

Kant and the Metaphysics of Causality

ERIC WATKINS

University of California, San Diego



PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa
<http://www.cambridge.org>

© Eric Watkins 2005

This book is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without
the written permission of Cambridge University Press.

First published 2005

Printed in the United States of America

Typeface ITC New Baskerville 10/13 pt. *System* L^AT_EX 2_ε [TB]

A catalog record for this book is available from the British Library.

Library of Congress Cataloging in Publication Data

Watkins, Eric, 1964–
Kant and the metaphysics of causality / Eric Watkins.
p. cm.

Includes bibliographical references and index.

ISBN 0-521-83567-4 (hard) – ISBN 0-521-54361-4 (pbk.)

1. Kant, Immanuel, 1724–1804. 2. Causation. I. Title.

B2799.C3W38 2004

122'.092–dc22 2004045924

ISBN 0 521 83567 4 hardback

ISBN 0 521 54361 4 paperback

Contents

<i>Acknowledgments</i>	<i>page</i> vii
<i>A Note on Citations and Translations</i>	xi
Introduction	1
PART I: CAUSALITY IN CONTEXT	
1 Pre-established Harmony versus Physical Influx	23
<i>Introduction</i>	23
<i>Leibniz and the Many Faces of Pre-established Harmony</i>	24
<i>Christian Wolff and Pre-established Harmony in Eighteenth-Century Germany</i>	38
<i>Knutzen's Leibnizian Arguments for Physical Influx</i>	50
<i>Baumgarten and Meier: A New Case for Pre-established Harmony</i>	73
<i>Crusius and Fundamental Powers</i>	81
<i>Conclusion</i>	93
2 Kant's Pre-Critical Theory of Causality	101
<i>Introduction</i>	101
<i>Kant's Concept of Force in the True Estimation and Physical Monadology</i>	104
<i>The Nova dilucidatio and the Principle of Succession</i>	112
<i>The Nova dilucidatio and the Principle of Coexistence</i>	140
<i>Kant's Pre-Critical Reaction to Hume</i>	160
<i>New Developments in the Inaugural Dissertation</i>	170
<i>Conclusion</i>	177

PART II: CAUSALITY IN THE CRITICAL PERIOD

3	Kant's Second and Third Analogies of Experience	185
	<i>Introduction</i>	185
	<i>The Context of the Second and Third Analogies</i>	185
	<i>The Argument of the Second Analogy</i>	203
	<i>The Argument of the Third Analogy</i>	217
	<i>Conclusion</i>	229
4	Kant's Model of Causality	230
	<i>Introduction</i>	230
	<i>Events and Event-Based Models of Causality</i>	232
	<i>Grounds, Causal Powers, and Determinations</i>	243
	<i>Making Sense of Activity, or the "Causality of the Cause"</i>	265
	<i>Implications for the Second and Third Analogies and for the "Critical Turn"</i>	282
	<i>Conclusion</i>	296

PART III: CAUSALITY AND CONSEQUENCES

5	The Metaphysics of Freedom	301
	<i>Introduction</i>	301
	<i>The Third Antinomy</i>	304
	<i>Aspects of Transcendental Idealism</i>	317
	<i>Freedom and Causality</i>	343
	<i>Conclusion</i>	360
6	Kant's Reply to Hume: Historical and Contemporary Considerations	362
	<i>Introduction</i>	362
	<i>The Historical Question of Kant's Reply to Hume</i>	363
	<i>Contemporary Considerations</i>	389
	<i>Conclusion</i>	421
	<i>Conclusion</i>	423
	<i>Bibliography</i>	431
	<i>Index</i>	441

Introduction

The goal of this book is to present a comprehensive account of Kant's views on causality in their proper historical context. Since what I take that context to be departs from the standard view in significant ways, in the first part of this introduction I sketch the familiar contours of the standard view and present very general historiographical and historical reasons that show why we might consider rejecting central aspects of such a view. I also suggest that we can discern the main features of a more adequate account by approaching the topic in a fuller, contextualist manner. In the second part of this introduction I summarize each chapter in this book, illustrating how such an approach makes it possible to provide a more satisfying historical and philosophical account of Kant's central views on causality.

