuition.¹³⁷ Thus, here Kant at least hints at an analysis of the one experience that appeals to the ability to represent any possible appearance.

Second, at A111, he says that “the possibility, indeed the necessity, of these categories rests on the relation in which our entire sensibility, and with it all possible appearances, stand to original apperception.” I will have more to say about this sentence in 3.2. For present purposes, I only indicate that his reference to ‘all possible appearances standing in relation to apperception’ strongly suggests that our capacity for thought (apperception) can intend the full reach of spatio-temporal objects, including those of the past and remote space. It is with respect to this capacity that the categories are deemed “necessary.”

2 Rejecting Empirical Concepts

The purpose of the fourth and final preparatory discussion is to provide the additional elements needed for the official deduction of the categories. So far I have argued that A110 introduces the capacity for global representation, understood as the ability to represent any possible appearance. But the section also introduces another, related element. As developed in the last chapter, the first three preparatory sections (A98-110) present a theory of cognition that is based on the application of empirical concepts to perceptual episodes. Kant however advances, or rather alters, the argument of the Deduction in the fourth section by rejecting the sufficiency of empirical concepts to

¹³⁷ Melnick makes this point in Part III, Chapter 1, Section 2 of *Space, Time and Thought in Kant*. In this book, he argues that the text of the *Critique* contains three distinct views on cognition laid over one another, namely, an early, a middle, and a late stage. He argues that A110-114 belongs to the middle stage, and that Kant first introduces global cognition at this stage. He says of A111 that “Kant says the categories are ‘the conditions of thought in a possible experience.’ This means that they are conditions for thinking beyond actual experience” (*Space, Time, and Thought in Kant*, p. 239).

ground cognition. With the rejection of empirical concepts, the solution is naturally found by appeal to *a priori* ones, and for the first time the categories are mentioned. The two elements of A110-114 can be thus brought together: the capacity to represent any possible spatio-temporal appearance is grounded upon *a priori* concepts. Kant says at A110: “The thoroughgoing and synthetic unity of perceptions is precisely what constitutes the form of experience, and it is nothing other than the synthetic unity of the appearances in accordance with concepts.” The required concepts are the categories.

2.1 Second Paragraph

In the second and fifth paragraphs of A110-114 Kant presents a problem with his previous account of empirical concepts. This problem is also mentioned in other places, in particular, at A100-101 and A121-122. To quote the second paragraph in full:

Unity of synthesis in accordance with empirical concepts would be entirely contingent, and, were it not grounded on a transcendental ground of unity, it would be possible for a swarm of appearances to fill up our soul without experience even being able to arise from it. But in that case all relation of cognition to objects would also disappear, since the appearances would lack connection in accordance with universal and necessary laws, and would thus be intuition without thought, but never cognition, and would therefore be as good as nothing for us (A111).

The relation of cognition to objects depends upon “connection in accordance with universal and necessary laws.” Kant now asserts that empirical concepts fail to supply this. They in turn must be based on a “transcendental ground of unity.” The next three paragraphs of the text identify this transcendental ground as the categories of the understanding.

But naturally the question is, why don’t empirical concepts provide the needed unity? In answering this I think it is best to discuss Kant’s well-known cinnabar example (A100-

101). Suppose that temporally extended experience contains no real unity, involving just a chaotic sequence of events in which no regularity can be detected. Suppose, as Kant hypothesizes, that cinnabar were sometimes red, sometimes black, sometimes light, and sometimes heavy. The problem is not so much that in this scenario we would be incapable of forming the empirical concept of cinnabar. We could form the concept by simply stipulating what representations are properly connected in it. The problem, rather, is that we would never be able to recognize our modes of connection as anything other than arbitrary stipulations, in which case we would never have reason to suppose that our empirical concepts are *objectively valid*. To recall, objective validity is the notion that objects of experience actually fall under or satisfy our concepts. But if cinnabar were sometimes red and sometimes black, then we would lose any basis for thinking that a concept connecting cinnabar with red rather than black were to apply to experience. Although we would have the concept, “cinnabar objects” would fail to fall under it. Of course given such observations we could alter the concept so that the rule connects cinnabar with red and black. However, by hypothesis, cinnabar would also sometimes show up as brown, green, etc., and so any reformulated concept would likewise lack objective validity.

The cinnabar example helps to explain what is asserted at A111: the objective validity of empirical concepts rests upon a unity of experience that empirical concepts do not provide but presuppose. When Kant says that “unity of synthesis in accordance with empirical concepts would be entirely contingent,” he is not denying that empirical concepts provide a non-arbitrary or rule-governed unity. What he is saying, as indicated in the rest of the sentence, is that their rule-governed unity depends upon a more

fundamental connection supplied by the categories. He continues: it “*would* be entirely contingent ... were it not grounded on a transcendental ground of unity” (my emphasis). Kant does not retract his view that, for example, the concept of body contains the rule that impenetrability and extension ought to belong to bodies.¹³⁸

We can now understand why in the rest of the Deduction the transcendental object completely drops out of the picture. In the objectivity passage, it is supposed to account for the objective validity of empirical concepts. But in respect to the problem Kant poses at A111, it is useless. In the last chapter, I argued that the transcendental object has no epistemological function since it has no content that can be used to determine what connections are proper; its legitimate function is merely to define what it means for representations to pertain to external objects. Kant’s position is that rule-governed unity is the criterion for relation to an object. The problem is that the transcendental object fails to supply this unity. To define relation to an object in terms of rule-governed unity is not to identify the *source* of that unity. Kant expresses in numerous places that the transcendental object cannot be intuited and therefore is as good as nothing to our cognition (A105). If Kant were to address the problem at A111 by appeal to something uncognizable, then he would be saying something to the effect that, “empirical concepts

¹³⁸ On this point, I disagree with Melnick’s reading of Kant’s critique of his previous views on empirical concepts. Melnick claims that at A110-114 Kant drops his view that empirical concepts involve necessary unity, i.e., the unity of a rule. He argues that Kant reduces empirical concepts to associative reactions: “Thus the empirical concept of ‘house’ is nothing more than a sum of reactions according to associative tendencies (rather than according to legitimacy) and so can be contrasted with necessary unity” (*Space, Time and Thought in Kant*, p. 237). His argument is that at A110-114 Kant shifts the empirical concept of an object to the *a priori* concept of substance, and that this shift implies that there is nothing left to an empirical concept other than tendencies to associate. The reason I disagree is because, even if substances are now the *basis* for how we connect representations, that does not imply that empirical connections lack rules. It strikes me that it only implies that empirical rules require *a priori* concepts as their basis. Furthermore, on Melnick’s reading, Kant’s view on empirical concepts is no different from Hume’s. I have tried to provide textual evidence that this not so. In the next subsection, I will discuss the fifth paragraph. I believe that this paragraph further underscores that Kant’s view is not the same as Hume’s.

have objective validity in virtue of an unknowable something about which nothing at all can be said, but which nonetheless somehow insures the unity of experience requisite to empirical concept application.” This would be the height of philosophical cheating, a sort of *Deus ex machina* appeal.

But there is a second, related reason for why the transcendental object is inadequate to address the problem. Since nothing can be known about it, then there is no reason to suppose that it would establish unity in experience. Whether what lies outside all experience is unified or not has nothing to do with the cognizing subject – as we might say, “that’s just the way it is.” But in the event that the source of experience turns out to manifest irregularity, the unity of apperception would fail to be operative. Recall that the unity of apperception is achieved by subjecting appearances to a rule. The problem is that on the condition of widespread disunity, no rule would be successfully applicable to experience, and consequently apperception would never obtain. In consequence, the possibility of cognition would depend on the sheer *luck* that the source of experience happens to display enough of the requisite unity. And Kant is quite adamant that cognition does not depend upon luck.

A central feature of his theory of representation – one that all commentators acknowledge – is that we, at some level, actually impose rules upon experience. He says: “Thus we ourselves bring into the appearances that order and regularity in them that we call nature, and moreover we would not be able to find it there if we, or the nature of the mind, had not originally put it there” (A125). And in the next sentence he supplies the reason: “For this unity of nature should be a necessary, i.e., *a priori* certain unity of the connection of appearances” (A125). What is asserted is that the unity of apperception is

not dependent upon luck, but rather is something that can be known to obtain *a priori*. This means that in any manifold of experience, we can be certain that it (the manifold) will exhibit the unity required for apperception or rule-application to obtain. However, the only way in which this is possible is if *we* introduce the unity to the manifold. This point is made at A113 as well: “But from this [i.e., apperception] as a transcendental representation, numerical identity is inseparable, and certain *a priori* ...” If the unity of apperception had to wait upon a unity supplied by the source of experience, then we would not be *a priori* certain of its presence (or identity) in any manifold of representations. Therefore, the transcendental object cannot be the source of unity in experience, but rather it must come from the nature of the mind itself. Given this point Kant finally introduces the categories at A111 as the *a priori* unity upon which empirical concept employment rests.

2.2 Fifth Paragraph

The fifth paragraph at A112-113 presents more or less the same problem, except that here Kant develops it not in reference to empirical concepts but Hume’s account of association. To quote it in full:

All attempts to derive these pure concepts of understanding from experience and to ascribe to them a merely empirical origin are therefore entirely vain and futile. I will not mention that, e.g., the concept of a cause brings the trait of necessity with it, which no experience at all can yield, for experience teaches us that one appearance customarily follows another, but not that it must necessarily follow that, nor that an inference from a condition to its consequence can be made *a priori* and entirely universally. But that empirical rule of association, which one must assume throughout of one says that everything in the series of occurrences stands under rules according to which nothing happens that is not preceded by something upon which it always follows – on what, I ask, does this, as a law of nature, rest, and how is this association even possible? The ground of the possibility of the association of the manifold, insofar as it lies in the object, is called the affinity of the manifold. I ask, therefore, how do you make the thoroughgoing

affinity of the appearances (by means of which they stand under constant laws and must belong to them) comprehensible to yourselves? (A112-113).

The paragraph begins with the simple enough point that the categories, as *a priori*, cannot be derived from experience. But more significantly this point is used to motivate a criticism of the attempt to ground the unity of experience on association. In Section IV of Book I of the *Treatise*, Hume identifies the three types of natural relations as resemblance, contiguity, and causality. All three involve the habitual or customary association of one idea with another (“a gentle force which commonly prevails”). The distinctive feature of Hume’s view is that associative connections are descriptive in character, not normative. For example, he claims that the mind automatically connects in the relation of cause and effect any two ideas experienced as constantly conjoined. What is provided is a principle for how we *do* in fact associate ideas under certain conditions. Kant, however, modifies this view by attributing a normative dimension to associative connections, and accordingly he speaks of empirical *rules* of association. With this alteration, the application of the empirical rule of causality contains the judgment that certain representations *ought* to be connected in the relation of cause and effect when their conjunction has been repeatedly experienced. But Kant then queries, “on what, I ask, does this, as a law of nature, rest, and how is this association even possible?” It is important to recognize that this question is *not* addressed to the *a priori* category of causality, but rather to causality understood as an empirical rule of association. Kant’s use of the indexical “this” refers back to the empirical rule of association mentioned at the beginning of the sentence. The answer is that all associative unity must be grounded on the *a priori* unity supplied by the categories.

It is relatively clear why the descriptive principle of association is not sufficient for grounding the unity of experience. The passage at A112-113 raises the problem of the objective validity of the concept of causality, a problem that Hume never considered. Kant wants to inquire into the “ground of the possibility of the association of the manifold, insofar as it lies in the *object*” (my emphasis). Since Humean associations are products of subjective habits or customs, there is no guarantee that objects of experience satisfy or fall under them. Although we do make causal connections based on constant conjunctions, it is a further question as to whether the objects themselves are causally related. Kant here reserves a special locution for connection in the object: he calls it the “affinity of the manifold” as opposed to its mere association. Humean associative principles are inadequate for grounding the type of unity called affinity.

But I mentioned that Kant’s account of association is different from Hume’s because he treats it as normative in character. Why, then, is association not sufficient even on this account? Let me answer. I claimed that the second paragraph at A111 does not alter Kant’s view that empirical concepts express rule-governed connections, and I believe that the fifth paragraph at A112-113 reinforces this reading. That is, just as empirical concepts are normative, so too are associative rules. Yet for this reason, the latter are subject to the same problem as the former. In both paragraphs, Kant distinguishes empirical rules from *a priori* ones, and he argues that the *a priori* certainty of apperception requires that the former be based on the latter. Presume that the unity of apperception is the unity of consciousness achieved by associating representations. In this case, whether associations can be made (i.e., whether the unity of apperception obtains) depends upon whether there is enough regularity in experience. To use Kant’s example, if cinnabar were sometimes

red but yet sometimes black, then we would have no grounds for claiming that cinnabar ought to be associated with red rather than black. That is, we would not be able to bring the manifold under a rule of association. Therefore, the *a priori* certainty of the unity of apperception would be lost, and the capacity for cognition would depend upon the luck.

3 Two-Faculty Theory of Cognition

The fourth preparatory section has two purposes. First, it redefines cognition as the capacity for global representation, which I have interpreted as the ability to represent any possible spatio-temporal appearance. Second, it corrects Kant's previous analysis of empirical concepts in order to explain why cognition requires *a priori* ones. These two points can be brought together: the ability to represent any possible spatio-temporal appearance requires the application of *a priori* concepts to experience.

From the standpoint of Kant's text, the next step would be to discuss the official deduction at A115-130. But for the moment I will hold off on this. Before returning to the text of the deduction in Chapters 6 and 7, I want to explore some philosophical issues regarding the phenomenon of global representation. In the next subsection, I address the question of why Kant would even need to deal with the issue of representing globally. That is, why can't his analysis of perceptual intentionality simply be extended to global cognition? My discussions have treated both forms of representation as different in kind and as requiring independent analyses. Moreover, I have read this difference into the structure of the Deduction itself by claiming that whereas A98-110 presents a theory of perception, A115-130 presents a theory of global cognition. For the sake of defending this reading further, I want to establish the philosophical point that Kant's two-faculty

theory of cognition prevents his account of perceptual intentionality from being unproblematically extended to global cognition. I argue that since the two-faculty theory seems to render global cognition impossible, Kant is left with the task of rescuing its possibility, at least if he is to avoid the threat of a *reductio*. After doing so, I will then proceed to develop the theory itself in Chapter 5.

3.1 Kant's Critical Turn

So the question is, why is there any special problem involved in representing the past or remote space that is not already answered by his theory of perception? The difficulty with global representation, or what can helpfully be described as representation of objects *in absentia*, is rooted in Kant's rejection of his own views presented in the Inaugural Dissertation (1770). I discussed these views in 2.1 of Chapter 2. Let me begin by reviewing the basics.

The second section of the dissertation is entitled "On the distinction between sensible things and intelligible things in general." Its purpose is to present the difference between the faculties of sensibility and understanding (or the intellect). The former is defined as the capacity to be affected by the presence of an object, enabling representation of things as they appear, i.e., phenomena. The latter is defined negatively as the capacity to represent objects independently of the sensibility, enabling representation of things as they are, i.e., noumena.¹³⁹ The objects of sensible cognition belong to the sensible world, and the objects of intellectual cognition belong to the intelligible world.

Since the plurality of objects that constitute the intelligible world cannot be represented sensibly (as objects of perception), the only way they can be represented is

¹³⁹ This distinction is stated in §3 and §4 of the dissertation.

conceptually (as objects of conceptual thought). §10 aims to clarify what is meant by conceptual cognition of things as they are in themselves:

There is (for man) no *intuition* of what belongs to the understanding, but only a *symbolic cognition*; and thinking is only possible for us by means of universal concepts in the abstract, not by means of a singular concept in the concrete. For all our intuition is bound to a certain principle of form, and it is only under this form that anything can be *apprehended* by the mind as immediate or as *singular*, and not merely conceived discursively by means of general concepts. But this formal principle of our intuition (space and time) is the condition under which something can be the objects of our senses. Accordingly, this formal principle, as the condition of sensitive cognition, is not a means to intellectual intuition ...¹⁴⁰

This paragraph distinguishes intuitive/sensitive representation from conceptual/discursive representation. The former is an immediate, singular representation of an object, where “immediate” means that the object is given perceptually to the subject, and “singular” means that a particular or determinate object is given. But since the understanding cannot intuit or make objects immediately present,¹⁴¹ it can only think them via “universal concepts in the abstract” or “discursively by means of general concepts.” In Chapter 1, I discussed some of the issues involved in interpreting the nature of purely conceptual cognition. Kant’s basic position is that conceptual cognitions are descriptions that either match or fail to match their respective noumenal objects. The description is a list of the general concepts by which we represent the noumenal object (the entity that is A, B, C, etc.), and provided that the description is precise enough it will characterize just that noumenal object and no other. Thus, the relation of conceptual representation to noumenal object is explained by isomorphism: the representation pertains to whatever object satisfies the description.

¹⁴⁰ *Immanuel Kant: Theoretical Philosophy*, p. 389.

¹⁴¹ The capacity to make objects immediately present through the sheer power of thought alone is called “intellectual intuition,” and it is ascribed only to the divine intellect.

The main lesson is that the Inaugural Dissertation offers a depiction theory of representation. Depiction theories in general assert that the relation of representation to object is grounded in isomorphism, e.g., a street map of Tokyo pertains to the city because the relevant structures are isomorphic. What is crucial is that the grounding relation does *not* depend upon the *sensible presence* of the represented object. Whether two structures are isomorphic has nothing to do with their proximity to each other. As a result, it makes no difference whether or not the subject perceives the object of representation: the representation pertains to whatever entities share its structure. Depiction theories, so to speak, get global cognition “for free.”

But Kant rejected his depiction theory only two years later in his well-known letter to Marcus Herz (1772). This letter raises the semantic question of how representations can be related to their objects. He asks, “What is the ground of the relation of that in us which we call ‘representation’ to the object?”¹⁴² Kant provides a causal analysis according to which representations and objects stand in relations of cause and effect. He immediately recognizes that this generates a fatal problem with his previous view since purely conceptual representations are neither caused by nor the causes of their objects. But, interestingly, after recognizing the failure of the Inaugural Dissertation, he makes the brand new suggestion at the end of the letter that when the understanding and sensibility are brought together, so that pure concepts apply to phenomena rather than noumena, then “the principles that are derived from the nature of our soul have an understandable validity for all things insofar as those things are supposed to be objects of the senses.”¹⁴³ This is possibly Kant’s first statement of a two-faculty theory of cognition.

¹⁴² Kant: *Philosophical Correspondence, 1759-99*, p. 71.

¹⁴³ Ibid.

His proposed two-faculty theory is historically unique. The position of the dissertation is that the sensibility and understanding can function apart from each other. The hallmark of the two-faculty theory is the denial of this independence. In the first *Critique*, one finds his most famous statement:

Without sensibility no object would be given to us, and without understanding none would be thought. Thoughts without content are empty, intuitions without concepts are blind. It is thus just as necessary to make the mind's concepts sensible (i.e., to add an object to them in intuition) as it is to make its intuitions understandable (i.e., to bring them under concepts). Further, these two faculties or capacities cannot exchange their functions. The understanding is not capable of intuiting anything, and the senses are not capable of thinking anything. Only from their unification can cognition arise (A51/B75).

I claim that Kant's proposal yields a consequence not often recognized. Namely, he inherits a new problem in explaining how global cognition could even be possible. Intuition cannot take place unless the object is given in experience, and when Kant speaks of "adding the object in intuition," the suggestion is that concepts, if they are to have content, must be applied to actual intuitive episodes. But recall Kant's references to the immense periods of past time and the possible inhabitants on the moon. In both cases, no immediate perceptual experiences are available, and in the case of the distant past, no immediate experience of the purported object of representation could *ever* be made available. But concepts, in order to possess significance, must be applied to intuitions, for otherwise they are mere "thoughts without content." Since representations of the past and remote space can only be conceptual in character, one is left wondering how they are distinguishable from the intellectual representations of the Inaugural Dissertation that Kant had junked. The problem is that the intuitive content by which perceptions are intentionally related to the world is seemingly missing in global representation. Thus, the

problem of representing objects *in absentia* is rooted in, and generated by, one of the most distinctive doctrines of Kant's critical period, the two-faculty theory of cognition.

This problem can be further explained with reference to his theory of judgment. He claims that "the understanding can make no other use of these concepts than that of judging by means of them" (A68/B93), which means that concepts are applied to intuitions only in the context of judgments. The example offered is, "all bodies are divisible." The concept divisible is predicated of the concept "body," and the question is how the whole judgment can relate to the state of affairs purportedly represented by it. His answer is, "In every judgment there is a concept that holds of many, and that among this many also comprehends a given representation, which is then related immediately to the object" (A68/B93). A judgment's relation to the world, then, is anchored in the subject term's reference to intuition. On Kant's view, only intuitions are immediately related to objects, and thus concepts are either related to intuitions or to other concepts. But concepts, if they are to pertain to the world, cannot be indefinitely related to other concepts. When a physical body is perceived, the concept body acquires relation to physical bodies by means of being applied to an intuition that stands in immediate relation some physical body. (And it is in virtue of this relation that the concept divisible *qua* predicate mediately pertains to bodies.) One can plainly see in Kant's answer the rejection of a depiction account of representation based on the conceptual isomorphism of judgment and state of affairs. According to such a theory, relation to intuition is unnecessary, because intentionality is grounded on the mirroring of structural relations; it is the relation that the *concepts have to themselves* that determines the state of affairs to which the judgment pertains. Thus, on the two-faculty theory, global cognition would

seem to be impossible for the reason that the reference to intuition by which the concepts of a judgment or thought pertain to the world is apparently lacking.

Nonetheless, even if Kant's analysis of judgment highlights the problem, it also provides clues to a general solution. Given the requirements of a two-faculty theory, global cognition must in *someway* be related to intuition. This point is expressed nicely at the beginning of the Transcendental Aesthetic where he says that "all thought, whether straightaway (*directe*) or through a detour (*indirecte*), must ultimately be related to intuition, thus, in our case, to sensibility, since there is no other way in which objects can be given to us" (A19/B33). Here a distinction is drawn between two different modes of relatedness to intuition. On the one hand, perceptual experience has an immediate or direct relation to objects of cognition, since they are given in the perceptual act itself. On the other hand, global representation has a roundabout or indirect relation to objects of cognition, since in this case they are represented *in absentia*. In other words, the former is characterized by relatedness to *actual* intuition, whereas the latter is characterized by relatedness to *possible* intuition.¹⁴⁴ Since, therefore, perceptual and global cognition are related to objects in different ways, Kant's analysis of the former cannot simply be extended to the latter. Global cognition poses a special difficulty, and it is incumbent upon Kant to explain the manner of its roundabout or detoured relation to possible experience.

¹⁴⁴ I note that the purely conceptual representations of the Inaugural Dissertation were denied relatedness to possible intuition. For this reason, Kant eventually had to reject the possibility of a pre-critical, rationalist form of cognition.

3.2 The “Entire Sensibility”

Of course it is not enough merely to point out that a two-faculty theory presents *prima facie* difficulties for the possibility of representing objects *in absentia*. Even if there is some difficulty involved in representing the past or remote space, as might be deducible from Kant views, one could say that this only indicates a need to expand upon his position, rather than evidence that he was himself engaged in the project of grounding global cognition. Before leaving the fourth preparatory section, and in the interest of responding to this potential objection, I want to conclude by highlighting a passage at A111. So far I have defended the reading by using the Postulates and Antinomies to explain the meaning of Kant’s reference to the “one experience in which all perceptions are represented.” For this reason, it will be helpful to dwell for a moment on a passage internal to the Deduction that seems to provide further support for the view that the categories are part of theory of global cognition.

Kant says:

However, the possibility, indeed even the necessity of these categories rests on the relation that the entire sensibility, and with it also all possible appearances, have to the original apperception, in which everything is necessarily in agreement with the conditions of the thoroughgoing unity of self-consciousness, i.e., must stand under universal functions of synthesis, namely of the synthesis in accordance with concepts, as that in which alone apperception can demonstrate *a priori* its thoroughgoing and necessary identity. Thus the concept of a cause is nothing other than a synthesis (of that which follows in the temporal series with other appearances) in accordance with concepts ... (A111).

The passage ends with a characterization of the unity of self-consciousness or apperception. As usual, the characterization is hardly a paradigm of clarity, but we have covered the ground required for understanding it. Conscious activity is unified when it is guided by a rule. What Kant here calls “original apperception” is conscious activity when

it is guided by an *a priori* rule. These rules are the categories, and he gives the example of cause. The passage asserts that the entire sensibility, and therefore all possible appearances, stand in relation to original apperception. This means that all possible appearances are governed by the categories. What we need, then, is an account of the meaning of the claim that the categories govern all possible appearances.

In the article “Kant on Apperception and *A Priori* Synthesis,” Paul Guyer notes two different ways of interpreting this assertion.¹⁴⁵ The first interpretation states that for any representation, *if* it belongs to a unity of consciousness, then it must be synthesizable by the categories. The second states that any representation we could ever have will be synthesizable by the categories. The first reading leaves open the possibility that there may be representations that are not capable of being synthesized and thereby of belonging to apperception. Guyer says that one would have to wait upon experience to determine what representations *do* belong to apperception. The second reading denies this possibility and asserts that any representation we could have will be synthesizable by the categories. Guyer is correct in arguing that this is Kant’s actual view, since only in this way is the transcendental unity of apperception *a priori* certain (A113).

But the second reading leaves unsettled a rather important issue. Guyer never considers the scope of the representations necessarily subject to the categories. The reading, as it is stated, is fully consistent with a view according to which *any perception* we could have will be subject to categorial synthesis. In this case, Kant’s concern is restricted to the role that the categories play in grounding perceptual experience. But if my reading of A110-114 is correct, then the categories (even if they have a role in perception) more significantly ground the global unity of the world. In what follows, I

¹⁴⁵ Guyer identifies and distinguishes both readings in Section IV of the article.

will present a further argument for my reading based on an analysis of the A111 passage. Since Kant says that “all possible appearances” belong to original apperception, I will focus on what is meant by a possible appearance.

There is no difficulty in asserting that objects occupying remote spatial regions are possible appearances. For instance, Kant identifies the inhabitants on the moon as possible perceptions because “in the possible advance of experience we may encounter them” (A493/B521). However, it does seem odd to describe past states of the world as possible appearances, for they are precisely what cannot be intuited anymore. How could Julius Caesar be a possible appearance, especially on the presumption that any detectible physical remnant of him has been destroyed? Kant’s inclusion of the immense periods of the past in his discussion of the reality of spatio-temporal objects is likely sufficient evidence that, even so, he treats past states as possible appearances. Nonetheless, it will be helpful to give additional arguments.

My first argument is a textual appeal. In “Kant’s Sensationism,” Rolf George cites the logic lectures as evidence that by ‘intuition’ Kant does not mean to indicate perceptual situations exclusively. Rather, George says that it means the same thing as singular term.¹⁴⁶ As evidence, he cites various texts where Kant identifies Caesar, Socrates, Bucephalus, Rome, the Earth, and the Sun as examples of intuitions.¹⁴⁷ Although I find his gloss on “intuition” as “singular term” problematic (since Julius Caesar is not a linguistic convention), I agree with his more precise definition of intuition

¹⁴⁶ He says: “In Kant’s earliest writings neither the German ‘*Anschauung*’ nor the Latin ‘*intuitus*’ can be found. ‘*Anschauung*’ is first introduced to replace the expression ‘*conceptus singularis*’ singular term, and is used in this sense in his logic lectures, as well as in the published *Logic*” (“Kant’s Sensationism,” p. 243-244).

¹⁴⁷ See “Kant’s Sensationism,” p. 244. George references Akad. 24, p. 257; p. 755; p. 905.

as a representation that pertains to only one object.¹⁴⁸ An intuition is a singularly referring representation.

But closer inspection reveals a blunder in George's discussion, for he confuses the act-object distinction characteristic of words such as 'intuition.' On his definition, intuition is the act whereby objects are represented. In this sense, Julius Caesar is *not* an intuition because he is an object of acts of representing. Furthermore, as I have argued, Julius Caesar is not the object of any type of intuitive representation. The only way in which the past can be represented is conceptually. Consequently, Julius Caesar is properly characterized as a possible object of conceptual representation. But since on Kant's two-faculty theory of cognition the only objects that can be represented are appearances, then Julius Caesar is a possible appearance. And it strikes me that the language of appearance, rather than intuition, is far preferable when referencing the representations of Caesar, Socrates, Bucephalus, etc., because it avoids the act-object ambiguity.

Given these corrections, and provided that no reason can be found for rejecting the *Logic*, then there is positive textual evidence that Kant classifies past (and spatially remote) appearances as falling within the scope of possible appearance. Moreover, given the assertion at A111 that all possible appearances stand in relation to original apperception and therefore the categories, the result is that the categories belong to a project of grounding global cognition.

But, nonetheless, we are still left with the question of what it could mean to call past states of the world possible appearances. My answer is simple enough. I define "possible appearance" as whatever is connectible with present perception. In the Antinomies, Kant

¹⁴⁸ Ibid.

says that to represent the “real things of past time” is to “represent to myself that, in accordance with empirical laws, or in other words, the course of the world, a regressive series of possible perceptions (whether under the guidance of history or in the footsteps of causes and effects) leads to a time-series that has elapsed as the condition of the present time ...” (A495/B523). A regressive series, as opposed to a progressive one, reaches back into the past, and the passage subtly notes that appearances represented in the regress of conditions are possible perceptions. This indicates that even appearances that can no longer be perceived, because they have passed away, are classified as possible perceptions. Yet, what has passed away can be represented as the basis for the now. The sense in which the past “conditions” or is the “basis” for present experience will be discussed in the next chapter, but the main idea is that we represent past appearances by connecting them with experiences currently undergone.

