Maimon’s Post-Kantian Skepticism

E. K. Fitton

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School of Philosophy and Art History
University of Essex

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Abstract: Maimon's Post-Kantian Skepticism

There is little doubt that Salomon Maimon was both highly respected by, and highly influential upon, his contemporaries; indeed, Kant himself referred to Maimon as the best of his critics. The appraisal and reformulation of the Kantian project detailed in Maimon's *Essay on Transcendental Philosophy* played a significant role in determining the criteria of success for post-Kantian philosophy, and was thus crucial to the early development of German Idealism. Key aspects of Maimon's transcendental philosophy remain, however, relatively obscure. In particular, it remains unclear to what degree Maimon's skepticism is internal to the Kantian framework, and how this skepticism is related to Maimon's so-called dogmatic rationalism. The central aim of this project is to present Maimon's as a distinct form of post-Kantian skepticism: one which poses significant problems for Kant's theoretical project and which motivates a reformulation of the critical framework. In Kant's eyes, pre-Kantian forms of skepticism are insufficiently critical insofar as they involve a commitment to transcendental realism. By contrast, I argue that Maimon's skepticism does not involve a commitment to transcendental realism and that it strikes at the heart of Kant's critical project insofar as it constitutes what I term 'critical' as opposed to merely 'empirical' skepticism. I further argue that Maimon's rationalism provides the materials for a response to this form of skepticism. This thesis contributes to contemporary debates in the history of philosophy concerning the nature of Maimon's coalition system and its relation to German Idealism, but also provides an alternative perspective on contemporary problems in the philosophy of perception concerning, in particular, the possibility of non-conceptual intentional content.

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Abbreviations and Principles of Citation

The following abbreviations are used throughout. Where I cite material from Maimon's works, this is followed by a reference to Valerio Verra's edition of the *Gesammelte Werke* (GW). In the case of Kant's works, I refer to the relevant pages of the Academy Edition (Ak), except in the case of the *Critique of Pure Reason* (KrV), where I use the customary A/B notation in order to cite passages from the Kemp-Smith translation of the first and second editions respectively. Where I cite passages from Fichte's works, I refer to the *Gesamtausgabe* (GA). In all references to collected works I provide the volume number in roman numerals, followed by a comma and then the relevant page number in arabic numerals. In the case of Hume's *Treatise*, I have provided citations in the following format: [book number].[part number].[section number]. Where English translations are available (i.e. in the case of the VT, the *Antwort*, the *Letter*, parts of the *Logik*, and all of Kant's, Fichte's and Hegel's works) these are cited, otherwise the translations I provide are my own. Only a small portion of the *Briefen des Philaletes an Änesidemus,* which are appended to Maimon's *Versuch einer neuen Logik oder Theorie des Denkens* (*Logik*), has been translated by di Giovanni, and I therefore note within the citation where this translation is used.

Maimon's works

GW	*Gesammelte Werke*. Verra, V (ed.). 1965-1976. Hildsheim: Georg Olms

April 1789 Letter	Letter from Maimon to Kant, 7th April 1789. In Kant's *Gesammelte Schriften*. Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin. 1900 15-17 trans. Somers-Hall. 2010. In the appendices of *Essay on Transcendental Philosophy*. London: Continuum (GW VI, pp.423-424)
VT	*Versuch über der Transzendentalphilosophie*. 1790. trans. Midgley, N. Somers-Hall, H. 2010. *Essay on Transcendental Philosophy*. London: Continuum (GW II, pp. 1-442)
Antwort	‚Antwort des Hrn. Maimon auf voriges Schreiben'. In *Berlinisches Journal für Aufklärung*. 1790. Trans. Somers-Hall, H. 2010. 'Herr Maimon's reply to the previous article'. In the appendices of *Essay on Transcendental Philosophy*. London: Continuum
Wörterbuch	*Philosophisches Wörterbuch, oder Beleuchtung der wichtigsten Gegenstände der Philosophie, in alphabetischer Ordnung*. 1791. Berlin: Johann Friedrich Unger (GW III, pp.1-246)
SGP	*Streifereien im Gebiete der Philosophie*. 1793. Berlin: Wilhelm Vieweg (GW IV, pp. 1-294)
UPP	*Über die Progressen der Philosophie (veranlagt durch die Preisfrage der königl. Akademie zu Berlin für das Jahr 1792: Was hat die Metaphysik seit Leibniz und Wolff für Progressen gemacht?)* 1793. Berlin: Wilhelm Viewig. (GW IV, pp. 23-80)
Logik	*Versuch einer neuen Logik oder Theorie des Denkens. Nebst angehängten Briefen des Philaletes an Änesidemus*. 1794. Berlin: Ernst Felisch (GW V, pp. 1- 496)
KA	*Die Kategorien des Aristoteles. Mit Anmerkungen erläutert und als Propädeutik zu einer neuen Theorie des Denkens dargestellt*. 1794. Berlin: Ernst Felisch (GW VI, pp.1-259)
krU	*Kritische Untersuchungen über den Menschlichen Geist oder das höhere Erkenntnis und Willensvermogen*. 1797. Leipzig: Gerhard Fleischer (GW VII, pp.1-373)

Kant's works

KrV	*Kritik der reinen Vernunft*. 1781/1787. trans. Kemp-Smith, N. 2007. *Critique of Pure Reason*. London: Palgrave Macmillan
Prolegomena	*Prolegomena zu einer jeden künftigen Metaphysik*. 1783. trans. Hatfield, G. 1997. *Prolegomena to any Future Metaphysics*. Cambridge: Cambridge University Press
MAN	*Metaphysische Anfangsgründe der Naturwissenschaft*. 1786. trans. Bax, E. 1883. Metaphysical Foundations of Natural Science. London: G. Bell and Sons
KpV	*Kritik der praktischen Vernunft*. 1788. trans. Gregor, M., Wood, A. 1999. *Critique of Practical Reason.* In *The Cambridge Edition of the Works of Immanuel Kant.* Cambridge: Cambridge University Press
Letter to Herz	*Letter from Kant to Herz*. 1789. trans. Midgley, N., Somers-Hall, H., Welchmann, A and Reglitz, M. Included in the Appendices of *Essay on Transcendental Philosophy*. 2010. London: Continuum
KU	*Kritik der Urteilskraft*. 1790. trans. Pluhar, W. 1987. *Critique of Judgment*. Cambridge: Hackett
Notes	*Notes and Fragments*. Guyer, P. (ed.). trans. Bowman, C; Guyer, P; Rauscher, F. 2005. Cambridge: Cambridge University Press.
Ak	*Gesammelte Schriften: Akademie-Ausgabe*. 1910. Berlin: Walter de Gruyter & Co

Hume's works

Treatise	*A Treatise of Human Nature*. 1739-1740. 2009. Aukland: The Floating Press
EHU	*An Enquiry Concerning Human Understanding*. 1748. Millican, P. (ed.). 2007. Oxford: Oxford University Press

Fichte's works

Grundlage	*Grundlage der gesamten Wissenschaftslehre*. 1974. trans. Heath, P and Lachs, J. 1982. *Foundations of the Entire Science of Knowledge*. Cambridge: Cambridge University Press
GA	*Gesamtausgabe der Bayerischen Akademie der Wissenschaften*. Lauth, R; Jacob, J. 1962. Stuttgart: Frommann-Holzboog

Hegel's works

Differenzschrift	*Differenz des Fichteschen und Schellingschen Systems der Philosophie*. 1801. trans. Harris, H.S., Cerf. W. 1988. *The Difference Between Fichte's and Schelling's System of Philosophy*. New York: SUNY

Introduction and summary of project

Upon receiving a copy of Maimon's *Versuch über der Transzendentalphilosophie* (VT), Kant wrote, in a letter to Herz, the mutual friend who had sent it, that:

> just a glance at it was enough to make me recognize its excellence, and not only that none of my opponents has understood me and the principle question [of the *Critique of Pure* Reason] as well as Mr Maimon, but also that only a few people possess such an acute mind for such profound investigations as he does (Ak. XI, 49).

Kant's sentiments were later echoed by Fichte:

> my respect for Maimon's talents knows no bounds. I firmly believe that he has completely overturned the entire Kantian philosophy as it has been understood by everyone until now … no one noticed what he had done; they had looked down on him from their heights. I believe that future centuries will mock us bitterly (1988, pp. 383-384).

It is clear, then, that Maimon was held in high esteem by his contemporaries. Yet despite recent increased interest the exact nature of Maimon's skeptical challenge to Kant remains unclear. If we are to take the assessment of his contemporaries seriously, Maimon's skepticism should both be insightful and provide us with motivation to overturn the Kantian system from within. On many recent interpretations, however, Maimon's skeptical challenge remains weak insofar as his criticisms of Kant's transcendental idealism are thought to rest upon contentious readings of the Transcendental Deduction, or upon misunderstandings about the nature of the discursivity thesis.[1] Further, there are doubts about the coherence of Maimon's 'coalition system', with Maimon's idiosyncratic style –his tendency is to treat individual aspects of the critical project in isolation[2] – making it difficult to treat

[1] See, for example, Franks, 2003, p.208

[2] See Freudenthal, 2003b

what often seem to be disparate lines of argument as parts of a systematic whole.[3] This is reflected in the secondary literature, as Gideon Freudenthal remarked in a recent review of the English translation of the VT, in the lack of an established 'Maimonian' position.[4] In particular, it remains unclear exactly how Maimon's skepticism is related to his dogmatic rationalism: is the dogmatic rationalism a response to the skepticism? Are skepticism and dogmatic rationalism two possible (mutually exclusive) responses to Kant's critical philosophy? Or are skepticism and dogmatic rationalism compatible – two parts of a singular and coherent whole? My hope is that this project goes a small way to addressing some of these issues and its purpose is therefore, in part, historical. If Maimon's skepticism is seen to be a consequence of his dogmatic rationalism then it need not pose a direct threat to Kant's critical project, dogmatic rationalism being a Maimonian as opposed to Kantian innovation. If, on the other hand, dogmatic rationalism is a response to Maimonian skepticism, and if this skepticism is internal to the Kantian framework, then Maimon can be seen to further the Kantian project, or to develop it from within: his skeptical arguments help us to identify weaknesses in the Kantian project, and his rationalism helps us to address these. Here I argue in favour of the latter interpretation; that is, my position is that Maimon's dogmatic rationalism serves as a partial response to what I will call his 'critical skepticism' – his doubts concerning Kant's deduction of the categories. Maimon's introduction of the infinite intellect as a

[3] See Beiser, 1993, p.287: '[Maimon's] philosophy is an apparently paradoxical coalition of rationalism, skepticism and criticism. Whether these seemingly conflicting elements cohere, and if so how, is the central problem of interpreting Maimon'

[4] See Freudenthal (2015). Beiser (1993, p.287) makes a similar claim, although more recently there has been a greater interest in Maimon and some of the issues that Beiser raises have therefore been addressed.

condition on the possibility of perception and on the possibility of mathematical judgment –his 'dogmatic rationalism' - serves as at least a partial response to this critical skepticism. Maimon remains an 'empirical skeptic', however, insofar as he holds that the synthesis of empirical determinations according to relations in space and time (e.g. by way of the concept of causality) can be made on only subjective and not objective grounds, and that judgments which employ these concepts have, therefore, merely subjective validity – that they are products of the imagination and stand in for the understanding in the production of knowledge, approximating but never attaining the level of complete, or infinite, understanding. I thus argue that Maimon's criticisms of Kant pose a more serious threat to the Kantian project than is often thought, and I present Maimon's own 'coalition system' as a systematic attempt to overcome these perceived shortcomings.

My motivations go beyond the historical, however, insofar as I think that an examination of Maimon's skepticism can help to shed light on two important post-Kantian problems, and offers at least the beginnings of a solution to them. It seems that the continued success of Kant's transcendental philosophy is increasingly dependent upon its being compatible with more modest appraisals of the mathematical and natural scientific knowledge that we possess; while there remains a need to provide a justification for the employment of formal explanation in the case of objects that are given *a posteriori*, the project of deducing these forms on the basis of pure logical forms, or self-evident first principles, seems both overly ambitious and anachronistic. Similarly, the problem of the *quaestio juris*, as it is understood by Maimon, has been a central focus in recent philosophy of perception. Maimon intends that his transcendental project will address precisely these concerns: his denial of

Kantian discursivity is meant to resolve the problems of receptivity, while his principle of determinability is developed as a means by which to distinguish legitimate from illegitimate forms of judgment on the basis of what is perceived in experience: i.e., without deriving legitimate forms of judgment from first principles.