Within general histories of modern philosophy, one can find a narrative concerning the specific issue of causality whose main story line is repeated with remarkable consistency, even if it is embellished on each occasion with slightly different details.¹ Told in the most general of terms,

¹ It is true that certain (primarily epistemological) aspects of a more general history of modern philosophy – of which what is described here is merely a part – were discredited long ago, e.g., by Louis Loeb, *From Descartes to Hume: Continental Metaphysics and the Development of Modern Philosophy* (Ithaca: Cornell University Press, 1981). However, despite the fact that a tremendous amount of excellent scholarly work has contributed to our understanding of early modern philosophers and the specific topics that they address, no consensus has emerged about what general narrative ought to take the place of the standard view. In fact, histories of modern philosophy that would be comprehensive in scope have rarely been offered in recent times. Since the narrative given here has not yet been replaced by an alternative view, it still represents the best available account on this issue.

the story is that philosophers in the early modern period, such as René Descartes and John Locke, attempted to articulate a novel metaphysical account of causality that could support the claims of the “new sciences” of mathematical physics and corpuscularianism discovered by Galileo Galilei, Isaac Newton, and Robert Boyle. Descartes and Locke, as the founders of radically opposed views within modern philosophy (“rationalism” and “empiricism,” respectively) disagreed about many substantive issues, such as the existence of innate ideas and the role of sensations, but their accounts of causality nonetheless revealed remarkable similarities (due in part to the fact that they shared a common opponent, namely medieval and early modern Aristotelians). For both accounts involved purely quantitative properties and exact laws of nature that invoke only efficient and, in fact, mechanistic causation in explaining how a cause necessarily brings about its effect, rather than qualitative features that occur merely “for the most part” and according to final or teleological causes, as many Aristotelians held.

Typically, it is then reported that Descartes’s position came under attack from later “rationalists,” such as Nicolas Malebranche, Benedict Spinoza, and Gottfried Wilhelm Leibniz. They objected that Descartes could not explain how causal relations obtain between the mind and the body, since the mind and the body are, on his account, distinct substances with radically different natures, and they thus concluded that his attempt at providing a truly comprehensive account of causality failed. These figures then developed their own positive accounts of causality in a way that would avoid this objection. Malebranche did so by denying that finite substances, such as the mind and the body, could act at all and by asserting that only an infinite substance (i.e., God) could truly be a cause. Spinoza argued that the mind and the body are not really distinct substances, but rather modes of one all-encompassing substance (God), so that causation between the mind and the body is a relation not between substances with different natures, but rather between modes of a single substance.² Finally, Leibniz asserted that a finite substance can act, but

² Spinoza’s position is more complex than this brief description might suggest insofar as he asserts (1) that each attribute of a substance (e.g., thought and extension) must be conceived through itself and (2) that the order of ideas in the mind parallels the order of (bodily) things. As a result of the first claim, he seems to deny that we could understand how the mind and the body, *described as such*, can act on each other, since understanding such an action would require us to conceive of a mode under one attribute as following causally from a mode conceived of under a different attribute. Yet as a result of the second claim, Spinoza seems to be committed to a parallelism between what occurs in the mind and what happens in the body, which one might otherwise try to explain as the result of causal interaction.

only on itself, and that God, prior to creation, programmed all substances with such extraordinary wisdom and care that their states *merely seem* to be the result of their acting on each other causally. Insofar as each of these three alternatives might appear, at first sight, to be at least as counter-intuitive as Descartes's view was problematic, the "rationalist" line of inquiry concerning causality looks to be, at best, a superfluous curiosity and, at worst, a dead end that simply distracts from the main story line. Since the primary role played by these rationalists in the story of causality is that of critics of Descartes's account of mind-body interaction rather than that of figures who contribute something of lasting positive value to the philosophical tradition that we inherit today, no significant harm would be done if their constructive views were given short shrift and not pursued in any further detail.

If the rationalists' positive views on causality are thus philosophically barren, empiricists would need to step up and play a more prominent role, should there be an interesting story to tell about causality in the modern period. George Berkeley, the next modern philosopher typically considered an empiricist, did not make especially important contributions to discussions of causality, since his views were quite close to Malebranche's. However, David Hume, the final empiricist of the modern period, delivered a truly spectacular performance, even if his very first critics mistakenly panned it. For in the course of following the fundamental assumptions of empiricism to their logical conclusion, so the story goes, he developed extraordinarily powerful criticisms of the very foundations of early modern accounts of causation, arguing, among other things, that the basic notion of causality invoked in their accounts does not possess the sense of necessity claimed for it. All that causality could be for us, according to Hume, is the constant conjunction of two events and a "subjective feeling of the mind," or expectation, following repeated observations of their regular occurrence together in the past, that they will be correlated in the future as well. For Hume asserts that one can have no impression from internal or external sensation of a necessary connection between any one event (the cause) and any other (its effect) and thus that no corresponding meaning can be attached to the terms that are commonly used to describe this kind of connection, such as "force," "power," or "bringing about." As a result, Hume famously showed that the new sciences do not require as robust a metaphysical account of causality as Descartes and Locke had thought, since all that is needed are mere regularities between distinct events rather than necessary connections between substances and their states.