But in addition to textual support for Kant’s classification of past and spatially remote objects as possible appearances, some valuable philosophical support can be given. The above appeal shows that Kant does classify Caesar, Socrates, and so forth, as possible appearances. But I think a stronger argument for why he *must* classify them as such can be provided. The key problem is that, if Kant were to refrain from classifying spatially and temporally remote appearances in this way, then any purported cognition of them would assume the status of a speculative, metaphysical cognition. Speculative metaphysics is an attempt to provide true judgments about the nature of objects that lie outside all possible experience. The four primary objects identified are God, freedom, the soul, and the totality of the world. Kant takes pains in the chapters on the Paralogisms, Antinomies, and the Ideal of Pure Reason to criticize the possibility of assertions about

these subject matters. This implies that if the past were classified as lying outside all possible experience, then representation of it too would be impossible, at least for creatures like us. For this reason, it is necessary to distinguish judgments about the past from metaphysical judgments such as, “the soul is a simple substance.” Otherwise, on the failure to draw the difference, one would effectively have not merely to an oversight, but a *reductio* of Kant’s theory of cognition. If cognition of the past were impossible, as what lies outside possible experience, then it would be deeply perplexing as to how cognition of the *present* would even be possible. For we represent the present as arising out of the past. And this last point is supported by Kant’s discussion of the threefold synthesis, where it is clear that objects are not represented (even in perception!) in some instantaneous moment but as extended in time across past, present, and future dimensions.

Let me summarize the argument of this subsection. First, Kant states at A111 that the categories govern all possible appearances. But for the textual and philosophical reasons given, the expression “all possible appearances” must be taken to reference not just any perception, but the full scope of spatio-temporal objects. Kant classifies even past and spatially remote objects as possible appearances. Consequently, the categories are involved in the project of grounding our ability to represent the full scope of spatio-temporal appearances, and for that reason, they are key elements in a theory of global cognition.

4 Conclusion

The chapter has analyzed the fourth preparatory section at A110-114. I have sought to establish the thesis that the objective validity of the categories grounds the possibility of global cognition, and I have done so by (1) analyzing the A110 reference to the “one experience,” (2) highlighting the implications of the two-faculty theory of cognition, and (3) examining the claim that the categories stand in relation to all possible appearances. I have not denied that the categories also play a role in enabling intentional perception, only that this is not the proper basis for establishing their objective validity. In Chapter 7, I will return to the topic of perception for the purpose of showing how Kant attempts to bring both aspects of cognition together.

I stressed at the beginning the programmatic character of the chapter. Although my discussions of the Postulates and Antinomies have touched upon the nature of global cognition, the full theory has not been presented. It remains to be seen what the nature of thought must be, on a two-faculty theory, such that we can intended any possible spatio-temporal appearance, whether of the past, present, or future. What is the nature of the “procedures” by which we represent the “connectedness” or “unity” of present with possible experience? The next chapter takes up this topic and question.

CHAPTER 5

KANT'S THEORY OF GLOBAL COGNITION

In Chapter 4, I argued that the objective validity of the categories makes our ability to represent the full scope of spatio-temporal appearances (what is called global cognition) possible. The purpose of the present chapter is to go beyond this merely programmatic claim by providing an exposition of global cognition itself. What, then, is the nature of cognition such that we can form thoughts about the appearances of past time, future time, and remote space? I defend the interpretive thesis that, according to Kant, global cognitions are rules for getting into perceptual contact with spatio-temporal appearances that are outside the scope of one's current perceptions. This interpretation was originally developed by Arthur Melnick in *Space, Time and Thought in Kant* (1989) and *Themes in Kant's Metaphysics and Ethics* (2004).

The chapter begins with an exposition of Melnick's position that Kantian cognitions are rules for intuiting spatio-temporal appearances. This view is notably different from the data-sensualist view, according to which cognitions are rules for synthesizing given sensations. For the sake of convenience, I dub Melnick's reading the "global-positioning thesis" in order to distinguish it from the data-sensualist thesis. I then offer an original defense of this nonstandard interpretation. The significance of my defense rests on its attempt to establish the correctness of the global-positioning thesis merely by addressing the requirements of Kant's two-faculty theory of cognition. In other words, I aim to show that the two-faculty theory *implies* that cognitions of remote appearances are rules for getting into intuitive contact with them. If successful, my argument will possess significant persuasiveness. Any interpreter must grant that Kant's critical philosophy is

based on his view that cognition requires the cooperation of the sensibility and the understanding, and if I can show that this view requires that global cognitions are rules for intuiting appearances, I can make out a very strong case for this reading by grounding it on a non-controversial aspect of his philosophy. By contrast, Melnick's defense of the global-positioning thesis is based on his constructivist interpretation of transcendental idealism. The limitation with this is that one need only reject constructivism to reject his view of global cognition. My strategy circumvents this potential difficulty, and it leaves the door open as to how to interpret transcendental idealism. After providing my defense, I consider some textual support for the global-positioning thesis, and lastly I compare Kant's views on global cognition with those given by William James in *The Meaning of Truth*. Their views are surprising similar, and since James believes his view is more or less a matter of commonsense, the similarity helps to free Kant's account from the suspicion that it is objectionably weird or idiosyncratic.

1 Global Cognition: Space

Kant restricts cognition to spatio-temporal appearances, which means that only what can be presented or perceived in space and time is an object of possible cognition. But I have argued that cognition is the capacity to intend objects. So, the problem that is under consideration is how it is possible to intend spatio-temporal appearances. Perception is one mode of intending spatio-temporal appearances, but not all intentional representations are perceptual. Sometimes we intend appearances that are not present in intuition – when for example we think about Pluto. But how is this possible? What must the nature of thought be such that it can intend or refer to spatially and temporally remote

reality? Melnick supplies an answer to this question. On his view, Kantian cognitions or intentional thoughts are rules for contacting possible spatio-temporal appearances. I will first present his account of cognition of spatially remote appearances before discussing his analysis of past-oriented cognition.

1.1 Exposition

Melnick defines cognition of spatially remote appearances in terms of the following rule:

Cognition of spatially remote appearances = It is legitimate to take n steps, be affected and react ϕ .¹⁴⁹

The claim is that to represent Pluto, or any spatially remote appearance, *just is* to be able to consciously formulate a rule for getting into perceptual contact with the appearance in question. We can call such rules “contracting rules.” Thoughts then are defined as contacting rules. But since it is neither immediately apparent what contacting rules are nor how they can explain the intentionality of thought, I will further explain Melnick’s view by analyzing the rule into its constituent components.

There are three components to the rule. The first component is identified by the phrase, “it is legitimate to”; the second component is identified by the phrase, “take n steps”; and the third component is identified by the phrase, “to be affected and react ϕ .” In explaining each component, I follow the order of presentation given in *Space, Time, and Thought in Kant*.

¹⁴⁹ *Space, Time, and Thought in Kant*, p. 28.

Melnick begins his analysis of global cognition by discussing the second portion of the rule, “take n steps.” For reasons that I will now explain, this portion of the rule refers to his interpretation of Kant’s conception of space. Melnick defends what can be called a “constructivist” reading of space.¹⁵⁰ According to this view, spatiality is not an intrinsic feature of appearances; but rather appearances acquire the property of being in space in virtue of *motions or performances* of a subject. Let me explain.

We contact and subsequently perceive objects by moving about in the world. Thus, Kant’s assertion that space is a form of intuition is taken to mean that spatial repositioning is the means by which objects are intuited. This last claim, however, is consistent with an objectivist interpretation of space, where space enjoys a reality apart from the subject (i.e., a kind of preexisting, empty container in which objects are situated), such that we contact objects by moving *through* given spatial expanses. But in the Transcendental Aesthetic Kant claims that space is subjective or transcendently ideal; in short, space in some way or other depends upon the subject. Melnick interprets this to mean that in addition to being the means by which appearances are contacted (i.e., a form of intuition), space is *nothing but* the motion or performance of the subject (i.e., *merely* a form of intuition).¹⁵¹ For example, if my car is not intuitively present but situated at some distance from me, I can make it present simply by moving to it. The transcendental ideality of space consists in the assertion that the spatial expanse between myself and the car is constructed or literally produced by the motion. That is, my motion

¹⁵⁰ See Part I, Chapter 1 of *Space, Time, and Thought in Kant*.

¹⁵¹ See *Space, Time, and Thought in Kant*, Part I, Chapter 1, Section 2, Part II, Chapter 2, Section 1, and Part V, Chapter 2, Section 1. These sections provide Melnick’s complete exposition of space.

does not move through the spatial expanse, but produces the spatial expanse.¹⁵² In this way, the reality of space is dependent upon the subject (i.e., the motions of the subject), and this dependence is what is named by the transcendental ideality of space. Melnick's interpretation of Kant's conception of space is characterized by the phrase "take n steps." In other words, it is by moving or step-taking¹⁵³ that space is produced, and moreover it is by moving or step-taking that we contact objects. According to Melnick, objects have no spatiality apart from their being encounterable in the course of motion or step-taking, i.e., a spatial construction.

But this conception of the ideality of space certainly seems to force a specific conception of the rules of the understanding. Rules govern, and what they govern are spatial constructions. The above formulation supplies a rule for spatial repositioning in virtue of which we can contact objects. As a rule, it supplies an instruction that ought to be followed, or is legitimate to follow, if one is to contact the object. As emphasized in Chapter 2, rules are not descriptions of how we do behave, but are norms for how we ought to behave. Various terms are used to capture the normative dimension of a rule – e.g., "ought," "should," "must," "permissible," "appropriate," "proper," "required" – and Melnick chooses the term "legitimate." Presumably, the reason is because there are multiple routes (more precisely, constructions) by which an object can be contacted, and

¹⁵² In *Themes in Kant's Metaphysics*, Melnick provides a very helpful analogy in explaining this odd assertion about the metaphysical status of space. He says that just objects do not possess *order* in themselves or intrinsically, so likewise objects do not possess spatiality in themselves or intrinsically. The books on my desk, for example, do not have themselves possess an order. However, I can give them an order by means of an activity of ordering: I might count them out and point to them, saying first this, second that, etc. Objects, then, *acquire* order by means of ordering, which is an activity we perform. He argues that Kant's view on space is similar: we give to objects their spatiality and spatial relations through our activity of spatializing. In this sense, space – as well as order – is dependent upon us.

¹⁵³ It is worth noting that space is not constructed merely by step-taking, but any form of motion – for example, moving one's head or traveling in a vehicle. Presumably, for the sake of simplicity, Melnick chooses to formulate this point in terms of step-taking.

the term “legitimate” captures that the instruction is one way, among others, by which to encounter the appearance in question. This, then, is the meaning of the first portion of the rule – “it is legitimate to”

But, now, what would be the upshot of obeying such a rule? The answer is that it would terminate in the intuition or perception of the appearance. The rule, by means of a spatio-temporal construction, puts one in immediate relation to the object. This result is captured by the third portion of the rule – “be affected and react ϕ .” On Melnick’s view, the variable ϕ stands for any intuition that one might have. So, for example, he would use the expression, “It is legitimate to take n steps, be affected and react ‘red.’”¹⁵⁴ However, I argued in Chapter 3 that perception involves more than just a passive, causally induced state but also involves a synthesis in accordance with concepts. Obedience to the rule terminates in perception of the appearance, but perception involves both intuition and concepts. In which case, I will modify the formulation in order to explicitly take this point into account. The phrase “to be affected and react ϕ ” should be understood as indicating a complex perceptual uptake involving both the affecting intuition as well as the conceptualizing of the intuition. So, for example, with the modification the rule might state that, “It is legitimate to take n steps, be affected and react ‘Pluto is uninhabitable.’” The concept uninhabitable is predicated of the subject term, Pluto, and the subject term refers to an object that can be given immediately in intuition.

The meaning of the above rule, then, is relatively straightforward. It specifies a rule (it is legitimate to) for moving or spatial-repositioning (take n steps) in terms of which an appearance may be perceived – that is, intuited and conceptualized – at the tail end of the

¹⁵⁴ He uses the “red” example in both *Space, Time and Thought in Kant* and *Themes in Kant’s Metaphysics and Ethics*.

spatial repositioning (to be affected and react ϕ). Essentially, it is an instruction for how to move around and relocate oneself in order to get into the perceptual vicinity of an object.¹⁵⁵ The only metaphysical component is the claim that the step-taking procedure should not be understood as motion through space, but as the production/construction of a spatial expanse itself.

Now we have the elements needed for understanding the intentionality of thought. Intentionally is characterized as that property by which representations are “about” things. Melnick argues that the rule is a representational state – or thought – of the cognitive subject. Consequently, the rule – or thought – is related to, pertains to, or about the object precisely because it is a rule *for encountering that object*. *Compliance with the rule would produce the behavior putting one in immediate perceptual relation to the represented object.*¹⁵⁶

But what is crucial for his analysis is that one does not actually have to comply with the rule in order to represent the object. The point can be seen by contrasting the above rule with a command. If one were to formulate the representation as a command, one would get:

Take n steps, be affected and react ϕ !¹⁵⁷

The command puts one in connection with the object by causally producing the contacting behavior. However, Melnick points out that the command alone is not

¹⁵⁵ For the sake of simplicity, the complex representational phenomenon of intuiting and conceptualizing will be hereafter encapsulated in the term “encountering,” for it captures both that the object is contacted as well as that it is encountered *as* something, i.e., uninhabitable, etc.

¹⁵⁶ See *Space, Time, and Thought*, pp. 27-36 for his discussion of intentionality.

¹⁵⁷ *Ibid.*, p. 29.

representational, but requires the additional compliance.¹⁵⁸ That is, part of the *content* of the rule is the *compliance itself* that is ordered by the rule, so that the complete representational state is the command plus actual compliance. By contrast, the original formulation above does not order compliance, but instead merely legitimates it. The content of the rule contains a possible spatial construction rather than an actual one; or otherwise put, the complete representational state consists of an instruction plus possible compliance. In this way, Melnick explains the global character of cognition. Since one does not have to perform the spatial construction legitimated by the rule, one can thereby represent what is outside the scope of current perception.¹⁵⁹

In explaining how thoughts can pertain to the remote past, Melnick develops an analogy to a clock set to ring at certain times.¹⁶⁰ Let me provide a similar analogy for the case of space. Suppose that one has a toy car that can be wound up, and when a button is pressed on its side, the inner spring-like mechanism releases and the car launches forward. Suppose, then, that the car is wound up and pointed in the direction of an item on the floor. In such a scenario, it certainly makes sense to say that the car is in the state of being geared toward or directed at the item, even if the mechanism is never released and if the car never actually contacts the item. Likewise, if cognitions are rules for getting into perceptual contact with objects, then one can say that they are cognitive states “geared” or directed at certain objects, even if the rule is never actually complied with. In the former case, the car possess a physical mechanism by which it is directed at an item,

¹⁵⁸ Regarding what he calls a command language, he says: “Now if claims [i.e., thoughts] come in the form of commands, there’d by no complete unity to me present claim (the giving of the command) since the ensuing behavior (which is not present at the giving of the command) is inseparable from the significance of the command: i.e., without the behavior the command by itself would have no integral significance” (ibid., p 32.).

¹⁵⁹ Melnick says: “To legitimate behavior does not call for actually performing that behavior. The rule by itself is the significant unity without any ensuing contact of reality” (ibid., p. 33).

¹⁶⁰ For his clock discussion, see *Space, Time, and Thought in Kant*, p. 45.

whereas in the latter case, the content of the thought is a rule which, if obeyed, would place one in the vicinity of the object.

1.2 Defense

I will defend the assertion that Kantian cognitions, or intentional thoughts, are rules for perceptually contacting objects. This subsection will focus on defending Melnick's interpretation of the representation of spatially remote appearances. Section 2 will address the representation of temporally remote appearances.

My defense proceeds along different lines than that given by Melnick. He begins with the constructivist account of space, and from this he draws the conclusion that thoughts are rules governing spatial constructions; constructions are activities, and rules properly govern activities. But if one rejects his constructivist interpretation, then the analysis of cognition could be rejected along with it.¹⁶¹ My approach will circumvent this potential difficulty by basing Kant's account of rules not on a controversial reading of the Aesthetic and transcendental idealism, but on an analysis of the two-faculty theory of cognition. The idea is that since any interpreter must grant Kant's two-faculty theory, my defense will have significant force if I can show that the two-faculty theory *requires or implies* that representation of spatially remote appearances comes in the form of contacting rules. Just as Melnick argues from the (controversial) premise that space and time are constructions, so I will argue from the (uncontroversial) premise that cognition has a two-faculty structure.

I begin by stating my argument in standard form:

¹⁶¹ This however does not suggest reasons for rejecting constructivism as a correct interpretation; it rather serves to motivate a different approach.

1. Cognition involves and requires the application of rules of the understanding to sensible intuition (i.e., Kant's two faculty theory).
2. The rules of the understanding are applied to the matter or form of sensible intuition.
3. Cognition requires the application of the rules of the understanding to either the matter or form of sensible intuition (concluded from 1 & 2).
4. In perceptual cognition, the rules of the understanding apply to both the matter and form of experience.
5. In the cognition of spatially remote appearances, the rules of the understanding do not apply to the matter of experience.
6. Therefore, in the cognition of spatially remote appearances, the rules of the understanding apply to the form of intuition (concluded from 3 & 5).
7. The form of intuition is the way or manner in which intuitions of objects are obtained.
8. To say that space is a form of intuition is to say that the way in which intuitions of objects are obtained is by spatial repositioning (concluded from 7).
9. Therefore, in the cognition of spatially remote appearances, the rules of the understanding are rules for spatial repositioning (concluded from 6 & 8).
10. Rules for spatial repositioning are rules for coming into perceptual contact with appearances (concluded from 8 & 9).
11. Therefore, cognitions of spatially remote appearances are contacting rules (concluded from 9 & 10).

Premises 1-3 simply state the uncontroversial features of the two-faculty theory of cognition. Kant's most colorful statement of the view is that "Thoughts without content are empty, intuitions without concepts are blind" (A51/B75). He identifies "two fundamental sources of the mind" (A50/B74), the sensibility and the understanding. The former is the capacity to receive representations through the impact of objects upon our sensory system. Kant is simply identifying the passivity of perception; we are affected in some way by objects, and the resulting representation is termed an "intuition." In the second instance, the understanding is the capacity to form concepts and apply them to

intuitions. Kant claims that only when the sensibility and understanding are united, and thereby when intuitions are conceptualized, is cognition (*Erkenntnis*) possible.¹⁶²

However, he struggles with several characterizations of the understanding by calling it the faculty of concepts, thought, judgment, spontaneity, and rules. At the end of the Deduction, he finally settles on the last characterization as definitive:

We have above explained the understanding in various ways – through a spontaneity of cognition (in contrast to the receptivity of sensibility), through a faculty for thinking, or a faculty of concepts, or also of judgments – which explanations, if one looks at them properly, come down to the same thing. Now we can characterize it as the faculty of rules. This designation is more fruitful, and comes closer to its essence” (A126).

Concepts, judgments, and thoughts “come down to the same thing” since they are merely varieties of rules. At bottom, the understanding is the capacity to form rules and apply them to intuition, which is simply what premise 1 of my argument asserts. But at the beginning of the Aesthetic, where Kant introduces and defines the key elements of his view on cognition, he distinguishes the matter from the form of sensible intuition. He attributes the form to space and time, and the matter to the sensations and impressions “ordered and placed” in space and time (A20/B34). This means that the rules of the understanding are applicable to either the matter or form of sensibility (being the two options available), and since cognition requires the application of rules to intuition, then cognition involves applying the understanding’s rules to either the matter or form of intuition. Premise 2 and 3 make use of an inclusive “or,” in which case an act of cognition could apply rules to either or both matter and form.

¹⁶² He says: “Intuition and concepts therefore constitute the elements of all our cognition, so that neither concepts without intuition corresponding to them in some way nor intuition without concepts can yield a cognition” (A50/B74).

So far the results are uncontroversial. Premises 6, 8, 9, 10, and 11 are deduced from other premises, and given the validity of the inferences, they are in no need of defense.¹⁶³ The soundness of the argument stands or falls with premises 4, 5, and 7. These premises make assertions about how to interpret central Kantian views, and it is now incumbent upon me to defend their correctness. I will discuss each premise in turn, noting that 7 is the most important and requires the most lengthy defense.

Premise 4. This premise says that perceptual cognition requires the application of the rules of the understanding to both the matter and form of experience. Since cognition is the relation of a representation to an object, then perceptual cognition refers to the phenomenon of perceiving objects. An act of perception involves an intentional relation with the object perceived, and the possibility of this relation requires applying rules simultaneously to *both* the matter and form of intuition.

Kant's theory of perception has been covered in Chapter 2, and here I summarize the results by analyzing his house example in the Second Analogy (A192-193/B237-238). He says:

In the previous example of a house my perceptions could have begun at its rooftop and ended at the ground, but could also have begun below and ended above; likewise I could have apprehended the manifold of empirical intuition from the right or the left. In the series of perceptions there was therefore no determinate order that made it necessary when I had to begin in the apprehension in order to combine the manifold empirically (A192-193/B237-238).¹⁶⁴

¹⁶³ The one inference that might be questionable in terms of validity involves premise 8. Yet the inference from premise 7 is valid since it is merely a case of substitution. If a form of intuition is a way in which we can obtain intuitions, then if space is a form of intuition, it is a way in which we can obtain intuitions. And we do this by spatial repositioning or moving about.

¹⁶⁴ In this context, Kant contrasts the perception of a house from the perception of a ship upstream and then downstream. In the former case, he points out that there is no required order in which we represent the "empirical manifold" or the parts of the house. Whether we perceive the roof before the ground, or the ground before the roof, is inconsequential. But in the latter case, we perceive "a happening" (A192/B237)

As I walk around and observe the house, I find that it has a roof and sides, a foundation and shingles. The activity of walking around the house, or even looking it over from a single vantage point, can be called scanning. The scanning of the house has both a spatial and temporal component, since the house cannot be taken in and perceived as a whole all at once. In the first place, the observation of the various parts of the house requires walking around the building, which is obviously an activity of spatial repositioning. But even if one only observes the house from a single vantage point, one's eyes are still involved in surveying the house. Consequently, the activity of perceiving involves movements on the part of the subject, such as walking or shifting one's eyes. These movements are both spatially and temporally extended. We move our body or eyes around the house over an period of time, and Kant calls this activity a spatial and temporal synthesis. Without delving into the transcendental ideality of space and time,¹⁶⁵ we can say for present purposes that spatial and temporal synthesis is just the *continuous*

or an event, and event-perception is subject to the rule of irreversibility. An event involves a preceding state followed by another. If the ship's position upstream is the preceding state in the perception of an event, and its position downstream is the antecedent state, then it is impossible for this order of perceptions to be reversed. But setting aside the full context, which is Kant's discussion of the category of cause, the example is important because it provides an explicit indication of what a "manifold of empirical intuition" involves. Kant identifies rooftop and ground as belonging to the empirical manifold, and my discussion runs with this reference. I note that Kant does *not* characterize the empirical manifold in terms of elementary or simple sensations such as cool, red, rough, etc.

¹⁶⁵ The conclusion of my argument does not depend upon any interpretive commitments to transcendental idealism. But nonetheless it is worth noting how the position I defend accounts for the transcendental status of space (and time). Kant claims that space (and time) are transcendently real. Described at a general level, this means that space (and time) are in some manner dependent upon the subject. There is, of course, disagreement as to how to make sense of this dependency. On Melnick's constructivist view - which I hold - spatial (and temporal) extents and relations are produced in activities the subject performs. This idea, at first glance, seems very counterintuitive, for we cannot help but think that space is that *through which we move*, rather than something produced in the motion. However, any view asserting that space is ideal, or dependent upon the subject, is bound to be counterintuitive. Melnick's view, essentially, is that space and time are not entities, but *activities*. The activity of scanning, for example, is that by which the parts of the house first acquire spatial properties, such as being next to one another. Apart from such activity, objects would not have spatial and temporal properties and relations. In other words, in the activity of scanning, we place or posit (A20/B34) the parts of the house side by side, and apart from such placing which we do, they would not have the property of being side by side. Space and time, then, are dependent upon us because spatial and temporal properties are produced by our activities.

activity of scanning. In the second place, the various parts of the house are perceived in the course of scanning it. Quite simply, as we look over the house we encounter in that activity its roof, sides, foundation, and so forth.¹⁶⁶ These parts are the empirical manifold that gets combined in the course of a spatio-temporal synthesis (i.e., scanning). Since the empirical manifold is the matter of intuition, and the spatio-temporal synthesis is the form of intuition,¹⁶⁷ then perception involves both the matter and form of intuition.

But Kant introduces an additional element. To perceive something as a house requires applying the concept house to the manifold that unfolds in the activity of scanning. The reason a concept is needed is because spatial contiguity is an insufficient basis for uniting various representations (e.g., roof and sides) into an object (e.g., house). In the course of scanning the object, we “run through and ... take together this manifold” (A99), and in doing so, we represent its parts as side by side, or next to, one another.¹⁶⁸ However, not everything we represent as spatially contiguous with the house belongs to the house, e.g., the ground upon which the house stands. We do not represent the ground as part of the house. Thus, since spatial contiguity is insufficient for uniting

¹⁶⁶ Hume’s description of the mind as a theater of ideas is profoundly mistaken. His metaphor portrays the mind as a wholly passive receptor of ideas that enter and exit the stage, as if the mind sits back and experiences what unfolds before it. But nothing could be further from the truth. Experience arises in the course of the subject’s activity of moving about the environment. The occurrence and order of what we experience are a product of how we choose to actively move about. This is an utterly simple point that Kant makes central to his understanding of perception and one that Hume overlooks.

¹⁶⁷ The full explanation for why the spatio-temporal synthesis is the form of intuition can be found in my defense of premise 7. A form of intuition is the activity in which the matter of appearance is intuited. Premise 7 puts this point by saying that a form of intuition is the way or manner in which intuitions are obtained. In perceiving the house, the means by which we come to have the perceptions of roof and sides is by the spatio-temporal synthesis that I have called the activity of continuous scanning. Thus, the spatio-temporal synthesis is the ‘form’ in which the manifold is experienced; it the activity by which, or in which, our perceptions arise. Further, the laws of geometry are the laws of this activity (e.g., we can’t move in such a way that parallel motions will cross), and so everything we encounter in the activity (i.e., all the matter of intuition) will be subject to the laws of geometry.

¹⁶⁸ In the *Transcendental Aesthetic*, Kant speaks of placing or positing perceptions in space (or time). He says, “Since that within which the sensations can alone be ordered and placed in a certain form cannot itself be in turn sensation, the matter of appearance is only given to us *a posteriori*, but its form must lie ready for it in the mind *a priori*, and can therefore be considered separately apart from all sensation” (A20/B34).

representations into a single object, rules of the understanding are additionally required. Kant claims that the concept house, as any concept, is a rule for unifying a manifold of representations into an object.¹⁶⁹ As a rule, it instructs what representations ought to be encountered in the course of scanning a house, and it serves to discriminate what properly belongs to houses (roof, sides, etc.) as opposed to what does not (the ground).

With this analysis, we can understand how rules of the understanding apply to both the matter and form of intuition in any act of perception. Perception involves an affecting intuition (matter) that is subject to a spatio-temporal synthesis or activity of scanning (forms of intuition) guided by a concept (rules of the understanding). In other words, since the concept is a rule for what should be encountered *in the course of scanning*, it not only unifies the empirical manifold into a single object, but it does so by means of guiding or instructing the activity in which the manifold is encountered and brought together.

Premise 5. This premise claims that in the cognition of spatially remote appearances, the rules of the understanding do not apply to the matter of intuition. My intention at this stage in the argument is draw out a contrast between perceptual and global cognition. What is definitive of the representation of spatially remote appearances is that the object of representation is not bodily or materially present to the subject; it must be represented *in absentia*. But in the case of perception, its object is bodily present before the subject. My claim is that since the former case does not involve the bodily presence of the object,

¹⁶⁹ Objective representation or object-representation involves more than just the presence of an intuition; it also requires a concept.

then the rules of the understanding do not apply to the matter of the represented object. But it is not immediately apparent how this follows.

When perceiving an object, the activity of looking it over is guided by a concept. For the concept to apply to the matter of intuition is for the subject to be able to bring the perceived manifold under the concept. As I walk around the house, I am (among other things of course) checking whether what is before me is, indeed, a house. In Chapter 3, I called this investigative behavior. If what I encounter fits what the concept instructs, then the concept applies. Concept application takes place in the activity of perceiving an empirical manifold, such as when my perceptions of roof, sides, and shingles instruct that a house stands before me. But the cognition of objects in remote space is importantly different because the subject does not have before it an empirical manifold to perceive. All cognition requires the application of rules, but the rule by which the subject represents a distant object cannot be a rule for how to look it over simply because there isn't an object presented to look over. In other words, since there isn't a perceived empirical manifold to investigate, the rules appropriate to global representations are not rules for investigative behavior. This leaves open the option that they are rules for some other type of behavior. Furthermore, since this type of behavior does not involve looking over the matter of intuition, it must in some way concern the *form* of intuition. This follows (by disjunctive syllogism) from the requirement that the rules of the understanding must be applicable to sensible intuition, either its matter or form. What could this type of behavior be?

Of course upon perceiving the object, one can then look over its empirical manifold in accordance with an investigative rule or a concept. But in order to be in a position to

do so, one *first* has to reposition oneself in space so as to get into its perceptual vicinity. Spatial repositioning is the behavior by which we come into perceptual contact with appearances, and we are accordingly left with the suggestion that the rules involved in global representations are rules for spatial repositioning. This claim can now be defended.

Premise 7. This brings me to the key premise of my argument. Premise 7 states that a form of intuition – in this case space – is the manner or means by which intuitions are obtained. At first, it might seem that this is equivalent to Melnick’s constructivist thesis, but upon closer inspection one sees that it is not. The premise does not make a claim about the transcendental ideality of space, and it does not assert that space is nothing but the subject’s motions or performances. It is committed only to the weaker claim that intuitions are obtained by how one repositions oneself or moves about in space. This claim is in fact consistent with an objectivist reading of space. I have chosen to use the phrase “spatial repositioning” rather than “spatial construction” to identify a phenomenon that is neutral as to the nature of the ideality of space.