Before I turn to an outline of the project, it is worth noting some of its limitations. Firstly, my focus in this dissertation is Maimon's relationship to Kant, and the development of his own 'coalition system' as a response to problems that he identifies in transcendental philosophy. As a consequence, I have not been able to consider a number of other important influences. In particular, the development of Maimon's transcendental philosophy was in part a product of his reflections upon the work of Maimonides (after whom he named himself)[5], and of the influence of the Hasidic movement that was, at that time, developing in Berlin. Yitzek Melamed has spoken on the topic of Maimon's relation to Hasidism and in particular on its influence on the development of Maimon's account of the infinite intellect.[6] Similarly, a number of book chapters and articles have addressed the question of Maimon's relation to Maimonides. In particular, Samuel Atlas has written about the influence of Maimonides on Maimon's resolution of antinomy.[7] Another limitation pertains to my engagement with Kant's works. In the introduction to the VT, Maimon writes: '[t]o what extent I am a Kantian, an anti-Kantian, both at the same time, or neither of the two, I leave to the judgment of the thoughtful reader' (VT, GW II, 9-10). I do not intend to answer this question here insofar as my concern is not

[5] See Bergman, 1967, chapter X

[6] Melamed, 2015

[7] See Atlas, 1948. See also Fraenkel, 2009

primarily to advance any particular reading of Kant's theoretical philsophy (although in places I will attempt to do so). I remain neutral, for example, on the question of whether Kant's argument in the transcendental deduction is progressive or regressive in form and consider the implications of Maimon's skepticism for *both* readings. Neither is my aim, then, to answer the question of the accuracy of Maimon's representation of Kant's critical project. I hope only to show that Maimon raises questions that should be of concern to the critical philosopher in general.

Outline of dissertation

In **Chapter One** I provide an overview of some dominant forms of skepticism and attempt to locate Maimon's with respect to these. I group these forms of skepticism into three kinds: 1) ancient skepticism, and in particular Pyrrhonian skepticism; 2) forms of modern skepticism, including those of Descartes and Hume; and 3) the skeptical challenges aimed at Kant's critical project by his contemporaries, and in particular, by Jacobi and Schulze. Having outlined these forms of skepticism, I consider some Kantian responses to them. In the case of pre-Kantian forms of skepticism, I argue that Kant's critical project serves as at least a partial response to these; Kant's resolution of the Antinomies of Reason in particular can be understood as a response to a certain line of Pyrrhonian skeptical argument which exploits the apparent equipollence of certain metaphysical positions in order to undermine the science as a whole.

Cartesian and Humean forms of skepticism are undermined insofar as the object of knowledge is no longer mind-independent but already entails some *a priori* content that is supplied by the subject. The skeptic is therefore refuted on the basis of a rejection of his transcendental realist assumptions. I argue that despite his apparent rejection of the mind-independent as an object of knowledge, Berkeley too falls into the trap of transcendental realism, and that Kant's arguments in the refutation of idealism and the fourth Paralogism serve as a response to this form of skepticism. I then turn to various forms of skepticism developed in response to Kant by his contemporaries. In particular, I consider those forms of skepticism that concern the thing-in-itself. I argue that these forms of skepticism cannot be considered truly post-Kantian since they are reliant upon a pre-critical framework. Finally, I consider Maimon's skepticism, which I argue is unique in that it does not concern the possibility of knowledge of mind-independent objects, as do the other forms of skepticism discussed. Instead, Maimon holds that there is space for skeptical doubt even when knowledge refers to objects that are produced, at least partially, by the subject. I argue that Maimon's is a post-Kantian reformulation of Humean skepticism: although Maimon remains skeptical about the existence of natural objects, his skepticism does not depend upon the mediacy of our representations as it does for Descartes and does not, therefore, entail a commitment to transcendental realism. Neither does his return to Humean skepticism signal a return to transcendental realism, since Maimon accepts that the subjective / objective distinction, if it is to be made, must be made on the basis of grounds that are internal to knowledge.

Maimon's skepticism comprises two distinct lines of argument, which he claims correspond to the *quid juris* / *quid facti* lines of inquiry that Kant discusses in the introduction to the Transcendental Deduction. In **Chapter Two** I examine Kant's characterization of the distinction and his attempts to respond to these two kinds of question with respect to the concepts outlined in the Metaphysical Deduction. In particular, I draw attention to the difficulties in defining these terms, and in understanding the relation between the arguments of the Metaphysical Deduction and those of the Transcendental Deduction. A key point of contention here is whether a response to questions of the kind '*quid facti'* is essential in determining the objective validity of the categories, or in responding to questions of the kind '*quid juris'*. Kant's characterisation of Locke's 'attempted physiological derivation' of the categories as concerning a *quaestio facti*, for example, has led some commentators to claim that the derivation of the categories is independent of questions of fact, with the implication being that Maimon's skepticism need not pose a serious problem for Kant. I argue that the term '*quaestio facti'* encompasses a range of possible questions, only one of which is exemplified by Locke's attempt to account for what Kant calls our 'possession' of *a priori* concepts. While some of these have no bearing on Kant's transcendental deduction of the categories, others are, at least on many contemporary interpretations, intrinsic to it, so that a failure to respond to the *quaestio facti* should equally mean a failure to respond to the *quaestio juris*.

Having defined the *quaestio facti* in the previous chapter, in **Chapter Three** I examine what I will call 'Maimon's *quaestio facti'*. In line with the conclusions of the preceding chapter, I outline two possible forms of skepticism. Those forms of skepticism that concern matters of fact that are not essential in determining the validity of judgments I entitle 'empirical skepticism', while those which concern matters of fact which serve as conditions on this validity I entitle 'critical skepticism'. My intention is to establish that Maimon's *quaestio facti* constitutes a form of critical as opposed to empirical skepticism. Further, I defend Maimon against claims that this line of argument must presuppose a regressive interpretation of the Transcendental Deduction. The central claim is not, as is often thought, that the categories apply only on the condition of a particular form of experience that must be merely presupposed, but instead that attempts to derive transcendental from formal logic fail, and that the transcendental status of some of the categories is therefore uncertain.

In **Chapter Four**, I turn to what I will call 'Maimon's *quaestio juris'*, the outcome of which is, I argue, the adoption of what I call the 'principle of complete rational determination'. The problem that this line of argument reveals is often characterized in relatively vague terms - as one of receptivity or of interaction between the faculties of understanding and intuition. The problem is that such criticisms, like Jacobi's criticism of the thing in itself and Schulze's skepticism, are at risk of falling outside the scope of the critical project, or of falling into the kind of rational psychology against which Kant warns us in the Paralogisms. The aim of this chapter is therefore to establish that Maimon's arguments do not rest upon presuppositions about the transcendental status of the faculties, but instead identify problems that are internal to the Kantian framework. Although Maimon presents his *quaestio juris* as concerning the relation of *a priori* form to *a posteriori* matter, I argue that Maimon's *quaestio juris* ultimately rests on his skepticism about the synthetic *a priori* in mathematics. Maimon's argument, as I present it here, is that a non-discursive employment of the understanding is a condition on the possibility of legitimate perceptual and mathematical judgments, and that, on these grounds, Maimon proposes that Kant's discursivity thesis should be abandoned.

In **Chapter Five** I turn to Maimon's 'dogmatic rationalism', which, I argue, attempts to address the weaknesses that Maimon believes his skepticism has revealed in Kant's transcendental idealism. While it is in the VT that Maimon first introduces the idea of an infinite intellect for which the form and matter – or the formal construction and material actuality – of objects are identical, the idea is only fully developed in his later works, and in particular in the *Verusch einer neuen Logik* (*Logik*) and in the *Kritische Untersuchungen über den Menschlichen Geist* (KrU). Maimon's claim here is that formal logic does not precede but is instead derived from transcendental logic. I examine Maimon's 'principle of determinability' which I argue has its origins in a passage from Kant's Transcendental Deduction, and which Maimon believes can serve as an alternative means of responding to the *quaestio facti*.

In the final two chapters I offer an assessment of Maimon's rationalism considered as a solution to the skeptical problems he raises. In his letter of response to Herz, Kant stresses the central role that a resolution of the antinomies of reason plays in the development of his critical philosophy. In **Chapter Six** I argue that a distinction between material and formal possibility plays an essential role in Kant's resolution both of the antinomies of the KrV and the antinomy of teleological judgment that is resolved in the KU. The central question is therefore whether Maimon's rationalism allows for a similar resolution. Maimon attempts to subsume the Kantian antinomies, together with several of his own from applied mathematics and physics, under one singular form, which he calls the 'antinomy of thought' – a move that is reflected in early development of German Idealism. The antinomies arise, according to Maimon, as a result of a limitation on the part of the finite intellect: that it must judge in terms of determinable and determination so that the identity of form and matter can never be thought by it. I argue that attempts to resolve the antinomies in this manner ultimately fail insofar as they are dependent on an incoherent account of the subject. Finally, I turn to the criticisms which Hegel makes of Fichte in the *Differenzschrift* in order to support my claims.

I **conclude** with Maimon, that although Kant successfully identifies the general terms by which valid non-empirical judgments might be possible, he does not provide us with an adequate means of distinguishing such judgments from invalid non-empirical judgments, as is required if there is to be a satisfactory response to the *quaestio facti*. Similarly, I argue with Maimon that a rejection of Kant's account of receptivity, and of the absolute form / matter distinction is necessary, and that Maimon's 'principle of determinability' can provide a principle for transcendental philosophy in general. Against Maimon, however, I argue that the grounding of the transcendental in an infinite understanding, or in the possibility of a thought of an object in general, is problematic. I turn to the opening sections of Fichte's *Grundlage* for the materials for an amended form of Maimonian transcendental philosophy.

Chapter One: Kant and varieties of skepticism

'Skepticism' Kant claims in the Transcendental Doctrine of Method is:

> a resting-place for human reason, where it can reflect upon its dogmatic wanderings and make survey of the region in which it finds itself […]. But it is no dwelling-place for permanent settlement. Such can be obtained only through perfect certainty in our knowledge, alike of the objects themselves and of the limits within which all our knowledge of objects is enclosed. (A761 / B789).

For Kant, skepticism is merely the second of three progressive phases of philosophical investigation, beginning with dogmatism and culminating in critique.[8] It would therefore seem that skepticism should have no place in the post-Kantian landscape; the properly critical philosopher should recognize the self-undermining nature of the skeptical position, and use this to carve out a region of certainty in which the (transcendental) metaphysician can operate. Yet Maimon proposes that Kant's own critical system is subject to further forms of skeptical argument. How, then, should we conceive of Maimonian skepticism in light of Kant's claim? Does it rest upon a misunderstanding of Kant's critical project? Or perhaps it implies a return to a pre-critical standpoint? My position here will be that Maimon's skepticism is unique amongst other dominant forms of skepticism in its being internal to the critical system, and, therefore, properly post-Kantian. In order to show that this is the case I

[8] 'The first step in matters of pure reason, marking its infancy, is *dogmatic*. The second step is *skeptical*; and indicates that experience has rendered judgment wiser and more circumspect. But a third step, such as can be taken only by fully matured judgment, based on assured principles of proved universality, is now necessary, namely, to subject to examination, not the facts of reason, but reason itself, in the whole extent of its powers, and as regards its aptitude for pure *a priori* forms of knowledge. This is not the censorship but the *criticism* or reason, whereby not its present *bounds* but its determinate [and necessary] *limits*, not its ignorance to this or that point but its ignorance in regard to all possible questions of a certain kind, are demonstrated from principles, and not merely arrived at by way of conjecture' (A761 / B789)

will, in this introductory chapter, consider three important forms of pre-critical skepticism. These include those traditionally considered pre-critical - Pyrrhonian, Cartesian and Humean – but also, I propose, many of the skeptical criticisms aimed at Kant's theoretical project by his contemporaries. Such forms of skepticism, I claim, should not be considered critical or post-Kantian insofar as they presuppose a pre-critical framework. The aim will be to determine the ways in which these forms of skepticism are pre-critical; to show that Maimon considers the Kantian project to be at least partially successful in addressing them, such that his skepticism does not depend upon a pre-critical standpoint; and to establish that Maimon's own skepticism is distinct from these pre-critical forms of skepticism in a relevant way, so that his can be seen as constituting a distinct, post-Kantian skepticism.