It is at this point that Immanuel Kant enters the standard story, claiming to have a reply both to the rationalists' (overly) ambitious claims to knowledge of God, freedom, and the immortality of the soul and to Hume's skeptical doubts about causality. In one of the most famous passages to be found in the history of philosophy – the Second Analogy of Experience – Kant is supposed to refute Hume's position by showing that the notion of causality Hume had called into question is not in fact dispensable at all, but is rather absolutely necessary as a condition of the very possibility of experience. Specifically, the category of causality is necessary because it makes possible knowledge of *objective* succession as something distinct from the merely *subjective* flow of our representations in consciousness.

The story fails to have an entirely happy ending, however, since after more than two centuries of sustained exegetical and philosophical attempts, no consensus has emerged about *what* Kant's argument in the Second Analogy is and *how* it is supposed to refute Hume's position. Instead, one typically faces some version of the following dilemma. Either one cannot find a valid argument that is actually successful in refuting Hume's position (i.e., many different reconstructions are proposed on Kant's behalf, but clever Humeans then take delight in pointing out the fallacies they involve) or one can identify a valid argument, but then, on closer inspection, one must admit that, in some subtle way, it draws on assumptions that a Humean could easily reject, so that the search for a cogent argument that does not beg the question against Hume continues.

Although failing to find an argument in Kant's Second Analogy of Experience that both successfully refutes Hume's position and does so on his own terms causes the story to end on a disappointing note, one's evaluation of how unhappy the ending is may depend, to a certain extent, on one's own philosophical outlook. Obviously enough, contemporary Kantians who are attracted to the idea that there might be substantive conditions of the possibility of experience continue to search for an argument that would win the day but are severely burdened with the worry that the lack of consensus is due not to the obscurity that might naturally be thought to accompany an argument so profound in its insight, but rather to the fact that no such argument is there to be found in the first place. By contrast, when present-day Humeans are in an optimistic mood, they might draw support from the Kantians' oft-repeated failure to produce the sought after goods and view the lack of consensus about his argument as representing the history of philosophy's verdict on the issue

and thus as constituting an important piece of evidence in their overall case for empiricism. However, without a definitive analysis of Kant's exact intentions and argument in the Second Analogy, Humeans cannot rest fully content in their views insofar as they must live in constant fear (or at least with the prospect of sporadic fits of melancholy) that the latest argument offered on Kant's behalf could turn out to be decisive.

The primary aim of this book is to tell a far different and, I hope, much more satisfying narrative about Kant's account of causality and its place in the history of modern philosophy. By taking some general historiographical considerations into account, we can provide both a compelling analysis of why the standard view goes wrong and positive guidance about how a more satisfactory story can be told. Though part of the standard view's appeal surely stems from the tidy way in which it can relate the history of modern philosophy in a simple, linear fashion (with each major figure in a given tradition improving in some way on the views of his immediate predecessor), its primary motivation in the case of causality is that it seems to allow Kant to speak directly to our contemporary philosophical interests because the issue of causality can be used to serve as a paradigm case for addressing the question of whether there are systematic grounds that would suffice to refute empiricism.

However, there are obvious dangers in an approach that simply assumes that Kant's interests are identical to our own so that we can immediately reconstruct and evaluate Kant's argument without having to bother with much else (beyond his unique terminology and odd architectonic, which add more than enough seemingly unnecessary difficulties on their own). It clearly runs the risk of leading one to read "foreign" arguments into an author's texts and it is perhaps not too surprising when the fate of these arguments turns out not to be consonant with the reputation of the philosopher in whose name they are offered. Less obviously, but more importantly, it can also lead to a narrowing of focus. In the current case, since Hume is typically considered the prime representative of empiricism and, as such, develops arguments about causality that are quite attractive to many today, and since Kant is explicitly critical of Hume in the Second Analogy, this approach makes it seem clear that Kant's primary interest in the Second Analogy of Experience lies in refuting Hume's skeptical doubts. Unless it bears directly on the Second Analogy, whatever else Kant says (even about causality) can be discussed later.