Kant’s two-faculty theory of cognition asserts that if the understanding is divorced from the sensibility, then cognition of the object thought by the understanding is not possible. For example, the representation of God does not constitute cognition since God cannot be an object of possible intuition. Kant admits that we can *think* God, but such thoughts merely involve entertaining a self-consistent concept. Regarding this point, he says:

To think of an object and to cognize an object are thus not the same. For two components belong to cognition: first, the concept, through which an object is thought at all (the category), and second, the intuition, through which it is given; for if an intuition corresponding to the concept could not be given at all, then it would be a thought as far as

its form is concerned, but without any object, and by its means no cognition of anything at all would be possible, since, as far as I would know, nothing would be given nor could be given to which my thought could be applied (B146).

The difficulty is not simply that we cannot know anything about God, but that God-thoughts lack an intentional structure. Since the concept of a perfect being is consistent, “it would be a thought as far as its form is concerned, but without any *object*” (my emphasis). God-thoughts, so to speak, reach no further than the concept; they fail to refer beyond themselves to an entity.¹⁷⁰ Clearly what is required for thoughts to relate to objects (i.e., cognition or *Erkenntnis*) is the possibility of presenting those objects in sensible intuition. But in Chapter 4, I stressed the requirement of possible rather than actual presentation. The latter would yield the intolerable consequence of restricting cognition to perception alone – in which case, thoughts about past time and remote space would be just as empty, or “without any object” (B146), as thoughts about God or supersensible reality. The issue therefore reduces to the following question: what is required for cognitions of spatially remote appearances to possess relatedness to possible intuition?

There are only three sets of concepts involved in understanding the relation of thought to intuition, and by exploring all of the options, I will provide an argument by

¹⁷⁰ To explain this point further, it is helpful to distinguish three senses of the term “about”: the object sense, the content sense, and the topic sense. In the first case, God-thoughts lack relation to an object, namely, God. This is precisely what Kant means by calling them empty. However, God-thoughts do have a content. The content of such thoughts is simply whatever is contained in our concept. Namely, our concept of God is of a perfect being. Given that the thought has content, it is natural to say that when we think about God we are thinking *about something*. However, this invites the misunderstanding that there is an *object or independent entity* to which our thought refers. This is where the topic sense of “about” is very helpful. When we think about God, our thought does have a *topic* even if it doesn’t have an object. For example, the topic of a paragraph is whatever the content of the paragraph concerns. Likewise, the topic of a God-thought is whatever the content of the concept concerns, namely, a perfect being. Our topic, then, is the content of our concept of God and not the object or entity, God. And the reason our thoughts lack reference to the entity God is because that entity can never be given in experience – and (given the two-faculty theory of cognition) possible givenness in experience is a requirement for intentional relatedness to objects.

elimination. First, thoughts relate either to the *matter or form* of intuition; secondly, they relate to intuition either *immediately or mediately*; and thirdly, they relate to *an actual or a possible* intuition. Cognitions of spatially remote objects, by their very nature, lack immediate relation to actual intuition and instead are mediately related to possible intuition.¹⁷¹ With that being said, all we need to investigate is how the distinction between matter and form comes into play. In particular, can cognition of remote space be mediately related to possible intuition via rules governing the *matter* of appearance alone? This question is important. An empiricist or verificationist would answer, yes.

Hume, for example, grounds representation on three principles of association: resemblance, contiguity, and cause and effect. Suppose that pictures of Pluto have been taken by spacecraft or that the planet has at least been detected in some other way. One could then trace a chain of associations back from distant Pluto to cognitive subjects on earth – i.e., the picture or detection was caused by the planet, scientists have relayed this information to others, etc. On this account, the capacity to represent Pluto depends upon the existence of, and one's own standing within, these associative chains. Since the objects of association are various perceptions or ideas, the material of experience in this

¹⁷¹ Immediate relation to actual intuition defines the type of relation characteristic of intuition. For example, as I walk about and perceive the house, the actual object is immediately experienced. However, in the course of looking over the object, I also apply a concept. That is, I represent the object through the medium of conceptualization. This means that perception involves, aside from the immediately presented experiences, a mediate relation to an actual intuition. My perception of the object as a house is mediated by rules/concepts.

In his discussion of judgment, Kant puts the point in the following way: "So in the judgment, e.g., "All bodies are divisible," the concept of the divisible is related to various other concepts; among these, however, it is here particularly related to the concept of body, and this in turn is related to certain appearances that come before us. These objects are therefore mediately represented by the concept of divisibility" (A68-69/B93-94). A body is presented immediately in experience (it is an appearance that "comes before us") when the subject perceives it, and the concept of divisibility is applied to one's immediate experience. We represent the body under the concept of divisibility, and Kant calls this the mediate representation of the body immediately experienced.

Global representation, by distinction, involves neither an immediate or mediate relation to *actual* intuition for the reason discussed with premise 5: the object is represented *in absentia*.

analysis connect one to Pluto. Similarly, a verificationist would ground representation of remote space on present evidence for the existence of remote entities. The evidence might be collected as described above, but what the verificationist emphasizes is that chain of association constitutes evidence for the reality of the object; our capacity to cognize Pluto is based on there being evidential grounds of its existence and features.

Kant holds neither of these views. First, in his discussion of the synthesis of reproduction in the imagination, he says:

It is, to be sure, a merely empirical law in accordance with which representations that have often followed or accompanied one another are finally associated with each other and thereby placed in a connection in accordance with which, even without the presence of the object, one of these representations brings about a transition of the mind to the other in accordance with a constant rule. This law of reproduction, however, presupposes that the appearances themselves are actually subject to such a rule, and that in the manifold of their representations an accompaniment or succession takes place according to certain rules; for without that our empirical imagination would never get to do anything suitable to its capacity. If cinnabar were now red, now black, now light, now heavy...then my empirical imagination would never even get the opportunity to think of heavy cinnabar on the occasion of the representation of the color red ... [and] no empirical synthesis of reproduction could take place" (A100-101).

This passage discusses and criticizes precisely the Humean view of cognition. The empirical synthesis of reproduction in imagination is Kant's way of referring to Humean associations. He says that when two representations are in due time associated with one another (say, smoke and fire, water and suffocation), the occurrence of one can bring about the thought of the other, even when the other is absent. In other words, there is a synthesis in the imagination or mind (i.e., I can think the other even when it is absent) that is based on empirical observations. However, the difficulty Kant notes is that the ability to associate representations depends upon them actually occurring together in experience. If cinnabar were sometimes red and sometimes black, sometimes green and

sometimes blue, then one would never be in a position to associate red with cinnabar. But whether experiences display the regularity necessary for association is *accidental*. At A122 he makes this same point by saying that, if cognition relied solely upon empirical associations, then “it would also be entirely contingent whether appearances fit into a connection of human cognition”; although we would have the faculty for associating perceptions, “it would still remain in itself entirely undetermined and contingent whether they were associable.” One should note that Kant is *not* saying that in a Humean world regularity is necessarily lacking; it could well be the case that throughout the entire history of a Humean world, regularity is never violated and association is trustworthy. Kant is merely asserting that such regularity would be a contingent feature of the world and therefore not guaranteed. But if empirical association is the basis for cognition of spatially remote appearances (and cognition in general), then the capacity to cognize remote appearances (and cognition in general) would depend upon happenstance or luck. Kant does not except this result, and that is why he demands that there must be an *a priori* or objective ground of association that we supply and thus guarantee: “There must therefore be something that itself makes possible this reproduction of the appearances by being the *a priori* ground of a necessary synthetic unity of them” (A101).

This same criticism applies to verificationism. How much we can verify depends upon how much regularity is to be met with in experience. One could hardly verify the existence of Pluto if detection instruments constantly turned up different results. Lest cognition depend upon chance, Kant would reject this view as well. Consequently, in Kant’s eyes at least, the attempt to ground a mediate relation of cognition to possible intuition via rules governing the matter of appearance fails.

Although the matter of appearance is a component in the representation of distant appearances – for it must be possible for such representations to terminate in perception – rules governing the matter of appearance alone cannot ground the mediate relation to possible intuition. The implication is that rules governing the *form* of intuition are required, and furthermore no other workable options are available. Consequently, what is needed is a conception of a form of intuition that can adequately explain how one can be mediately related to possible intuition. Let me begin by discussing the demands that the two-faculty theory places upon cognition of remote space, for whatever this conception of a form of intuition turns out to be, it must meet these demands.

Kant distinguishes intellectual from sensible intuition. The former is a capacity ascribed to divine cognition, and it consists of the ability to produce the object of thought by the sheer power of thought alone. God, in thinking of an object, produces in that very act the object itself. Consequently, divine cognition possesses a single faculty structure since the power of thought alone guarantees relatedness to the object. However, for finite creatures such as ourselves, the only way in which we can intuit an object is if it is present to the senses. But what if an object is not present to the senses? How is it possible for human cognition *to produce* an object?

There are two senses of “produce” – namely, we can either (a) create the object or (b) make it available. The former, in turn, involves either creation *ex nihilo* (i.e., through the sheer power of thought alone) or construction from given sense-data. Of course, the first option is definitive of divine cognition and therefore impossible for us, but the second option is possible. In fact, it is nothing more than the data-sensualist interpretation à la Kitcher. Yet, as established in Chapter 4, data-sensualism is a thesis about perceptual

experience and does not provide an appropriate basis for understanding cognition of remote space.¹⁷² Thus, the appropriate sense of production is the latter.

This means that we are left with the question of how spatially remote objects can be made available or present to the senses. The answer is obvious: they are produced by moving or repositioning oneself in space. The matter of experience is presented in actual intuition. Since spatial repositioning, when carried out, puts one in immediate relation to actual intuition, such positioning when not carried out but merely legitimated (i.e., brought under a rule) enables a mediate relation to possible intuition. What is meant by mediate relation to possible intuition is simply that there is a possible or legitimate way of repositioning oneself in space such that, *if* performed or carried out, *would* put one in

¹⁷² Let me spell the reasons out. The data-sensualist conception of a form of intuition as can be characterized as a template, for example, one might think of an analogy to a word processing template. Along the same lines, H.J. Paton famously used the analogy of blue-glasses to explain Kant's conception of space and time. Although such analogies may help to convey the general doctrine, they are inadequate for scholarly demands and moreover convey a veiled *ad hominem* charge. For this reason, it is useful to examine Patricia Kitcher's influential formulation, for she does away with any analogies.

She distinguishes between a process and product form. Referring to Kant's discussion in the Inaugural Dissertation (which is virtually identical to the passage at A20/B32, quoted above), she says: "This passage uses "form" ambiguously to refer to both a property of sensory representations and a law of the mind that produces sensory representations out of *sensa*. To avoid confusion I will refer to the putative law of the mind as "process form" and to the putative property of the representation as "product form." The thesis is that as sensations depend on both the objects and the sensory organ, sensory representations depend upon both properties of the *sensa* and the mind's mode of producing representations out of *sensa*" (*Kant's Transcendental Psychology*, p. 36). The process form is the cognitive mechanism by which intuitions are constructed out of sensations or *sensa*. In virtue of this process, the elements or parts of intuitions come to possess spatial and temporal relations or qualities such as size, shape, and before/after; in her words, they possess a product form by means of the operation of the process form. What I have described as a template, then, is non-metaphorically understood as the spatio-temporal relations that all intuitions possess (product form), and what I have described as the activity of ordering *sensa* within the template is the activity of the mind whereby the spatio-temporal relations of intuitions are produced (process form).

Given this, one can see why the conception of a form of intuition appropriate to cognition of remote space (and global cognition in general) cannot be a process form. Above I argued that, if representation of remote space is to be possible, then the form of intuition must be capable of putting one in mediate relation to possible intuition. A process form operates over *sensa*, which by definition can only exist as elements of conscious experience; and intuitions are constructed out of *sensa*. The problem is that a process form cannot enable mediate relation to *sensa*, for the relation of a process form to *sensa* is one of *processing* and only what is given can be processed; a process form cannot process data that are not available or present to it. Since the requirement of global cognition cannot be met by a process form, then Kitcher's analysis – and data-sensualism in general – fails to ground representation of remote space.

immediate relation to the object. What mediates the relation to a possible intuition of Pluto is the possible spatial repositioning in virtue of which Pluto may be encountered.

Kant expresses this point when he says:

In whatever way and through whatever means a cognition may relate to objects, that through which it relates immediately to them, and at which all thought as a means is directed as an end, is intuition. This, however, takes place only insofar as the object is given to us; but this in turn, is possible only if it affects the mind in a certain way. The capacity (receptivity) to acquire representations through the way in which we are affected by objects is called sensibility. Objects are therefore given to us by means of the sensibility, and it along affords us intuitions; but they are thought through the understanding, and from it arise concepts. But all thought, whether straightaway (*directe*) or through a detour (*indirecte*), must ultimately be related to intuitions, thus, in our case, to sensibility, since there is no other way in which objects can be given to us (A19/B33).

Interestingly, Kant describes thought as directed to intuition as its end. He then identifies two ways in which thought can be directed to intuition, straightaway (directly) or through a detour (indirectly). I have described the first way as consisting of the immediate relation to actual intuition (i.e., perception), and the second as the mediate relation to possible intuition (i.e., global cognition). Whereas the first involves the application of concepts to immediately given percepts, the second requires a “detour.” This detour is the possible spatial repositioning by means of which a thought can be related to a possible intuition. It is *through* a possible activity of moving that we can be placed in the vicinity of an object and thereby apply a concept to it. This is exactly what is expressed in the representation, “It is legitimate to take n steps, be affected and react ‘Pluto is uninhabitable.’” With this, we now have a sufficient answer as to how a form of intuition can enable mediate relation to possible intuition. But is this conception of a form of intuition necessary for explaining cognition of remote space?

I can see no other way in which spatially remote objects can be made bodily present than by moving to them or repositioning in space. In which case, I am willing to leave the possibility that intuitions can be obtained in some other manner open, and I invite the reader to consider what that may be. For my case, I see no other explanation. I note, however, that it is conceptually possible for there to be beings in possession of a sensibility with a different form, such that for them space and time are not necessary conditions for intuition or making objects present. But of course this is not Kant's position regarding human intuition, and so it does not provide any room for denying the necessity for spatial repositioning in cognition of remote appearances, at least for *beings like us*.

Although premise 7 is only asserted in the main argument, I have now produced a sub-argument for the claim. The sub-argument reads as follows:

1. Cognition of spatially remote appearances, by definition, involves the mediate relation to possible intuition.
2. One is mediately related to possible intuition via rules governing either the matter or form of intuition.
3. One cannot be mediately related to possible intuition via rules governing the matter of intuition, if Kant's demand that cognition not depend on luck is to be met (see criticisms of associationism and verificationism).
4. One can only be mediately related to possible intuition via rules governing the form of intuition, if Kant's demand that cognition not depend upon luck is to be met (concluded from 2 & 3).
5. What is needed for cognition of spatially remote appearances is a conception of a form of intuition that explains how one can be mediately related to possible intuition via rules governing it (concluded from 1 & 4).
6. Spatial repositioning is the way or manner in which intuitions of objects are obtained.
7. It is only by bringing spatial repositioning under a rule that one can be mediately related to possible intuition.

8. The only conception of a form of intuition capable of accounting for the mediate relation to possible intuition is that it is the way or manner in which intuitions of objects are obtained (concluded from 6 & 7).
9. If cognition of spatially remote appearances is to be possible for Kant, a form of intuition is the way or manner in which intuitions of objects are obtained (concluded 1 & 8).
10. Cognition of spatially remote appearances is possible for Kant (established in Chapter 3).
11. Therefore, a form of intuition is the way or manner in which intuitions of objects are obtained (concluded from 9 & 10).

In developing the main argument, as well as the sub-argument for premise 7, I have remained neutral on the question of whether constructivism is true, and more generally, of how one should interpret Kant's transcendental idealism regarding space. I used the term "repositioning" rather than "constructing" for the purpose of maintaining this neutrality, since repositioning oneself in space is consistent with repositioning oneself in objective space. What I have sought to establish is that, however one interprets the ideality of space, cognition of remote space comes in the form of contacting rules: "It is legitimate to take n steps, be affected and react ϕ ." I have left the issue of how one should interpret the "take n steps" portion of the rule open. In this way, I have been able to identify the basic form of rules for global cognition merely by analyzing the requirements of the two-faculty theory, rather than on the basis of the controversial thesis of constructivism.

2 Global Cognition: Time

Melnick's account of intentionality immediately raises a problem regarding past-oriented cognitions. If cognition consists of rules for perceptually encountering objects, then how can the past be cognized given that we can no longer perceptually encounter it?

Plainly put, we cannot formulate rules for getting back into the past. In order to address this difficulty, and to make sense of what rules for “temporal positioning” are supposed to be, Melnick has to provide a different analysis of cognition of the past. I will work my way toward the view through careful analysis involving Kant’s text before concluding with Melnick’s actual formulation.

2.1 Exposition

Since Kant claims that all cognitions are rules, what is needed is a rule for representing past states or the way things once were. The simplest way to formulate such a rule would be as follows:

It is legitimate to have been affected and to have reacted ϕ .

However, Kant would claim that this type of rule is *empty* or void of representational content because it involves no reference to a present perception that one could have. In other words, the rule fails to terminate in or involve a perception. This requirement is expressed, among other places, in two important passages from the Postulates and Antinomies (both discussed in Chapter 3). In the former, Kant says:

The postulate for cognizing the actuality of things requires perception, thus sensation of which one is conscious – not immediate perception of the object itself the existence of which is to be cognized, but still its connection with some actual perception in accordance with the analogies of experience, which exhibit all real connection in an experience in general (A225/B272).

And in the latter:

That there could be inhabitants of the moon, even though no human being has ever perceived them, must of course be admitted; but this means only that in the possible

progress of experience we could encounter them; for everything is actual that stands in one context with a perception in accordance with the laws of the empirical progression. Thus they are real when they stand in an empirical connection with my real consciousness, although they are not therefore real in themselves, i.e., outside this progress of experience (A493/B521).

Both passages are concerned with explaining what it means to represent an unperceived appearance as actual or real.¹⁷³ Kant's answer is that "everything is actual that stands in one context with a perception in accordance with the laws of empirical advance." So, for example, in the Postulates he says that to think of universal magnetic matter (A226/B273) as real is to think that there is a series of perceptions, starting from some present perception, that would eventually terminate in the perception of the magnetic matter. Or, in the Antinomies, he says that to call the inhabitants on the moon real is to say that, starting from some present perception, there is a series of perceptions that would eventually terminate in the immediate perception of such inhabitants. But the problem with the above rule is that it fails to be connected with any present perception, and yet Kant says that this is required for representing what is real. This means that representation of past reality, i.e., what was once real, also requires reference to a present perception; but given that such reference is lacking, the rule fails to account for how we can represent the past. This leaves the problem of how the rule should be formulated.

Kant says that everything real must stand in connection or in one context with "some actual perception." As said, this implies that the rule by which the past can be represented must connect such past states with some current or present perception. The basic point, in other words, is that *we represent the past by representing how we are presently situated with respect to the past.*

¹⁷³ The German adjective is "*wirklich*," which can be translated as either real or actual. Kemp Smith tends to translate it as "real" whereas Guyer and Wood tend to translate it as "actual."

Given this point, the rule might be modified in the following manner:

With respect to a present perception, it is legitimate to have once been affected and to have reacted ϕ .

For example, suppose that we want to explain how it is possible to represent that a certain desk was once green but no longer is so. The rule says is that upon perceiving the desk *now*, it is legitimate to have once been affected and to have reacted “the desk is green.” Although it might seem much simpler to formulate the rule as, “... it is legitimate to say the desk was green,” one here needs an account of what is meant by the assertion “the desk *was* green,” and the above formulation provides this. To say that the desk was green is to say that it was once appropriate to have been affected and to have reacted, in the past, “the desk is green.” But nonetheless, this formulation still makes use of the past tense, and even though such use is not viciously circular, it would be preferable to analyze the past tense away for the sake of completeness at least. And as it turns out, there is a way to do this. To say that we *once* could have done something is to exclude doing it *now*; in other words, it is to say that we are beyond or are no longer able to do it now. The rule can then be formulated as:

With respect to a present perception, it is legitimate to be beyond (or up from) first reacting ϕ .

But this rule only captures that, for example, the desk was green, not how long ago it was green. Accordingly,

With respect to a present perception, it is legitimate to be *so far* beyond (or so far up from) first reacting ϕ .

Yet this is still not complete. What is needed is some way of measuring or serializing how far beyond one is from first reacting ϕ . Kant, shortly after discussing the inhabitants on the moon, briefly mentions past time. He says that present perceptions are connected to past appearances by a “chain of experience” (A495/B523). That being the case, all that needs to be done is to serialize this chain or series of perceptions, and we can do this by thinking of the series as ordered into various stages. When, for example, traveling from Champaign to Chicago, we can designate Rantoul at stage 3 and Kankakee at stage 9, such that in the series of perceptions Rantoul is designated as occurring at an earlier stage or position within the series. Accommodating this point, the rule reads:

With respect to a present perception, it is legitimate to be at stage k beyond (or up to stage k from) first reacting ϕ .

So far, this analysis brings us fairly close to Melnick’s position; yet it still lacks a component, namely, his constructivism. Perhaps it is most natural to think of time as a stream that flows on and on, and whose continuance doesn’t depend upon us or anything else for that matter. Given this view, the serializing activity referred to in the above rule would be the serialization of the objective flow of time itself; the stages would be conceived as stages of objectively passing time. Just as we can think of places on the grid of space, so we can think of stages in the stream of time. But Kant denies that time is objective. Rather he claims that time, like space, is merely a form of intuition, i.e., in some sense it is dependent upon the subject. Melnick’s constructivism provides one way of making sense of this dependency. Serialization is an activity that a subject can perform, and consequently Melnick explains the transcendental ideality of time by

identifying time with the serializing activity itself. This account parallels what he says in the case of space: just as we do not move through space but rather produce it by our motion, so too we do not serialize an objective flow of time but rather produce the temporal series by our serialization.

In *Themes in Kant's Metaphysics and Ethics*, Melnick provides some examples of temporal constructions. First, he refers to a conductor who tempers or paces the playing of an orchestra by a series of gestures indicating downbeats.¹⁷⁴ On an objectivist conception of time, the conductor's downbeats would occur *in* a given temporal expanse or flow; but on a constructivist reading, the temporal expanse is produced by the downbeats. He also refers to a traffic cop speeding up or slowing down traffic by the waving of his hands, as well as the tapping of one's foot. Many more examples can be given, and what they all have in common is that they involve some kind of repetitive motion that generates a temporal expanse. It is true that the motion is also spatial, but its repetitive nature draws attention not to an increasing expanse of space (for in tapping my foot I do not draw attention to a growing spatial expanse, as I would in outlining the size of a room) but to an increasing expanse of time.¹⁷⁵

Once constructivism is taken into account, we can more fully understand Melnick's canonical rule for representation of the past. It reads:

Cognition of past appearances = Upon being affected, it is legitimate to be
Waiting Up to 4 Reacting first α .¹⁷⁶

¹⁷⁴ *Themes in Kant's Metaphysics and Ethics*, p. 10.

¹⁷⁵ I note that Melnick's order analogy is helpful in this context as well. See footnote 4 above.

¹⁷⁶ *Space, Time, and Thought in Kant*, p. 41.

One should understand the phrase “waiting up to 4,” and likewise “to be at stage k beyond,” as indicating a stage in a temporal construction. What the rule asserts, then, is that there is a temporal construction that can legitimately be performed from first reacting α up to being presently affected. Take my example of representing that a certain desk was green. What is needed is a rule that enables one to represent that the desk I perceive now (which currently is red) once was green. One way to make sense of this is in terms of objective time. I can think that the desk I now perceive is at a later stage in objective time, and is therefore that far beyond the past green state of the desk. Objective time, then, would situate my present perception with respect to the past state of the desk. However, this solution is not available to Kant. Instead, Melnick appeals to a constructivist interpretation of time: what it means to be presently situated beyond a past state is nothing but being at a later stage of a temporal construction or serialization. In the case of the desk, then, I represent my present perception of the desk as occurring at a later stage in a temporal construction that begins with reacting, “the desk is green.” The rule for representing past appearances, then, is a rule for a temporal construction.

But as it turns out, there is still one more issue remaining. What exactly *connects* or links the present perception to the past reaction? Recall that Kant says, “everything is actual [or real] that stands in one context [or Kemp Smith’s translation, ‘connection’] with a perception” (A493/B521). The answer would seem to be that temporal constructions provide this connection; but it turns out that they are not enough. Temporal constructions produce expanses of time. That there is a temporal construction that can be performed from a past perception (green desk) up to a present perception (red desk) means only that the latter occurs later in time, but does not necessarily link them. The

analysis so far has suppressed the key point that *it is the same desk* that was once green but now is red. Since it is the same desk, the two perceptions stand in “one context” or connection, for they are perceptions of states of one and the same entity, i.e., *a substance*.¹⁷⁷

However, this point must be related to Melnick’s constructivism. It cannot be the case that one state of the desk *qua* substance is later than another because these states are positioned one after another in objective time. Rather, what it means for one state to be later than another is simply that a temporal construction from the one to the other can be performed. Although Melnick gives various examples of actual temporal constructions, as discussed above, perhaps it is easiest to think of a temporal construction in terms of tapping one’s finger. However, one can also think of a mental analogue to this, a kind of tapping in the mind, and indeed Kant himself attributes constructions to the imagination or as occurring in the imagination.¹⁷⁸ Suppose, then, that one perceives the green state of the desk and proceeds to tap one’s finger (or its mental analogue) and thereby “mark time” or “temporize,” as Melnick says. Further suppose that one continues to mark the time of the substance up to its change of state to red. In this case, one actually performs a temporal construction, where this construction “holds to” or “keeps to” a single substance, through its change of state. Having performed the construction, one can then

¹⁷⁷ The role of substance, and the analogies more generally, will be discussed more in Chapters 6 and 7.

¹⁷⁸ The subject of Chapter 6 is the imagination. The faculty of imagination has an indispensable role to play in Kant’s theory of cognition, and Kant wavers on whether to attribute it to the sensibility or understanding. What Kant means by the imagination, and the role it plays in cognition, is a very complicated and contested issue. But there is a passage at A102 that provides some useful clues. In the second preparatory section of the Deduction, dealing with the synthesis of imagination, he says: “Now it is obvious that if I draw a line in thought, or think of the time from one noon to the next, or even want to represent a certain number to myself, I must necessarily first grasp one of these manifold representations after another in my thoughts” (A102). Kant is here discussing the drawing of a line, or the thinking of one noon to the next, as occurring in the imagination. Melnick would call the drawing of a line as a spatial construction (of a figure), and Kant refers to this activity as occurring in the imagination.

situate the state of red as occurring at a later stage in the construction. In *Themes in Kant's Metaphysics and Ethics*, Melnick describes this whole scenario as temporizing-cum-tracking.¹⁷⁹ What is tracked is a single substance, where this tracking involves some type of time-marking procedure (e.g., tapping one's finger or its mental analogue). It should not be too difficult to see how present perceptions can be connected to past states via an actual time-marking procedure. First, what connects later states with previous states is their belonging to a single substance, and second, what serializes the states into before and after is their position or "positing"¹⁸⁰ within the time-marking procedure (rather than their position within objective time).

But now the key to Melnick's analysis, as the case with space, is that one does not have to actually perform the temporal construction, or to "time" the object, from the past reaction up to the present perception. Perhaps I have been away from the desk for a long period of time and only now see that it was red and think, "but it was green." Indeed, the vast majority of objects we encounter in experience have not been subject to a continuous, unbroken temporizing-cum-tracking procedure. All that is required is the thought of a *legitimate or possible* temporal construction, and in this way I can still represent the past state of the desk without having actually temporized-cum-tracked it.

Let me summarize. Cognitions or intentional representations, for Kant, are in the form of rules. In the case of space, Melnick argues that they are rules for encountering objects. But past appearances can no longer be encountered, so instead they must be rules for being presently situated with respect to past states; that is, they aren't rules for getting to past appearances, but rules for being up from past appearances. How, then, can such

¹⁷⁹ See *Themes in Kant's Metaphysics and Ethics*, Part III, Chapter 6.

¹⁸⁰ At A20/B34 of the Aesthetic, Kant says that "sensations can alone be ordered and placed in a certain form ..."

rules account for the intentionality of thoughts about the past? In order for the thought to have content, it must have reference to intuition, and since the past can no longer be intuited, this intuitive content must be supplied by a present perception. What is needed, then, is a rule that establishes a connection between a present perception and a past state. A rule that establishes this connection is thereby a rule for presently being up from *that* past state, and thus pertains to or is about the past state in question. But what establishes the connection is the possibility, not necessarily the actuality, of a temporizing-cum-tracking procedure; in other words, all that is required is a possible temporizing-cum-tracking procedure from the past state to the present perception. Consequently, what it means to represent the past *just is* to have the thought of a legitimate or possible temporizing-cum tracking procedure. Since what is tracked is a substance, the category of substance is required for, or necessarily part of, being able to intend the past.

2.2 Defense

The same defense provided for space can be extended to time:

1. Cognition involves and requires the application of rules of the understanding to sensible intuition (i.e., Kant's two faculty theory).
2. The rules of the understanding are applied to the matter or form of sensible intuition.
3. Cognition requires the application of the rules of the understanding to either the matter or form of sensible intuition (concluded from 1 & 2).
4. In perceptual cognition, the rules of the understanding apply to both the matter and form of experience.
5. In the cognition of past time, the rules of the understanding do not apply to the matter of experience.
6. Therefore, in the cognition of past time, the rules of the understanding apply to the form of intuition (concluded from 3 & 5).