1.1 Pre-critical skepticism

I begin by considering what it means to be a pre-critical skeptic, before turning to the question of how Kant intends that his 'Copernican revolution' should undermine these forms of skepticism. It is first helpful, however, to note some limitations of my analysis. There are important differences between the aims and methods of modern and ancient skepticism. As Forster has argued (1989, p.11), for example, ancient skepticism constitutes a particular kind of method – adopting a position of equipollence with respect to *all* knowledge, modern skepticism does not; modern skeptical arguments are made with respect to specific knowledge claims, and these skeptical positions often themselves entail commitments to various other knowledge claims. This distinction has important implications for Kant's ability to respond to skepticism; as will be seen, the critical method can be seen to depend, at least in part, on exploiting the dogmatic commitments of the skeptic in order to undermine his skeptical position. Clearly this is more difficult to do in the case of a skeptic who seeks to avoid dogmatic belief altogether, and it is for this reason that Forster ultimately concludes that Kant is unsuccessful in responding to ancient skepticism.[9] While Kant believes himself to have responded to the Pyrrhonian skeptic, Forster argues, as will be seen, that his reading of Pyrrhonian skepticism in fact overly narrows its scope. Kant's relationship to the modern skeptics is similarly complex. While some commentators take Kant's Transcendental Deduction to be an attempt to respond to the Humean skeptic, for example, others do not.[10] It is beyond the scope of this chapter to engage with the substance of these debates and I will not therefore, be concerned with the question of whether Kant's supposed anti-skeptical arguments are successful. Instead, I aim only to show that Maimon situates himself within the critical framework insofar as he *does* think that Kant is in a position to respond, at least partially, to these forms of skepticism, and that Maimon's own skeptical concerns pertain to the critical framework itself.

Secondly, although I will refer in particular to Cartesian skepticism, Kant's concern is not only with Cartesian skepticism as it is presented in the First Meditation, but also as it manifests itself in the systems of the philosophers of the modern period in general (and in particular in that of Berkeley) to the extent that he believes that it motivates what he calls 'empirical idealism'. In order to determine

[9] See Forster, 2008, chapter 12.

[10] For an account of why Kant should be considered as responding to the Humean skeptic in the first *Critique* and, in particular, in the Transcendental Deduction, see Strawson (1966). For an alternative account, see Ameriks, 2003.

what it means to be a pre-Kantian (and, by contrast, a post-Kantian) skeptic, it is therefore important not only to distinguish Maimon's skepticism from those of Descartes and Hume, but also to distinguish his philosophical project from that of Berkeley.

1.1.1 Kant and ancient skepticism

By ancient skepticism, we usually intend one of two important schools: so-called academic skepticism, and Pyrrhonian skepticism. Of particular interest with respect to Kant's critical philosophy is Pyrrhonian skepticism as advanced by Sextus Empiricus, according to whom:

> Skepticism is an ability to set out oppositions among things which appear and are thought of in any way at all, an ability by which, because of the equipollence in the opposed objects and accounts, we come first to the suspension of judgment and afterwards to tranquillity (Book I, iv, p.4)

Pyrrhonian skepticism is thus primarily a therapeutic method as opposed to a position: a means of suspending judgment and attaining a (supposedly desirable) state of tranquillity. Suspension of judgment is supposed to arise when we recognise that, with respect to 'things which appear', there are equally compelling reasons to adopt the antithesis of any judgment as there are to adopt the thesis itself (ibid.). To adopt the skeptical method is, therefore, to seek to recognise what Sextus Empiricus calls 'equipollence' with respect any proposition– an 'equality with regard to being convincing or unconvincing' (ibid.p.5).

It is perhaps for this reason, then, that Kant holds that what he calls the 'Antinomies of Reason' – four sets of two equally compelling and yet apparently mutually exclusive metaphysical propositions – lead to a 'euthanasia of reason' (A407/B434): that antinomy 'subjects [reason] to the temptation … of abandoning itself to a sceptical despair' (ibid.) Reason is here stilled, as it is for the Pyrrhonian skeptics, for its own sake. Forster's (2008) analysis is especially helpful in understanding the relationship between Kant and the Pyrrhonian skeptics.[11] The Antinomies are indeed supposed, Forster argues, to be representative of the Pyrrhonian position: the opposing yet equally convincing sets of arguments that Kant outlines in the Antinomies are motivations for Pyrrhonianism is so far as they reveal the contradictions that are inherent to metaphysics and therefore encourage us to abandon the science altogether.[12] Kant's resolution of the antinomies by way of transcendental idealism is therefore supposed to serve as a response to the Pyrrhonian skeptic: the oppositions set up in the antinomies presuppose transcendental realism, and once transcendental realism has been rejected the opposition dissolves.[13] In the case of the first two antinomies it is shown that thesis and antithesis both share a dogmatic assumption – that space and time are mind-independent, or properties of things in themselves. If this assumption is rejected, both the thesis and the antithesis are shown to be false. In the case of the third and fourth antinomies, the opposition is shown to depend upon the assumption of transcendental realism, with the opposition itself being shown to be illusory if the thesis of transcendental idealism is instead adopted. Both thesis and antithesis may be true since each can refer to different entities (or to the same entities but considered in different ways): the thesis applies to objects of spatiotemporal experience, while the antithesis applies to objects thought by way of the categories but not necessarily appearing in space and time. It is

[11] See Forster, 2008, chapters 4 and 8.

[12] Forster argues that Kant (illegitimately) restricted Pyrrhonian skepticism to metaphysical claims. See Forster, 2008, chapter 12.

[13] See 6.2.3 of this dissertation for a more detailed discussion.

important to note, however, that Kant's supposed resolution of the antinomies does not necessarily serve as a response to Pyrrhonian skepticism. Forster argues (2008), for example, that Kant illegitimately restricts the scope of Pyrrhonian skepticism to metaphysical claims.[14] If Pyrrhonian skeptic is a truly global skepticism then it cannot accurately be considered either pre or post-Kantian since it can be committed to neither transcendental realism nor to transcendental idealism.

1.1.2 Kant and the modern skeptics

Kant's approach to modern skepticism takes various forms. In the A edition, Kant's discussion of the relation between skepticism and empirical idealism appears in the fourth Paralogism. Although Kant does not mention him by name, it seems likely that his arguments there are addressed to Descartes. The Cartesian skepticism takes the existence of spatially external objects to be problematic because he holds that we cannot ever have direct perception of these objects, but only of the representations that arise within us as a result of an interaction with them. As Kant puts it, 'all outer appearances are [according to the Cartesian skeptic] of such a nature that their existence is not immediately perceived, and … we can only infer them as the cause of given perceptions' (A367). If we can only ever *infer* the existence of spatially external objects, then our claims to knowledge of such objects will always be vulnerable to the objection that our inferences may be incorrect. In the *Meditations* Descartes describes the various ways in which our inferences may indeed be mistaken.[15] On Kant's view the Cartesian dualist is thus an 'empirical idealist'

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[14] See in particular Forster, 2008, chapter 12.

[15] See Descartes, 1641.

(A371). The empirical object is merely ideal, while the real object of knowledge lies beyond the realm of possible perception.

Kant's position is that this empirical idealism, and the associated skepticism, is a product of 'transcendental realism' - of a presupposition that *a priori* objective qualities are mind-independent - and that a rejection of transcendental realism should therefore also serve as a response to such skepticism.[16] In the case of Cartesian skepticism, this is a result of 'regard[ing] time and space as something given in themselves, independently of our sensibility' (A369). Because events in space take place according to causal laws, this presupposition - that spatially external objects must also be external in the sense of being mind-independent- means that our experience of such objects must be mediated. As a consequence, the nature, and indeed existence, of the external object can only be inferred on the basis of our representation of it; we can have no direct or immediate access to the objects of perception. 'All outer appearances' Kant writes, 'are of such a nature that their existence is not immediately perceived, and … we can only infer them as the cause of given perceptions. Therefore the existence of all objects of the outer senses is doubtful' (A366-7).

It is not skepticism with respect to the existence of the external objects itself that concerns Kant, however, but instead the relation between object and representation that the Cartesian position implies. Transcendental realism leads to empirical idealism because the appearance of an object can only ever be ideal in

[16] Kant's transcendental idealism is sometimes defined purely in terms of the ideality of space and time (see, for example, Waxman, 2002, p.65). I define it more broadly as the claim that the conditions of objectivity are ideal, in order to encompass key Kantian innovations concerning, for example, the transcendental ideality of causality.

relation to the real, mind-independent object.[17] This is true not only where space and time are taken to be properties of things in themselves but is also necessarily the case whenever qualities that are taken to be objective (or constitutive of the object) are at the same time taken to be mind-independent. If the mechanisms by which we experience objects as interacting are to be mind-independent, our knowledge of objects can only arise by way of these mechanisms. As a result, empirical idealism is manifest, according to Kant, even in the systems of philosophers who claim to be anti-skeptical. In the case of Descartes, for example, skepticism is eventually supposed to be overcome by means of ontological argument. Kant's argument is that Descartes remains an empirical idealist, however, because he retains the mediacy of the perception of objects:

> The term '*idealist*' is not, therefore, to be understood as applying to those who deny the existence of external objects of the senses, but only to those who do not admit that their existence is known through immediate perception, and who therefore conclude that we can never, by way of any possible experience, be completely certain as to their reality (A368-9).

Moreover, Kant holds that Descartes' position remains insufficiently critical in that, while he claims to doubt the existence of the spatiotemporal object, his doubt (which is grounded in the presupposition that representation can only approximate the external object, and that the external object can be known only mediately), already presupposes the reality of time and space. On Kant's view it is this presupposition of transcendental realism that eventually leads to more radical forms of idealism. In the case of Berkeley, the dogmatic assumption that mediate perception yields knowledge of the intrinsic properties of mind-independent objects is abandoned. It may seem,

[17] 'I am not … in a position to *perceive* external things, but can only infer their existence from my inner perception, taking the inner perception as the effect of which something external is the proximate cause' (A368)

then, that Berkeley has avoided the trap of empirical idealism; he no longer considers perceptions of objects to be mediated by, for example, space or causal interactions, and perceptions are not, therefore, taken to be ideal or to represent or approximate 'real' mind-independent objects. Kant's argument, however, is that Berkeley remains an empirical idealist in that his rejection of material substance and his consequent anti-skepticism is dependent upon an implicit assumption of transcendental realism.[18] On the Kantian account, Berkeley's rejection of mind independent substance leads him to reject extended matter only because he tacitly equates spatial externality with ontological externality, i.e. with mind-independence. In doing so, Berkeley assumes the standpoint of the transcendental realist in that he presupposes that extended substance must be mind-independent, or that spatial properties should be a feature of things-in-themselves. When Berkeley subsequently rejects the mind-independent on the basis that the very idea is contradictory, his transcendental realism therefore leads him to abandon extended substance along with it. 'After wrongly supposing that objects of the senses, if they are to be external, must have an existence by themselves, and independently of the senses,' Kant writes, 'he [Berkeley] finds that, judged from this point of view, all our sensuous representations are inadequate to establish their reality' (A369).

[18] The degree to which Kant's representation of the Berkeleyan position is accurate, as well as the degree to which Kant's own account of external objects differs to that of Berkeley, is a contentious issue. While some scholars have argued that Kant is not accurate in his portrayal of Berkeley as a subjective idealist, and that Kant's own account does not, in fact, differ significantly from that of Berkeley, others have defended Kant, arguing that such criticisms depend upon a phenomenalist interpretation of Kant's transcendental idealism. For an example of the former, see Strawson,1966, p.21-22: 'The doctrine that the material and the mental constituents of the natural world are alike only appearances turns out, in the end, to bear with unequal weight on bodies and states of consciousness. Kant, as transcendental idealist, is closer to Berkeley than he acknowledges'. For an example of the latter, see Allison, 1973a.