We can avoid these dangers if we first try to understand Kant's views and arguments within their proper historical context, before determining

whether and how it makes sense to use them in addressing our contemporary questions and concerns. The primary disadvantage of this historiographical approach is that one cannot guarantee in advance that Kant will have anything interesting to say to us. In response, one might simply appeal to the fact that the value of Kant's position to contemporary philosophy has been consistently documented over such a wide range of issues in the past that there is no reason to think that the issue of causality should be any different. Yet one can also point out that the standard view is, in reality, in no better shape on this issue. For simply assuming without question that what Kant says directly addresses our contemporary concerns does not entail that it actually does so, a fact made clear by the repeated failure of previous reconstructions of Kant's argument in the Second Analogy to refute empiricism.

But what exactly does it mean to say that we should understand Kant's views on causality in their proper historical context? To assess the standard story's assumption that refuting Hume's position in the Second Analogy of Experience is Kant's primary concern regarding causality, three general points are immediately relevant. First, it would be a mistake to assume that one can focus on the Second Analogy to the exclusion of other passages within the *Critique of Pure Reason*. For however one interprets Kant's argument in the Second Analogy, it must be consistent with the main thrust of his other arguments in the *Critique*, especially those that deal directly with the issue of causality, such as that of the Third Analogy and the Third Antinomy – *regardless* of whether or not their arguments appear, at first glance, to be a lost cause from a contemporary philosophical perspective, since, according to the historiographical approach being recommended, our primary task is simply to *understand* what Kant's views are.

Second, it would be preferable if Kant's views on causality in the *Critique* were to fit in naturally with his remarks about causality in other contexts, for example, with those that occur in works written during his "pre-Critical" period, in the *Reflexionen* that give insight into his private thoughts at the time, and in the transcripts from the metaphysics lectures he held throughout his career. It is true that these passages involve various complex interpretive issues (e.g., involving the "Critical turn" and Transcendental Idealism), but addressing such complex issues may ultimately provide indispensable help as opposed to problematic obstacles to our inquiry (as, I think, the narrowness of the standard view ultimately does). Thus whatever the "proper historical context" might amount to exactly, we should prefer an account of causality that is more comprehensive in

scope than is suggested by the standard story's exclusive focus on the Second Analogy.³

Finally, as soon as we extend our focus beyond the Second Analogy of Experience, it becomes even more imperative that we ask whom Kant intended to address with the *Critique of Pure Reason*. That is, for whom did Kant write this book and whose views did he intend to attack with it? It is evident from its title that he wanted to criticize views that he thought of as being supported by "pure reason" alone. Hume, who is a famous opponent of reason, would seem to be Kant's ally in such an endeavor rather than his enemy. Moreover, the fact that Kant wrote the *Critique* in German and not Latin suggests that his intended audience was not primarily European (whether it be French or English), but rather German. Nor ought one underestimate the consequences of the fact that Kant was educated and then lectured and wrote throughout his entire career only in Germany (or East Prussia, to be more exact). It should not be surprising, but rather to be expected that an exclusively German education and career would influence in significant ways both his fundamental aims and the particular ways in which he tries to achieve them. Fairly general historical considerations thus suggest that Kant would be directing his views at Leibniz and his various rationalist "followers," such as Christian Wolff, Moses Mendelssohn, Martin Knutzen, Alexander Baumgarten, and Georg Friedrich Meier, and even the briefest familiarity with Kant's pre-Critical writings reveals that he was extremely interested in the views of Christian August Crusius as well. Accordingly, if these figures influenced Kant, then the rationalists' views on causality may not be the dead end that the standard view maintains.

Thus, to understand Kant's views on causality in their proper historical context we must undertake several specific tasks before beginning to think about how his views might be adapted to address our contemporary interests. First, we must establish what range of substantive views on causality Kant would have been familiar with from his education and the first part of his career. Then, we must consider what his initial reaction to these views was during the roughly two and a half decades of his pre-Critical period (1746–1770). Only then can we look to the *Critique* in order to determine what his intent and arguments are. At that point we must take

³ Following this approach to its logical conclusion, one ought also to consider Kant's views on teleological causation in the *Critique of Judgment* as well his views in physics in the *Metaphysical Foundations of Natural Science*. In light of the scope of our current investigation, however, for the present, we set aside such considerations for the most part.

into account more than just the Second Analogy of Experience; at the very least, we must give careful consideration to Kant's Third Analogy of Experience, which asserts the necessity of mutual interaction, just as the Second Analogy does with respect to causality. However, we must also be open to the possibility that Kant's Third Antinomy (which addresses the consistency of freedom and natural causality) could add significant content to his views on causality. Only after having completed these tasks can we turn to evaluating Kant's arguments and consider whether and how they might be appropriated for other contexts. That is, only at the end of such an investigation, and not at its beginning, are we in a position to determine how Kant is replying to Hume and in what respects Kant's views on causality might be relevant to our contemporary questions and interests.