7. The form of intuition is the way or manner in which intuitions of objects are obtained.
8. To say that time is a form of intuition is to say that the way in which intuitions of objects are obtained is by temporal positioning (concluded from 7).
9. Therefore, in the cognition of past time, the rules of the understanding are rules for temporal positioning (concluded from 6 & 8).
10. Rules for temporal positioning, with respect to representing the past, are rules for presently being up from past appearances.
11. Therefore, cognition of past time takes the form of rules for presently being up from past appearances (concluded from 9 & 10).

This argument parallels the argument for space in two notable ways. First, it preserves the neutrality of the ideality of time. By using the phrase “temporal positioning” I avoid commitment to constructivism, and instead name a phenomenon that is consistent with positioning in objective time. Second, the rules that enable representation of the past, for the same reasons as remote space, do not structure or concern the matter of appearance. Past states are not presently given, and Kant even references the “immense periods that have preceded my own existence,” which are beyond my own history and not something that *ever* could be presented anymore. It is revealing that Kitcher says literally nothing about past time (or time in general), for one wonders how her interpretation of a form of intuition as a process form could account for representation of the past. A process form processes given data, and the problem is that in this case the data can no longer be given. In making the judgment, “Socrates is wise,” the concept is predicated of the subject, Socrates. The problem concerns the possibility of the judgment’s reference to the world given that the subject is not, and can never be, present in intuition or perception. It is simply not compelling to think that the problem can be solved by appeal to synthesis of given sensory information (i.e., Kitcher’s process form)

since there is no sensory information, or Socrates' perceptions, to synthesize. We may think of walking around a given object and combining the information received (i.e., a process form operating in spatial perception), but surely we do not think the same about Socrates. Again, what is definitive of global cognition is that the object is not bodily or materially present to the subject; it must be represented *in absentia*.

However, there is one important difference between the two arguments. In the case of space, it is fairly clear what spatial repositioning refers to, but not so much in the case of time. For this reason, premise 10 in the argument above requires its own separate discussion and defense. What is "temporal positioning?" Actually, this indicates two things. First, any spatial construction takes time to perform. Temporal positioning, here, refers to the extent of time or the time-parameter (how soon, how quickly, etc.) within which the spatial positioning either actually takes place or is legitimated to take place. For example, a spacecraft might wait too long to launch and so no longer be correctly positioned to contact Pluto, for Pluto has moved to an inaccessible reach of its orbit. But this sense of temporal positioning concerns only future time, not past time. So how does one make sense of temporal positioning with respect to past time? Of course, one cannot position oneself back into the past, i.e., time travel, but one can be positioned with respect to the past or be situated up from the past. And this is the second sense in which temporal positioning can be understood. In this case, temporal positioning might be better described in terms of a "temporal situatedness." This why premise 10 is qualified: Rules for temporal positioning *with respect to the past* are rules for presently being up from past appearances. The rule for being situated with respect to the past reads: "With respect to a present perception, it is legitimate to be at stage k beyond first reacting ϕ ."

Although I won't provide the details, I note that the argument for premise 7 can be extended to time. One merely needs to replace 'spatial repositioning' with 'temporal positioning,' understood in the second, and not the first, sense given above.

3 Inhabitants on the Moon, Tigers in India, and Julius Caesar

The above arguments have relied mostly on a philosophical or conceptual evaluation of the requirements of the two-faculty theory, with minimal textual analysis. To make up for this deficiency, I conclude by identifying passages from the *Critique* where Kant expresses the view that has been attributed to him. In doing so, I will also discuss William James's views on intentionality for the purpose of comparing and contrasting their very similar positions.

Although the *Critique* has almost no examples, there are two passages where Kant provides and explicitly discusses specific examples of global cognition. Both passages have already been discussed, but a complete analysis can now be provided. I begin by discussing the inhabitants on the moon passage in the Antinomies:

That there could be inhabitants of the moon, even though no human being has ever perceived them, must of course be admitted; but this means only that in the possible progress of experience we could encounter them; for everything is actual that stands in one context with a perception in accordance with the laws of the empirical progression. Thus they are real when they stand in an empirical connection with my real consciousness, although they are not therefore real in themselves, i.e., outside this progress of experience (A493/B521).

Kant of course is not claiming that there are actual inhabitants on the moon. His point concerns the nature of representation: what does it mean to cognize or think them as real? The answer is that we think a series of possible perceptions that would eventually terminate in the perception of the moon inhabitants. So far I have left open how such a

rule is to be formulated, but it can now be supplied. The rule reads: “It is legitimate to take n steps, be affected and react “These are moon inhabitants!” In this scenario, we do not literally take steps to the moon, but more generally we think of a possible repositioning in space by means of which we might encounter them. Kant characterizes this repositioning as a “progress of experience,” for in getting in a spacecraft, say, we encounter a series of perceptions in the course of moving or repositioning in space. In this way, the inhabitants are conceived as standing in connection with my “real consciousness” and as part of one larger “context” of unfolding experience.

This view is similar to what James’ says in *The Meaning of Truth*. In a chapter entitled “Tigers in India,” he distinguishes between two ways of “knowing” things: either we know them immediately/intuitively or conceptually/representatively.¹⁸¹ I have characterized the latter as involving a mediate relation to the object of representation. But it is clear that he treats the term “knowing” as a semantic, not an epistemological, concept. He asks how one’s thought can “self-transcend” to the tigers in India: “At the very least, people would say that what we mean by knowing the tigers is mentally *pointing* towards them as we sit here./But now what do we mean by *pointing*, in such a case as this?”¹⁸² This is precisely the phenomenon of intentionality, and James provides what he calls a “very prosaic answer.” He says:

The answer, made brief, is this: The pointing of our thought to the tigers is known simply and solely as the procession of mental associates and motor consequences that follow on the thought, and that would lead one harmoniously, if followed out, into some ideal or real context, or even into the immediate presence, of the tigers.¹⁸³

¹⁸¹ *The Meaning of Truth*, p. 33.

¹⁸² *Ibid.*, p. 34.

¹⁸³ *Ibid.*

The idea is that to intend the tigers in India is to think of some way of proceeding through the world (Kant's progress of experience) that would, if carried out, place one in the immediate presence of the tigers. This procession does not have to be actually carried out, and James underscores this in an instructive footnote:

A stone in one field may "fit," we say, a hole in another field. But the relation of 'fitting,' so long as no one carries the stone to the hole and drops it in, is only one name for the fact that such an act *may* happen. Similarly with the knowing of the tigers here and now. It is only an anticipatory name for a further associative and terminative process that *may* occur.¹⁸⁴

The relation of fitting is made analogous to intentionality, and he says that to intend the tigers in India involves a terminative process that may – or is legitimate – to occur.¹⁸⁵

James, however, usefully expands upon Kant's view. His reference to an "ideal or real context" suggests something less than being lead into the immediate presence of the tigers. What he means is explained in a later chapter entitled "Knower and Known," where he says that, "Ether-waves and your anger, for example, are things in which my thoughts will never *perceptually* terminate, but my concepts of them lead me to the very brink, to the chromatic fringes and to the hurtful words and deeds which are their really next effects."¹⁸⁶ Although we cannot directly perceive a theoretical entity such as an ether-wave, or an "ejective reality" such as someone else's anger, we can still be lead into the vicinity of their most immediate observable effects. This point is useful since Kant never addresses the problem of representing atoms or quarks and the like, and one might

¹⁸⁴ Ibid.

¹⁸⁵ James' position is also expressed well in the first chapter of *The Meaning of Truth*, entitled "The Function of Cognition." He says: "A percept knows whatever reality it directly or indirectly operates on and resembles; a conceptual feeling, or thought, knows a reality, whenever it actually or potentially terminates in a percept that operates on or resembles that reality, or is otherwise connected with it or with its context" (*The Meaning of Truth*, p. 28). Again, he defines intentionality in terms of a terminative process, which is either actually or merely *potentially* carried out.

¹⁸⁶ Ibid, p. 69.

think that his theory of cognition would render the representation of theoretical entities or ejective realities impossible. But this is not the case. In the case of quarks or someone else's anger, there is nothing more to intuiting them than being in the presence of their most immediate effects, more or less; cognition of either consists of a rule for getting into the appropriate observational situation, e.g., cloud-chamber streaks or blows across one's head. Such situations are directly confirming of their reality.

Comparison with James' position is helpful, for he presents his view as basically a matter of commonsense opposed to the more extravagant theories of the day. Notably, he denies any view according to which the thought and thing could be connected even if they were the only two realities constituting the entire world. What is required, he says, is a world or context through which one traverses, from a *terminus ad quo* to a *terminus ad quem*. This point, properly understood, serves to demystify the seeming mysteriousness of intentionality. Wittgenstein captures this mystery nicely when he queries: "How was it possible for thought to deal with the very object *itself*. We feel as if we caught reality in our net" (§428). That is, it is as if the thought *all by itself* were capable of reaching out to the world, catching it as it were, and pulling it back in. But this would be a very queer thing for a thought to do. James denies that thoughts harbor any such intrinsic power or "special inner mystery."¹⁸⁷ Rather, they are connected to the thing by virtue of the world through which they lead us, and so long as there is a connecting world, there is no mystery to intentionality. In this way, one sees that Kant's view isn't so weird, but is a sensible and viable solution to the problem of intentionality. A thought is a rule governing behavior or conduct; it is intentionality related to an object of representation

¹⁸⁷ Ibid., p. 34.

simply and solely by the intervening behavior that it governs or legitimates, not some mysterious power to send tentacles out to the world.

I turn now to cognition of past time. Again, in a passage in the Antinomies, Kant says:

Accordingly, all events which have taken place in the immense periods that have preceded my own existence mean really nothing but the possibility of extending the chain of experience from the present perception back to the conditions which determine this perception in respect of time (A495/B523).

At this point, I can now formulate the actual rule for representation of the past. Kant refers to the “conditions which determine this perception in respect of time.” By “this perception” he means some present perception, not some past reaction. As a result, there must be some condition which determines or grounds some present perception “in respect of time.” I claim that this involves two interconnected phenomena. First, the perception must be determined both as *presently had* and as so far along from a previously elapsed past. In other words, as I have said above, the present is situated *as* present with respect to a past time from which it has emerged. Kant calls this dual phenomenon time-determination. For example, when I presently perceive my car, I represent it as having a history or a past. I might situate my perception as occurring *now*, four days *from* when I last drove and perceptually interacted with it. In the analysis of past-oriented cognition, we saw that Melnick provided a way of understanding this phenomenon. To presently situate a perception with respect to the past is to formulate a rule that reads: “Upon being affected, it is legitimate to be waiting up to 4 reacting first ϕ .” The condition which determines a present perception in respect of time is temporizing-cum-tracking, for I determine my perception as presently occurring so far along in this (possible) procedure.

However, there is a limitation to this interpretation of the passage. Kant makes no mention of present substances, such as my car or desk, but to the “immense periods that have preceded my own existence.” Julius Caesar, for instance, belongs to this immense period; and, unlike my car, he is no longer around. What I need to do, then, is to extend the account to cover cognition of appearances that have long since lost their integrity as enduring substances. Kant provides a clue in his reference to “extending the chain of experience from the present perception back to the conditions ...” It is quite natural to suppose the reality of a causal chain leading up from the past to the present, and indeed it is the introduction of the category of causality that allows the account to be expanded. Since substances stand in causal interactions, the temporizing-cum-tracking procedure need not be restricted to a single substance, but can track causal interactions between substances over time (i.e., timing substantial interactions). So, for example, Julius Caesar’s crossing of the Rubicon became part of the history of the Rubicon, and the Rubicon still persists today. One can thereby formulate the rule: Upon being affected by the Rubicon, it is legitimate to be up to stage k from first reacting, “Behold, here Caesar crosses!” And even if the Rubicon is no longer around, one can still track its interaction with other substances, and so on, up to some present substance.

Let me stress that one does not have to actually track the interactions of substances. Again, all that is required is a possible or legitimate tracking procedure to up some present perception. On the interpretation that has been defended, to license a tracking procedure of this sort just is what it means to have thoughts about Caesar.

As it turns out, James also discusses representation of Julius Caesar in *The Meaning of Truth*. The chapter is entitled “The Existence of Julius Caesar,” and the position he

provides is verificationist in a way that his position on tigers in India is not. One reason might be that James changes the topic to truth, rather than intentionality, and asks instead – what makes the saying “Caesar really existed”¹⁸⁸ true? As with the tigers, James refers to the finite intermediaries between the thought and the purported fact, and he says: “The real Caesar, for example, wrote a manuscript of which I see a real reprint and say ‘the Caesar I mean is the author of that.’ The workings of my thought thus determine both its denotative and connotative significance more fully.”¹⁸⁹ First, let me note just how similar this is to Kant’s formulation. James provides a perfectly commonsensical way of thinking about the matter: Caesar left various effects or marks behind, e.g., a manuscript, and by observing these effects I can cognize Caesar’s past existence. One might then formulate Kant’s rule in parallel fashion: “Upon perceiving a manuscript reprint, it is legitimate to say, “Caesar wrote this.” In this way, I want to emphasize that Kant’s position is not as strange as it might seem at first, but is actually within the purview of ordinary thinking. However, the two positions are also importantly different.

To begin, James refers to finding actual evidence of Caesar’s existence. It is this evidence that determines the connotative and denotative significance of the claim, “Caesar existed”; it determines both what the statement means and what it refers to. Kant does not hold this view. On his formulation, the substance or reality that affects us does not function in the rule as the *evidential basis* of the past state or event represented. To return to my previous example, we can ask how the presently green desk provides evidence that it once was red. Presumably one could scrutinize the desk more carefully by scraping paint off, therein discovering the red paint underneath. But this is an

¹⁸⁸ Ibid, p. [120] 286.

¹⁸⁹ Ibid.

evidence-seeking procedure, something which Kant's rule does not specify. Rather, Kant speaks of conditions that *determine a present perception with respect to time*, and this is achieved not by an evidential basis but a substantival basis. For Kant, the procedure that determines a present perception with respect to time is either the possibility of tracking a single substance or interactions of various substances. For this reason, his actual formulation of past-oriented cognition isn't exactly what was given above. For the sake of formulating a rule parallel to the one James provides, I stated:

Upon perceiving the manuscript reprint, it is legitimate to say, "Caesar wrote this."

But Kant's formulation reads:

Upon perceiving the manuscript reprint, it is legitimate to be up to stage k first reacting, "Caesar is writing his manuscript."

In the first rule, the manuscript reprint is functioning as evidence for one's assertion about Caesar. In the second rule, the manuscript reprint is functioning in time-determination. It grounds not evidence, but the legitimacy of being up to a certain stage in the activity of temporizing or timing.

4 Conclusion

The task of the chapter has been to present an interpretation of Kant's views on what is required for cognizing the appearances of remote space and time. Given the constraints of the two-faculty theory, any contentful representation must have a relation to sensible intuition. Yet interestingly this relation seems to be lacking in global cognitions. When thinking about the appearances of remote space and the distant past, the objects of

representation are not present in sensible intuition. One is left wondering whether these representations are just as empty as the representations of supersensible reality. Just as thoughts about God are not cognitions, so perhaps thoughts about remote space and time are not cognitions. The problem is that in both cases the object of thought is not given sensible intuition. As Kant says, “It is just as necessary to make the mind’s concepts sensible (i.e., to add an object to them in intuition) as it is to make its intuitions understandable (i.e., to bring them under concepts) ... Only from their unification can cognition arise” (A51/B75).

The first step in saving global cognition is to recognize that the appearances in distant space could be presented in intuition by means of repositioning oneself in space. And even if the distant appearance is so far away that we could never actually get to it, we could still think of a possible way of getting into its perceptual vicinity. We recognize that distant appearances are only contingently outside the scope of our perceptions. The result is that thoughts about distant appearances can be related to sensible intuition by means of a rule for how to spatially relocate so as to terminate in the perception of the appearance. I called this a mediate relation of a thought to a possible intuition. The rule that defines the cognition of a spatially remote appearance was formulated as follows:

Cognition of spatially remote appearances = It is legitimate to take n steps, be affected and react ϕ .¹⁹⁰

My thought that Pluto is uninhabitable is mediately related to possible intuition because there is a possible procedure by which I can encounter Pluto.

¹⁹⁰ See *Space, Time, and Thought in Kant*, p. 28.

The second step is to recognize that although past appearances – as gone – are beyond being encounterable, we can nonetheless form a rule for being up from a past state. The rule is not an instruction for how to go back into the past to perceive the object, but it is a representation of how we are presently situated with respect to the past. Again, I called this a mediate relation of a thought to a possible intuition. The rule that defines the cognition of temporally remote appearances was formulated as follows:

Cognition of temporally remote appearances = With respect to what is presently perceived, it is legitimate to be at stage k beyond (or up to stage k from) first reacting ϕ .

The thought that John's desk was green is related to possible intuition because we can think of our present experience of John's (now) red desk as occurring at the tail end of a passage of time beginning with a perception of his green desk.

Thoughts about past time and remote space are meaningful because we can think of a possible procedure by which our thought is mediately (even if not immediately) related to a possible intuition that we could have had. This possible procedure is either a repositioning of oneself in space so as to perceive an object, or a tracking of a continuous passage of time from a past state up to a present state. The key to distinguishing global cognitions from representations of supersensible reality is that in the latter case such a possible procedure is altogether lacking. Since an infinite God cannot be given in any type of necessarily finite experience, there is no procedure by which one's thoughts could be related, either mediately or immediately, to a sensible intuition of God.

Now that an analysis of global cognition has been provided and defended, we can turn back to the text of the Transcendental Deduction in the next two chapters to

complete the interpretation. I argue that the categories are deduced by Kant's proving that they are required for the possibility of global cognition. Since we now have an account of global cognition, we can use it to understand the text and argument of the Deduction.

Admittedly it is odd that I have developed the theory without any references to the Deduction itself. The reason will become apparent in the next chapter. The passages in the Deduction where Kant references global cognition are saddled with such interpretive difficulties that there is simply no way of understanding them on their own. In particular, in the official deduction of the categories at A115-130, Kant utterly baffles the reader by suddenly introducing the transcendental synthesis of the imagination (A118). He gives this unusual synthesis a central place in his argument for the objective validity of the categories, and then provides almost no explanation of what it is. His complete proof is succinctly presented in this passage:

The unity of apperception in relation to the synthesis of the imagination is the understanding, and this very same unity, in relation to the transcendental synthesis of the imagination, is the pure understanding. In the understanding there are therefore pure *a priori* cognitions that contain the necessary unity of the pure synthesis of the imagination in regard to all possible appearances. These, however, are the categories, i.e., pure concepts of the understanding; consequently the empirical power of cognition of human beings necessarily contains an understanding, which is related to all objects of the senses, though only by means of intuition, and to their synthesis by means of imagination, under which, therefore, all appearances as data for a possible experience stand. (A119).

The burden of the next two chapters is to explain the proof given in this passage. Chapter 5 is devoted entirely to interpreting the faculty of transcendental imagination, and Chapter 6 applies the results of Chapters 1-5 to articulate the full meaning of the passage. By way of anticipation, I indicate that the canonical rules of global representation formulated in this chapter can be used to interpret the claim that "The unity of apperception ... in relation to the transcendental synthesis of the imagination, is

the pure understanding” (A119). The pure understanding is the faculty of global cognition, and this faculty, as Kant says, involves the unity of apperception in relation to the transcendental synthesis of the imagination. I will argue that the transcendental synthesis of the imagination is a spatio-temporal synthesis, and that the unity of apperception is achieved when a rule is applied to that synthesis. For example, in the cognition of a spatially remote appearance, the spatial repositioning by which the appearance could be encountered is the transcendental synthesis of the imagination, and when that synthesis is brought under a rule or legitimated, it is related to the unity of apperception. All of this then is contained in the canonical rule, “It is legitimate (i.e., the unity of apperception) to take n steps (i.e., the transcendental synthesis of the imagination), be affected and react ϕ (i.e., the empirical understanding). The entire rule is the thought of a distant appearance being a certain way, and the faculty for forming such thoughts is called the pure understanding. Kant, for reasons that have yet to be explained, asserts that we could not form such thoughts if the categories weren’t objectively valid.

CHAPTER 6

PART ONE OF KANT'S PROOF OF THE CATEGORIES: THE PRODUCTIVE IMAGINATION

The previous chapters have focused on the sections of text in the Transcendental Deduction that Kant refers to as preparatory. Chapter 2 investigated Kant's statement of the principle¹⁹¹ of the deduction (A84-94) for the purpose of identifying its topic, intentionality. In this section, Kant describes his methodology for doing metaphysics, and lays out the principle that if there are certain *a priori* concepts necessary for cognition, then they must apply to any object that can be cognized. I argued that cognition is the phenomenon of intentionality. Chapter 3 developed one part of Kant's theory of intentionality, namely, his theory of perception, and focused largely on the first three preparatory sections known collectively as the threefold synthesis (A95-110). It is in these sections that his most detailed discussions of perception occur. Chapter 4 explored some corrections Kant made to his views on perception and its relation to the transcendental deduction (A110-114). In this crucially important body of text, Kant altered his previous analysis of empirical concepts, introduced the categories for the first time, and based the principle of the deduction on the possibility of global rather than perceptual cognition. My most important argument was intended to establish that Kant's proof of the categories is based on his claim that their objective validity makes global

¹⁹¹ The so-called "principle" of the deduction refers to Kant's statement of the strategy or method for deducing a category, i.e., for establishing that it is objectively valid. This strategy is as follows: Kant says that if it can be proved that cognition of objects requires the application of certain *a priori* concepts to them, then it can be proved that those *a priori* concepts (i.e., the categories) must apply to any object that we can cognize. But this leaves the issue of what cognition is open. Commentators refer to the cognitive capacity that the categories make possible as the so-called "premise" of the deduction (not to be confused with the principle of the deduction). I argued in Chapter 2 that the premise of the deduction, or the cognitive capacity that the categories make possible, is intentionality. In Chapter 4 I made this more precise by arguing that, specifically, they are required for the intentionality of global cognition.

cognition possible. Chapter 5 went beyond the programmatic assertion that the principle of the deduction is global cognition, and it developed the actual theory itself. If the categories are claimed to make global cognition possible, then surely it is incumbent upon the interpreter to explain its nature. I argued that it consists of rules for spatio-temporal positioning. This leaves only the final section of text (A115-130), which is appropriately entitled “Of the Deduction of the Pure Concepts of the Understanding,” for consideration. Here Kant applies all of his preparations in developing the official proof of the objective validity of the categories.

As it turns out, once Kant has completed his preparations, he is able to state the entire proof in a single, dense paragraph. It reads:

The unity of apperception in relation to the synthesis of the imagination is the understanding, and this very same unity, in relation to the transcendental synthesis of the imagination, is the pure understanding. In the understanding there are therefore pure *a priori* cognitions that contain the necessary unity of the pure synthesis of the imagination in regard to all possible appearances. These, however, are the categories, i.e., pure concepts of the understanding; consequently the empirical power of cognition of human beings necessarily contains an understanding, which is related to all objects of the senses, though only by means of intuition, and to their synthesis by means of imagination, under which, therefore, all appearances as data for a possible experience stand. Now since this relation of appearances to possible experience is likewise necessary (since without it we could not obtain any cognition at all through them, and they would thus not concern us at all), it follows that the pure understanding, by means of the categories, is a formal and synthetic principle of all experiences, and that appearances have a necessary relation to the understanding (A119).

This paragraph will be unpacked over the course of the next two chapters. The basic organization of the argument is not too difficult to discern. It exhibits the proof-structure that I gave in Chapter 4:

1. If the objective validity of the categories makes cognition possible, then the categories must apply to any object that can be cognized by us.
2. Cognition is the capacity for global representation.

3. Global representation is the capacity to represent any possible spatio-temporal appearance.
4. Cognition is the capacity to represent any possible spatio-temporal appearance (concluded from 2 & 3).
5. Therefore, if the objective validity of the categories grounds the capacity to cognize any possible spatio-temporal appearance, then they must apply to any possible spatio-temporal appearance that can be cognized (concluded from 1 & 4).

The conclusion of this argument is a conditional statement, since it is only later in the *Analytic of Principles* that Kant attempts to prove that there are specific concepts, such as substance and cause, that make cognition possible. However, in the passage where Kant gives his proof, he isn't so careful regarding this point. He does not state his conclusion conditionally because he asserts in the argument that the categories do make cognition possible, in which case this assertion is made in anticipation of what he goes on to show. If we modify the argument so as to fit the non-conditional statement Kant here gives, the result is as follows:

1. Cognition is the capacity for global representation.
2. Global representation is the capacity to represent any possible spatio-temporal appearance.
3. Cognition is the capacity to represent any possible spatio-temporal appearance (concluded from 1 & 2).
4. The objective validity of the categories makes this capacity possible, and consequently their objective validity makes cognition possible.
5. Therefore, since the objective validity of the categories makes cognition possible, they must apply to any object that can be cognized by us, i.e., all possible appearances (concluded from 4 by Kant's principle of the deduction).

This gets us pretty close, but the full statement of the argument requires yet one additional modification. Kant's opening sentence introduces some brand new

terminology when he speaks of the transcendental synthesis of the imagination. I claim that this sentence is just his definition of cognition, with the addition of this terminology. The sentence reads: “The unity of apperception in relation to the synthesis of imagination is the understanding, and this very same unity, in relation to the transcendental synthesis of the imagination, is the pure understanding” (A119). In this chapter and the next, I argue that the unity of apperception in relation to the synthesis of imagination is *perception* (i.e., the empirical understanding), and the unity of apperception in relation to the transcendental synthesis of imagination is *global cognition* (i.e., the pure understanding). So, Kant begins his proof by defining perceptual and global cognition. He then says that the categories “contain the necessary unity of the pure synthesis of imagination” (A119). Keeping in mind that necessary unity is the unity of a rule, and that the unity of a rule is the unity of apperception,¹⁹² it turns out that this is just another way of saying that the categories enable the transcendental imagination to be related to the unity of apperception. But since global cognition has been defined as the relation of the transcendental imagination to the unity of apperception, Kant’s statement means that the categories make global cognition possible. The paragraph then concludes with the statement that all possible appearances are necessarily related to, or capable of being brought under, the rules of the understanding: “it follows that ... appearances have a necessary relation to the understanding” (A119). Appropriately altered, the full argument sans suppressed premises and with the addition of his new terminology reads:

¹⁹² My interpretation of the unity of apperception as the unity of a rule guiding conscious behavior was argued for in Chapter 3. See specifically section 2.1. Given the identification of necessary unity with the unity of apperception, which in turn is the unity produced by a rule, Kant’s sentence reads that the categories “contain the unity of apperception of the pure synthesis of imagination” (A119). This is admittedly rather awkward, but to say that there is a unity of apperception *of* the pure synthesis of imagination is to say that pure imagination can be brought under rules. For the categories to “contain” the capacity to bring the pure imagination under rules is to say that they make such a thing possible.

1. Cognition is the capacity for global representation.
2. Global representation is the capacity to represent any possible spatio-temporal appearance, *and this capacity is defined as the ability to bring the transcendental synthesis of imagination to the unity of apperception.*
3. Cognition is the capacity represent any possible spatio-temporal appearance, and this capacity is defined as the ability to bring the transcendental synthesis of the imagination to the unity of apperception (concluded from 1 & 2).
4. The objective validity of the categories makes this capacity possible.
5. The objective validity of the categories makes cognition possible (concluded from 3 & 4).
6. The objective validity of the categories enables global representation (concluded from 1 & 5).
7. The objective validity of the categories enables the cognition of any possible spatio-temporal appearance (concluded from 2 & 6).
8. Therefore, since the objective validity of the categories enables the cognition of any possible spatio-temporal appearance, then they must apply to any possible spatio-temporal appearance that can be cognized (concluded from 7 by Kant's principle of the deduction).

With Kant's definition of cognition as the unity of apperception in relation to the transcendental synthesis of the imagination, it is simply not possible to understand his proof without an explanation of the meaning of his new terminology. Intriguingly, he says that imagination is a necessary component of all cognition. The task of this chapter is to explain what the faculty of imagination is. This task has, in part, been treated in Chapter 3 where I explained the role of imagination in perception; specifically, I explained the *reproductive* imagination's role in perception. But I have yet to touch at all upon the *transcendental or productive* imagination, and the reason is because Kant barely

even mentions this faculty until a few lines before he gives the actual proof!¹⁹³

Accordingly, the chapter divides into two parts. First, I reiterate familiar points about the nature of the reproductive imagination and its role in perception, and second, I discuss the transcendental/productive imagination.

The second section is the bulk of the chapter by far. It begins with a presentation and critique of the textual accuracy of two main types of reading: the object-constitution and object-construal reading of the transcendental imagination. Wilfred Sellars and Patricia Kitcher offer the former interpretation, and Michael Young offers the later. I argue that Sellars and Kitcher mistakenly reduce the productive imagination to the empirical productive imagination and reproductive imagination, respectively. Next, I argue that although Young avoids my objection to Sellars and Kitcher, he does so at the expense of incorrectly equating the function of the productive imagination in the Deduction with its function in the Schematism. I argue that the productive imagination has two separate functions in these two texts. After presenting my criticisms of these very interesting, high-profile views on imagination, I offer what I take to be the correct reading. On the basis of close scrutiny of the *B-edition* Deduction, which provides a considerably more fleshed out treatment of transcendental imagination than the A-edition, I argue that it is the faculty for producing continuous spatial and temporal expanses. Equivalently put, it is the faculty for spatio-temporal synthesis. Kant's position, then, is that the possibility of global cognition requires that spatio-temporal synthesis (i.e., transcendental imagination)

¹⁹³ Kant does make brief mention of transcendental imagination earlier in the second section of the threefold synthesis. Most of the section involves an account of reproductive imagination, as indicated in the title of the section, "On the synthesis of reproduction in imagination." But at the very end of the discussion he says, "the reproductive synthesis of the imagination belongs among the transcendental actions of the mind, and with respect to this we will also call this faculty the transcendental faculty of the imagination" (A102). However, he makes no attempt to explain what this transcendental faculty is. He gives at best a hint when he says that it is involved in "pure *a priori* cognition" (A102). Given no further explanation, the reader can only be left puzzled.

be brought under the rules of the understanding (i.e., apperception). And this is exactly the definition of cognition with which the official proof of the categories begins.