How, then, and to what extent, does Kant's own 'transcendental idealism' allow him to avoid the trap of 'empirical idealism'? In the fourth Paralogism of the A edition, Kant appears to give only a negative solution to the problem. In line with the rest of the Paralogisms, the aim of which is to expose transcendental illusions which occur when our inquiries are extended beyond the limits of possible knowledge, Kant's aim here is to show only that the empirical idealism which characterizes modern skepticism is a form of transcendental illusion and that it is a result of the assumption of transcendent knowledge, or knowledge of things in themselves. Kant leaves open the possibility of an alternative to empirical idealism, therefore, but does not provide any refutation of this form of idealism. Nevertheless, he does emphasize the importance of empirical realism as an alternative to the idealist position. In the case of the empirical idealist, the transcendental illusion occurs because we take our experiential knowledge to be knowledge of things-in-themselves and on the basis of the inaccessibility of things in themselves remain skeptical: either, as in the case of the Cartesian skeptic, about the existence of mind-independent, spatial objects; or, as in the case of the Berkeleyan idealist, about the empirical reality of spatial and temporal qualities. Kant's claim in the Paralogisms, then, is that both the Cartesian and the Berkeleyan positions are insufficiently critical in that they entail that we have some knowledge of things in themselves, when things-in-themselves should in fact be beyond the limits of knowledge. If we are to take Berkeley's criticism of the mind-independent seriously, Kant argues, then any claims that we may make about it (including that it is unknowable) should have no bearing whatsoever on our understanding of experiences, or of their material ground. This does not, of course, mean that we may not employ other arguments in order to reject the material.

However, it does provide Kant with one means of avoiding the problem of this specific form of modern skepticism in that it allows him to propose that we *can* have direct, immediate, access to the objects of experience.

Earlier in the KrV Kant *does*, however, provide us with a motive for rejecting transcendental realism. In the Transcendental Aesthetic Kant argues that space and time can themselves be neither concepts nor intuitions, as the empirical idealist holds that they are, but must instead be pure *forms* of intuition. As a consequence, they cannot be given to the experiencing subject as part of the content of intuition, nor can they be mere products of thought. Kant is able to refute the Berkeleyan position, then, on the basis that Berkeley's rejection of extended matter is dependent upon his conflating spatial externality with mind-independence. It is not just that this conflation is dogmatic then, but that the arguments of the Transcendental Aesthetic serve to refute it. Kant is able to avoid empirical idealism because the externality of the object is defined only in terms of spatiotemporal relations, and, since spatiotemporality is not a feature of things-in-themselves, spatial externality does not entail mind-independence. As a consequence, the reality of external objects can be maintained, while the spatiotemporal properties of those objects can at the same time remain immediately accessible:

> Matter is with him, therefore, only a species of representations (intuition), which are called external, not as standing in relation to objects *in themselves external*, but because they relate perceptions to the space in which all things are external to one another, while yet the space itself is in us (A370).

The structure of Kant's argument changes in the second edition of the KrV. Here, the fourth Paralogism is entirely rewritten, and the argument which had appeared there in the A edition is instead presented in an altered form, under the title of the 'Refutation of Idealism'. As is clear from the name, the merely negative response given to the problem of empirical idealism in the A edition is here replaced with a positive refutation of the idealist position. As discussed, dogmatic forms of empirical idealism, such as that of Berkeley, which make positive claims about the existence of extended substance, have already been undermined by the arguments of the A-edition fourth Paralogism and the Transcendental Aesthetic. The task of the Refutation of Idealism, however, is to answer not only to those forms of idealism that make positive claims on the basis of transcendent enquiry, but also to those which claim only to remain skeptical with respect to external objects: 'The required proof must, therefore, show that we have *experience*, and not merely imagination of outer things' (B275). Kant's argument must show, therefore, that not only is immediate access to the objects of experience possible, but we are warranted in our supposition that such objects exist.[19] Kant's strategy in the Refutation of Idealism is to show that the existence of external spatial objects is a condition on the possibility of the (experience of the) experiencing subject. Since not even the Cartesian skeptic can doubt the reality of the experiencing subject, such an argument should convince him of the reality of spatially external objects. Kant's claim is that inner sense – the experience of the subject as existing within time - is possible only on the assumption of experience of extended substance, so that the fact of inner sense should already entail the reality of objects of experience:

> I am conscious of my own existence as determined in time. All determination of time presupposes something *permanent* in perception. This permanent cannot, however, be something in me, since it is only through this perception that my existence in time can itself be determined. Thus perception of this permanent is possible only through a

[19] There is some debate surrounding the nature of Kant's argument in the Refutation of Idealism. For a discussion of some of the problems of the interpretation of the Refutation of Idealism which I have offered here, see Guyer, 1983.

> *thing* outside me and not through the mere *representation* of a thing outside me (B275).

In order that the experiencing subject be experienced by itself as an experiencing subject, or in other words, in order that there be 'inner sense', there must be something which endures throughout a temporal succession. Were this not the case, there would not be one singular and unified time stream but instead multiple, disparate time streams. In order that the experiencing subject experience itself as such, then, it is necessary that there be an enduring *substance* in experience. Because the experience of the subject, in the form of inner sense, is possible only as a result of the experience of a permanence in perception, however, the experiencing subject cannot be the originator of this permanence. Permanence can only, therefore, be provided in the form of outer sense, or of extended substance.[20]

1.1.3 Kant and Humean skepticism

So far I have considered only the first of the two forms of modern skepticism originally identified – the skepticism that results from empirical idealism. It seems that Kant seeks to undermine this form of skepticism by showing that it is insufficiently critical insofar as it presupposes that objective qualities are, or must be, mind-independent. I turn now to another form of modern skepticism: Humean

[20] See B277-8: 'Not only are we unable to perceive any determination of time save through change in outer relations (motion) relatively to the permanent in space (for instance, the motion of the sun around the earth), we have nothing permanent on which, as intuition, we can base the concept of a substance, save only *matter*; and even this permanence is not obtained from outer experience, but is presupposed *a priori* as a necessary condition of determination of time, and therefore also as a determination of inner sense in respect of [the determination of] our own existence through the existence of outer things'

skepticism.[21] The Humean skeptic is not skeptical about the existence of objects of experience, as the Cartesian skeptic is, but instead about the inference from those objects to objects that are not themselves experienced. This inference, Hume argues, depends upon an employment of the concept of causality; we experience an object which we take to be an effect and infer, on the basis of this effect, another object as cause. Yet causality itself is not something that we directly perceive. What, then, is the origin of this concept? And are we justified in employing it, and, therefore, in making inferences about objects that are beyond any immediate perception? Hume's position is that since we cannot directly perceive causality we must arrive at the idea of it by way of the 'constant conjunction' of perceptions in experience (*Treatise*, 1.3.6); we have, in the past experienced a particular perception as following from another and the expectation that these presentations will in the future be similarly conjoined leads us to ascribe an objective relation of cause and effect to them. 'The idea of cause and effect', Hume writes,

> is derived from experience, which informs us, that such particular objects, in all past instances, have been constantly conjoined with one another: And as an object similar to one of these is supposed to be immediately present in its impression, we thence presume on the existence of one similar to its usual attendant. (*Treatise,* 3.1.6)

The inference from cause to effect (or from effect to cause) therefore depends upon the principle that future events must resemble past events, and the validity of the inference will depend upon the soundness of this assumption. Hume's position is that there is no reliable basis for it.

[21] There is some dispute about Kant's knowledge of Hume, and the degree to which his account is accurate. For a discussion of this see Beiser (2009) and Forster (2008).

It is Humean skepticism, Kant claims, that first motivated his critical project,[22] and the matter of Kant's relation to Hume is, therefore, complicated. As Frederick Beiser has pointed out (2009, p.43), Kant does not include Hume among the empirical idealists, so that a response to his skepticism cannot straightforwardly take the form of a denial of the mind-independence of space and time as it does in the case of the other modern skeptics. Beiser argues that this is because Hume's skepticism concerning causality means that he does not take experience of external objects to be mediated by causality in the way that the empirical idealists do. Hume, then, leaves open the possibility that our experience of external objects is immediate, so that he is committed neither to empirical idealism, nor to empirical realism. Kant does, however, consider Hume's skeptical project pre-critical. This is because while Hume questions the mind-independence of causal relations, he does not extend this skepticism to the intrinsic properties of objects in general, and he remains, at least in this respect, therefore, a transcendental realist. In fact, Kant argues, had Hume extended his skepticism to the conditions of objectivity more generally, he would have been in a position to resolve his skepticism insofar as he would have recognised the role of the subject in constituting the objects to which the concept of causality is to be applied:

> Since [Hume] could not explain how it can be possible that the understanding must think concepts, which are not in themselves connected in the understanding, as being necessarily connected in the object, and since it never occurred to him that the understanding might itself, perhaps, through these concepts, be the author of the experience in which its objects are found, he was constrained to derive them from experience. (B127)

[22] See Ak. IV, 260

Hume believes that the necessity entailed by the concept of causality cannot be accounted for by way of *a priori* concepts because he presupposes that the objects of experience are entirely mind-independent such that *a priori* concepts of the understanding could play no part in their constitution. Paul Franks calls this 'methodological naturalism' (2007, pp.50-51); the presupposition is that 'the methods of science are the only methods appropriate for understanding anything, including epistemic practices such as natural science itself' (2007, p.50). As a consequence, when natural scientific methods fail to account for the validity of judgments such as those involving natural causality, the Humean skeptic is forced to ascribe merely subjective as opposed to objective legitimacy to the judgment. Hume, like Berkeley, Kant claims, therefore provides us with a motivation to progress towards the critical standpoint, but he does not himself attain it. Hume provides merely a 'censorship' but not a 'criticism of reason' (A761 / B789); he recognizes that an understanding of mind-independent objects is not possible, but he does not take the further step of determining the role of the understanding in constituting objects of experience and thus, as Franks argues, fails to recognise the possibility that certain concepts or judgments may be warranted independently of the methods of natural science. I will examine the nature of Kant's response to Hume in more detail in chapters two and three. Kant's general strategy in responding to him, however, is, again, to reject transcendental realism. Hume is able to remain skeptical about the application of certain concepts despite their apparent necessity because he distinguishes between subjective necessity, which determines how we must *think* about objects of experience, and objective necessity, which determines how things must actually be. Kant is able to respond to this form of skepticism because he holds that the object of knowledge is already a product of the activity of the subject. If the application of particular concepts is a condition on the possibility of the thought of objects, it is also therefore a condition on the possibility of experience of them.

1.2 The skepticism of Kant's contemporaries

So far I have considered Kant's relation to the modern skeptics. I turn now to a number of different forms of skepticism which emerged in response to Kant's critical project. In particular, I am concerned with two lines of skeptical argument. The first is most notably formulated by Jacobi in his famous claim that '*without* [the] presupposition [of the thing in itself] I could not enter into the system, but *with* it I could not stay within it' (1787, p.223). According to this line of argument, Kant's own project remains insufficiently critical in that, although Kant denies that knowledge of the thing in itself is possible, the existence of the thing in itself remains an essential presupposition of his transcendental idealism. In particular, the thing-in-itself is required in order that sensation be accounted for while at the same time the synthetic activity of the understanding with respect to the sensible matter is supposed to be a condition on the possibility of the object that is thought as the cause of sensation:

> The Kantian philosopher goes right against the spirit of his system whenever he says that the objects produce *impressions* on the senses through which they *arouse* sensations, and that in this way they *bring about* representations. For according to the Kantian hypothesis, the empirical object, which is always only appearance, cannot exist outside us and be something more than a representation (Jacobi, 1787, p.220).

Among the early post-Kantians, Pistorius, Schulze, and Maimon also hold this view.[23] Strawson has a similar concern in mind when he writes that '[t]he doctrine [of transcendental idealism] is not merely that we can have no knowledge of a supersensible reality. The doctrine is that reality is supersensible and that we can have no knowledge of it. There are points in plenty at which the doctrine takes swift plunges into unintelligibility' (1966, 38). Here, Strawson echoes Jacobi's concerns, arguing that:

> 'Kant denies the possibility of any knowledge at all of things, as they are in themselves, which affect us to produce sensible experience. It is evidently consistent with, indeed required by, this denial to deny also that the physical objects *are* those things, as they are in themselves, which affect us to produce sensible experience' (1966, p.41).