The structure of the following investigation into Kant's views on causality and their place in the history of modern philosophy is organized according to the contextualist historiographical approach described above. Part I ("Causality in Context") begins by presenting a detailed historical account both of which views of causality Kant would have been familiar with and of what his own immediate reaction to these views was in his pre-Critical writings. Chapter 1 ("Pre-established Harmony versus Physical Influx") focuses on the first of these tasks by presenting the views of Leibniz, Wolff, Knutzen, Baumgarten, Meier, and Crusius on causality. Though most of these figures suffer complete neglect in standard histories of philosophy (and considerably less attention in specialist histories than one might expect), their discussions of causality are often interesting in their own right and revealing about what issues were considered important at the time. In addition to addressing topics that are standard fare in the history of modern philosophy (such as the mind-body problem and the problem of the conservation of motion or living force), their primary focus on the issue of causality – which happened to be, for perhaps independent reasons, the central philosophical topic of the day – took the form of a debate about whether to accept Leibniz's doctrine of "pre-established harmony" or to develop a version of a doctrine he dubbed "physical influx," which allows for causation between finite substances.

Although Leibnizian-Wolffian philosophy is often presented as if it were a monolithic view, it turns out that many of those to whom this term refers developed their views with a considerable degree of independence from Leibniz. Accordingly, while Leibniz originally proposed pre-established harmony in the context of his idealism and his

view of the relationship between the primitive forces of monads and the derivative forces of bodies, Wolff, against the background of the radical shift in intellectual context that occurred in Germany between the late seventeenth century and the first part of eighteenth century, restricted it to the mind-body relationship (as opposed to considering it as a doctrine that pertains to all finite substances). As a result, despite his agreement with Leibniz about the necessity of ultimately real simple substances that result in the composite bodies we see, Wolff was agnostic about whether *all* simple substances must have representational powers or whether some might be endowed with physical forces instead.

Though Knutzen is a Leibnizian, just as Wolff is, namely in virtue of accepting simple substances that are endowed with the power of representation and that bear ultimate responsibility for the physical properties of bodies, he mounted an extensive case in favor of physical influx rather than pre-established harmony. While his case involves several distinct arguments, its main thrust relies on the idea that if a simple substance either has the capacity to move itself or is impenetrable (i.e., can resist the attempt of a distinct substance to penetrate the space it occupies), then it must also be able to act on other substances. Baumgarten and Meier, who were more orthodox Leibnizians in virtue of accepting pre-established harmony and many of Leibniz's other views, articulated new arguments for pre-established harmony, arguments that were based on intricate terminological considerations pertaining to what relations are required for substances to belong to the most perfect world and on some unusual metaphysical assumptions about the notion of an action (including that of a smallest action).

By contrast, Crusius, the leading Pietist philosopher of his generation, rejected many of the principles that were considered fundamental to any Leibnizian system. As part of his anti-Leibnizian program, he developed an interesting independent project that placed causality (in the guise of his notion of a "fundamental power") at its very core. In the course of carrying out this project, he argued that real rather than ideal relations are required to explain why certain substances belong to one and the same world, that substances can be related to each other by means of their very existence, and that God's will rather than his intellect plays an essential role in explaining why substances do not merely correspond to, but also depend on each other. Thus, the historical background to Kant's account of causality as formed by the views of Leibniz, Wolff, Knutzen, Baumgarten, Meier, and Crusius in the first half of the eighteenth century is much more diverse and interesting than one might have surmised from

the way that it is treated or, more typically, passed over in most histories of modern philosophy.⁴

Chapter 2 (“Kant’s Pre-Critical Theory of Causality”) then shows in detail how Kant’s views during his pre-Critical period can be understood against the background of the positions presented in Chapter 1. Though one might not have expected someone like Kant simply to toe the standard Wolffian line, it is striking to see just how creative his contributions to the debate about causality were. Early on Kant cultivated a deep and abiding interest in metaphysical aspects of causality by defining (in 1746/1747) the concept of force in terms of activity (rather than motion, as “certain Wolffians” had) and by developing (in 1755) an intricate argument designed to show that change in the intrinsic determinations of substances is possible only if they stand in causal connections with each other, that is, only if physical influx is true. While Kant was thus highly critical of the Wolffian position in several respects, he also developed a nuanced attack on Crusius’s position. He agreed with Crusius (against Baumgarten and Meier) that only a real relation can allow substances to belong to one and the same world, but then argued against Crusius that substances cannot stand in real relations by means of their existence alone. As a result, in attempting to chart a middle course between the positions of the Wolffians and Crusius, Kant developed a sophisticated metaphysical account of causality, according to which (contra the Wolffians) substances can act on each other by means of the grounds that constitute their immutable essences, and (contra Crusius) grounds must be understood in terms of the activities rather than the mere existence of these substances.