1 The Reproductive Imagination

Kant distinguishes the reproductive from the productive/transcendental imagination. His most sustained discussion of the former faculty is found in the threefold synthesis at A104-110 of the Transcendental Deduction. Here he distinguishes three types of synthesis involved in perceptual experience: the synthesis of apprehension, imagination (reproductive), and recognition. The synthesis of apprehension is the activity of discriminating or discerning the various components of a representation. Such activity is temporally extended, and it consists of scanning or looking over the object. For example, in perceiving a house, I “run through” its various parts of roof, sides, shingles, windows, and so forth, and by discriminating its parts one after the other, I can apprehend them as components of the whole or as “contained in a single representation” (A99), i.e., a house.

But the synthesis of apprehension is bound up with the synthesis of imagination. Its role is to recall previously apprehended connections and thus to establish retentions, anticipations, and associations in perceptual experience. As I walk around the house and perceive its various sides, I also recall or reproduce in imagination the sides that I had just perceived but am no longer perceiving, as well as anticipate the sides that I will soon go on to perceive. In this sense I form an “image” of the entire house even though the house in its entirety can never be given in perception. This does not involve literally picturing the house, but is the activity of gathering together and retaining information about the house.

Neither synthesis, however, is rule governed. They involve simply the awareness, recollection, and anticipation of the spatio-temporal contiguity¹⁹⁴ of certain representations. But contiguity is an insufficient basis for uniting representations into determinate objects. When looking over a house, one might discern the following items as standing in contiguous relations: roofs, sides, ground, shingles, chimney, smoke. However, neither the smoke rising from the chimney nor the ground upon which the house stands are judged to be parts of the house. According to Kant, the capacity to make such a judgment requires a rule specifying what representations ought to be connected together in preference to others. The concept of a house is just this rule. It specifies that, among other things, roof and sides ought to be united in the representation of the house, but not sides and ground.¹⁹⁵

The synthesis of recognition, therefore, brings the synthesis of imagination under a rule connecting certain representations rather than others. This, then, is all that is meant by Kant's opening claim in the official proof that the unity of apperception in relation to the synthesis of reproductive imagination is the empirical understanding (A119). The empirical understanding is the faculty for perceiving determinate objects of representation. This ability involves the three empirical syntheses discussed above. But since the synthesis of apprehension and imagination are insufficient for uniting representations into objects, what is additionally needed is a rule guiding them. Kant refers to these rules as empirical concepts of objects, e.g., body, house, cinnabar. The

¹⁹⁴ Contiguity is one of Hume's three modes of association, along with resemblance and cause and effect. For two representations to be contiguous is for them to be either next to one another in space (e.g., the roof is next to or touching the sides of the house) or to be discerned after one another in time (e.g., I first see the sides then see the roof).

¹⁹⁵ The term "specify" could be misunderstood. We construct concepts, and what properties we choose to associate or build into the concept is guided by pragmatic concerns, i.e., what enables us to deal most effectively with our environment. Concepts specify what they do, or acquire their content, as a product of our interests and concerns.

application of a concept or rule to this process of information-gathering is what is meant by “bringing” the synthesis of reproductive imagination to apperception.

With this background, we can now investigate what Kant means by the productive imagination. In various other places, he refers to the pure, *a priori*, and transcendental imagination. All four characterizations refer to one and the same faculty, and the differences are merely terminological, not substantive. For the most part, I will refer to the productive imagination since this highlights more illuminatingly its distinction from the reproductive imagination. What, then, is the productive imagination and its intriguing role in cognition?

2 Productive Imagination as Object Constitution and Object Construal

We have a good understanding of the empirical, reproductive imagination. It is nothing other than what the empiricists called associative principles, except that Kant is careful to stress that such associations are brought under rules governing how we ought to associate and as such acquire a normative status beyond mere reports of how we do or are disposed to associate. What remains mysterious are Kant’s allusions to productive imagination. I will first consider in Section 2.1 and 2.2 possible interpretations of this faculty by looking at some of the commentators who give it prominent attention: Sellars, Kitcher, and Young.¹⁹⁶ I will criticize their readings and then provide in Section 3 and 4 what I take to be the correct one.

¹⁹⁶ P.F. Strawson published the *Bounds of Sense* in 1966. The aim of the work was to separate those aspects of the first *Critique* that have contemporary philosophical value from those aspects that are best discarded as antiquated and mistaken. Strawson’s main thesis was that the *Critique* contains “two faces” (*The Bounds of Sense*, pp. 15-21). He argued, on the one hand, that the *Critique* presents a valuable project of attempting to identify the general features that experience must possess if it is to be made intelligible to ourselves. He characterized this as Kant’s “analytical project.” He then distinguished it from what he called the “transcendental psychology” with which Kant entangled his analytical aim. Kant’s mistake, according

2.1 Object-Constitution: Presentation and Critique

Both Sellars and Kitcher adhere to the view that the productive imagination is responsible for constructing or constituting the objects of our representation. I call this the object-constitution interpretation. By contrast the reproductive imagination is claimed to be dependent upon the operation of the productive imagination, for as reproductive it merely connects objects and thus presupposes the objects (constituted by the productive imagination) that it connects. I will first present Sellars and Kitcher's interpretation, respectively, before providing my objections to them.

In *Science and Metaphysics*, Sellars describes the constitutive nature of the productive imagination by claiming that it constructs the intuitions that serve as the subject term of judgments. According to him, intuitions are demonstrative representations, or representations of a *this-such*, which take the form of, to use his own example, "this-cube." Here we represent an individual *as* a cube. This representation can further function as the subject term in the judgment "this cube is a die" or any other similar type of judgment.¹⁹⁷

Not much more is said about the productive imagination, but Sellars does elaborate on the phenomenology of the as-structure of perception in his later article "The Role of the Imagination in Kant's Theory of Experience." He begins by considering the

to Strawson, was to argue that these general features of experience are actually supplied by transcendental activities or faculties of the human mind. For Strawson, the whole picture of mental faculties generating the world of experience was philosophically intolerable.

Strawson's book has had considerable impact on Kant studies. Accordingly, many commentators reject the value of "faculty talk," and simply fail to consider the operation of the faculties that Kant himself believes to be indispensable to cognition. Most notably, Kant's claim that the *productive* imagination is an indispensable component of cognition is often ignored. But this neglect is not universal. There are some commentators who give the productive imagination prominent attention and believe that the imagination is vital to all aspects of cognition, both in understanding Kant's text and the phenomenon itself. Sellars, Kitcher, and Young justly give it this level of attention.

¹⁹⁷ *Science and Metaphysics*, pp. 4-5. Sellars explains the difference by saying that the representation "this-cube" is incomplete, whereas the judgmental representation "this cube is a die" is complete.

perception of a red apple. We see the apple not just as having a red surface, but also as having a white inside. Phenomenological analysis reveals, he argues, that the white inside is “bodily”¹⁹⁸ present in the perceptual experience. The “white inside” is not merely present in the sense of “believed in” or “conceptually represented alongside the apple-perception.” Rather, the “white inside” forms part of the content of the perception, the sensible experience, itself. He continues by noting that there is something peculiar to this experience. The puzzling feature concerns the fact that though we represent the apple as red-containing-white, where the white is as much actually present in the perception as is the red, we nonetheless do not see the whiteness: “How can a volume of white apple flesh be present *as actuality* in the visual experience if it is not seen?”¹⁹⁹ The answer: it is imagined. After making some additional moves irrelevant for our purposes here, he then concludes that the phenomenon of perceiving-as consists of the productive imagination constructing sense-image models of external objects.²⁰⁰

Sense-image models, first, are seen as models *of* external objects and consequently in some unspecified sense are distinct from them, as Sellars’ diagrams show.²⁰¹ Second, they involve both actual sense-experience – that is, the presence of the external object to the subject – and the additional imaging of that sense-experience. So, in the case of the red apple, I see of the apple that it has a red surface facing me, but I also imagine the cool, juicy, white inside. Consequently, my perception of the apple consists of sense-data

¹⁹⁸ See “The Role of Imagination in Kant’s Theory of Experience,” p. 234. Sellars refers to the characterization of this phenomenon in terms of bodily presence as a “familiar metaphor.”

¹⁹⁹ Ibid.

²⁰⁰ Ibid., p. 236-237.

²⁰¹ Ibid., 239 & 240. In both diagrams, the external object is drawn outside the scope of the perceiver’s head, whereas the sense-image model is drawn within the perceiver’s head. The drawing certainly *suggests* indirect realism; however for present purposes I can avoid the complicated question of whether Sellars is actually presenting a version of indirect realism. It is likely that Sellars’ view is much more nuanced than indirect realism. The drawing might be his awkward way of expressing Kant’s claim that the object of representation is an appearance.

that have been brought into an encompassing image; the red surface that I see is brought into my image of the apple as juicy, cool, and white inside. If this point seems obscure, perhaps it can be cleared up by keeping in mind that by “imaging” Sellars means the ordinary activity of making an image, or as one might say more colloquially, picturing. Furthermore, sense-image models are seen as *perspectival* in nature. They are constructed from the perspective in which our bodies are oriented toward or facing the object. Apples, as Sellars says, are imagined from a point of view, and part of the content of the apple-image is such a point of view.

But the productive imagination does more than merely construct individual sense-image models, Sellars argues. In addition, he says that the productive imagination has “a capacity to form images in accordance with a recipe.”²⁰² Here Sellars is referring to the role of the productive imagination in generating schemata:

Consider the example of a perceiver who sees a pyramid and is walking around it, looking at it. The *concept* of a red pyramid standing in various relations to a perceiver entails a *family* of concepts pertaining to sequences of *perspectival* image-models of oneself-confronting-a-pyramid. This family can be called the schema of the concept of a pyramid.²⁰³

The basic claim is that the imagination can produce image-models from a great many possible perspectives, which is to say that it can produce a “family” of image-models. In perceiving the apple, I not only imagine its red surface with a white inside from one perspective but from multiple perspectives that I currently do not occupy. I imagine the various ways in which it might look as I move around it. Such a family of image-models

²⁰² Ibid., 238.

²⁰³ Ibid.

is called a schema, and it is this schema that enables me to apply the concept of an apple to my sensible experiences.²⁰⁴

As it turns out, Kitcher shares the object constitution reading. Her analysis lacks the phenomenological niceties of Sellars's, but then again her only concern is to show that there must be a synthesis of imagination underlying perception. She begins by defining the law of association as a rule that links cognitive states based solely on spatio-temporal contiguity. The reproductive imagination, then, consists of imaginative linking based on observation of spatio-temporal contiguity. But she soon notes that spatio-temporal contiguity, due to its promiscuity, is an insufficient basis for uniting representations into an object. For example, observations of striking matches and flames nearly always occur together and yet we do not unite them into a single object; however, we do unite our various representations of parts of the phone into such an object. This shows, she continues, that the rules for object-constitution cannot be the law of association, and as such the reproductive imagination presupposes rather than provides rules for object-constitution. For these reasons Kitcher claims that, according to Kant, rules for object-constitution cannot be based on empirical associations, and so must be *a priori*. That is, the rules for object-constitution must come from the subject, not the senses, and she attributes the origin of these rules to the productive imagination.²⁰⁵ Both Kitcher and Sellars are in agreement on this conclusion, and the only difference is in their arguments for why there must be a synthesis of productive imagination involved in object-perception.

²⁰⁴ Sellars sums up his view nicely: "As an association of *objects* [the reproductive imagination] presupposes the constitution of objects by the productive imagination. And the principle of such constitution is not happenstance, but conformity to recipe-schemata derived from concepts" ("The Role of Imagination in Kant's Theory of Experience," p. 240).

²⁰⁵ See *Kant's Transcendental Psychology*, p. 81-82.

Neither interpretation of the productive imagination is adequate. The problem common to their readings, and to any object-constitution interpretation, is that by making the productive imagination operate on the material of representation in constructing objects, it cannot be seen as genuinely free from or as operating independently of the reproductive imagination. And yet Kant makes clear that the productive imagination is pure, *a priori*, or transcendental, which entails that it cannot be seen as depending upon the reproductive imagination. I will now explain how this general criticism applies to Sellars and Kitcher's readings specifically.

According to Sellars, the productive imagination has two different functions. It constructs both sense-image models and concept schemata, and in both cases the productive imagination is intertwined with the reproductive imagination. With regard to the former case, we saw that the sense-image model of an external object involves not just what we perceive of it, but what we perceive it *as*. For example, we perceive the apple as having a cool, juicy, and white inside. But the fact that we construct this type of image-model rather than another is guided by our past observations of apples and cool white flesh. It is true that we don't *see* the white inside, and for this reason it makes sense to speak of the production of an image and not merely the reproduction of what is currently seen. However, the problem is that the produced image is essentially an *anticipatory* representation. The produced image captures what one would expect to see if one were to cut open the apple, and as such, it is inseparably connected with the reproductive imagination, i.e., what one recalls having seen before.

But with regard to the latter case, the problem is slightly different. Concept schemata involve not only one perspectival image-model, as with sense-images, but an indefinitely

large family of perspectival image-models. Concept schemata can therefore better be seen as a *recipe* for generating this family of perspectival image models. It is simply not possible to observe an object from all possible perspectives, and yet concept schemata enable us to subsume any possible perspective under our concept of the object. This means that the productive imagination, in this case, is not merely anticipating what has previously been observed, but representing or constructing perspectives that have never been previously occupied vis-à-vis the object. However, the problem is that even if the imagination in its schematizing role is not anticipative, it is *extrapolative*. Picture, again, the red apple with a cool, juicy, white inside. It is certainly possible to perceive the apple from the vantage point of slowly drifting thirty feet above it. Although I have never seen an apple from this perspective, I can still imagine it. But it strikes me as quite clear that my image is in some sense extrapolated from my experience of heights and motion and distance. Extrapolation is not as strictly tied to past observation as anticipation, but neither can it be separated from it altogether. One extrapolates *to* a possible perspective *from* actual experience. Consequently, the creativity attributed to the productive imagination is still intertwined with imagination in its reproductive role.

Since the construction of both sense-image models and concept schemata require the reproductive imagination in some way, Sellars fails to give an analysis of the productive imagination in its genuinely pure, *a priori*, or transcendental role. Rather, he only manages to provide an analysis of the *empirical* productive imagination. In the Schematism chapter, Kant claims that the construction of “the image is a product of the empirical faculty of productive imagination” (A141-142/B181). On Sellars’s reading, Kant’s references to “images” are references to sense-image models, and here one sees

that Kant explicitly attributes their construction to the empirical, not pure, imagination. Consequently, Sellars has provided an analysis of the productive imagination in its merely empirical operation as anticipative and extrapolative in our dealings with the variety of the matter of intuition.²⁰⁶ Surely the characterization of imagination as empirically productive captures the middle-ground between pure production and slavish reproduction which I have identified as at work in sense-image model construction.

The general criticism given above applies to Kitcher's account as well. The problem with her reading is that she actually reduces the productive imagination to the reproductive imagination. This point can be seen if one fully analyzes her point involving matches/flames and telephone parts. The reason she introduces these examples is to show that the law of association, which she claims is based solely on spatio-temporal contiguity, is an insufficient basis for uniting representations into objects. For example, we don't unite matches and flames into an object, but we do unite telephone parts. From this she concludes that there must be some other faculty at work, aside from the reproductive imagination, called the productive imagination that generates these connections. But the problem is that she mistakenly overlooks the point that the reproductive imagination is guided by empirical rules of the understanding that serve to connect certain representations over others.²⁰⁷ So, in the case of striking matches and flames, the empirical rule of association does not license connecting them as parts of an object, but it does license connecting them in the relation of cause and effect. The

²⁰⁶ That, according to Sellars, the productive imagination deals with the matter of intuition is made clear when he defines it as such: "In any event, it is clear that Kant applies the term 'intuition' to both the representations which are formed by the synthesizing activity of the productive imagination and the purely passive representations of receptivity which are the 'matter' (A86; B108) which *the productive imagination takes into account*. Yet if he is not unaware that he is using the term 'intuition' somewhat ambiguously, he does not seem aware of the radical nature of the ambiguity" ("The Role of Imagination in Kant's Theory of Experience," p. 7, my emphasis).

²⁰⁷ Kant explicitly refers to such privileging as a function of the empirical understanding at A121.

empirical rule, then, performs the privileging function that is needed over and above association based on contiguity alone. What she thinks is required of the productive imagination is actually carried out by empirical rules guiding the reproductive imagination. Of the former she says: “‘Productive’ is used to make a contrast with a faculty that (only) follows the law of association ...”²⁰⁸ To only follow the law of association, on her analysis, is to connect any spatio-temporally contiguous cognitive states. But empirical rules guiding reproductive imagination as *norms* do not merely follow the law of association so understood. On her reading, she assigns to the productive imagination the role that Kant actually assigns to the combined operation of the empirical syntheses of imagination and recognition.

Evidence for this can be found in a passage in the Transcendental Deduction. Kant says:

Since, however, if representations reproduced one another without distinction, just as they fell together, there would in turn be no determinate connection but merely unruly heaps of them, and no cognition at all would arise, their reproduction must thus have a rule in accordance with which a representation enters into combination in the imagination with one representation rather than with any others” (A121).

This passage is contained in the so-called subjective deduction, which occurs towards the end of the Deduction, and it provides a précis of the threefold synthesis discussed earlier in the Deduction. To connect representations based on spatio-temporal contiguity is to connect whatever representations happen to be experienced together, or as Kant says, to reproduce representations “just as they fall together.” In the section on the threefold synthesis, Kant calls this “the synthesis of reproduction in imagination.” The point of the passage, then, is to explain why cognition requires more than just the synthesis of

²⁰⁸ *Kant’s Transcendental Psychology*, p. 81-82.

imagination. In addition, he says, cognition requires rules of the understanding that serve to connect certain representations in preference to others, or “rather than with any others.” In the threefold synthesis, this is called the “synthesis of recognition in a concept.” Concepts are defined as rules (A106), and their function is to guide the reproductive imagination by instructing it to connect certain representations rather than others. So, for example, our concepts instruct or license connecting telephone parts into an object, but not matches and flames. Kant nowhere speaks of the productive imagination in this passage, which would be expected if Kitcher’s reading were correct. Rather Kant simply speaks of rules, and rules are a product not of the imagination, but the understanding.

To sum, both Sellars and Kitcher provide an object-constitution reading that focuses on the role of the productive imagination in manipulating the matter of intuition. Sellars, in developing his interpretation, reduces the pure productive imagination to the empirical productive imagination, and Kitcher reduces the productive imagination to the reproductive. As a result, neither provides an analysis of the imagination in its pure, *a priori*, or transcendental function.

2.2 Object-Construal: Presentation and Critique

In light of these problems, another account is needed. One particularly interesting candidate is Michael Young’s object-construal or hermeneutical reading in “Kant’s View of Imagination.” His view is subtly but importantly different from the previous. Whereas object-constitution involves the generation of an object of representation by synthetically combining sense components into a complex of representation, object-construal by

contrast involves the activity of interpreting sensible affection as awareness of something. Young rejects any reliance on imaging, and construction more generally, by explicitly rejecting the view that “perceiving a house, for example, requires entertaining mental images of it as it might appear from other perspectives, under other circumstances, etc.”²⁰⁹ How are we to understand object-construal, then? I begin by discussing Young’s account of the imagination in general before concluding with his specific conception of the productive imagination. My criticism is that his general account attributes to the imagination a rule-governed synthesis that belongs to the understanding instead, and that his account of the productive imagination fails to distinguish its role in the Deduction from that in the Schematism.

Young grants that the term “imagining” in some contexts might refer to mental imaging – as is the case with any act of picturing something. In other contexts, however, imaging should be seen as simply referring to the idea that “‘one sees more than meets the eye,’ taking or treating or construing what is sensibly present as something other, or something more, than what immediately appears.”²¹⁰ So, for example, someone might construe a line on a chalkboard *as* a lever. This shows that interpretation does not always involve constructing complexes on the basis of more elemental sensory information. On his view, the general activity of the imagination consists of taking sensory information, which by itself has no representational character, and interpreting it as something more than just bare sensory information, e.g., construing it as a desk, a sea, a mountain. Young further claims that to construe an object as something involves situating it within a broader spatio-temporal framework of how it would appear at various times and in

²⁰⁹ “Kant’s View of Imagination,” p. 142.

²¹⁰ *Ibid.*, 141.

various perspectives. This in turn involves bringing the object of representation under a *rule* that links it with other experiential states one could have.²¹¹

For this reason, though, I argue that Young over-intellectualizes the imagination by attributing to it a function that is reserved for the understanding. Namely, he claims that imaginative synthesis is essentially a rule-governed synthesis when in fact rule-governed synthesis belongs only to the understanding. However, I should note that he does acknowledge the difference between the imagination and the understanding, but not in a manner that avoids my criticism. The synthesis of imagination, according to Young, is defined as object-construal, and Young is careful to distinguish this activity from judgment, which is a function of the understanding. Young acknowledges that the distinction between object-construal (as an activity of the imagination) and judgment (as an activity of the understanding) is difficult to draw, but insists that there is a difference between construing something “sensibly present as an *F*” and having “the discursive representation of a thing of kind *F*, the *concept* of such a thing ...”²¹² I will simply grant that there is a genuine distinction here. My criticism is that, even so, the imagination on his view is incorrectly interpreted by Young as supplying its own rule (albeit a proto-conceptual one) rather than merely guided by a rule. The synthesis of imagination, I argue, is not a rule-governed synthesis. In the second section of the threefold synthesis where Kant isolates the imagination for analysis, he only says that the synthesis of imagination needs a rule for connecting representations, but not that it supplies its own rule. Rules are first introduced with the synthesis of recognition, where he introduces

²¹¹ Ibid., 146.

²¹² Ibid., 149. He explains this point by saying that it consists of “link[ing] or unit[ing] one’s current sensible state with other such states, i.e., with other ways – past or merely possible – in which the thing might appear.”

concepts and defines them as rules (A106). Recall the passage at A121 quoted above. In this passage, the imagination reproduces representations “just as they fall together,” and only with the addition of the rules of the understanding does this synthesis become rule-guided. The bare activity of the imagination, on Kant’s view, is an example of a non rule-governed synthesis.

This criticism is intended to apply only to Young’s interpretation of the imagination as empirical object-construal. What I now need to consider is his interpretation of the productive imagination. As to the productive imagination he says, “We may employ imagination, that is, construe things sensibly present as instantiating pure concepts of the understanding. This is what Kant calls the pure or productive function of the imagination.”²¹³ According to Young, imagination in general is the capacity to interpret sensible objects as of a certain type. But what he here says is that when the type in question cannot be given in experience, as is the case with the categories, then a contribution to experience executed by the productive imagination is required. The function of the imagination, he says, is to construe objects as instances of the pure concepts of cause, substance, etc. But this is exactly the role of the *schema* of the pure concepts of the understanding. On Young’s analysis, then, the function of the productive imagination is to schematize the categories and thereby to enable their application to experience.

In this way, Young avoids reducing the pure productive imagination to either the empirical productive or reproductive imagination. The schematization of the categories is genuinely pure or *a priori*. However, in doing so, he equates the role that the pure productive imagination plays in the Transcendental Deduction with the role that it plays

²¹³ Ibid., 155.

in the Schematism chapter. In my view, however, this is a serious mistake. Kant does discuss the pure productive imagination in both the Deduction and Schematism, but this does not imply that they play the same *role* in those texts. The basic reason why their roles cannot be the same is because otherwise the argument of the Deduction would be question begging. Concepts are schematized, and as such schematization requires the concepts that are schematized. Sellars makes exactly this point when he says that recipe-schemata are *derived* from concepts.²¹⁴ By the time Kant gets to the Schematism chapter, the categories have already been justified as requirements of discursive or non-divine cognition. Kant therefore sets aside the problem of how to justify the objective reality of the categories and raises a completely different issue having to do with how pure concepts can be applied to sensible intuition. This means that the categories are taken for granted as components of cognition, and their schematization is an operation of the productive imagination *upon them*. However, in developing the argument of the Transcendental Deduction, the categories cannot be assumed as elements of cognition. In order to avoid begging the question, this synthesis must be able to function apart from, or in independence from, the categories. The problem is that this independence from concepts of the understanding is precisely what the imagination in its schematizing role lacks.

²¹⁴ He says: "As an association of *objects* [the reproductive imagination] presupposes the constitution of objects by the productive imagination. And the principle of such constitution is not happenstance, but conformity to *recipe-schemata derived from concepts*" ("Kant's View of Experience," p. 240). In particular, they derive from the concept of an object standing in various relations to a perceiver.

3 Productive Imagination as Figurative Synthesis: Presentation and Defense

Given the problems with the object construction and construal interpretations, what is needed is an account of the pure imagination that (a) does not reduce it to the empirical productive imagination, or (b) in the attempt to avoid doing so, does not equate pure schematizing imagination with the pure imagination of the Deduction. I believe that there is a way to satisfy both requirements by defining the synthesis of the pure imagination as the production of the *forms* of intuition themselves, i.e., the production of space and time.

The thesis that space and time originate from (or are the products of) a synthesis of productive imagination has relatively recently been termed the *entia imaginaria* thesis by Wayne Waxman (1991) and Beatrice Longuenesse (1998). I far as I am aware this thesis was first formulated, at least in 20th century scholarship, by Arthur Melnick in the 1980's when he gave it the title "constructivism." It is certain a minority position, and it is usually dismissed as unsubstantiated by the text. The primary reason for this is because Kant never claims in the Aesthetic that space and time are products of imaginative synthesis, nor for that matter does he so much as mention the imagination. What he does say is that space and time are given as pure intuitions, and with this one might think that the *entia imaginaria* thesis is pretty much dead in the water. Their status as given seems plainly inconsistent with their status as produced by imaginative synthesis. But as it turns out, reconciliation of these claims is a problem facing any interpretation, for there are various places where Kant certainly seems to assert the latter. Many of them have been conveniently collected by Waxman.²¹⁵

So, for example, Kant asserts in his famous response to Eberhard: "one can and must admit that space and time are merely conceptual entities (*Gedankendinge*) and beings of

²¹⁵ See *Kant's Model of the Mind*, pp. 37-40.

the imagination.” Space and time so understood are then distinguished from mere fictions of the imagination (e.g. unicorns): “this is not to say that they are invented by the latter [i.e., imagination] but rather that they underlie all its [i.e., the sensibility’s] compositions and creations.”²¹⁶ Less metaphorically, in the *Anthropology*:

The imagination (*facultas imaginandi*), as a faculty of perception without the presence of the object, is either *productive*, that is, a faculty of the original representation of the object (*exhibitio originaria*), which consequently precedes experience, or it is *reproductive*, that is, a faculty of the derived representation (*exhibitio derivativa*), which calls to mind a previous empirical perception. Pure perception of space and time belong to the productive faculty.²¹⁷

The productive imagination is described as the capacity to represent, in the sense of exhibit, an object prior to experience. Since pure intuitions of space and time are classified as *exhibitio originaria*, they consequently originate from the productive imagination. Furthermore, Waxman identifies several passages from the *Opus postumum*: “[Space and time] do not exist apart from representations and are given only in the subject; i.e., their representation is an *act* of the subject itself and *a product of the imagination* for the sense of the subject,” and just as clearly, “Space and time are products (but primitive products) of our own imagination; hence they are generated intuitions in that the subject affects itself.”²¹⁸

Without question, Kant asserts at least in texts external to the first *Critique* that space and time are products of the imagination. In this section, I am concerned with defending one aspect of this view. I defend the claim that *determinate or finite* spatial and temporal expanses are generated by the productive imagination. So, for example, Kant characterizes the drawing of a circle or a line, or any other geometrical figure, as an act of

²¹⁶ *The Kant-Eberhard Controversy*, p. 120, Ak 203.

²¹⁷ Kant, *Anthropology from a Pragmatic Perspective*, p. 56, §28.

²¹⁸ Translations taken from Waxman, *Kant’s Model of the Mind*, p. 38-39.

the productive imagination. The reason this is only one aspect of the *entia imaginaria* thesis is because it refrains from asserting that the single, all-encompassing, unique space and time referred to in the Aesthetic (A25/B39) is itself a product of the productive imagination. This representation is not of a determinate spatial or temporal expanse, but of an infinite or unlimited space and time embracing every spatial and temporal expanse delimited within it, or at least that is how it is usually understood.²¹⁹ I can safely steer clear of this issue because only determinate expanses play a role in Kant's theory of global cognition in the Analytic. For example, cognition of the possible inhabitants on the moon involves the thought not of an unlimited space,²²⁰ but a particular spatial repositioning by which they might be contacted.

In the A-edition, Kant unfortunately confines his comments to the role of the productive imagination in cognition and says very little about its nature. The only clear statement is that the synthesis of the productive imagination is brought to the unity of apperception by the categories. But the reader is left more or less in the dark as to what the productive imagination is supposed to be. In the likely attempt to correct this mistake, §24 of the B-edition characterizes the productive imagination as a figurative synthesis and then in §26 connects the figurative synthesis with the formal intuition of space and time. In consequence, the productive imagination is the origin of space and time *as* formal intuitions. "Figurative synthesis" and "formal intuition" are strictly B-edition terminology, and I will address them in Section 3.1 and 3.2, respectively. After doing so,

²¹⁹ Waxman and Longuenesse both agree that the "one and the same unique space" (A25) refers to what might be best described as the *one and only* space embracing all there is. Melnick, however, denies this and claims that the "one space" refers to any determinate spatial expanse (say, a line) that embraces all of *its* parts as determinations or limitations within it. I think that Melnick attributes the representation of the one and only space and time not to the pure intuitions of the Aesthetic, but to the regulative rules of reason in the Antinomies.