This notion that the thing in itself somehow grounds the sensible intuition is supposed to be problematic not only because it entails that we have knowledge of the thing-in-itself, but also because it relies upon the application of the category of causality (which should be limited to the objects of experience) to things-in-themselves which are supposed to be external to experience. In Strawson's terms, the relation between the faculty of intuition and the thing-in-itself is supposed to one of 'affectation':

> but when it is added that we are to understand by space and time themselves nothing but a capacity or liability of ours to be affected in a certain way by objects not themselves in space and time, then we can no longer understand the doctrine, for we no longer know what "affecting" means, or what we are to understand by "ourselves" (Strawson, 1996, p.41).

Skepticism concerning metaphysical interpretations of the thing-in-itself also plays an important role in the work of the German Idealists. If interpreted as an

[23] See, for example, Pistorius, 1784, p.100 (review of Schulze's *Elucudations*): 'the most important, and in my opinion, essential error that pervades the authors entire system … [is] that according to it an objective intelligible world and things in themselves are assumed, as we put it in our provincial dialect, for no reason at all.'

ontologically distinct entity, the thing-in-itself is problematic in that it appears to be a remnant of the transcendental realism that Kant intended to overturn. Fichte, for example, advances a reformulation of the Berkeleyan argument. The very concept of the mind-independent thing-in-itself is contradictory for the same reasons that the thought of mind-independent matter is:

> According to Kant [… The thing in itself] is something which we merely append *in thought* to appearances, according to laws of thought that call for demonstration, and were demonstrated by Kant, and which we are *obliged* to append, according to these laws; *something, therefore, which arises only through our thinking* […] And this noumenon, or thing-in-itself, what further use do these commentators wish to make of it? This thought of a thing-in-itself is grounded upon sensation, and sensation they again wish to have grounded upon the thought of a thing-in-itself. Their earth reposes on a mighty elephant, and the mighty elephant – reposes on their earth. Their thing-in-itself, which is a mere thought, is supposed to *operate* upon the self! (I 483)

The scope of these forms of skepticism is limited, however. Firstly, they do not appear to take into account the technical sense in which Kant uses the term 'knowledge'. According to Kant, '[a]lthough we cannot *know* these objects as things in themselves, we must yet be in a position at least to *think* them as things in themselves; otherwise we should be in the absurd conclusion that there can be appearance without anything that appears' (Bxxvi). For Kant, knowledge is possible only through the application of the categories of the understanding, which in turn apply only to objects that exist in space and time. This does not mean, however, that things in themselves cannot be thought. While they are not within the domain of transcendental logic, they are within the domain of general logic. Additionally, it is not necessarily true that the positing of a causal relation between the thing in itself and the experiencing subject entails a transcendent application of the category of causality. When Kant distinguishes the mathematical from the dynamical categories, he draws attention to the regulative, as opposed to constitutive, nature of the dynamical categories, which include the category of causality. As will be discussed further in chapter six, the regulative nature of the application of these categories means that it is possible to attribute a spatiotemporal effect to a non-spatiotemporal cause.[24] As a consequence, the application of the category of causality is not transcendent, so long as the effect is also subject to a distinct natural chain of causality. A final problem with these criticisms (or skepticisms concerning the thing-in-itself) is that they appear to presuppose a metaphysical interpretation of the relationship between appearances and things in themselves. Alternatives to such readings are, however, possible. Indeed, Fichte's criticisms in the passage quoted above are addressed not to Kant himself, but to particular *commentators on* Kant: '[a]nd this noumenon or thing-in-itself, what further use do these *commentators* wish to make of it' (I 483, emphasis added). Allison, too argues (2004) that the thing in itself should not be considered a distinct metaphysical entity at all, but that appearances and things in themselves should instead be thought of as two distinct ways of thinking about the same objects of experience. It seems, then, that post-Kantian forms of skepticism which are concerned with the thing-in-itself apply only to particular, metaphysical, interpretations of the relation between appearances and things in themselves.[25]

[24] 'The dynamical regress is distinguished in an important aspect from the mathematical. Since the mathematical regress is concerned only with the combining of parts to form a whole or the division of the whole into parts, the conditions of this series must always be regarded as parts of the series, and therefore as homogeneous and as appearances. In the dynamical regress, on the other hand, we are concerned not with the possibility of an unconditioned whole of given parts, or with an unconditioned part for a given whole, but with the derivation of a state from its cause. In this latter regress, then, it is not, therefore, necessary that the condition should form part of an empirical series along with the condition' (A560 / B588)

[25] Paul Franks does offer a reformulation of Jacobi's skepticism, which he argues *is* post-Kantian. See Franks, 2014.

1.3 Maimon's post-Kantian Skepticism

I turn now to Maimon's own skepticism, which, I argue, should be considered post-Kantian. Here, I consider the relation of Maimon's skepticism to those discussed above, and argue that Kant's rejection of transcendental realism does not in itself suffice to respond to the Maimonian line of argument. I also consider some interpretations of Maimon's skepticism which appear to characterise his as a pre-critical form of skepticism, and argue that these characterisations are misguided. The question of the exact nature of Maimon's skepticism will be addressed over the course of the dissertation. The important distinction that I want to draw here, however, is that Maimon's post-Kantian skepticism, unlike the pre-critical forms of skepticism outlined above, does not presuppose transcendental realism. In other words, in order to adopt the position of the Maimonian skeptic we are not committed to any particular position with respect to how things may be independently of our experience of them. As will be seen, two distinct lines of argument are usually thought to comprise Maimon's skepticism, and these correspond to the '*quaestio facti'* and the '*quaestio juris'* which Kant himself introduces in the Transcendental Deduction. For ease of expression I will refer to these throughout as 'Maimon's *quaestio facti*' and 'Maimon's *quaestio juris*' respectively, although it should be noted that although *quaestio* translates as 'question', I use this term to refer to the relevant Maimonian line of argument and not to the question itself.

1.3.1 Maimon and the early commentators on Kant

The above claim (that Maimon's skepticism is post-Kantian insofar as it does not presuppose transcendental realism) distinguishes mine from two other lines of interpretation. According to some commentators, Maimonian skepticism, together with the skepticisms of Hume and Schulze, constitutes a form of transcendental realism in that knowledge is taken to involve a relation between subjective representations and things in themselves. Breazeale, for example, groups these three forms of skepticism together under the title of 'critical skepticism' and claims that:

> we can see that [the argument of the critical skeptic] involves a premise that will prove to be the crux of the dispute between transcendental idealism and critical skepticism: namely, the assumption that "genuine knowledge" requires access to a realm of independently existing things in themselves' (2013, p.238).[26]

According to Schulze, Kant's transcendental idealism remains dogmatic in its assumption that the categories have their origin in the mind of the subject, for the same reasons that Kant himself thinks that transcendental realism remains dogmatic. 'If', Schulze argues, 'things-in-themselves [are] entirely unknown to us as the *Critique of Pure Reason* claims, we cannot know at all which determinations can be produced in the mind because of their influence on it, and which cannot.' (Schulze, 1792, p.145). Against this kind of skepticism, the Kantian strategy would be not so much to respond to the skeptic as to refuse to engage with him: the skeptic is operating with a pre-critical conception of what knowledge should be. For the critical philosopher, knowledge is a relation between judgments and the objects of experience which warrant them, but Schulze's skepticism takes knowledge to consist in a relation between a faculty-in-itself and independently existing objects of experience: 'a conclusion is actually being drawn from the *constitution of representations and*

[26] See also Breazeale, 2013, p.239: 'a critical skeptic (of which the most distinguished contemporary example for Fichte was unquestionably Salomon Maimon) will nevertheless continue to insist that there is something more to "objectivity" than "necessity and universality," and will at this point reiterate his demand that genuine knowledge requires some kind of verifiable correspondence between representations and things in themselves.'

thoughts in us to the constitution of objects in themselves, outside us.' (Schulze, 1792, p.99). As Breazeale argues, while the kind of knowledge that the skeptic seeks is not attainable, this does not mean that we cannot have an alternative account of knowledge: one that is not susceptible to these skeptical doubts.[27]

As has been pointed out by Beiser, however, it does not make sense to place Maimon in this group of skeptics, or to think that he is concerned with knowledge as a relation between representations and mind-independent states of affairs. [28] In the 'Letters of Philaletes to Aenisidemus' (appended to the *Logik*), Maimon criticizes Schulze's skepticism precisely because it retains this pre-critical understanding of knowledge:

> Your [Schulze's] *skepticism* only differs from [the critical skepticism] in that, as regards the *being* or *non-being of things in themselves and their properties, critical philosophy* not only holds that so far nothing certain has been established about them in accordance with universally valid principles, but also that *nothing can be so established* in principle. Your *skepticism*, although it appears on the surface to stand even more radically *opposed* to dogmatism than *critical* philosophy, is in fact much more in *sympathy* with it (*Logik*, GW V, 299-300, trans. Giovanni)

Maimon's position, then, is that Schulze's is not in fact a true critical skepticism – it rests upon dogmatic assumptions in that it supposes that knowledge describes a relation between objects of experience and mind-independent states of affairs – an assumption that is revealed in his belief that knowledge of mind-independent things-in-themselves remains a theoretical possibility. '*My skepticism*, on the contrary,' Maimon claims, 'far from saying anything in support of *dogmatism*,

[27] According to Breazeale, this is Fichte's strategy in addressing Maimonian skepticism. See Breazeale, 2013, chapter 2.

[28] See Beiser, 2003, p.238. Charlotte Katzoff too, I think, makes this mistake (See Katzoff, 1975). Katzoff argues that Maimon's skepticism is not post-Kantian in that it rests upon a dogmatic interpretation of Kant's theory of knowledge according to which the subject/object distinction transcends experience (and manifests itself as an object-in-itself and a subject-in-itself), and that Maimon incorrectly believes that Kant has grounded knowledge in a subject-in-itself.

stands opposed to it even *more* so than critical philosophy does' (*Logik*, GW V, 300, trans. Di Giovanni). Maimon accepts the Kantian account of knowledge as a relation between judgments and objects of experience, but he doubts the possibility of even this kind of knowledge within the Kantian framework. '*Critical* philosophy', he writes, 'accepts the *actual* thinking of *objects* in accordance with *conditions* grounded in the faculty of cognition *a priori* as *a fact* of consciousness, and only shows in which way they are *conditions*. *Skepticism* puts that same fact in doubt' (*Logik*, GW V, 301-302 trans. Di Giovanni). Maimon's commitment to transcendental idealism can, I think, be seen most clearly in the following passage from the *Logik*:

> That in knowledge which remains unchanged throughout all changes in the subject, is the objective. That, however, which changes along with changes in the subject, is the merely subjective in knowledge. We can determine as little of the subject itself (outside the I) as of the object of knowledge itself outside the faculty of knowledge (the object in itself), … If the objective is to be distinguished from the merely subjective in knowledge (which distinction is of great importance in the whole of philosophy), *then we must look for this distinction not in the ground (in the source) but instead in the faculty of knowledge itself.* (*Logik*, GW V, 176-177, emphasis added)

Whether or not we presuppose a subject / object relation that is external to the faculty of knowledge, cognisance of the subjective / objective distinction itself requires that there is a ground that is internal to the faculty of knowledge. If we are capable of distinguishing between subjective and objective, in other words, then there must be some basis *within experience* on which we do so.