It is crucial to note, however, that Kant’s attention during this period was not limited solely to German philosophers, even if they were clearly his main focus in developing his distinctive account of causality. For after Hume’s *Enquiry Concerning Human Understanding* was translated into German in 1755, Kant reacted by introducing a new metaphysical distinction between real and logical grounds, reinterpreting the ontological principles he had developed earlier in terms of real grounds and making the notion of a real ground fundamental to several principles that became central parts of his overall position in the early 1760s. By the time of his

⁴ Lewis White Beck’s classic *Early German Philosophy: Kant and His Predecessors* (Cambridge: Harvard University Press, 1969) and Max Wundt’s *Die deutsche Schulphilosophie im Zeitalter der Aufklärung* (Hildesheim: Georg Olms, [Tübingen, 1945] 1992) are both excellent counterexamples to this claim, though both accounts, due to their breadth (which is quite extraordinary in Beck’s case), cannot focus on a single specific issue such as causality.

Inaugural Dissertation in 1770, however, Kant had apparently finished incorporating into his account the changes that he thought Hume's objections required in a direct way, even if he had still not completely worked out all of the implications that followed from his immediate reaction to them. Instead, by this time he had begun to reflect on more general issues in metaphysics, such as whether the world has an essential form (in addition to the form it happens to have in virtue of its actual interactions), how to understand the unique principles of the sensible world, and what the possible consequences are of not maintaining a strict separation of the principles of the sensible world from those of the intelligible world. Over the next decade, Kant would continue to reflect on these and other issues that, taken together, amount to what is commonly referred to as the "Critical turn."

This detailed description of what accounts of causality Kant was familiar with early in his career and of how he reacted to them and developed his own thoughts further throughout his pre-Critical period puts us in a position to turn to our main task in Part II ("Causality in the Critical Period"), namely that of understanding Kant's intentions regarding causality in their proper historical context by presenting his account of causality as it was developed in the *Critique of Pure Reason* and other relevant texts from that period in light of the results of Part I. Chapter 3 ("Kant's Second and Third Analogies of Experience") reconstructs Kant's central arguments in the Second and Third Analogies of Experience. On the one hand, these arguments are fully "Critical" in the sense that they are not simply remnants left over from his pre-Critical period and then added on as extraneous elements to his project in the *Critique*, but rather integral components of his project. As Analogies of Experience they play a central part in the *Critique's* systematic goals by establishing the necessity of two particularly important categories, namely causality and mutual interaction. By solving the problem of time-determination that arises for our knowledge of temporal relations, they also reveal how experience of a particularly fundamental kind is possible. Accordingly, Kant sees these arguments as making a major contribution to his primary goal in the *Critique* of establishing the conditions of the possibility of experience.

On the other hand, when the arguments of the Second and Third Analogies are interpreted in light of their proper historical context, several features immediately stand out. First, a number of Kant's crucial premises depend on concepts and principles that derive from his pre-Critical period. The Second Analogy's claim that causality is required to determine the successive states of an object is justified in part by noting,

just as Kant does in his pre-Critical period, that any determination requires a real determining ground, which is just a different name for a cause. Similarly, the Third Analogy's distinctive assumption that a substance cannot determine its own place in time finds its most plausible justification in a line of argument that is based on his pre-Critical principle that a substance cannot act on itself so as to change its own state.

Second, it is striking that Kant does not simply launch on an entirely new Critical line of argument in the Analogies, leaving his pre-Critical project completely behind. Rather, he combines certain aspects of his pre-Critical views (e.g., his interest in the connection between temporality and causality and in the concept of the world as a real whole) with a radically new metaphilosophical and methodological "Critical" framework. More specifically, Kant incorporates his pre-Critical view that mutual interaction, as a real causal relation, is necessary for substances to form a single world into his project of explaining how we can have a single, unified experience, that is, experience of a plurality of objects unified in a single time. Taking Kant's pre-Critical views into account thus allows us to see, in a way that was not obvious before, that, at least in the context of these central arguments of the *Critique*, Kant is neither an arch-epistemologist (who might be concerned solely with "epistemic conditions" or "inference tickets") nor a purely descriptive metaphysician (who would merely try to describe, on the basis of conceptual analysis, what the world must be like). Rather, he is interested in establishing a certain kind of metaphysical principle (concerning causality and mutual interaction at the phenomenal level) as the necessary presupposition of fundamental epistemological principles (which include our knowledge of succession and coexistence, that is, our unified experience of the world).