²²⁰ The Antinomies, rather than the Deduction, deal with representation of space and time in their totality.

I will then address in Section 4 whether the productive imagination of the A-edition is the same as that of the B-edition before concluding with some general remarks about Kant's redrafting of the proof.

3.1 Figurative Synthesis

Kant distinguishes the figurative synthesis from the intellectual:

This synthesis of the manifold of sensible intuition, which is possible and necessary *a priori*, can be called figurative (*synthesis speciosa*), as distinguished from that which would be thought in the mere category in regard to the manifold in general, and which is called combination of the understanding (*synthesis intellectualis*) ... (B151).

The passage begins with reference to a “synthesis of the manifold of sensible intuition.”

One might take this to suggest the categories, since their function is to ground the possibility of experience by synthetically uniting representations. But Kant is careful to draw a distinction between two types of synthesis – one that is sensible and one that is intellectual. Categorical synthesis is a function of the intellect or understanding, and for that reason Kant assigns it the title of “intellectual synthesis.” Ultimately, the intellectual synthesis is applied to sense experience, but on its own it is purely intellectual. This means that aside from being subject to the categories, the manifold *also* involves a sensible or non-intellectual synthesis called the ‘figurative synthesis.’ Kant equates this synthesis with the transcendental synthesis of imagination (B151), and then equates the latter with the productive imagination (B152).

The first part of §24 says nothing further about the figurative synthesis, and defines it mostly in opposition to the intellectual synthesis of a category, but the second part

corrects this and offers a positive characterization with reference to some actual examples:

We cannot think of a line without drawing it in thought, we cannot think of a circle without describing it, we cannot represent the three dimensions of space at all without placing three lines perpendicular to each other at the same point, and we cannot even represent time without drawing a straight line (which is to be merely the external figurative representation of time), attending merely to the action of the synthesis of the manifold through which we successively determine the inner sense, and thereby attending to the succession of this determination in inner sense (B154).

The first two examples involve the representation of a spatial expanse in the form of a circle and line. The third example involves representing not an expanse of space, but a particular spatial structure, i.e., its three-dimensionality. The fourth example shifts to time, and similarly it concerns the representation not of *a* time, but the temporal structure of succession. It is clear enough that Kant's topic is representation of determinate extents or structures of space and time, rather than the unique, all embracing space and time of the Aesthetic. But what kind of representation is this?

Although Kant does misleadingly use the word 'think' he unquestionably is not referring to a conceptual representation, for in the immediately preceding sentence he characterizes it as a "determinate intuition ... which is possible only through the determination of the manifold through the transcendental action of the imagination... which I have named the figurative synthesis" (B154).²²¹ What we have, then, is an *intuitive* representation of a determinate spatial or temporal extent that is brought about by the *activity of the imagination*. To put the point in reverse: the activity of the

²²¹ In this sentence, Kant is caught up in a discussion of inner sense. In doing so he draws a distinction between time as a mere form of intuition and time represented as having "combination of the manifold." In §26 he describes this difference as that between forms of intuition and formal intuition. In the next subsection, I will argue that formal intuition, in the act sense, is identical to the figurative synthesis. But even if his remarks refer to time and inner sense, they can be extended to space and outer sense as well.

imagination called “figurative synthesis” produces the intuition of a spatial or temporal extent. This leaves us with two obvious questions. First, how does drawing a line or circle yield an intuitive representation? Second, what does drawing a line or circle have to do with the imagination?

In order to answer the first question, some distinctions must be made. To start, intuitions can be either empirical or pure. The former involves the perfectly ordinary phenomenon of perceiving an object, whereas the latter is perhaps best explained by a discussion in the Transcendental Doctrine of Method:

But to construct a concept means to exhibit *a priori* the intuition corresponding to it. For the construction of a concept, therefore, a non-empirical intuition is required, which consequently, as intuition, is an individual object, but that must nevertheless, as the construction of a concept (of a general representation), express in the representation universal validity for all possible intuitions that belong under the same concept. Thus I construct a triangle by exhibiting an object corresponding to this concept, either through mere imagination, in pure intuition, or on paper, in empirical intuition, but in both cases completely *a priori*, which having had to borrow the pattern for it from any experience. The individual drawn figure is empirical, and nevertheless serves to express the concept without damage to its universality for in the case of this empirical intuition we have taken account of only the action of constructing the concept (A713-714/B741-742).

The topic concerns the construction of mathematical concepts, and what is peculiar about these concepts is that their object can be exhibited *a priori* or in pure intuition. Although this characterization might seem odd, Kant’s point is simply that triangles and circles can be produced anytime in one’s imagination or on paper, whereas objects corresponding to empirical concepts cannot. Dog-perceptions, for instance, require sensory affectation and for that reason are empirical; the construction of a mathematical concept, on the other hand, does not require sensory prompting and consequently is termed *a priori* or pure.

But there is yet another distinction to be made. The term “intuition” is ambiguous as to its act and object senses: in its former sense it names the activity of exhibiting or

producing something, whereas in its latter sense it names the object exhibited. So in the case of empirical intuition, the activity of exhibiting a dog requires the dog's presence in experience since one cannot show or display either to oneself or another the object if it is not present. This, however, is not required of the construction of a mathematical concept because the object is produced in the act itself. But now one is bound to wonder: Is the act itself a pure intuition? Or does "pure intuition" refer only to the object subsequently intuited? Toward the end of the passage, Kant seems to assert the latter. He says that a figure constructed in imagination is an example of a pure intuition, whereas a figure constructed on paper is an example of an empirical intuition. Here he seems to restrict the domain of pure intuition to objects of imagination only, thereby excluding physical drawings. However, we should take another look at the *Anthropology* passage quoted above:

The imagination (*facultas imaginandi*), as a faculty of perception without the presence of the object, is either *productive*, that is, a faculty of the original representation of the object (*exhibitio originaria*), which consequently precedes experience, or it is *reproductive*, that is, a faculty of the derived representation (*exhibitio derivativa*), which calls to mind a previous empirical perception. Pure perception of space and time belong to the productive faculty.²²²

Kant characterizes the "original representation" of the object as an *exhibitio originaria*, which implies that the act of exhibiting is in itself representational. The representation is the productive act, and "pure intuition" refers to that subclass of activity where the object is given in the activity itself. But with this point there is no reason to restrict pure intuition to imagined objects, for the act of physically drawing a circle can appropriately

²²² Kant, *Anthropology from a Pragmatic Perspective*, p. 56, §28.

be characterized as an *exhibitio originarium*. Of course, what is seen on the page is an empirical object, but the act of producing it does not require sensory prompting.

In the passage from the Transcendental Doctrine of Method, Kant seems to get into some confusion by failing to distinguish the act and object senses of “intuition.” The passage begins with the claim that non-empirical intuitions are required for the construction of mathematical objects but soon falls into contradiction by asserting that geometrical figures can be constructed on paper in empirical intuition. Kant then tries to get out of the contradiction by saying that it really doesn’t matter how the figure is constructed because “we have taken account of only the action of constructing the concept” (A714/B742). What is important, then, is that the act is one and the same whether produced in imagination or on paper, and both acts are sufficient for constructing, and thereby representing, the object itself.

I have now provided an answer to the first question. The intuitive representation, as pure, *just is* the production of the determinate spatial or temporal expanse. However, I seem to have brought additional confusion to the second question by claiming that the activity of drawing figures on paper are also *exhibitio originaria* and therefore pure intuitions. What does the imagination have to do with drawing lines and circles? Let me begin by turning to an important footnote where Kant equates the productive imagination with motion:

Motion of an object in space does not belong in a pure science, thus also not in geometry; for that something is movable cannot be cognized *a priori* but only through experience. But motion, as description of a space, is a pure act of the successive synthesis of the manifold in outer intuition in general through productive imagination, and belongs not only to geometry but even to transcendental philosophy (B155f).

This footnote provides clear evidence that the productive imagination need not be restricted to imagining in the usual sense. The motion of a subject (e.g., drawing a line with one's hand) is characterized as the "description of a space," which I claim is the production/representation of a determinate spatial extent. But the description of a space is further characterized as "a pure act of successive synthesis of the manifold of outer intuition in general ...". I have not yet discussed the sense in which the figurative synthesis is a *synthesis*.

According to Kant's initial definition, synthesis is the act of bringing different representations together in order to cognize their diversity in one representation (A77/B103). This suggests that the production of a spatial extent consists of synthesizing more elementary spatial components so as to form a larger extent. But this cannot be the nature of the figurative synthesis because Kant asserts in the Aesthetic that space is not represented as a composite; rather, it is represented as a whole from which its parts are delimited, but not out of which it is composed (A25/B39). Space, in other words, is ontologically *continuous* since it is a whole preceding its parts rather than preceded by its parts. Kant's various references to synthesizing the manifold of outer intuition should be taken simply as the assertion that motion is productive of continuous expanses, since motion itself is continuous.

As it turns out, this is the reason why Kant so oddly attributes the figurative synthesis to the faculty of productive imagination. After introducing the figurative synthesis in §24, he goes on to define the imagination as the "faculty for representing an object even without its presence in intuition" (B151). The objects under discussion are space and time themselves, and the figurative synthesis as an *exhibitio originarium* is the

activity of producing, and thereby representing, a continuous expanse. But continuity cannot be sensed. One might see a figure on a page with such and such dimensions, but one does not see its continuity. This is one reason why Kant claims that space and time are not empirical concepts extracted from experience, but instead non-sensory intuitions. Thus, the figurative synthesis, even when broadened to include motion in general, is attributed to the imagination because it enables representation of what is not and can never be given in empirical intuition. And it is clear that the definition is intended to refer specifically to empirical intuition. If Kant were to claim that the imagination enables representation of space and time apart from empirical *and* pure intuition, then the resulting representation would be purely conceptual, in which case his own assertion in the Aesthetic that our representation of space and time is intuitive would be contradicted (A25/B39).

To sum, the productive imagination does not involve imaging, but is the activity called “figurative synthesis” whereby we produce/represent in pure intuition determinate and continuous spatial and temporal extents.

3.2 Formal Intuition

In §24 Kant connects the figurative synthesis to the origin of space and time only by way of his examples. The lack of an explicit assertion connecting the two is nonetheless compensated for in §26 where he introduces the formal intuitions of space and time. I argue that such intuitions are produced by the figurative synthesis, or if “intuition” is taken in its act sense, they are identical to that synthesis.

In §26 Kant states:

But space and time are represented *a priori* not merely as forms of sensible intuition, but also as intuitions themselves (which contain a manifold), and thus with the determination of the unity of this manifold (see the Transcendental Aesthetic). Thus even unity of the synthesis of the manifold, outside or within us, hence also combination with which everything that is to be represented as determined in space and time must agree, is already given *a priori*, along with (not in) these intuitions, as condition of the synthesis of all apprehension (B160-161).

After referring the reader to the Aesthetic, Kant adds a footnote:

Space, represented as object (as is really required in geometry), contains more than mere form of intuition, namely the comprehension of the manifold given in accordance with the form of sensibility in an intuitive representation, so that the form of intuition merely gives the manifold, but the formal intuition gives unity of the representation. In the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it precedes all concepts, though to be sure it presupposes a synthesis, which does not belong to the senses but through which all concepts of space and time first become possible. For since through it (as the understanding determines the sensibility) space or time are first given as intuitions, the unity of this *a priori* intuition belongs to space and time, and not to the concept of the understanding (§24) (B160-161n).

B160 begins by distinguishing space and time as formal intuitions from space and time as forms of intuition. The latter refers to the mere *capacity* to be affected. The actualization of this capacity, however, requires that an object be given in intuition and that the object be subject to what is now called “formal intuition.” Both passages assert variously that in formal intuition the manifold is represented as having unity, composition, synthesis, or comprehension. What makes the passage tricky to interpret is the temptation to think that the manifold referred to is empirical, in which case Kant would be referring to the unity of a given representation, e.g., a house. But his reference to geometry shows that what he has in mind is the pure manifold. The pure manifold, however, can be nothing other than space and time themselves. Accordingly, space and time themselves are represented as unified in formal intuition, and since we can only represent as unified (object) what has

been unified (act),²²³ then the origin of the formal intuition of space and time is the figurative *synthesis*. But what does Kant mean by his assertion that space and time are represented as unities?

We already have the answer to this question. When Kant states that this unity cannot be attributed to a concept of the understanding, he is merely repeating his previous assertion in §24 that the manifold of intuition is subject to a non-intellectual, figurative synthesis. But we saw that the figurative synthesis produces determinate, continuous spatial and temporal expanses. Thus, the unity Kant speaks of is simply the continuity of spatial and temporal expanses themselves. Despite all of the unwieldy terminology, the basic point that has been under discussion in these two subsections is straightforward enough: the activity or motion of drawing a line, for example, produces a determinate, continuous spatial expanse. And for the reasons given above, Kant attributes such activity to the productive imagination.

I should note that both passages play on the ambiguity of the term “intuition.” When taken in its object sense (as seemingly in the first sentence of B160 and B160n), “formal intuition” indicates the result of the synthesis, and one can therefore say that the figurative synthesis produces the formal intuitions of space and time. But when taken in its act sense (as seemingly in the second and third sentences of B160n), “formal intuition” indicates the activity by which the continuous expanse is produced or exhibited, so that one can actually identify the figurative synthesis with formal intuition.

²²³ Kant sounds this claim all throughout the B-edition Deduction. For example, in the opening paragraph he says that “we can represent nothing as combined in the object without having previously combined it ourselves, and that among all representations combination is the only one that is not given through objects but can be executed only by the subject itself, since it is an *act* [*Actus*] of its self-activity” (B130, my emphasis).

But in any case, the key result of the analysis is that the productive imagination in its pure rather than empirical use does not concern the matter of intuition, but generates continuous spatial and temporal expanses. Given that space and time are forms of intuition, it generates a unity of the form rather than the matter of intuition. The argument of the last two subsections can be summarized:

1. Formal intuitions of space and time are intuitive representations of unified spatial and temporal expanses.
2. This is not an intellectual unity supplied by the categories but rather supplied by the figurative synthesis.
3. The figurative synthesis generates intuitive representations of unified spatial and temporal expanses (concluded from 1 & 2).
4. The productive imagination is the figurative synthesis.
5. The productive imagination generates intuitive representations of unified spatial and temporal expanses (concluded from 3 & 4).
6. With respect to the act sense of 'intuition,' the intuitive representation *is* the generation of the expanse itself.
7. The productive imagination generates unified spatial and temporal expanses (concluded from 5 & 6).
8. Space and time are forms of intuition.
9. Therefore, the productive imagination generates a unity of the form of intuition (concluded from 7 & 8).

4 Figurative Synthesis and Schemata

I claimed that what is needed is an account of the pure imagination that neither reduces it to the empirical productive imagination, nor in the attempt to avoid doing so, equates it with the schematizing imagination. How the former has been accomplished is clear enough. The problem with object constitution readings is that the imagination manipulates the matter of intuition, which I argued is the function of the empirical

productive imagination. On my reading, the imagination remains genuinely pure since it produces the forms of intuition themselves, or as Kant sometimes says, the pure manifold. But it is less clear whether the second requirement has been satisfied. In this section, I will address this somewhat complicated question.

It will be helpful to say a few words about the schematizing imagination. Schemata are introduced in order to solve the problem of how sensible experiences or appearances can be subsumed under concepts. So, for example, one's experiences of dogs involve tremendous variety, and one is bound to wonder how all of these experiences can be identified as instances of the concept dog. Suppose one attempts to resolve the issue by appealing to mental images: we compare our experience to the image we have of a dog, and if the former fits the latter, the concept is applied. The problem with this is that, as Kant correctly points out (as did Berkeley), images are determinate and consequently lack the open-endedness or generality required for dealing with the wealth of experience. Whatever image I form, it will be of a dog of a certain breed, size, shape, etc. Thus, Kant appeals not to images, but to schemata, and he defines them as "a general procedure of the imagination for providing a concept with its image ..." (A140/B179-180). Schemata, then, are not images but *procedures* for forming "images." Kant's language certainly suggests that he is referring to some kind of internal visualization of the object, but I don't think that it is necessary to interpret the phenomenon this way. Recall that in the A-Deduction Kant says that the synthesis of apprehension, when coupled with the synthesis of imagination, achieves an "image" of a perceptual object. I don't think that he is literally referring to the process of forming mental pictures of the object from different perspectives. And in any case such a view when evaluated from a phenomenological

standpoint seems to be downright wrong. Instead of forming a picture, what one is really doing is gathering together perceptual information acquired in the course of moving around and looking over the object. The empirical imagination is the faculty of encoding and recalling that information, and consequently schemata are procedures for perceptual information-gathering. What these procedures consist of, exactly, is a bit obscure since it is “a hidden art in the depths of the human soul” (A141/B180-181), but we can get a sense of them by thinking about the differences involved in detecting, say, dogs versus cats. The procedure for detecting a dog will involve testing whether it barks, fetches sticks, enjoys swimming in water, and various other things that would not be involved in the procedure for detecting a cat. But if the schema is a procedure for information-gathering, how is it distinct from the synthesis of apprehension? I suggest that schemata are such procedures not as actually performed but *as internalized*, whereby we acquire and retain the proneness²²⁴ to engage in a certain manner of information-gathering when presented with various perceptual objects. Kant describes schemata as *representations* of a general procedure, and I claim that this representation is one’s present proneness to act in a certain way. I further suggest that this proneness is what is lacking in the concept. Concepts are nothing more than specifications of what ought to be encountered in the course of perceiving an object, i.e., a rule. To schematize a concept is to internalize the rule as a general procedure, and via schematization the concept is capable of actually operating on appearances. Finally, since what is in the imagination – or as I am now

²²⁴ Melnick uses this term, and I think that it preferable to both “tendency” and “disposition.” I note however that my claim that schemata are internalized procedures departs from his view. He claims that schemata are rehearsals of the procedure, and as such can be rehearsed even when the object isn’t present. But it seems that my view can accommodate this point, for one acquires the capacity to rehearse the procedure to oneself or another person by internalizing the procedure. It seems to me that the rehearsal is secondary, and it also seems to me that one might not want to equate the schema with the rehearsal, for then schema would only exist in the actual rehearsal. See Chapter 7, *Kant’s Theory of the Self*, unpublished manuscript.

saying, internalized – is not a particular image, but a general procedure, it will accordingly have the open-endedness necessary for subsuming the variety of experience under the concept.

But this is only an account of empirical concept schemata. The particular problem with pure concepts, i.e., the categories, is that they can never be given an “image.” Causality, for example, is not an observable feature of experience, and for this reason the synthesis of apprehension cannot engage in information-gathering regarding causality. Rather, Kant claims that the schema of a pure concept provides the time-determination necessary for category application. Since the details of this are notoriously difficult, and not necessary for present purposes, I will focus on perhaps the simplest case. The schema of the category of magnitude is number. As discussed above, since spatial expanses are continuous they cannot be perceived but rather are constructed by the figurative synthesis. However, the mere construction of a spatial expanse does not thereby provide representation of the *magnitude* of the expanse. In other words, magnitude does not belong to pure intuition, and for that reason it is classified as a pure concept of the understanding. This concept acquires application to experience by means of the activity of counting, which Kant defines as “a representation that summarizes the successive addition of one (homogenous) unit to another” (A142/B181). One way to do this might be to recite numerals as one constructs an expanse of space, thereby enabling representation of the magnitude of the spatial extent. Kant then connects this activity with the “generation of time itself in the apprehension of the intuition.” (A143/B182). This means that in addition to generating representation of the magnitude of spatial extents, it also generates representation of the magnitude of temporal extents. Kant treats the latter

as more fundamental since is it involved in any representation that we can have, both inner and outer. Given this, the time-determination characteristic of the schema of magnitude is the generation of time itself or the time-series (A145/B184), and it is by means of such time-determination, which is involved in any intuitive episode, that the pure concept has operability in intuition.

With this outline of the nature of schema, both empirical and pure, we are now in a position to determine whether the figurative synthesis is identical to the schematizing imagination. The basic nature of the latter is that it is procedural and as such requires a concept. When one looks to Kant's examples in the B-Deduction, it does seem that the figurative synthesis is procedural. He says that we cannot think a line without drawing it in *thought*, and it makes sense to interpret this as a reference to an internalized procedure for constructing the mathematical concept of a line. In fact, earlier in the B-Deduction, Kant explicitly connects the figurative synthesis with concepts:

But in order to cognize something in space, e.g., a line, I must draw it, and thus synthetically bring about a determinate combination of the given manifold, so that the unity of this action is at the same time the unity of consciousness (in the concept of a line), and thereby is an object (a determinate space) first cognized (B137-138).

That is, the act of drawing a line is guided by a concept, or rule, and therein brought to the unity of consciousness. Furthermore, I made appeal to the Transcendental Doctrine of Method where the topic is precisely the construction of mathematical concepts, and Kant even refers to the object of the concept as its schema (A714/B742). Finally, in the Schematism chapter, the productive imagination is attributed not to the sensibility but the understanding (A140/B179), and this same attribution is given in the B-Deduction when it is characterized as “an effect of the understanding on sensibility” (B152).

For these reasons, the figurative synthesis does contain schematic components. However, it is important to recognize that the figurative synthesis can be stripped of these components in one's analysis, and doing so provides the best and only direct way to analyze the productive imagination of the A-Deduction. When we remove from the figurative synthesis any mathematical concept to schematize, then what is left over is pure production of spatial and temporal extents that are determinate and continuous (unified). One way to put the point is that the figurative synthesis, so treated, does not aim at constructing a line, but rather constructs a spatial extent that just so happens to be in the figure of a line. Since this type of synthesis is not guided by a concept, it can appropriately be characterized as *blind* – which, indeed, is how Kant initially describes the imagination:

Synthesis in general is, as we shall subsequently see, the mere effect of the imagination, of a blind but indispensable function of the soul, without which we would have no cognition at all, but of which we are seldom even conscious. Yet to bring this synthesis to concepts is a function that pertains to the understanding, and by means of which it first provides cognition in the proper sense" (A78/B103).

So, we are really left with two types of imaginative synthesis. One that is blind and as such consists of the pure production of a spatial and temporal expanse, and another that is schematic and enables the *cognition* of a determinate spatial or temporal extent. The passage at B137-138, quoted above, is specifically concerned with cognition (*Erkenntnis*) of space and time, and Kant never wavers on his claim that cognition is only made possible through the cooperation of the understanding and sensibility. Thus, cognition of a determinate expanse requires a concept that unifies one's apperception in the construction of the figure. However, we also have the capacity for more elementary representations of space and time that are something less than cognition but still

representational in nature. Kant describes them in the *Anthropology* as *exhibitio originaria*, which are simply the figurative synthesis stripped of its schematized concept.

I claim that they are the productive imagination of the A-Deduction.

There are only two passages in the A-Deduction that make any mention of the nature of the productive imagination. Both passages, I believe, provide evidence for my interpretation. First, Kant says:

Now it is obvious that if I draw a line in thought, or think of the time from one noon to the next, or even want to represent a certain number to myself, I must necessarily first grasp one of these manifold representations after another in my thoughts. But if I were always to lose the preceding representations (the first parts of the line, the preceding parts of time, or the successively represented units) from my thoughts and not reproduce them when I proceed to the following ones, then no whole representation and none of the previously mentioned thoughts, not even the purest and most fundamental representations of space and time, could ever arise (A102).

Kant begins by listing some conceptually informed representations, i.e., the construction of the mathematical concepts of line and number, as well as the representation of the magnitude of a temporal expanse (from noon to noon). He says that these representations require the conscious reproduction of previous moments in a present moment in order to achieve consciousness of a whole. For instance, if I am to be aware that I have counted up to three, I must be aware that I have counted one and two and that counting one and two is part of a single procedure producing three. But then Kant distinguishes such “thoughts” from the “purest and most fundamental representations of space and time.” I have provided the conceptual room necessary for accommodating this distinction – namely, it is the difference between the figurative synthesis with and without its schematized concept. Regarding the latter, Kant specifically identifies space and time themselves as representations, rather than mathematical constructions, and says that they

involve consciousness of the generation of a whole extent, where the extent is not built up out of parts but encompasses its parts within itself. Because it is “all-embracing,” its parts are so to speak reproduced in the generation of the whole expanse.

Second, in the context of the official Deduction, Kant discusses the relationship between apperception and the productive imagination as follows:

It is this apperception that must be added to the pure imagination in order to make its function intellectual. For in itself the synthesis of the imagination, although exercised *a priori*, is nevertheless always sensible, for it combines the manifold only as it appears in intuition, e.g., the shape of a triangle (A124).

Clearly this passage implies that the productive imagination is capable of operation apart from the understanding. Kant does not say that the synthesis of productive imagination is made possible by being brought to the unity of apperception, but only that it is rendered *intellectual*. He then states that “in itself,” i.e., apart from the understanding, it can be exercised *a priori*, and he ascribes it to the *sensibility*. Kant’s reference in this passage to an *a priori* imaginative synthesis which combines the manifold as it appears in intuition is certainly bound to confuse the reader, but I have supplied the resources necessary for understanding what he means. It is simply the production, via physical motion or mental construction, of a continuous spatial or temporal expanse, and such production can be exercised apart from any sensory prompting. It yields not cognition of a triangle, but it might happen to be in the shape of a triangle.

5 Conclusion

The chapter has developed an account of the pure imagination that neither reduces it to the empirical productive imagination nor the schematizing imagination. According to

the view I have defended, the pure imagination is the faculty for constructing determinate, continuous expanses of space and time and therefore generates the forms of intuition themselves. I have used this account to explain with relative ease Kant's unwieldy terminology: figurative synthesis, formal intuition, the pure manifold, pure intuition, and *a priori* synthesis. But one issue remains. I said that if the existence of a synthesis of productive imagination were dependent upon the categories, then Kant's argument would be circular. Where does that leave the B-Deduction, then? Wouldn't the argument be question begging since the figurative synthesis is schematic and thereby rests upon pure concepts, e.g., magnitude?

I believe the argument of the B-Deduction is not circular. The reason is because it has a different structure that enables Kant to avoid the circularity that would have been inevitable in the A-Deduction. Commentators have long pointed out the B-Deduction is peculiar in that Kant seems to provide two proofs. In §20 he proves that "the manifold in a given intuition also necessarily stands under the categories," which is a straightforward affirmation of the objective validity of the pure concepts of the understanding. But then in §21 he says that only the "beginning of a deduction of the pure concepts of the understanding has been made," and after proceeding through a number of difficult sections, he provides in §26 the "transcendental deduction of the universally possible use of the pure concepts of the understanding in experience." Commentators have debated over whether the B-Deduction contains two steps in one proof or two distinct proofs. The consensus is in favor of the former, although this is not a debate that I need to enter into. I only point out that the two-part structure, however understood, enables Kant to characterize the figurative synthesis schematically without circularity.

Having established the objective validity of the categories in §20, the remainder of the proof is concerned with what essentially is the topic of the Schematism, albeit worked out at a general level without discussion of particular schemata. In §22 Kant reiterates that the categories have significance only in relation to objects of experience. But the problem is that the intellectual synthesis contained in the category has nothing in common with sensible intuition; they are heterogeneous. Thus, Kant appeals to the figurative synthesis to bridge the gap between these extremes of human cognition. Since the synthesis of apprehension contains the figurative synthesis, Kant can establish without difficulty that sensible intuition is subject to the latter. However, the figurative synthesis “can be none other than that of the combination of the manifold of a given intuition in general in an original consciousness in agreement with the categories, only applied to our sensible intuition” (B161). In other words, the figurative synthesis is homogeneous with the intellectual synthesis. So in the case of magnitude, the construction of the spatial expanse is attributed to the figurative synthesis, but if one abstracts from space as the form of sensible intuition, then one is left with the intellectual unity represented in the concept of magnitude. It is one and the same unity represented either with respect to the form of sensible intuition or in abstraction from it, and for this reason the figurative synthesis plays the mediating role that enables category application to sensible intuition.

Details aside, the reworked structure of the B-Deduction saves Kant from circularity. However, I do contend that any interpretation that altogether equates the productive imagination with the schematizing imagination will necessary fail to make sense of the

A-Deduction and will furthermore overlook the presence of a non-schematic imaginative synthesis in the *Critique* as a whole.

CHAPTER 7

PART TWO OF KANT'S PROOF OF THE CATEGORIES: THE TRANSCENDENTAL UNITY OF APPERCEPTION AND THE AFFINITY OF THE MANIFOLD

This chapter concludes Kant's proof of the objective validity of the categories. To recall, I outlined the argument as follows:

1. Cognition is the capacity for global representation.
2. Global representation is the capacity to represent any possible spatio-temporal appearance, and this capacity is defined as the ability to bring the transcendental synthesis of imagination to the unity of apperception.
3. Cognition is the capacity represent any possible spatio-temporal appearance, and this capacity is defined as the ability to bring the transcendental synthesis of the imagination to the unity of apperception (concluded from 1 & 2).
4. The objective validity of the categories makes this capacity possible.
5. The objective validity of the categories makes cognition possible (concluded from 3 & 4).
6. The objective validity of the categories enables global representation (concluded from 1 & 5).
7. The objective validity of the categories enables the cognition of any possible spatio-temporal appearance (concluded from 2 & 6).
8. Therefore, since the objective validity of the categories enables the cognition of any possible spatio-temporal appearance, then they must apply to any possible spatio-temporal appearance that can be cognized (concluded from 7 by Kant's principle of the deduction).