A second line of interpretation takes Maimon's skepticism, and as a consequence his rationalism, to result from his position with respect to Kant's thing-in-itself, and for reasons that closely resemble those that Jacobi cites. Maimon rejects the given in experience, so this line of argument goes, because he is skeptical about Kant's thing-in-itself. Since the thing-in-itself is supposed to serve as a mind-independent ground of experience, its removal means that Maimon must account for the totality of experience purely in terms of the activity of the subject. Hugo Eduardo Herrera (2010), Samuel Atlas (1964), and Charlotte Katzoff (1981) in particular, are advocates of this line of interpretation. 'Maimon's philosophy', Atlas writes for example:

> is thus based, *first, on the disproof of metaphysical entities, such as things-in-themselves*, understood as substances bearing appearances, and, second, on the reflective analysis of the phenomena of consciousness as such, establishing the necessity for a complete correlation between consciousness and its object. (1964, p.20, emphasis added)

While it is true that Maimon denies that the thing-in-itself can be thought as the mind-independent ground of appearances, my position is that Maimon's rationalism and his denial of the merely given are not dependent upon his position with respect to things-in-themselves. One reason is that Maimon, like Fichte, does not believe that these criticisms concerning the thing-in-itself pose a real problem for Kant because he does not take Kant's thing in itself to be a metaphysically distinct entity which stands as the cause of the representation. Criticisms concerning a particular conception of the thing-in-itself are therefore aimed not at Kant himself but instead only at particular commentators on Kant. As is reflected in his criticism of Schulze, Maimon does not think that things-in-themselves are the unknowable source of appearances, but instead that the Kantian thing-in-itself is by definition unknowable in that it does not conform to the conditions of judgment:

> Kant very often uses the word 'given' in connection with the matter of intuition; by this *he does not mean* (and nor do I) something within us that has a cause outside us, for this cannot be perceived directly, but merely inferred. … 'given' signifies only this: a representation that arises in us in an unknown way (VT, GW II, 203, emphasis added)

It is clear from the above passage that Maimon does not think that Kant remains dogmatic with respect to things in themselves, and Maimon's position on the thing-in-itself should not itself, therefore, require a reformulation of Kant's transcendental idealism. A further implication of the passage, however, and a further reason for rejecting the claim that Maimon's skepticism is, primarily, a skepticism about things-in-themselves, is that a denial of the mind-independent thing-in-itself does not in itself require that we account for the totality of experience purely in terms of the activity of the subject. We can simply accept that there is an aspect of experience that we are unable to account for, and can remain neutral as to the question of its source. If Maimon is to deny that there is a merely given component of experience, then his argument must therefore be made on grounds that are internal to knowledge. In chapter four I argue that Maimon's treatment of the given is a consequence of his *quaestio juris* line of argument, which concerns Kant's discursivity thesis. Maimon's claim, I propose, is that complete rational determination is a condition on the possibility of perceptual judgment: a claim is that independent of his position with respect to the thing-in-itself.

1.3.2 Maimon and modern forms of skepticism

I have argued, then, that Maimon should be considered post-Kantian insofar as he is not a transcendental realist. This should mean that his skepticism does not result from empirical idealism, and that his position is therefore distinct from those of Descartes and Berkeley. Maimon is, in fact, an empirical realist: when we have experience of an object, this experience does not happen indirectly by way of a representation in the way in which the Cartesian skeptic thinks that it does. 'If I say: I am conscious of something,', Maimon claims, 'I do not understand by this something that is outside consciousness, which is self-contradictory; but merely the determinate mode of consciousness, i.e. of the act itself' (VT, GW II, 29-30).[29] Thus, we perceive objects of experience directly, and any skeptical claims must concern the object of perception. Maimonian skepticism, then, does not concern the relation between representations and the mind-independent objects they are taken to represent, nor between judgments and mind-independent objects of judgments. Instead, the distinctive Maimonian claim is that we can remain skeptical about the application of concepts such as that of causality to objects of experience *even where those objects of experience are mind-dependent* or, in other words, where the subjective / objective distinction is internal to the faculty of knowledge.

I have so far argued that Maimon's empirical realism distinguishes him from the Cartesian skeptic. As discussed, however, Humean skepticism does not necessarily presuppose empirical idealism, and Maimon's empirical realism will not in itself, therefore, distinguish his skeptical standpoint from that of Hume. Maimon's rejection of transcendental realism does, I suggest however, mean that his skeptical position is distinct from Hume's. Hume is skeptical about the inference from present states of affairs to other non-perceived states of affairs because he holds that the inference is made on the basis of concepts (in particular that of causality) that appear to have no empirical or rational basis. Kant's response is to show that such inferences are valid because concepts such as that of causality are themselves constitutive of

[29] See also VT, GW II, 30: 'The word "representation", used of the primitive consciousness, … leads us astray; for in fact this is not representation, i.e. a mere making present of what is not now present, but rather presentation, i.e. the representation of what was previously not as existing'

objectivity (or objective states of affairs) in general. Maimon concedes this Kantian point: objectivity is not merely given but must be constructed; certain synthetic a priori forms of judgment are valid not because they are rationally grounded, nor because they derive from experience, but because they are concerned with the necessary structure of knowledge itself.

According to Maimon's *quaestio facti* line of argument, however, Kant has not provided an adequate response to the Humean skeptic in that he has failed to respond to the demands of the *quaestio facti*; on the one hand, Kant has established that *a priori* determination is a condition on the possibility of subject/objectivity, and on the other he has determined that the application of the categories, including that of causality, is a condition on a certain kind of objectivity. Maimon does not think that Kant has done enough, however, to show either that the *a priori* determination happens by way of the particular categories that are outlined in the Metaphysical Deduction, or that our experience is of the particular kind that would require the application of those categories. As a consequence, Kant has established against Hume only that the mathematical and transcendental judgments *can* have objective validity, but not that they in fact *do*.

1.3.3 Maimon and ancient skepticism

Maimon's skepticism remains closer to the modern than to the Pyrrhonian variety insofar as his is not a global skepticism, nor a skeptical methodology, but instead an attempt to further Kant's critical system by identifying vulnerabilities within it. Maimon is skeptical, for example, about the actuality of natural causality while remaining committed to the central Kantian claim: objectivity is constructed by, as opposed to given to, the subject. As discussed, it is Kant's view that a resolution of antinomy is possible once we reject the premise of transcendental realism. As will be argued in chapter six, Maimon's rationalism does make a resolution of the antinomies of reason problematic. Maimon does at least think, however, that a resolution of the antinomies along Kantian lines is possible within his own system. He at least does not think himself to be, therefore, vulnerable to Pyrrhonian skepticism in the form of metaphysical antinomy. Like Kant, Maimon holds that the antinomies arise because we confuse objects of experience with things in themselves. As will be seen in chapter six, in Maimon's case, this means that we attempt to represent the fully rationalised object to ourselves in space and time, when spatiotemporality is itself a product of incomplete rationalisation.

1.4 Conclusion

In the above I have identified three key groups of pre-Kantian skepticism – Pyrrhonian, modern and early post-Kantian, and have argued that these forms of skepticism rest upon pre-critical foundations. As a consequence, I have argued that Maimonian skepticism, which does not presuppose transcendental realism, and which is not, therefore pre-critical, constitutes a distinct, post-Kantian variety of skepticism. In this respect, I distinguish the reading that I offer in the course of this dissertation from a number of other lines of interpretation, which identify Maimon's skepticism with that of either Hume or Descartes or with early commentators on Kant. Maimon's skepticism thus poses a serious threat to Kant's critical project insofar as it reveals problems that are internal to the Kantian account of knowledge.

Chapter Two: ‘*Quid juris*?’, ‘*quid facti*?’ and the problem of objective validity

I turn in the next three chapters to the details of Maimon’s skepticism. It is well established that Maimon’s skeptical concerns can be divided into two distinct lines of argument: the *quaestio juris* and the *quaestio facti* - terms which he borrows from the introduction to Kant’s Transcendental Deduction. It is much less clear, however, exactly what Maimon understands by these terms; in particular, Maimon’s claim that Kant’s response to the ‘*quaestio juris*’ must ‘presuppose as indubitable the fact that we possess a set of experiential [synthetic *a priori*] propositions’ (VT, GW II, 5), and his claim that the answer to the *quaestio facti* is, for Kant, simply a matter of judgment about which nothing more can be said,[30] may appear misguided in light of contemporary readings according to which the *quaestio facti* is supposed to have been addressed in the Metaphysical Deduction and the actuality of synthetic *a priori* propositions is supposed to be established in the Transcendental Deduction. Neither is it obvious how we are to understand the relation between these two lines of Maimonian argument. On some accounts, they remain entirely distinct - two different

[30] See for example, VT, GW II, 70-71: ‘I come now to the *quid facti*? Kant mentions this merely in passing, but I hold it to be of great importance with respect to the deduction of the categories. Its meaning is this: how do we know from our perception that *b* succeeds *a* that this succession is necessary, whereas the succession of the very same *b* upon *c* (which is equally possible) is accidental? Kant indeed notes (and rightly) that the answer to this question depends only upon the power of judgment and further that no rules can be given for this.’ And VT, GW II, 128: ‘if I perceive something preceding and something necessarily following it (without looking to their matter, but to the particular determination of succession in general), then I judge that the succession of these objects one after the other is objective (*whether the perception is itself correct amounts to the answer to the question* quid facti*? It is based only on the power of judgment and no further rules can be given for this*)’ (emphasis added).

strategies for undermining the Kantian system[31] – while on others they are mutually dependent, and essential to the development of Maimon's own transcendental system.[32] The position that we take on these issues has important implications not only in terms of the degree to which Maimonian skepticism poses a problem for Kant, but also for our understanding of Maimon's own rationalism. In order to better understand Maimon's skepticism, in this chapter I examine the distinction as it is presented by Kant in the KrV. I hope to show that this confusion around the relation between '*quid juris'* and '*quid facti'* lines of inquiry is not limited to the secondary literature on Maimon, but has its origins in Kant's own account, and intend that an explication of this account will therefore help to clarify Maimon's position.

2.1 The origins of the distinction

The *quaestio juris* ('*quid juris*?') and the *quaestio facti* ('*quid facti*?') translate as 'the question of right' ('by what right?') and 'the question of fact' ('what fact?') respectively. The distinction appears in the context of the Transcendental Deduction, the aim of which is to establish the objective validity of the categories that have been enumerated in the preceding chapter – the Metaphysical Deduction. Surprisingly, given the degree of influence that it has had, Kant's discussion of the distinction itself is very brief. He says only that:

> Jurists, when speaking of rights and claims, distinguish in a legal action the question of right (*quid juris)* from the question of fact (*quid facti)*; and they demand that both be proved. Proof of the former, which has to state the right or the legal claim, they entitle the *deduction*. (A84/B116)

[31] See, for example, Beiser 1993, chapter 10.

[32] See, for example, Bransen, 1991.

Some work is therefore required if we are to make sense of this legal distinction in the context in which Kant employs it. Dieter Henrich's historical account of the legal process of deduction to which Kant refers is helpful here.[33] The method of deduction, and the corresponding *quid juris*, *quid facti* distinction, has its origins in eighteenth-century property law. While Kant is concerned with our entitlement to make particular kinds of judgments, or to employ particular concepts, the original, juridical, deduction concerns entitlement to some particular property. A deduction is appropriate in this case because the rights associated with this kind of entitlement are not absolute but merely hypothetical, or acquired. As such, it is necessary to determine both what should constitute legitimate possession ('*quid juris*?'), and the nature of the acquisition of the possession in any particular case ('*quid facti?'*). The concern is that the possession is illegitimate or without grounds, and the aim of the deduction is to 'legally trace the possession somebody claims back to its origin' (Henrich, 1989, p.35), with the intention that doing so will establish this legitimacy.[34] The *quaestio facti* is therefore satisfied once a full account of the circumstances surrounding the acquisition is provided, and the *quaestio juris* is satisfied once it has been determined that the relevant rights in fact apply in these circumstances.[35] Importantly, both the *quaestio juris* and the *quaestio facti* must be satisfied if the possession is to be determined to be legitimate: to determine that a particular set of

[33] See Henrich, 1989.

[34] See Henrich, 1989, p.35: 'In order to decide whether an acquired right is real or only presumption, one must legally trace the possession somebody claims back to its origin. The process through which a possession or a usage is accounted for by explaining its origin, such that the rightfulness of the possession or the usage becomes apparent, defines the deduction. Only with regard to acquired rights can a deduction be given. This implies that by definition a deduction must refer to an origin'.