Chapter 4 ("Kant's Model of Causality") then considers what model of causality Kant is committed to on the basis of the arguments of the Second and Third Analogies, taken in conjunction with several other remarks concerning causality that he makes in the Critical period. What these arguments – and especially that of the Third Analogy of Experience – make clear is that Kant's model of causality cannot be that of one event causing another event, since it would be contradictory to assert that one event could mutually interact with, that is, be both the cause and the effect of, another. Since Kant presupposes a model of causality that is fundamentally different from Hume's event-event model, he cannot be using the arguments that are based on this model to refute Hume's position. Because Kant never explicitly asserts that he intends to refute Hume's position and because the fundamental structure of his argument is incompatible with

such an intention, we can now see quite clearly that the standard view's assumption about the intent of the Second Analogy must be mistaken.

If Kant's model of causality is not that of one event causing another, how should it be understood? Again, Kant's pre-Critical theory of causality provides important guidance insofar as one can understand Kant's Critical model as being similar (though certainly not identical) to his pre-Critical model in basic ways. For not only does Kant continue to accept the notion of a real ground that was fundamental to his earlier account, but he also continues to think that causality occurs if one substance determines the state of another by actively exercising its causal powers according to their natures and circumstances.

Given that causal powers are a standard feature of accounts of causality from Aristotle on, the fact that Kant's account of causality invokes causal powers might lead one to think that he has nothing new to offer. In fact, however, the ways in which he develops his position are quite innovative. First, Kant rejects the identification of causal powers with substances (an identification that Baumgarten explicitly endorsed), since that violates our standard way of talking about substances as *having* powers. Yet Kant also refuses to allow that causal powers might be simply relational determinations (or what we might call relational properties), since the grounds of relational determinations cannot themselves be relational determinations (on pain of infinite regress). Thus, they are irreducible to either substances or relational determinations, and must instead be accepted as a primitive relation "in between" substances and their determinations. Second, Kant also thinks of this irreducible relation as being essentially asymmetrical in virtue of the way that the active-passive distinction applies to it. If a cause determines its effect, it does so by actively determining some object that is passive with respect to that determination. This activity, or, as Kant sometimes puts it, the "causality of the cause," is not something that could itself be determined, since as something essentially active it can never be a passive determination. By incorporating an asymmetrical active-passive dichotomy into an irreducible causal relation in this way, Kant can represent his model of causality as distinct from more traditional accounts of causal powers.

But what sense can be attached to the notion of activity that is central to Kant's distinctive model of causality? Unfortunately, several of the passages that one might naturally look to for an answer, such as the *Metaphysical Deduction* and the *Schematism*, are of no help in clarifying the content of Kant's category of causality and thus the notion of activity it contains (beyond what was already clear from the arguments of the

Second and Third Analogies). Moreover, while Kant's account of physics fits in perfectly with such a notion insofar as it holds that a body *exercises* its attractive and repulsive forces in causing other bodies to move, it cannot add any clarification to that notion. For Kant can agree with Hume's insight, translated into Kantian terminology, that we do not have an intuition of the exercise of such forces (which must instead be represented by the categories), just as we do not literally see the "hitting" of one billiard ball by another. That is, it is difficult to identify in a clear way what there is to the activity of a cause apart from the empirical effects it produces; all that we seem to "see" are determinations (passive determinate states), not determinings (i.e., the processes by which the determinations are determined). Fortunately, however, Kant's account of self-consciousness and his distinction between apperception and inner sense can provide help on this point insofar as they show that even if we do not *know* the determining self through inner sense (since we can know only the determined self in this way), we can still be aware of activities in apperception in order to be able to be aware of representations as our own. As a result, Kant's model of causality not only differs in significant respects from both Hume's event-event and Leibniz's causal power models, but can also explain its fundamental components with a reasonable degree of clarity.

In Part III ("Causality and Consequences"), we turn to consider what consequences follow from Kant's Critical views on causality for closely related issues such as that of freedom and the question of what the nature of Kant's reply to Hume is and how it might be relevant to our contemporary philosophical interests. Chapter 5 ("The Metaphysics of Freedom") discusses the relations between Kant's views on natural causality and freedom, revealing that many of the basic metaphysical concepts employed in the model of phenomenal or natural causality described in Part II are of significant help in appreciating some of the less readily understood aspects of Kant's account of freedom. Specifically, just as natural causality is to be understood primarily not in terms of events, but rather in terms of a substance determining the state of another substance by means of an exercise of causal powers in accordance with its nature, so, too, freedom is to be understood not primarily in terms of desires (which are simply one kind of mental event), but rather in terms of an agent or, more metaphysically, a substance determining its actions according to its freely chosen character.