At this stage, it will be useful to recapitulate how the previous chapters have contributed to developing this argument. Chapter 2 explained Kant's proposed method for doing metaphysics. On Kant's conception, metaphysics is an *a priori* discipline that seeks to establish the general features that reality must possess. His goal is to prove that

the categories, which are twelve in number, are those features.²²⁵ Given his observation that “there is no doubt that up to now the procedure of metaphysics has been a mere groping, and what is worse, a groping among mere concepts” (Bxv), he proposes a method for doing metaphysics consisting neither of mere conceptual analysis, nor of a direct study of reality itself, but instead of an inquiry into the requirements for *cognizing* reality. Ingeniously he suggests that if there are certain features reality must possess in order to be cognized by us, then we can be certain that any reality we can cognize must possess those features. But what is this phenomenon called “cognition” (*Erkenntnis*) that the categories make possible? In Chapter 2, I argued that it is the phenomenon of intentionality. Chapter 4 then made this claim more precise, and my principal concern was to establish that the categories enable one to represent/intend any possible spatio-temporal appearance. Following Melnick, I called this capacity global cognition, and I distinguished it from perception. Essentially, the point was that the ability to represent an object does not require presently perceiving that object.²²⁶ We can represent/intend objects *in absentia* when they are spatially and temporally remote, and this is the capacity for which the objective validity of the categories is especially required. This means that Chapter 2 was responsible for explaining the relevance of premises 4 and 7 in drawing the conclusion (since this inference is based on Kant’s transcendental method for

²²⁵ The categories are divided into four groups of three. Under the first heading of quantity, Kant identifies unity, plurality, and totality; under the second heading of quality, he identifies reality, negation, and limitation; under the third heading of relation, he identifies substance, causality, and community; and under the fourth heading of modality, he identifies possibility, existence, and modality. The categories are *a priori* concepts, and Kant seeks to establish their objective validity. In other words, Kant’s aim is to show that the categories are not merely fictions (i.e., subjective habits) projected by the mind upon reality, but that reality actually satisfies or falls under these concepts (i.e., objectively valid concepts). Focusing on the key categories of relation, we can say that his aim is to show that reality is a system of causally interacting substances standing in relations of simultaneity or community. Finally, to establish that the categories are objectively valid is to perform what Kant calls a *transcendental deduction* of them.

²²⁶ The capacity to cognize an object does depend, however, on its relation to *possible perception*. This is a requirement of Kant’s two-faculty theory of cognition, and the burden of Chapter 5 was to work this requirement into an analysis of the theory of global cognition.

metaphysics), and Chapter 4 provided the justification for premise 1 (since the chapter established that the categories enable global cognition). Using terminology explained in the last chapter, we can say that Chapters 2 and 4 were responsible for explaining the principle and premise of the deduction, respectively.²²⁷

As it turned out, Chapters 3 and 5 did not directly play a role in the argument. Chapter 3 was concerned with developing Kant's theory of perception. Perception involves an intentional relation to an object, and I sought to explain how Kant analyzes this relation. Since Kant discusses perception at A99-110 (what is called the threefold synthesis), this study was necessary for completeness in dealing with the text, and it also provided important material for understanding Kant's fundamental concept of the transcendental unity of apperception. However, I argued in Chapter 4 that the categories, although involved in perception, are not deduced by showing that they are required for perception. For this reason, Chapter 3 does not figure in the official proof. Chapter 5 was similar to Chapter 3 in the respect that it was not programmatic, but developed Kant's actual theory of global cognition. But nonetheless, the argument of the Transcendental Deduction does not require this analysis, but only rests on the methodological claim that if their objective validity enables it, then they must apply to any cognizable appearance.

This takes us to Chapter 6 and 7. Both chapters seek to explicate the meaning of Kant's official proof of the categories given at A119. This proof introduces terminology not used in the preparatory sections of the Deduction. Kant begins with the sentence, "The unity of apperception in relation to the synthesis of the imagination is the understanding, and this very same unity, in relation to the transcendental synthesis of the

²²⁷ See footnote 1 of Chapter 5 for an explanation of difference between the principle and premise of the Deduction.

imagination, is the pure understanding” (A119). By way of anticipation, I stated in the introduction to Chapter 6 that “the unity of apperception in relation to the synthesis of the imagination” is his definition of perception or the empirical understanding, and that “the unity of apperception in relation to the transcendental synthesis of the imagination” is his definition of global cognition or the pure understanding. However, instead of fully establishing this interpretative thesis, the chapter went on to explain the nature of the faculty of imagination, most importantly, the transcendental imagination. It concluded with the claim that transcendental imagination is the faculty for producing determinate spatio-temporal extents. As a result, Chapter 6 was part of an attempt to understand the meaning of premise 2 (and by implication premise 3). What is now required is to complete the analysis of premise 2.

Chapter 7 is divided into two main sections. The first section finishes the discussion of premise 2 by explaining what it means “to bring” the transcendental synthesis of the imagination to the unity of apperception and how such “bringing” enables global cognition. Whereas Chapter 6 discussed the imagination, it is now necessary to explain its relationship to apperception. Once this relationship is explained, a complete analysis of the proof and the meaning of its premises will have been provided. The second section then addresses Kant’s discussion of the affinity of the manifold at A120-128. The A-edition Deduction is finally brought to a conclusion with the claim that the categories ground the affinity of the manifold, and that the affinity of the manifold in turn grounds empirical association. On the reading I propose, the affinity of the manifold *is* our system of rules for global cognition, and this system of rules is claimed to ground the empirical

associations constitutive of perceptual experience. Section 2 spends some time interpreting what it means to say that the former “grounds” the latter.

1 Unity of Apperception (in Relation to Imagination)

As previously identified, the first sentence of Kant’s proof states that, “The unity of apperception in relation to the synthesis of the imagination is the understanding, and this very same unity, in relation to the transcendental synthesis of the imagination, is the pure understanding” (A119). The proof, then, begins by distinguishing the empirical from the pure understanding.²²⁸ The former consists of the relation of apperception to the reproductive imagination, whereas the latter consists of the relation of apperception to the productive imagination.²²⁹ He then goes on to say that the categories “contain the necessary unity of the pure synthesis of imagination” (A119). To say that they “contain” such unity is to say that they are required for bringing it about.²³⁰ However, the unity of apperception is the unity of consciousness brought about by a rule, and Kant characterizes the unity brought about by a rule in terms of necessity (*Notwendigkeit*). This means that the expression “the necessary unity of the pure synthesis of imagination” refers to Kant’s previous definition of the pure understanding as the unity of apperception in relation to the transcendental synthesis of the imagination. The categories, then, bring about the relation of apperception to the transcendental imagination. This much I believe is beyond dispute. The difficulties and disagreements are found in the first sentence.

²²⁸ Since “pure” is always intended to contrast with “empirical,” it is clear that the first independent clause defines the empirical understanding.

²²⁹ Kant various references to the transcendental, pure, *a priori*, and productive imagination name one and the same faculty. I have chosen to make use of the last characterization. Imagination in its productive use contrasts with imagination in its reproductive use.

²³⁰ See footnote 2 in the introduction to Chapter 6 for a more extended explanation of this claim.

What does Kant mean by the empirical understanding? And much more importantly, what does he mean by the pure understanding?

1.1 Empirical Understanding

Kant's account of the empirical understanding is found in his discussion of the threefold synthesis (A99-110), which was the subject of Chapter 3. Additionally, the threefold synthesis was dealt with in Chapter 5,²³¹ where the emphasis was on explaining how it involves a synthesis of both the matter and form of intuition, and also in Chapter 6,²³² where the emphasis was on explaining the role of the reproductive imagination. All that is needed now is cursory summary of a now familiar phenomenon.

The threefold synthesis begins with a discussion of the synthesis of apprehension (A99-100). This synthesis is the activity of discriminating or discerning the various components of a representation. Such activity is temporally extended, and it consists of scanning or looking over the object. For example, in perceiving a house, I "run through" its various parts of roof, sides, shingles, windows, and so forth, and by discriminating its parts one after the other, I can apprehend them as components of the whole or as "contained in a single representation" (A99), i.e., a house.

But the synthesis of apprehension is bound up with the synthesis of imagination (A100-102). Its role in this context is to recall previously apprehended connections and thus to establish retentions, anticipations, and associations in perceptual experience. As I walk around the house and perceive its various sides, I also recall or reproduce in imagination the sides that I had just perceived but am no longer perceiving, as well as

²³¹ See the analysis of premise 4 in Section 1.2.

²³² See Section 1.

anticipate the sides that I will soon go on to perceive. In this sense I form an “image” of the entire house even though the house in its entirety can never be given in perception. This does not involve literally picturing the house, but is the activity of gathering together and retaining information about the house.

Neither synthesis, however, is rule governed. They involve simply the awareness, recollection, and anticipation of the spatio-temporal juxtapositions of certain representations. But as we have seen, such contiguity is an insufficient basis for uniting representations into determinate objects. So, when looking over a house, one might discern the following juxtapositions: roofs, sides, ground, shingles, chimney, smoke. However, neither the smoke rising from the chimney nor the ground upon which the house stands are judged to be parts of the house. According to Kant, the capacity to make such a judgment requires a rule specifying what representations ought to be connected together in preference to others. The concept of a house is just this rule. It specifies that, among other things, roof and sides are united in the representation of the house, but not sides and ground.²³³

The synthesis of recognition (A103-110), therefore, brings the synthesis of imagination under a rule connecting certain representations rather than others. This, then, is all Kant means by the claim that the unity of apperception in relation to the synthesis of reproductive imagination is the empirical understanding. The empirical understanding is the faculty for perceiving determinate objects of representation. This ability involves three types of empirical synthesis. But since the synthesis of apprehension and

²³³ The term “specify” could be misunderstood. Empirical concepts are constructed, and what properties we choose to associate or build into the concept is guided by pragmatic concerns, i.e., what enables us to deal most effectively with our environment. Concepts specify what they do, or acquire their content, as a product of our pragmatic concerns. Kitcher actually has a helpful discussion on this topic, as she rejects the idea that they have such conditions; rather empirical concepts are “open-ended.”

imagination are insufficient for uniting representations into objects, what is needed is a rule guiding them. Kant refers to these rules as empirical concepts of objects, e.g., body, house, cinnabar. The application of a concept or rule to this process of information-gathering is what is meant by “bringing” the synthesis of reproductive imagination to apperception.

1.2 Pure Understanding

Most of the controversy concerns what Kant means by the pure understanding. I have argued throughout the dissertation that the cognitive ability the categories make possible is global cognition. Given this, I claim that the pure understanding is the faculty of global cognition. In this subsection, the main results of the last two chapters are brought together. My discussions in this section are indebted to Melnick.²³⁴

Kant defines the pure understanding as the relation of the transcendental imagination to the unity of apperception. What is this relation? Let me first discuss space before proceeding to time. In the previous chapter, I argued that the transcendental imagination is the figurative synthesis (stripped of a concept to schematize), which in turn is the faculty for producing continuous, finite spatial extents. This capacity is ascribed to motion. So, for example, Kant refers to the act of drawing figures such as circles or lines (B154). But there is no reason to restrict the figurative synthesis to the construction of mathematical objects, and this is because space is a *form of intuition*. It is by means of moving, or repositioning ourselves in space, that we intuit objects. If my car is situated at

²³⁴ In particular, it draws on his interpretation of transcendental idealism, and his claim that rules legitimate procedures. Although I note that this reference to transcendental idealism isn't at all necessary for reconstructing what Kant means by the pure understanding. See *Space, Time and Thought in Kant*, Part V, Chapter 2, Section 2 for his discussion of A116-119.

a distance from me, I can make it intuitively present by moving to it. Appearances therefore are encountered in the course of spatial productions, and we represent their situatedness in space in terms of how they are positioned, or at what point they arise, within the course of a production. For example, I might provide someone with the following instruction:

Move 12 blocks over and 3 blocks up to encounter my automobile.

It is by means of moving 12 blocks over and 3 blocks up that experience can terminate in the intuition of my car.

I note that the above instruction is consistent with an objectivist conception of space. Quite naturally we regard space as enjoying an absolute reality, not dependent upon subjects of experience. It is conceived as a void through which one moves and in which all objects are situated, and it would exist even if there were no objects. This last claim, however, is denied in a relationist conception of space, according to which space is nothing more than the relations objects have to one another. Yet this is still an objectivist position, for even if the reality of space supervenes on objects it nonetheless exists independently of subjective experiences on the part of cognizing beings. Kant distinguishes his own subjectivist position from objectivism in either form. He says that space “only attach[es] to the form of intuition alone, and thus to the subjective constitution of our mind, without which these predicates could not be ascribed to any thing at all” (A23/B37-38). In brief, space depends upon the subject of experience in some manner or other. The trick in making sense of Kant’s idealism is to explain just this manner in which the reality of space is dependent upon us.

The results of Chapter 6 can now be applied for the purpose of articulating the meaning of transcendental idealism. We saw that Kant asserts in several places the *entia imaginaria* thesis, according to which space is a product of the imagination. In the *Opus postumum*: “[Space and time] do not exist apart from representations and are given only in the subject; i.e., their representation is an *act* of the subject itself and a *product of the imagination* for the sense of the subject,” and quite explicitly, “Space and time are products (but primitive products) of our own imagination; hence they are generated intuitions in that the subject affects itself.”²³⁵ Here we see that the representation of space (and time) is attributed to a productive act of the imagination, and one should be careful to note that Kant says space does not exist apart from representation. The wrong interpretation, therefore, would treat space as an objective reality which is *then* represented in a productive act of imagination. But idealism requires that space exists only in the productive act of imagination itself, which constitutes both its representation and reality. This idea was explained by a close analysis of the figurative synthesis in the B-edition Deduction, and the result was that the productive act of imagination, called a figurative synthesis, was nothing other than the motions of the subject in the act of drawing a line, or moving about, or even just shifting one’s attention with one’s eyes.²³⁶ The step to idealism, although deeply counter-intuitive, is easy enough to make. Normally we think of space as a void through which we move; but according to Kant’s

²³⁵ References and translations are taken from Wayne Waxman, *Kant’s Model of the Mind*, pp. 38-39.

²³⁶ See Section 3.1 of Chapter 6 for the detailed discussion. The discussion was guided by two questions. First, I asked how an activity such as drawing a line or circle yields an intuitive representation, and second I asked what drawing a line or circle has to do with the imagination. In answering the first question, I explained how the representation of space is the product of a productive act of imagination, and in answering the second question, I explained why Kant ascribes the motions of the subject to the faculty of productive imagination. Transcendental idealism simply takes the extra step in claiming that not only is the representation of space based on the motions of the subject, but the reality of space is as well. This means that spatial expanses are produced by the motions of the subject, and apart from the possibility of such motions, there are no spatial expanses.

idealism, spatial extents and relations are produced by the motions of the subject. Space, then, is dependent upon the subject because it is produced in our motions as we get about the world and encounter objects. In this way, we can interpret Kant's claim that spatial relations "only attach to the form of intuition alone, and thus to the subjective constitution of our mind, without which these predicates could not be ascribed to any thing at all" (A23/B37-38). A form of intuition is the way in which objects are presented to us. But since it is by moving that objects are so presented, then to say that space is a form of intuition is to say that space is the motions of the subject. Apart from our motions, spatial "predicates could not be ascribed to any thing at all." That is, objects acquire spatial properties in virtue of being encounterable in our moving.

The above instruction should be understood from this properly Kantian perspective. The instruction to move 12 blocks over and 3 blocks up is an instruction for a spatial production. Although it is deeply tempting to conceive of oneself as separated from the car by an objective spatial expanse, and to conceive of one's motion as occurring through that objective expanse, Kantian idealism asks us to resist that temptation. The instructed motion is called the figurative synthesis, which produces a finite spatial expanse and gives to objects their spatial situatedness and relations to one another. My car is represented as so far away – that is, acquires this spatial property – not because of its position in objective space, but because of where it arises in the course of a spatial production performable by me or anyone else. And to represent other cars and appearances as yet further away from my own is, again, a matter of representing where they are encountered in the course of the production, i.e., not 12 blocks over and 3 blocks up, but 12 blocks over and 15 blocks up.

The instruction, if obeyed, would produce a finite spatial expanse, the production of which is called the figurative synthesis. What, then, does it mean “to bring” the figurative synthesis to apperception? Apperception is the unity of consciousness brought about by a rule. Therefore, to bring the figurative synthesis to apperception is nothing more than to bring it under a rule. But since a rule specifies what ought to be done, or is legitimate to do, the result is:

It is legitimate to move 12 blocks over and 3 blocks up and react, “This is my automobile.”

This, then, is what Kant means by the relation of the productive imagination to the unity of apperception. However, this relation is nothing other than the characterization of the representation of spatially remote appearances given in Chapter 5. With this result, we can now say that the pure understanding, which is defined as the relation of the productive imagination to the unity of apperception, is the faculty for global cognition. It is precisely by bringing the spatial production under a rule that we can cognize what lies beyond current perceptions (although, given the requirements of the two-faculty theory, not beyond possible perception altogether). Recall the key point that one does not have to perform the spatial production legitimated by the rule in order to represent the distant object; the content of the representation is an instruction plus possible (not actual) compliance.²³⁷

The same result applies to time. The figurative synthesis with respect to time is a time-marking activity. I mentioned that Melnick provides various examples of time-marking activities, and I suggested that perhaps it is easiest to think of such an activity in

²³⁷ See the end of Section 1.1 of Chapter 5.

terms of tapping one's finger or its mental analogue.²³⁸ Kant ascribes the figurative synthesis to motion, which by suggestion consists of tapping one's finger. However, given the repetitive nature of the motion, it does not draw attention to a growing spatial expanse but only to a growing temporal extent: the longer one taps, the greater the extent of time produced. But, again, given Kant's transcendental idealism, the time-marking procedure does not occur in the objective flow of time; it produces a finite expanse of time. Furthermore, time too can be brought under rules. The instruction above could be modified as follows:

It is legitimate to move 12 blocks over and 3 blocks up, before noon, to encounter my car.

A temporal dimension has been incorporated into the rule, for one has been instructed not only to move, but to do so within a time-frame; the spatial production is accompanied by a time-marking activity. However, the reference to noon should not be taken as indicating a point in objective time, but rather a stage in a time-marking activity beyond which, according to the rule, it is not appropriate to proceed.

Consequently, this is how one should understand the relation of the figurative synthesis to the unity of apperception with respect to future time. But how should this relation be conceived with respect to past time? In Chapter 5, I provided the following formulation:

With respect to what is presently perceived, it is legitimate to be at a stage beyond encountering ϕ .

²³⁸ See Section 2.1 of Chapter 5.

Representations of past appearances do not legitimate any temporal production that can actually be performed. Although I can move to my car before noon, I cannot go back into the past and perform a time-marking activity from some past state up to some present state. Rather, the rule specifies a possible time-marking activity, such that it is legitimate to represent oneself as at a later stage of an activity that could have been performed but was not. In this way, the rule enables one to represent back into the past – namely, past states are represented as having occurred at the beginning of a possible time-marking activity leading up to a present perceptual state. As a result, the figurative synthesis, or the possible time-marking activity, has been brought to a rule, i.e., the unity of apperception.

1.3 The Role of the Categories

I have now provided a complete analysis of the second premise of Kant's proof of the categories. To bring the productive imagination, or the figurative synthesis, to the unity of apperception is to apply a rule to a spatial or temporal production. But since the representational integrity of a rule does not require the actual performance of what it legitimates, then the act of bringing the productive imagination to apperception is what enables one to represent globally or beyond the scope of one's current perceptions. I summarize the results:

1. The pure understanding is defined as the relation of the productive imagination to the unity of apperception.
2. To bring the productive imagination to the unity of apperception is to bring the figurative synthesis under a rule.
3. The figurative synthesis is the production of spatial and temporal extents.

4. Rules legitimate activity.
5. To bring the figurative synthesis of space under a rule is to legitimate a spatial production. (concluded from 3 & 4).
6. This was interpreted as a rule for representing spatially distant appearances.
7. To bring the figurative synthesis of time under a rule is to legitimate a temporal production (concluded from 3 & 4).
8. This was interpreted as either a time-framed rule for a possible spatial construction or a rule for being up from a past state. The first is a rule for representing the future encounter of a spatially distant object, and the second is a rule for representing a past appearance.
9. Given that global cognition is the capacity to represent spatially and temporally remote appearances, the relation of the figurative synthesis to apperception is the capacity for global cognition (concluded from 2-8).
10. Therefore, the pure understanding is the faculty for global cognition (concluded from 1 & 9).

At this stage we can now introduce the role of the categories. Kant claims that the categories “contain the necessary [i.e., rule governed] unity of the pure synthesis of the imagination [i.e., the figurative synthesis] in regard to all possible appearances [i.e., all possible spatio-temporal appearances]” (A119). I interpreted this to mean that the categories are required for bringing the production of spatio-temporal expanses under rules, thereby making global cognition possible. Why are they required?

A full answer to this question would require an investigation of the entire *Analytic of Principles*, and most importantly, the *Analogies of Experience* where Kant discusses substance, cause, and community. The reason for this is because the *Deduction* only provides a method for showing how pure concepts are applicable to objects of possible experience. The basic method states: if it can be shown that *a priori* concepts are required for cognition, then it can be proved that they must apply to any object that can be

cognized. Kant makes no effort to show that there are such *a priori* concepts until the *Analytic of Principles*.

It is beyond the scope of the chapter to embark upon this full analysis, but I can provide some indications of the role of the categories in realizing global cognition. The rule for representing past appearances has been characterized in the following way: “With respect to what is presently perceived, it is legitimate to up to a stage in a temporal production beginning with encountering ϕ .” I argued that the legitimacy of the rule rests upon their being some connection between the past state and one’s present perception. For example, past chemical processes on Pluto presumably have no connection with my current perception of a green desk. But *sans* connection, the present perception provides no basis for being up from those chemical processes. The required link was found in an appeal to the category of substance. Substances endure in time, and if the past and present states are states of one and the same substance then the needed connection is found, for they both belong to the unfolding history of that substance. This means that what is presently perceived must be conceived as a substance if the rule for representing past appearances is to be legitimate and have intentionality. Furthermore, I argued that this analysis of representation of the past is nonetheless limited, since it only accommodates representation of past states of currently existing substances. But Kant claims that we can represent even the immense periods that have long preceded our own existence. Julius Caesar, for example, no longer endures as a substance (i.e., the substance that once was Caesar no longer retains its identity as Caesar), but we can still form thoughts that intentionally represent him. I suggested that this problem can be solved by appeal to the category of causality. Since substances causally interact, it is possible to formulate a rule

for tracking these causal interactions up to some present perception. So, for instance, we can formulate the rule: “Upon perceiving the Rubicon, it is legitimate to be up to a stage in a temporal production beginning with, ‘Caesar crosses here.’” And even if the Rubicon no longer endures, it too has interacted with further substances, and so on.

This brief discussion is intended to provide at least a basic understanding of the role of the categories. The claim is that the possibility of cognition of the full scope of past time requires that we think or conceive of the world as having an ontology of causally interacting substances.

But are the categories required for representing distant (or future) appearances? Admittedly, neither substance nor cause are contained in the rule, “it is legitimate to take n steps to encounter ϕ .” However, let me discuss the role of the category of magnitude. This category is not required for the representation of continuous spatial or temporal expanses. All that is required for forming this representation is the activity of producing the expanse (*exhibitio originaria*). Kant refers to these representations of space and time as “elementary” (A102) and distinguishes them from cognition of determinate expanses. What is required for cognition is not only pure intuition, but a concept guiding the construction, e.g., the concept of a line or triangle. But not even this kind of representation requires magnitude. For example, one might simply be instructed to draw linearly or triangularly without any indication as to the size of the line or triangle.

Given that magnitude isn’t even involved in cognition of space and time, one is bound to wonder what role it has in cognition. I claim that magnitude is necessary for representing appearances *as having location* in space and time, rather than space and time themselves. I will focus on space, but the following points apply to time as well. Since

the schema of magnitude is number, one can see that this category is contained in the enumeration of the spatial production. One is instructed to take n steps, which is merely a variable standing for whatever enumeration is supplied. But suppose the rule lacked any form of enumeration. In this case, the rule might be: produce a linear spatial expanse, encounter ϕ . This rule provides no representation of where in the course of the production ϕ is to be encountered and consequently fails to represent ϕ as having a spatial *location*. At best ϕ is merely represented as having spatial *reality*. This is a subtle distinction, but it is based on Kant's claim that magnitude is a pure concept that does not belong to pure intuition. One must keep in mind the difference between producing a spatial expanse (pure intuition) and enumerating the production of the expanse (pure concept). Location, on Kant's view, is a function of something's position within a spatial production. To be positioned within a spatial production is to be capable of arising at a *stage* of the production, such that the representation of location is not possible without the schema of magnitude. If one abstracts from the schema of magnitude, all that is left over is the representation of something's merely arising within a production. The tricky point is that to represent something's arising within a spatial production (i.e., as having spatial reality) is not *ipso facto* to represent it as having location within that spatial production. Location, as I said, results only from the additional application of the category of magnitude to the production of the expanse. The reason why the two are so difficult to separate is because anything that has spatial reality can also be *given* spatial location. But furthermore, recognizing this separation requires keeping firmly in mind Kant's transcendental idealism. It is easy to fall back on an objectivist conception of space when thinking about Kant's claims, and according to this conception spatial locations are indeed contained in

– and therefore do not need to be added to – objective space. Consequently, on this account, by the very fact that something has spatial reality (i.e., exists in objective space) it follows that it has a particular spatial location. But not so on Kant’s view.

2 The Affinity of the Manifold

At this point, a complete interpretation of Kant’s proof of the categories has been provided. But we are still left with the final section of text to discuss. To review, I divided the Transcendental Deduction is divided into four thematic sections. The first section, from A84-94, is where Kant identifies his methodology for justifying the objective validity of a category. The second section at A95-110 is referred to as “preparation,” (A98) along with the third transitional section at A110-114. In the fourth section the categories are deduced. This fourth section covers A115-130, and the actual proof is given in a single paragraph at A119. What then is the purpose of the remaining text from A120-130? I now address this question. Here Kant introduces the objective affinity of the manifold, and he claims that it grounds the possibility of the subjective associations of perception.

Kant begins his proof of the categories (A119) with a formal definition of perceptual and global cognition. The former is defined as the relation of the reproductive imagination to apperception, and the latter is defined as the relation of the productive imagination to apperception. This leaves Kant with the problem of how perceptual and global cognition can be brought together so as to be understood as part of a single, unified theory of cognition. My claim is that, according to Kant, global cognition is not merely another capacity alongside perception, but makes perception possible.

Evidence for the claim that purpose of A120-130 is to bring global and perceptual cognition together (grounding the latter on the former) can be found in the first paragraph introducing the official deduction. He begins by saying: “What we have expounded separately and individually in the previous section we will now represent as unified and in connection” (A115). Kant is referring to the four preparatory sections from A98-115 that have presented certain doctrines “separately and individually.” The next sentence says: “The possibility of experience in general and cognition of its objects rest on three subjective sources of cognition: sense, imagination, and apperception” (A115). One might think that what has been “expounded separately and individually” in the previous sections are just these sources or capacities, so that his purpose is now to present them in systematic interconnection. But even cursory examination reveals that this is incorrect, since in the threefold synthesis these capacities are not discussed in separation from one another. On a superficial level, Kant does discuss each under a separate heading, but the discussion as a whole aims to show how all three capacities are employed together in making objective perception possible. Thus, what is still in need of connection is something else. Kant continues the sentence: “each of these [i.e., sense, imagination, apperception] can be considered empirically, namely, in application to given appearances, but they are also elements or foundations *a priori* that make this empirical use itself possible” (A115). A distinction, then, is drawn between the empirical and *a priori* uses of sense, imagination, and apperception. I now rely on my arguments in Section 1 to claim that the former are involved in perception, whereas the latter are involved in global cognition.²³⁹ This means that what has been expounded “separately

²³⁹ The *a priori* “uses” of sense, imagination, and apperception refer to the *a priori* syntheses that these faculties can perform. Chapter 6 provided an interpretation of the *a priori* synthesis of imagination as the

and individually” is Kant’s analysis of global cognition and perception. What he needs to explain is the connection between them, and he identifies the relation as one of *grounding* or *making possible*: global cognition (which involves *a priori* synthesis) is claimed to ground perception (which involves empirical synthesis).

However there does remain the further question of whether his attempted grounding is *successful*. Kant’s problem concerning the possibility of perception is that the employment of empirical concepts required for the perception of objects depends upon regularity in experience. Kant gives the example of cinnabar (A100-101): if cinnabar were sometimes red, sometimes black, sometimes light, sometimes heavy, we would never be justified in applying a concept specifying what properties appropriately belong to cinnabar. Kant attempts to insure the requisite regularity by appeal to the categories. Since our imposition of the categories upon experience guarantees regularity, then the empirical concept application required for perception obtains. This account is general

figurative synthesis of the B-edition Deduction. But this synthesis turns out to be the same as the *a priori* synthesis of sense. In the first preparatory section of the A-edition Deduction, Kant describes the *a priori* synthesis of sense – or what he here calls apprehension – as follows: “Now this synthesis of apprehension must also be exercised *a priori*, i.e., in regard to representations that are not empirical. For without it we could not have *a priori* neither the representations of *space nor of time ...*” (A99, my emphasis). In the second preparatory section, Kant describes the *a priori* synthesis of imagination as follows: “Now it is obvious that if I draw a line in thought, or think of the time from one noon to the next, or even want to represent a certain number to myself, I must necessarily first grasp one of these manifold representations after another in my thoughts. But if I were always to lose the preceding representations (the first parts of the line, the preceding parts of time, or the successively represented units) from my thoughts and not reproduce them when I proceed to the following ones, then no whole representation and none of the previously mentioned thoughts, not even the purest and most fundamental representations of *space and time*, could ever arise” (A102, my emphasis). The *a priori* syntheses of sense (or apprehension) and imagination are *one and the same synthesis*. They both refer to the *production of spatial and temporal extents* (the drawing of a line, or thinking of one noon to the next), i.e., they are the figurative synthesis. On the other hand, the *a priori* synthesis of apperception refers to the rules of the understanding, and these rules involve the categories. In Section 1.2 of this chapter, I defined global cognition – or the pure understanding – as the relation of the figurative synthesis to the unity of apperception. In other words, it consists of bringing the figurative synthesis under rules of the understanding, where this bringing is enabled by the categories. If my analysis in 1.2 is correct, then the *a priori* syntheses that Kant references – namely, sense/apprehension, imagination, and apperception – are all components of global cognition or the pure understanding. This, then, is meant to be distinguished from the empirical rules involved in perception or the empirical understanding.

enough for most interpreters to accept. My reading, however, more specifically asserts that the application of the categories to experience enables global cognition, and *it is by virtue of making global cognition possible* that they further enable the conditions of perception. In other words, our system of global cognitions is the basis for the regularity required for perception. But does this actually work? Does Kant successfully argue that our system of global cognitions guarantees regularity in perception?