[35] See Henrich, 1989, p.36: 'To answer [the *quaestio juris*], one has to focus exclusively upon those aspects of the acquisition of an allegedly rightful possession by virtue of which a right has been bestowed, such that the possession has become a property'.

circumstances holds cannot by itself establish the legitimacy of possession because the rights associated with the concept of legitimate possession amount to more than can be established simply by examination of the facts of possession. Similarly, even if a possession can be traced back to some particular feature of an acquisition, the legitimacy of the possession cannot be determined until it has been established that *in this particular case* those circumstances do in fact hold. The method of deduction that Henrich describes is specific to the Roman law tradition, but the distinction between questions of right, or law, and questions of fact exists in many contemporary legal systems,[36] where a jury is appointed to determine questions of fact, while a judge is concerned with the question of law[37] – in this case, whether a particular law applies. A *quaestio juris* may arise, for example, in cases where a defendant claims diminished responsibility. While there is a question of fact concerning the mental state of the defendant, there is also a question of law concerning whether the partial defence applies such that, for example, a charge of manslaughter instead of murder may be appropriate.[38]

2.2 The problem of objective validity and the legitimacy of concepts

How, then, does this legal analogy map onto Kant's argument in the Transcendental Analytic? Kant first expands on the meaning of the *quaestio juris* in relation to

[36] Even here, the distinction proves problematic. See Smith, J.W, 2009.

[37] This division of responsibility is interesting in light of Kant's later claim, which Maimon picks up on, that questions of fact are simply a matter of judgment, and that no laws can be given for these. See A133/B172

[38] See Loughnan, 2012, p.236: 'Whether a particular defendant has the requisite abnormal mental state is a question of fact for the jury., although the question of whether a particular clinical condition can give rise to such a state is a question of law'.

empirical concepts, and his discussion there provides an insight into the more general problem of legitimacy:

> Many empirical concepts are employed without question from anyone. Since experience is always available for the proof of their objective reality, we believe ourselves, even without a deduction, to be justified in appropriating to them a meaning, an ascribed significance. But there are also usurpatory concepts, such as *fortune*, *fate*, which, though allowed to circulate by almost universal indulgence, are yet from time to time challenged by the question: *quid juris*. This demand for a deduction involves us in considerable perplexity, no clear legal title, sufficient to justify their employment, being obtainable either from experience or from reason. (A84-85 / B117)

So-called empirical concepts supposedly have an empirical warrant: if we want to apply the concept 'dog' in experience, for example, there are a number of intuitable determinations that we can point to in order to justify this application.[39] We might point out that the creature has four legs, that it makes a barking noise, or even that if we examine its DNA under certain conditions we find that it resembles that of other animals that we call dogs. Usurpatory concepts on the other hand do not appear to have any empirical warrant, making our application of them problematic. If I wish to argue that a particular event is a consequence of fate, for example, there do not appear to be any empirical grounds that I can point to in order to justify my claim. In the terms of the legal analogy, I might say that I have a well-developed concept of what it means in abstract terms to commit the crime of theft, but unless there are clearly defined empirical markers which determine, for example, ownership, then no matter how much empirical evidence I call upon in response to a *quaestio facti*, I will never be able to justify a charge of theft. It is important to distinguish this kind of

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[39] While Kant's position in the first *Critique* appears to be that there is no *quaestio juris* with respect to empirical concepts, whether this was, in fact, Kant's view is a matter of debate. It is sometimes argued, for example, that Kant attempts, in the third *Critique*, to address a *quaestio juris* with respect to empirical concepts. See, for example, Ginsborg (2006a, 2006b) and Kitcher (1986).

skepticism, then, from the skepticism that arises with respect to the *quaestio facti*. There are instances where we cannot be sure that we are correct in applying a particular concept and not another. We may find, for example, that there is just as much empirical evidence in support of our applying the concept of 'dog' as that of 'fox'. Our application of the concept remains justified however, although not necessarily correct, as long as we can point to empirical determinations which warrant it.[40]

2.3 *A priori* concepts, or *a priori* judgments?

Kant's concern, at least in the Transcendental Deduction, is not ultimately with empirical warrant, or with so-called empirical concepts, but instead with what Kant often refers to as '*a priori* concepts', or with the categories that have been outlined in the Metaphysical Deduction. 'Now among the manifold concepts which form the highly complicated web of human knowledge,' he writes:

> there are some which are marked out for pure *a priori* employment, in complete independence of all experience; and their right to be so employed always demands a deduction. For since empirical proofs do not suffice to justify this kind of employment, we are faced by the problem how these concepts can relate to objects which they yet do not obtain from any experience. The explanation of the manner in which concepts can thus relate *a priori* to objects I entitle their transcendental deduction (A85/B117)

The above passage immediately presents us with a problem, however. In his previous discussion of fate and fortune, *concepts* were supposed to be usurpatory: the problem was that the concepts had no corresponding intuitive content so that their application in experience could not be justified. Here, however, Kant does not refer to *a priori*

[40] For a more detailed examination of Kant's account of the application of empirical concepts see Kitcher, 1990, chapter 8: 'Cognitive Constraints on Empirical Concepts'.

concepts at all, but instead to concepts that are 'marked out for *a priori employment*'. These two formulations appear to address subtly different skeptical concerns. If the issue lies with the concepts themselves, and their lack of intuitable content, then a response to the *quaestio juris* will take the form, primarily, of identifying corresponding intuitive content – or of establishing that particular intuitive determinations can serve as a warrant for the application of the concept. If, on the other hand, the issue lies with the *a priori application* of concepts then an empirical warrant is, by definition, insufficient, and a response to the *quaestio juris* should instead establish that the relevant judgment has universal applicability. While in the former case a *quaestio juris* might concern our right to employ certain concepts (e.g. that of causality) within experience, in the latter case, the *quaestio juris* concerns our right to make *particular kinds of judgments* – i.e. those that express necessity and universality (e.g. that every event has a cause). In the former case, then, a response to the *quaestio juris* will require only that we establish that we are justified in applying the relevant concepts in experience, while in the latter case a response to the *quaestio juris* will require that we show that certain kinds of judgments are *necessarily true* of all objects of experience. Which is it, then - the *a priori* status of the concepts themselves, or the *a priori* nature of certain judgments that involve them - that means that a deduction is required?

At first glance, this distinction might appear relatively trivial. Perhaps the two formulations are different ways of expressing the same problem: *a priori* concepts are just concepts that are to be employed in *a priori* judgments or, conversely, *a priori* judgments are simply judgments that employ *a priori* concepts. Closer analysis reveals difficulties in this strategy, however. Suppose that we wish to define apriority primarily in terms of warrant; a judgment is *a priori* if it is warranted independently of experience.[41] Analytic judgments, since they are supposed to be *a priori* should be included under this definition: analytic judgments are *a priori* because they are warranted independently of experience. Yet analytic judgments often employ concepts that Kant himself would consider empirical, i.e. which do not have an *a priori* origin. If I claim that 'the red apple is red', this is an analytic judgment that is warranted independently of experience and should on this definition therefore be *a priori*, yet neither the concept of red nor the concept of apple is usually thought to be *a priori*. Maimon himself makes this point when he writes that '[i]f I say that the red in *a* is identical to the red in *b*, then the proposition is analytic even though the objects of the comparison are given intuitions' (VT, GW II, 67).

It cannot be straightforwardly the case, then, that so-called *a priori* concepts are defined in terms of their employment in *a priori* judgments. Perhaps we can narrow the scope of the term '*a priori* concept' by defining it as follows: '*a priori* concepts can *only* be employed in *a priori* judgments, where *a priori* judgments are warranted independently of experience'. In this way, we exclude concepts that have their origin in experience, and which are primarily employed in empirical judgments, but which can nevertheless be employed in analytic judgments. The problem, however, is that many of the concepts which Kant defines as *a priori can* be employed in *a posteriori* judgments. While the judgment "every event has a cause" is supposed to be *a priori*, the judgment "fire is a cause of smoke" is supposed to be an empirical judgment. If, on the other hand, we wish to define the apriority of

[41] Kant himself appears to adopt this position when he writes that: 'in view of their [the categories] subsequent employment, which has to be entirely independent of experience, they must be in a position to show a *certificate of birth* quite other than that of descent from experiences' (A86-87/B118-119).

judgments in terms of the apriority of the concepts that they employ, we run into similar problems: if we claim, for example, that an *a priori* judgment employs only non-empirical concepts, then we, again, exclude certain analytic judgments.

It seems, then, that we must abandon any effort to define the apriority of concepts and the aprioty of judgments in terms of one another. It cannot be the case that the *a priori* concept is defined as such by its employment in *a priori* judgments, nor that *a priori* judgments are defined by their employment of *a priori* concepts. This seems to leave us with two options. One is to continue to talk of *a priori* concepts but to define them independently of *a priori* judgments. Again, there are two ways in which we can do this. On the one hand, we can maintain the focus on the *application* of concepts as opposed to the concepts themselves, but avoid the problem of analytic judgments, by defining the *a priori* in terms of its universal applicability: we can say something like 'a concept is *a priori* if it applies to all objects of experience' or 'a concept is *a priori* if it can be employed in synthetic *a priori* judgments'. If this is Kant's intention, however, then his argument in the Transcendental Deduction appears to be question begging. On the other hand, we can emphasize the status of the concept itself. Here, we can define apriority in terms of origin: empirical concepts have their origin in experience, while *a priori* concepts have an origin that is independent of experience (this is usually taken to mean that they have their origin in the subject). The other option is to abandon talk of *a priori* concepts entirely: apriority is properly a feature of judgments and not of concepts, and Kant's arguments in the Transcendental Deduction establish the validity of particular kinds of *judgments* (e.g. all events in nature are causally determined), and not particular kinds of concepts.

In summary, then, it seems that a transcendental deduction may be aimed at establishing, or accounting for, the validity of one of the following:

(1) Concepts which are to apply universally to objects of experience and which do not therefore require an empirical warrant[42]

(2) Concepts which have a non-empirical origin – which are not arrived at by way of experience[43]

(3) *A priori* judgments: judgments which can be warranted independently of experience[44]

The dominant trends in the secondary literature take Kant to be concerned with *either* (1), (2) or (3).[45] Kant can, I think, however, be seen to conflate (2) and (3). Kant appears to move between the two formulations as if they are synonymous. He talks of '*a priori* concepts' throughout the KrV. In particular, at the end of the A-deduction, he writes:

> If the objects with which our knowledge has to deal were things in themselves, we could have no *a priori* concepts of them. For from what source could we obtain the concepts? If we derived them from the object (leaving aside the question how the object could become known to us), our concepts would be merely empirical, not *a*

[42] By 'objects of experience' here, I intend natural objects as opposed to, for example, the object of aesthetic experience.

[43] Senderowicz provides a helpful overview of this line of interpretation. See Senderowicz 2005, p.62: 'The subjective origin of pure concepts is in this context equivalent to their non-experiential origin. Pure concepts are possibly not instantiated by objects (appearances) of experience. A priori judgments are possibly false.'

[44] It is, I think, possible, for example, to read Kant as claiming that the categories themselves derive from experience, but that the judgments which they refer to are conditions upon experience. In this case, the concepts themselves do not have an *a priori* origin, but merely an *a priori* warrant.

[45] For examples of (1) see Senderowicz, 2005, and Freudenthal, 2003. There is sometimes a tendency in the secondary literature on Maimon to adopt reading (1), perhaps because, as I discuss in chapter three, Maimon himself can be seen to advance this reading.; for examples of (2) see Guyer, 2010; Proops, 2003; Allison, 2015; Strawson 1966; Horstmann, 1981. Strawson claims, for example, that: 'To say that a form of intuition or a concept of an object in general is *a priori* is, for [Kant], not primarily to say that it embodies a limiting condition of any experience of which we can form a coherent notion. It is primarily to say something about the source or origin of the corresponding feature of experience' (1966, p.49). For examples of (3) see Ameriks, 1978 and Lau, 2015.

> *priori*. And if we derived them from the self, that which is merely in us could not determine the character of an object distinct from our representations (A128-129)

The implication here is clear – apriority has to do with the origin of concepts: concepts which we arrive at by way of experience are empirical, while concepts that 'derive from the self' are *a priori*.[46] Similarly, in a later note he writes that '[t]he universality and necessity in the use of the pure concepts of the understanding betrays their origin and that it is either completely impermissible and false or else must not be empirical' (Ak, 18:267, trans. Guyer, 2005). Elsewhere, however, he implies that it is the *a priori* relation of concepts to objects that is at issue:

> The objective validity of the categories as *a priori* concepts rests … on the fact that, so far as the form of thought is concerned, through them alone does experience become possible. They relate of necessity and *a priori* to objects of experience, for the reason that only by means of them can any object whatsoever of experience be thought. (A93/B126)

Yaron Senderowicz (2005) has argued along similar lines, but concluded that it is *commentators* on Kant who are mistaken in conflating these two positions.[47] Kant cannot be concerned with the objective validity of *a priori* concepts, Senderowicz argues, because apriority already entails objective validity. Senderowicz' account I think, however, fails to recognize the dual sense in which Kant himself uses the term *a priori*: as can be seen by the fact that Senderowicz calls upon passages where *a priori* judgments are said to have universal necessity and, therefore, objective validity.[48] In this way, then, I follow John Callanan (2011) in holding that Kant does

[46] My interpretation here is in line with John Callanan's (see Callanan, 2011). While there are reasons to think that Kant allows for the position that so-called *a priori* concepts are arrived at by way of experience, as I will argue later in this chapter, the ultimate origin of the concepts remains, I think, subjective.