These conceptual and structural similarities allow one to see more clearly how Kant might hope to answer certain questions that naturally arise regarding the multifaceted problem of free will and determinism.

For example, by understanding causality in terms of the activity or determining ground of a substance rather than a determinate event, one can see that the radical difference in kind between our agency – which, as an activity, determines our states – and any complex hierarchy of desires that we might have – which, since they are determinate states, will always be determined or caused by something else and thus stand in need of further explanation – can help to stop the potentially infinite regress that seems to arise otherwise. They also allow one to understand Kant’s resolution of the modal conflict that arises between the necessity of determinism and the contingency (apparently) entailed by free will. For if the laws of nature, from which the necessity of determinism derives, are contingent on the natures of things, including the natures that we freely choose for ourselves (which we typically call our character), then it turns out that the necessity of determinism does not ultimately conflict with, but rather depends on, the contingency of our free will. Accordingly, understanding Kant’s general model of causality helps to clarify how Kant might think that he can respond to certain long-standing difficulties that arise in attempting to account for freedom.

However, it would be a mistake to think that clarification goes only in the one direction. For Kant’s understanding of freedom helps us to appreciate certain aspects of his model of natural causality that might otherwise go unnoticed. One of Kant’s most prominent discussions of freedom occurs in the *Antinomies of Pure Reason* and thus in the context of *Transcendental Idealism*, which, unlike *Transcendental Realism*, distinguishes between appearances and things in themselves, that is, between the phenomenal and noumenal worlds. This distinction is important for the problem of free will and determinism because it allows for the possibility that they could both be true (namely, if they hold for different worlds). Determinism must apply to the phenomenal world, because the cause of any phenomenal event presupposes a prior event in time, which, since it must be caused, requires a prior event, and so on. But we might be able to act freely in the noumenal world, because it is not temporal and noumenal causes are therefore not events that presuppose prior events that require causal determination.

While temporality thus forms a crucial aspect of Kant’s resolution of this aspect of the problem of free will and determinism, it points to an even more fundamental difference between the phenomenal and noumenal worlds, namely that the noumenal world is completely determinate, whereas the phenomenal world (with times and causes going back indefinitely) cannot ever be completely determinate and must

therefore be indeterminate in some respect.⁵ The indeterminacy of the phenomenal world is important to the issue of freedom because we can freely determine our actions in the phenomenal world only if it is previously indeterminate with respect to that action. Because freedom is understood in terms of our agency, that is, in terms of our being grounds that determine our actions, the world in which our actions occur must be open to being determined in that way or, in short, must be indeterminate. But this point can be applied to Kant's model of phenomenal causality as well. For admitting indeterminacy in appearances creates the conceptual space that is necessary for Kant's model of phenomenal causality, which holds both that events can become determinate through the causality of a phenomenal cause (or determining ground) and that the activity or "causality of this cause" can itself be indeterminate and thus not an event. In this way, Kant's account of freedom can be used to clarify his general model of causality, just as his general model was used to highlight aspects of his views on freedom.

In Chapter 6 ("Kant's Reply to Hume: Historical and Contemporary Considerations") we can finally address the historical question of what Kant's reply to Hume is and how Kant's views on causality can be relevant to our contemporary interests. With regard to the historical question, it is helpful first to supplement our discussion of Kant's immediate reaction to Hume in the pre-Critical period (in Chapter 2) by considering how Hume's *Enquiry* was received more generally in Germany from 1755 to 1770. What emerges from this consideration of the reception of Hume (by Sulzer and Tetens) is that Kant would have been justified in assuming that most, if not all of his readers (but especially those enamored with "pure reason") would not have thought that a refutation of Hume's views on causality was necessary in the first place. But to understand the Critical Kant's views on Hume it is important to consider his explicit references to Hume in the first and second editions of the *Critique* as well. They suggest that Hume's views on causality were important to him not primarily in their own right, but rather as an illuminating illustration of Hume's more general skeptical approach, which, due to its inherent instability, should be replaced with his own Critical methodology.

Finally, reflection on the differences between Kant's and Hume's models of causality reveals a vast chasm. Hume's events are states of affairs

⁵ Kant's claim that the phenomenal world is essentially indeterminate follows from his analysis of how the condition-conditioned relationship applies in different ways to the phenomenal and noumenal worlds.