Much of Kenneth Westphal's work on the first *Critique* involves showing that Kant's attempt – however interpreted – fails, and consequently that the possibility of perception rests upon transcendently realist sources of regularity that cannot be guaranteed or supplied by the mind. That is, whether regularity is present in experience has nothing to do with the human mind or the categories; one might say colloquially, “that’s just how it is.” Westphal says:

On the other hand the constitutive employment of categories [as opposed to the regulative employment of an idea of reason] in application to particular objects concerns (among other things) our identification of objects and events, and this involves our having and applying whatever empirical concepts are necessary for identifying those objects. As Kant (rightly) points out, our having those concepts requires that we find a certain amount of regularity among the objects and events we sense. Failing such regularity, we would not have experience at all ... The basis of this regularity Kant calls “the principle of affinity.”²⁴⁰

Westphal claims that the application of the categories to experience depends upon “our having and employing whatever *empirical concepts* are necessary for identifying those objects” (my emphasis). Take the cinnabar example: the ability to apply the empirical concept of cinnabar requires that experience *not* present it as sometimes red, black, light, and heavy. The use of empirical concepts, and by implication the categories, rests on the

²⁴⁰ Kenneth Westphal, *Kant's Transcendental Proof of Realism*, p. 91-92.

regularity of our sensations. He says that the ground of this regularity in objects of experience is given the title “affinity.” But now the question is whether the mind is capable of insuring that this regularity will obtain: Can the mind supply the affinity on which cognition depends? Westphal says, no. On his view, Kant’s argument that the mind does ensure this condition fails:

Finally, it also cannot be the case that we are solely responsible for introducing order and regularity into the appearances we call nature, as Kant also claims (A125). The basic reason is the same in each case: if the matter of sensation is given us *a posteriori*, then *ex hypothesi* we cannot generate its content. Consequently, we also can neither generate nor otherwise insure the regularities, the recognizable similarities and differences, within that content or among that set of given intuitions. The satisfaction of the transcendental principle of affinity by any manifold of intuitions or appearances cannot be generated, injected, or imposed by that subject... The satisfaction of the principle of affinity can be *required* by the cognitive nature of a subject, and thus it can be a *transcendental* condition for the possibility of that subject’s unified self-conscious experience. This is a *conditional* necessity. The satisfaction of the principle of affinity is a contingent function of the specific characteristics of *a posteriori* matter of sensation...²⁴¹

Westphal denies that the cognizing subject can guarantee the regularity required for experience (perception)²⁴² by imposing or injecting formal structures that will produce this material regularity, and this failure is claimed to be an immediate inference from Kant’s view that sensations can only be given *a posteriori*. He emphasizes that this regularity is a transcendental condition in the sense that it is necessary for the possibility of cognition. However, whether there is regularity in experience is only a *contingently* granted condition, and therefore cognition depends upon the luck that experience actually tosses up regularity. When he refers to the need for a transcendently realist source of regularity, he is simply asserting that cognition depends upon the world’s happening to be

²⁴¹ Ibid., p. 115.

²⁴² I note that Westphal’s whole discussion collapses experience into acts of perception. He never considers global cognition, and the discussion only addresses requirements for perception. So when he refers to cognition and experience, he is really discussing perception.

regular enough for concept application to be possible. The goal of his book, as indicated by its title *Kant's Transcendental Proof of Realism*, is to show that Kant unwittingly, or as he says *sans phrase*, proves that this transcendently realist condition indeed obtains, albeit contingently.

In what follows, I will present Kant's solution to the problem of perception as here articulated, as well as evaluate its success. I argue that his attempted solution fails, but that this failure does not leave all cognition at the mercy of a transcendently realist source of regularity as Westphal mistakenly claims.

2.1 Affinity and Objective Connection

Kant briefly introduces transcendental affinity at A113, but then provides a more detailed discussion at A120-125. The affinity of the manifold is distinguished from empirical association. The latter is a phenomenon with which we are already familiar. Empirical associations are established by the synthesis of reproduction in imagination, and they involve either connecting various representations associated with an object (e.g., the parts of a house or properties of cinnabar) or connecting representations of objects themselves (e.g., smoke and fire). Empirical associations, however, can be brought under rules. The repeated perceptions of smoke and fire, for example, *license* one to connect them. Kant puts the point in the following manner:

Since, however, if representations reproduced one another without distinction, just as they fell together, there would be in turn no determinate connection but merely unruly heaps of them, and no cognition at all would arise, their reproduction must therefore have a rule in accordance with which a representation enters into combination in the imagination with one representation rather than any others (A121).

The order of our experiences is the product of actively moving around. Upon witnessing smoke, I might turn my head or otherwise orient my body such that the next perception I have is of treetops followed by clouds. If one actually attends carefully to sequences of experiences, one is likely to find that the perception of fire rarely follows that of smoke, at least immediately, but that a great many other things might follow: treetops, ground, scattering people, blowing trash, etc. Thus, rules are needed, and their main function is to privilege connection of certain representations over others. Even though treetops might immediately follow smoke, the empirical rule of association does not license causally connecting treetops and smoke, but instead smoke and fire. It is important to note two basic features of these rules. First, even though they privilege certain connections over others, their privileging function is still based on and justified by *experience*; experience is the ground of their authority. Second, all such empirical rules are *subjective*. They are rules for how we choose to connect and organize perceptual experience, and presumably (Kant doesn't explicitly say so) this choice is based on pragmatic considerations of what best enables us to deal with and navigate the environment.

But it is these two characteristics that motivate Kant's introduction of the affinity of the manifold. We connect smoke and fire in the relation of cause and effect. But are they really causally connected? Is fire in fact causally productive of smoke? Kant describes this type of question in terms of whether there is something over and above our choice to associate; whether, that is, there is a connection in the *object itself*. Kant expresses this concern in the following passage:

There must therefore be an objective ground, i.e., one that can be understood *a priori* to all empirical laws of the imagination, on which rests the possibility, indeed even the necessity of a law extending through all appearances, a law, namely, for regarding them throughout as data of sense *that are associable in themselves* and subject to universal

laws of a thoroughgoing connection in reproduction. I call this objective ground of all association of appearances their affinity (A122, my emphasis).

Kant's concern with appearances being "associable in themselves" is, I think, more clearly expressed in an earlier passage in the fourth preparatory section: "The ground of the possibility of the association of the manifold, *in so far as it lies in the object*, is called the affinity of the manifold (A113, my emphasis)." Connection in the object is given the odd title of the affinity of the manifold, and Kant grounds all empirical rules of association on this affinity (A123). But what does Kant mean by "objective connection" or "connection in the object"? In other words, we need an analysis of what it means to say that smoke and fire are "really," or "in fact," causally connected.

Perhaps the best analysis can be found in Kant's discussion of Hume in the Doctrine of Method. Here Kant identifies objective connection with the categories:

That the sunlight that illuminates the wax also melts it, though it hardens clay, understanding could not discover let alone lawfully infer from the concepts that we antecedently have of these things, and only experience could teach us such a law. In the transcendental logic, on the contrary, we have seen that although of course we can never immediately go beyond the content of the concept which is given to us, nevertheless we can still cognize the law of the connection with other things completely *a priori*, although in relation to a third thing, namely, possible experience, but still *a priori*. Thus if wax that was previously firm melts, I can cognize *a priori* that something must have preceded (e.g., the warmth of the sun) on which this has followed in accordance with a constant law, though without experience, to be sure, I could determinately cognize neither the cause from the effect nor the effect from the cause *a priori* and without instruction from experience. He [Hume] therefore falsely inferred from the contingency of our determination in accordance with the law the contingency of the law itself, and he confused going beyond the concept of a thing to a possible experience (which takes place *a priori* and constitutes the objective reality of the concept) with the synthesis of the objects of actual experience, which is of course always empirical; thereby, however, he made a principle of affinity, which has its seat in the understanding and asserts necessary connection, into a rule of association, which is found merely in the imitative imagination and which can present only contingent combinations, not objective ones at all (A765-767/B793-795).

Kant distinguishes between an empirical and an *a priori* component in our judgments about causality. Whether two given appearances are causally connected depends upon the testimony of experience, such that it is impossible to judge that the warmth of the sun causes the wax to melt merely by examining the concept of warmth. The causal connection between them is described as a law which nonetheless is taught by experience (“only experience would teach us such a law”). This empirical law is merely subjective and contingent in the sense that it is based solely on what we choose to associate given what we happen to experience. As Hume says, causal connections are not features of representations themselves, but products of habits or customs formed from observations of constant conjunctions. This point reflects exactly what Kant says at A112-113 when he oddly describes causality as an empirical rule of association. On the other hand, the *a priori* component concerns our judgment that there *must* have been a cause to the melting of the wax, whatever that cause might turn out to be. In other words, given the objective validity of the categories, we are justified in thinking that this event necessarily arose from some other event in the advance of time. Kant accordingly charges Hume with confusing the necessity inherent in the law of cause and effect itself from the contingency in – or better said, the empirical basis of – our judgments about what effects follow from what causes.

But now the key point is that the necessity in the law is what explains objective connection or affinity. Causality as a category is not a mere rule of association, but “a principle of affinity, which has its seat in the understanding and asserts necessary connection ...” That is, to ask whether the melting of the wax is “really” causally tied to the warmth of the sun *just is* to ask whether we are justified – in fact required – to think

that the melting of the wax *necessarily* arose from a cause. If it turns out that experience provides evidence that the warmth of the sun was the cause in question, then we are justified in claiming there is an objective, in the sense of necessary, connection between them. This, I believe, is the meaning of Kant's question at A113²⁴³ when he asks for the ground of empirical connections. For without justification of the law of causality supplied by the deduction, we would never be in a position to ascribe connection in the objects themselves. This justification, in turn, consists of relating the concept of an event to "a third thing, namely possible experience." Kant argues that if events didn't arise from causes in the necessary advance of time, then experience would not be possible. Thus, even if we cannot know *a priori* what effects follow from what causes, we nonetheless can know *a priori* that causality must hold of experience since it makes it possible.

2.2 Affinity and Global Cognition

But now we need to consider the relation between affinity, understood as objective or necessary connection, and global cognition. The passage above does not specifically address global cognition because Kant is only concerned with explaining the nature of objective connection in terms of the necessity inherent in the category.

In an easily misinterpreted passage of the fourth preparatory section, briefly mentioned above, Kant distinguishes causality as an empirical rule of association (i.e., a Humean conception of causality) from causality as a category:

²⁴³ Kant raises the following question: "But that empirical rule of association, which one must assume throughout if one says that everything in the series of occurrences stands under rules according to which nothing happens that is not preceded by something upon which it always follows – on what, I ask, does this law [i.e., causality as an *empirical* rule of association] of nature, rest, and how is this association possible?" (A113). He gives a formal answer, still in need of explanation: "The ground of the possibility of the association of the manifold, in so far as it lies in the object, is called the affinity of the manifold" (A113). I discuss this question and answer in the next section.

But that empirical rule of association, which one must assume throughout if one says that everything in the series of occurrences stands under rules according to which nothing happens that is not preceded by something upon which it always follows – on what, I ask, does this, as a law of nature rest, and how is this association even possible? (A112-113).

If one takes the “law of nature” to refer to the category of cause, then one will be misled into thinking that he is inquiring into the ground of the categories themselves, or of what makes a transcendental deduction possible. Rather, Kant’s reference to a law of nature harks back to his reference to the empirical rule of association, such that what he really asks for are the conditions upon which causality *qua* empirical rule rests. And this condition is the affinity of the manifold. But then he goes on to ascribe the affinity of the manifold to the categories, and more specifically, the analogies of experience: “All appearances therefore stand in a thoroughgoing connection according to necessary laws, and hence in a transcendental affinity, of which the empirical affinity is a mere consequence” (A113-114). The categories, then, provide the affinity of the manifold. But since the categories also ground global cognition, then it is at least possible that the affinity of the manifold is our system of global cognitions.

At A122-124 Kant, I believe, makes this identification. He says: “I call this objective ground of all association of appearances their affinity. But we can never encounter this anywhere except in the principle of the unity of apperception with regard to all cognitions that are to belong to me” (A122). The affinity of the manifold and the unity of apperception are two sides of the same coin. The reason is because the rules of the understanding perform the dual function of both unifying objects of experience (i.e., the manifold) and our consciousness of them. But then Kant goes on to define the unity of consciousness correlative to the affinity of the manifold in the following way: “the

affinity of all appearances (near or remote) is a necessary consequence of a synthesis in the imagination that is grounded *a priori* on rules” (A123). He immediately clarifies: “The imagination is therefore also a faculty of a synthesis *a priori*, on account of which we give it the name of productive imagination ...” (A123). That is, the unity of consciousness correlative to objective affinity involves *not* the relation of the reproductive imagination to apperception, but that of the productive imagination to apperception. I have defined this as global cognition.

Crucial to understanding the affinity of the manifold, then, is the recognition of two ways in which consciousness can be unified: it can be unified either in a perceptual episode or in a cognition beyond a perceptual episode. So, for example, the former might involve the recognition that a certain perceptual object is a piece of cinnabar by means of applying the empirical concept to the reproduction of appearances. But, on the other hand, the latter involves a rule that legitimates a possible spatial or temporal production, as for example when one represents a distant appearance by the rule that, “it is legitimate to move 12 blocks up and 3 blocks over to encounter my car.” Unity of consciousness is always a function of rules, and such rules can pertain either to perceptual episodes or global cognitions. The former involve the application of rules to the reproductive imagination (empirical understanding), and the latter involve the application of rules to the productive imagination (pure understanding). This means that the unity of consciousness that is under consideration is effected not by empirical concepts, but by rules for global cognition. But since affinity is “a necessary consequence” (A123) of such rules, then the unity of the manifold that is under consideration, i.e., the affinity of the manifold, is also effected not by empirical concepts, but by rules for global cognition.

The meaning of this identification is not too difficult to understand. Global cognition unifies all possible spatio-temporal experience. Kant describes this as the “unity of nature” (A127) or the “unity of the world-whole, in which all appearances must be connected” (A218/B265f). We have, in other words, a system of representations that intend not only given intuitions, but past, future, and remote appearances. Such representations unify possible experience for the reason that they consist of rules that specify possible or legitimate connections between absent reality and present perceptions. Thus, the representation of remote space involves rules for spatial productions that would put one into contact with the object, and the representation of past time involves rules for temporizing substantial interactions that connect a past state to a present perception. The unification of all possible experience grounded on such rules is just what is meant by the “affinity of appearances (*near or remote*)” (A123, my emphasis).

But now what does global representation have to do with objective connection? In answering this question, we simply have to connect the two senses of “affinity” that have been discussed. On the one hand, the affinity of the manifold refers to the unity of all possible experience, and on the other hand, it refers to the necessary unity supplied by a category. However, since the unity of all possible experience is made possible by the categories, then the unity or connection supplied by the latter is necessarily present in the former – for without it the former would not be possible. In more simple terms, the rules for global cognition discussed in Chapter 5 involve the categories, and therefore they also involve the type of necessary unity the categories contain. Therefore, the unity of all possible experience involves a unity of necessary connections thought by means of the categories.

2.3 Affinity and Association

Given this interpretation of the affinity of the manifold, we are now in a position to investigate its relation to empirical association. Kant, as we have seen, distinguishes between two types of cognition: the relation of the productive imagination to apperception and the relation of the reproductive imagination to apperception. The former is the pure understanding, which is the faculty for global cognition; the latter is the empirical understanding, which is the faculty for perceptual cognition. Kant claims that the faculty of pure understanding grounds empirical understanding and apparently explains how this grounding works in the following passage:

Actual experience, which consists in the apprehension, the association (the reproduction), and finally the recognition of the appearances, contains in the last and highest (of the merely empirical elements of experience) concepts that make possible the formal unity of experience and with it all objective validity of empirical cognition. These grounds of the recognition of the manifold, so far as they concern merely the form of an experience in general, are now those categories. On them is grounded, therefore, all formal unity in the synthesis of the imagination, and by means of the latter also all of its empirical use (in recognition, reproduction, association, and apprehension) down to the appearances, since the latter belong to our consciousness at all and hence to ourselves only by means of these elements of cognition (A125).

Actual experience, or perception, involves the empirical syntheses of association, imagination, and recognition. But it further contains “concepts that make possible the formal unity of experience,” i.e., the categories. Kant then clarifies that the experience to which he refers is “an experience in general,” which I interpret to indicate the “one single experience, in which all perceptions are represented as in thoroughgoing and lawlike connection” cited at A110. In other words, he is referring not to the unity of a given perception, but to the unity of all possible appearances in space and time. Consequently, it is *this* unity that is claimed to be at the basis of the empirical elements of cognition; and

this unity goes “down to the appearances,” i.e., perception. I preliminarily represent the argument for this grounding relation as follows.

Preliminary Argument:

1. The application of the categories to experience enables the productive imagination to be brought to the unity of apperception.
2. The relation of the productive imagination to the unity of apperception is global cognition.
3. Global cognition consists of rules for objectively unifying all possible experience, i.e., it consists of rules that effect the affinity of the manifold.
4. The application of the categories to experience enables the objective unity of all possible experience, i.e., the affinity of the manifold (concluded from 1-3).
5. Actuality is a subset of possibility.
6. If all possible experience is objectively unified, then any actual experience is objectively unified as well (concluded from 5).
7. Any actual experience is objectively unified (concluded from 4 & 6).
8. Therefore, the unity of consciousness in the application of empirical concepts is insured to obtain (concluded from 7).

This is not exactly the argument that Kant gives. Nonetheless, let me discuss what is wrong with the argument in order to work towards Kant’s version. This argument, I believe, is not valid since it contains two equivocations. First, it equivocates on the notion of “possible experience.” The phrase “unity of possible experience” can refer either to the unity of the full scope of space and time or to the unity in any perception that we could have. But from the fact that the productive imagination can always be brought to the unity of apperception (i.e., unity of the full scope of space and time), it does not *automatically* follow that the reproductive imagination can be brought to the unity of apperception (i.e., unity in any given perception), for these are two *different* kinds of

synthesis. Additional premises are therefore needed draw this inference. However, from the fact that in any *possible perception* the reproductive imagination can be brought to apperception, it does follow that in any *actual perception* the reproductive imagination can be brought to apperception. This inference is valid, however it is not the inference that the argument above makes. The argument above grounds the relation of the reproductive imagination to apperception on the basis of the relation of the *productive* imagination to apperception. What, then, are the additional premises required to draw the above inference? It appears that the above argument should be replaced with following one.

Kant's Argument:

1. The application of the categories to experience enables the productive imagination to be brought to the unity of apperception.
2. The relation of the productive imagination to the unity of apperception is global cognition.
3. Since the productive imagination produces the form of intuition, then the relation of productive imagination to apperception provides an objective unity of the *form* of intuition (concluded from 2).
4. Global cognition consists of rules for objectively unifying the *form* of all possible experience, i.e., it consists of rules that effect the affinity of the manifold (concluded from 2-3).
5. The application of the categories to experience enables the objective unity of the *form* of all possible experience, i.e., the affinity of the manifold (concluded from 1-4).
6. But if the form of all possible experience is unified, then the *matter* of actual experience is unified.
7. The *matter* of actual experience is unified (concluded from 5 & 6).
8. Therefore, in any perceptual experience, the reproductive imagination can be brought to apperception (i.e., an empirical concept) since the manifold is guaranteed to contain the requisite unity (concluded from 7).

With this, we see that the preliminary argument above also equivocates on “objective unity.” It claims that if all possible experience is objectively unified, then any given experience is objectively unified as well. However, there are two senses of “unity”: formal and material. Now Kant recognizes that the unity the categories supply is *formal*, for he explicitly says so.²⁴⁴ What then does it mean to provide formal unity of experience? Recall that space and time are forms of intuition. The productive imagination generates spatial and temporal extents, and it is in this activity of generating expanses that appearances are encountered. The categories, then, enable the form of intuition to be brought under apperception or rule-governed unity. It is this rule-governed unity of the form of intuition, i.e., formal unity, that defines global cognition or the pure understanding. Thus, an adequate representation of Kant’s argument requires bringing this point into play. The unity of all possible experience referred to in premises 3, 4, and 6 of the preliminary argument above is a *formal* unity.

But the problem is that Kant can only infer from the formal unity of experience that any actual experience (since actuality is a subset of possibility) will involve formal unity. What is required to solve the problem of perception, however, is not merely formal unity, but material unity. The application of empirical concepts requires that appearances themselves are actually regular: that cinnabar is *not* sometimes red and sometimes black, sometimes heavy and sometimes light, etc. Westphal, I believe, is correct on this point. But from the fact that there is formal unity in experience, it does not follow that there is

²⁴⁴ He makes this point at A125: “These grounds of the recognition of the manifold, so far as they concern merely the form of an experience in general, are now those categories. On them is grounded, therefore, all formal unity in the synthesis of imagination, and by means of the latter also all of its empirical use (in recognition, association, and apprehension) down to the appearances . . .” This passage is a fairly direct statement that the categories provide a formal unity to experience, and that this formal unity “goes down to appearances” and therefore guarantees the regularity required for the use of recognition, imagination, and apprehension in perception.

material unity in experience. In other words, premise 6 in Kant's argument above is false. This point can be seen by looking at the A765/B793 passage quoted above. Kant claims that the transcendental deduction establishes that if wax melts, for example, then there must have been some cause for this occurrence. The deduction of the categories does not establish any regularities regarding what causes go with what effects. Kant assigns this assessment specifically to experience, and therefore as something outside the bounds of a transcendental inquiry, such that if warmth regularly coincides with the melting of wax, then we are justified in thinking that the melting has necessarily arisen from the warmth of the sun. But from the fact that we are required to think that the melting of the wax had a cause, it does not follow that warmth will regularly cause its melting. In other words, causality involves the necessary advance of time itself, i.e., a feature of time as the *form* of intuition. But from the necessity of such a law, it does not follow that the *matter* of experience will be regular. As a result, once we disambiguate between the formal and material senses of "unity," we see that Kant's actual argument is a *non-sequitur*.

Kant, therefore, does not successfully show that the material, objective unity of experience required for the application of empirical concepts can be grounded on the formal, objective unity of all possible experience enabled by the application of the categories. Nonetheless, Westphal is wrong in thinking that Kant's proof altogether fails. Kant identifies the following situation as impossible:

For even though we had the faculty for associating perceptions, it would remain in itself entirely undetermined and contingent whether they were also associable; and in case they were not, a multitude of perceptions and even an entire sensibility would be possible in which much empirical consciousness would be encountered in my mind, but separated, and without belonging to **one** consciousness of myself, which, however is impossible (A122).

The primary problem is that our cognitive situation might be such that there is *no way* in which our perceptions can be brought under a rule and thereby belong to a unified consciousness. In denying that this cognitive situation is possible, Kant claims that there must be an objective basis – a regularity in our experiences – that enables our perceptions to be brought under concepts of objects. But this entailment does not hold, for Kant actually has available *another* way to bring perceptions to the unity of consciousness which does not require regularity in experience. In short, he can claim that perception involves a spatial synthesis, and so long as this spatial synthesis can always be brought under a rule, then the unity of apperception obtains. Let me explain.

Kant needs to construct an argument that neither equivocates on “possible experience” nor “unity.” In other words, he needs to show that the exact same synthesis present in global cognition is also present in actual perception. The synthesis involved in the former is simply the relation of the productive imagination to apperception, which provides a unity of the form of experience, i.e., a rule-governed unity of space and time. Kant needs to show that this same synthesis is involved in perception. His argument could go as follows:

1. The categories guarantee that the productive imagination can always be brought to apperception.
2. Perception also involves the productive imagination in relation to apperception.
3. Therefore, in any perception, the productive imagination can be brought to the unity of apperception (concluded from 1&2).

This argument is valid. But what does premise 2 mean? I have said that perception involves a temporally extended activity of scanning an object. What I meant by this was that it involves an activity of looking over the material components of the object, such as

the roof and shingles of a house. However, the act of scanning can also be understood as the construction of the spatial dimensions or parameters of the perceived object, such that this act is directed at a synthesis of its spatial *form* rather than its material components. This might seem strange, but it is simply the operation of the productive imagination in perceptual experience. Space, recall, is produced by motion. This production is called a figurative synthesis which is “a pure act of successive synthesis of the manifold of outer intuition in general” (B155f). In Chapter 6, I argued that Kant’s references to “synthesizing the manifold of outer intuition” should be understood simply as the assertion that motion, or the figurative synthesis, is productive of continuous spatial expanses. He provides the examples of drawing a line or a circle. But the production of space need not be restricted to the construction of mathematical objects; it can also be extended to the perception of empirical objects. So, for instance, the perception of a house involves “the necessary unity of space and outer sensible intuition in general, and I as it were draw its shape in agreement with this synthetic unity of the manifold in space” (B162). What Kant means, I claim, is that the scanning of the house involves bringing the perception under a spatial production, the motion of which is physically carried out by the eyes or the turning of one’s head, and which enables one to represent the spatial parameters of the object. As Kant says, we so to speak draw the outline of the house in this activity. But furthermore, as emphasized in the passage, this activity can be brought under a *rule*, i.e., it has necessary unity. Kant refers to the category of quantity, and he says that any perception must be in agreement with this category. The key point is that the spatial synthesis to which perceptions are subject can always be quantified or given magnitude, *even if the matter of experience fails to exhibit regularity*. In other words,

since the intellectual unity of the category governs the form of intuition (i.e., our activity of producing spatial expanses), it does not depend upon regularity in the matter of experience.

This, then, is at least one example of how perception contains the relation of the productive imagination to the unity of apperception.²⁴⁵ But given that the possibility of this relation is guaranteed, Kant has therefore guarded against perceptual experience altogether failing to belong to a unified consciousness. Consequently, Westphal may be correct in claiming that the regularity of the matter of experience cannot be supplied by the mind, but he is wrong to claim that the very possibility of cognition is therefore at the mercy of, and requires, such transcendently realist sources of regularity. Whether experience is regular or not, the productive imagination can always be brought under rules of synthesis, and therefore cognition so understood can be achieved, either globally or in perception.

3 Dissertation Conclusion

The chapter has brought the Transcendental Deduction to a close. Chapter 2 began by discussing Kant's new transcendental method for metaphysics, according to which *a priori* metaphysical concepts, such as substance and cause, are proved to apply to any object that we can cognize on the ground that their application first makes cognition of objects possible. This necessitated an inquiry into the nature of cognition. I distinguished perceptual from global cognition, and this distinction structured the rest of the chapters. Chapter 3 developed Kant's theory perception in order to show that the categories,

²⁴⁵ At B162-163, Kant also discusses the relation of temporal production to the category of cause in the perception of the freezing of water.

although involved in perception, are not deduced by making it possible. Chapter 4 argued that the true basis for deducing the categories is global cognition. It provided a preliminary account of global cognition, which was then fleshed out in more detail in Chapter 5. Chapters 6 and 7 focused on developing Kant's official proof of the categories given at A119. The former focused on interpreting the faculty of imagination. My discussion sought to establish that the productive imagination, called the figurative synthesis in the B-edition, is the ability for producing and thereby intuitively representing finite spatio-temporal extents.

The present chapter completed discussion of the text of the Transcendental Deduction. At A119 Kant provides his proof of the categories. This proof is based on the definition of cognition as the relation of the productive imagination to apperception; the categories are claimed to make cognition, so defined, possible. I interpreted this definition to mean that cognition is the capacity for global cognition, which consists of bringing the production of spatio-temporal extents (the figurative synthesis in the B-Deduction) under a rule. This means that the application of the categories to experience makes global cognition possible.

At 120-130, Kant goes on to discuss the affinity of the manifold and its relationship to perception. I argued that the affinity of the manifold, *near or remote* (A123), consists of an objective (in the sense of necessary) unity of all possible experience. This unity is nothing other than our system of global cognitions by which we represent all possible appearances, including ourselves, as belonging to a rule-governed and on-going world of experience. The capacity to form such a system of representations covering all possible appearances – past, future, spatially remote or near – involves the categories (and so the

necessary unity they provide), since they make such a system possible. Kant attempts to infer from the objective unity of all possible experience effected by the categories that the world cannot fail to exhibit the regularity required for perception. I criticized his argument on the ground that it equivocates on the notion of objective unity. The categories effect a unity of the *form of intuition*, and it is this unity which is involved in any global cognition; it is the unity involved in bringing a production of a spatio-temporal extent under a rule. However, the answer to the problem of perception requires more than just formal unity. It requires *material* unity, understood as the regularity of sensations. Kant cannot prove the necessity of a material unity – or regularity – of our sensations solely on the basis of a formal unity involved in global cognition. Both Westphal and I agree that material unity cannot be based on formal unity alone. However, I believe that Westphal is incorrect in asserting that cognition therefore depends upon a transcendently realist source of regularity. On his view, cognition is at the mercy of the world exhibiting regularity in experience. I argued that this is incorrect: even if one encounters a perceptual situation that is a bumbling, buzzing confusion (to use James' phrase), one can still bring the spatio-temporal synthesis involved in perception under a rule, thereby achieving cognition.

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