[47] See Senderowicz 2005, chapters 2 and 3.

[48] See Senderowicz, 2005, chapter 2.

not instigate the 'normative turn' or the disentanglement of the question of non-empirical origin from the question of *a priori* warrant.[49] For the present purposes, however, the distinction is important because it has implications for our understanding of the form of Kant's argument in the Transcendental Deduction, to which I now turn.

2.4 The form of Kant's argument in the Transcendental Deduction

(1) and (2) correspond to two common formulations of the *quaestio juris*; on (2), the quaestio juris must be formulated as a kind of 'what right?' question: 'what right do I have to apply concepts that have no corresponding intuitive content to objects of experience?'. The problem is that these concepts, because they have a non-empirical origin, do not have any corresponding intuitive content, and a response to the *quaestio juris* will therefore require that some corresponding intuitive content be identified. For this reason, it is sometimes claimed that the *quaestio juris* is not satisfied until the arguments of the Analytic of Principles have been made.[50] On (1), however, the quaestio juris can be formulated as a kind of 'how possible?' question: 'how is it possible that concepts can apply *a priori* to objects of experience?'. This reading allows us to make sense of Kant's claims at A94/B127 that Hume was forced to adopt the skeptical position as a result of his failure to recognize the possibility of the synthetic *a priori*:

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[49] See Callanan, 2011. Senderowicz also criticizes proponents of (2) on the basis that Kant's notion of apriority should already entail objective validity, in which case a transcendental deduction should not be necessary in the case of concepts that are already thought to have a non-empirical origin - see Senderowicz, 2005. Senderowicz's argument itself depends, however, on the conflation of these two kinds of supposed apriority – that of concepts and that of objects, and therefore, I think, fails as a criticism of the proponents of (2).

[50] See, for example, Thielke, 2006.

> David Hume recognized that, in order to be able to do this [to obtain knowledge which far transcends all limits of experience[51]] it was necessary that these concepts should have an *a priori* origin. But since he could not explain how it can be possible that the understanding must think concepts, which are not themselves connected in the understanding, as being necessarily connected in the object, and since it never occurred to him that the understanding might itself , perhaps, through these concepts, be the author of experience in which its objects are found, *he was constrained to derive them from experience*, namely, from a subjective necessity (that is, from custom) (emphasis added)

The implication here is that Kant believes that he is able to offer an alternative to the Humean position because he can account for the possibility that *a priori* truths can nevertheless have an objective warrant; in other words, by answering a kind of 'how possible' question.

Divisions in the secondary literature between those commentators that take Kant to be concerned with the objective validity of certain forms of judgment, and those that take him to be concerned with the objective validity of certain concepts, also have some overlap with the distinction between so-called progressive and regressive readings of Kant's argument in the Transcendental Deduction.[52] On regressive interpretations, knowledge of a certain kind is presupposed, and the validity of the categories is shown to be a condition on the possibility of that knowledge. On progressive readings, on the other hand, the objective validity of certain concepts or certain judgments is supposed to be established solely on the basis that human cognition is discursive, and not on the basis of any presuppositions about the nature or actuality of discursive knowledge. Those commentators that take Kant

[51] By 'knowledge which transcends all limits of experience' here, it might be tempting to think that Kant has in mind transcendent metaphysical knowledge. This would not fit, however, with the general argument that Kant makes in the Transcendental Deduction and I therefore think this is best understood as knowledge which involves necessary connection and which is therefore beyond the limits of induction.

[52] Senderowicz argues that not enough attention has been paid to the role of our understanding of Kant's account of apriority in our understanding of his argument in the Transcendental Deduction. See Senderowicz, 2005.

to be concerned with establishing the objective validity of concepts that have a non-empirical origin (2) tend to advocate a progressive reading: the arguments of the Transcendental Deduction establish that the categories have objective validity because synthesis of the manifold by the subject takes place by way of them.[53] To return to the distinction made above, Kant determines *that* the categories have objective validity. In the case of the progressive reading, the objective validity of the categories thus depends on their being 'in a position to show a certificate of birth quite other than descent from experiences' (A86-87/B119), and, therefore, on their being shown to derive from pure forms of thought that are intrinsic to the subject. The Metaphysical Deduction is therefore a key component in establishing the validity of the categories insofar as Kant there sets out to show that the categories derive from the pure logical forms of thought.[54] According to Strawson, for example, the objective validity of the categories is ensured not because it is only by the application of them that we can discern an object of experience in the manifold of intuition, but because the unity that we find in the manifold when we do discern an object in this way, has already been supplied by the subject, and must have been to the extent that as this synthesis of the manifold according to the categories is already a condition on the possibility of a manifold of intuitions being attributable to a single subject:

> We shall find that its fundamental premise is that experience contains a diversity of elements (intuitions) which, in the case of each subject of experience, must somehow be united in a single consciousness capable of judgment, capable, that is, of conceptualizing the elements so united. We shall find that its general conclusion is

[53] See, for example, Allison, 2015, p.180: 'the understanding has an extra-logical function through which it introduces a 'transcendental content' into its representations' and Proops, 2003.

[54] See, for example, Proops, 2003, p.220: 'the question of a concept's legitimacy turns upon facts about its origins'

> that this unity requires another kind of unity or connectedness on the part of the multifarious elements (Strawson, 1966, p.50) [55]

Similarly, on Henrich's reading, §20 of the Transcendental Deduction establishes that the application of the categories is a condition on the unity of intuition in general ('that intuitions are subject to the categories *insofar* as they, as intuitions, already possess unity' (1969, p.645)), but §26 is supposed to establish, further, that the manifold of sensible intuition *is* a unity of this kind: that it is a condition of experiences being attributable to a single subject that intuitions are unified in this way. The categories therefore serve as conditions on the possibility of unity both at the level of the sensible intuition of an object *and* at the level of the thought of it. As a consequence, the synthesis of apprehension is not only a condition on the possibility of the experience of objects, but also of 'perception, that is, empirical consciousness of the intuition' (B160):

> In this manner it is proved that the synthesis of apprehension, which is empirical, must necessarily be inconformity with the synthesis of apperception, which is intellectual and is contained in the category completely *a priori*. It is one and the same spontaneity which in one case, under the title of imagination, and in the other case, under the title of understanding, brings combination into the manifold of intuition. (B161)

Those commentators that take Kant to be concerned with the validity of the universal application of particular concepts - (1) - on the other hand, tend to be proponents of the regressive reading: the application of the categories is, so this reading goes, a condition on the possibility of objectivity, or knowledge, in general, which must itself be merely presupposed. These readings ask *how* certain forms of

[55] Passages such as the following support this line of interpretation: 'All synthesis, therefore, even that which renders perception possible, is subject to the categories; and since experience is knowledge by means of connected perceptions, the categories are conditions of the possibility of experience, and are therefore valid *a priori* for all objects of experience' (B161)

judgment are possible, and transcendental idealism turns out to play an essential role in the response to this question. The success of Kant's Transcendental Deduction is thought to depend upon his showing that certain *a priori* forms of judgment (e.g. the judgment that every event has a cause) are conditions on the possibility of knowledge in general.[56] On the most extreme regressive interpretations, the actuality of synthetic *a priori* judgments such as that all natural objects are subject to causal laws is presupposed, and the Transcendental Deduction shows that this is possible because the categories are employed in the synthesis of the manifold (this reading is particularly common in the Maimonian literature). According to more moderate variants of the regressive interpretation, knowledge in general is presupposed, and the employment of certain concepts is shown to be a condition on the possibility of such knowledge, ensuring that those concepts have universal applicability. Within the regressive interpretation there is an important distinction to be made between those interpretations which take the starting point of the transcendental deduction to be the possibility of *objective* knowledge, and those which take the starting point to be judgment or knowledge in general. Ameriks' account serves as an example of the first kind. According to Ameriks, Kant establishes the objective validity of the categories by showing their application to be a condition on the possibility of objectivity, and thus objective knowledge, in general. As a consequence, the argument is not complete

[56] See Ameriks, 1978. According to Ameriks, the transcendental deduction of the categories is best understood by examining the arguments of the Transcendental Aesthetic (which, as will be seen, Kant claims provide a transcendental deduction of space and time). Since the Transcendental Aesthetic argues from the premise that mathematical knowledge is objectively valid to the thesis of Transcendental Idealism, Ameriks argues that the Transcendental Deduction should be interpreted along similar lines.

until the Principles, where the reasons for this dependence are revealed. [57] Chong-Fuk Lau's interpretation serves as an example of the second. Lau argues that the categories attain 'second-order objective validity' as a result of their necessary employment in judgments which express 'first-order objective validity' (i.e. empirical judgments). As such, the category does not acquire validity through its applicability to empirical objects, 'but rather in [its] validity to the structure by virtue of which empirical concepts can be related to objects and acquire first-order objective validity' (2015, p.457). Kant appears to argue along these lines in the second analogy, for example, when he claims that:

> the relation of appearances (as possible perceptions) according to which the subsequent event, that which happens, is, as to its existence, necessarily determined in time by something preceding in conformity with a rule – in other words the relation of cause and effect – is the condition of the objective validity of our empirical judgments, in respect of the series of perceptions, and so of their empirical truth; that is to say, it is the condition of experience. (A202/B247)

On Lau's interpretation it is not necessary that Kant determine that we do in fact have experience in order to determine the validity of the categories – the claim is simply that the application of the categories is implicit in all knowledge.

It is important to note here that these two versions of the regressive argument answer to subtly different demands; on Ameriks' interpretation, it must be shown that the categories are conditions on the possibility of objects of *experience* whereas on Lau's interpretation, it must be shown that the categories are conditions on the possibility of *knowledge*. Both, however, must establish not only that the categories

[57] See Ameriks, 1978. Ameriks argues that Kant establishes the objective validity of the categories by showing that objective *experience*, and therefore objective knowledge in general, is dependent on the validity of the categories.

play such a role in the case of *human* judgment or knowledge, but also that they are *necessary* forms of knowledge in general.[58]

2.5 The quaestio facti

I hope to have established in the above, then, that there are multiple ways of interpreting Kant's *quaestio juris*, and thus multiple ways of understanding the Transcendental Deduction as a response to it. I turn now to a consideration of the *quaestio facti*. It is often thought that a response to the *quaestio facti* serves as the premise of the transcendental deduction.[59] The strongest evidence in support of this claim appears to be that when he introduces the distinction between the *quaestio juris* and the *quaestio facti,* Kant appears to claim that proof of the validity of the categories requires that *both* be resolved:

> Jurists, when speaking of rights and claims, distinguish in a legal action the question of right (*quid juris)* from the question of fact (*quid facti)*; and *they demand that both be proved*. Proof of the former, which has to state the right or the legal claim, they entitle the *deduction*. (A84/B116, emphasis added)

On progressive interpretations, the *quaestio facti* is therefore often taken to concern the supposed *a priori* origin of the categories, or the fact of synthetic unity: the arguments of the Transcendental Deduction establish that *if* the categories derive from *a priori* forms of thought *then* they have objective validity insofar as it is

[58] It is important to note one further area of uncertainty. The claim here is that the categories are legitimate because their application is a condition on the possibility of judgment in general. Kant distinguishes, however, between two types of judgment: judgments of experience and judgments of perception. Judgments of experience entail objectivity, while judgments of perception do not. There is some debate around whether Kant's argument in the Transcendental Deduction establishes only that judgments of experience entail the application of the categories, or whether judgments of perception do too. For a detailed discussion of this see Longuenesse, 1998, chapter 7 and Allison, 2012, chapter 2.

[59] See, for example, Proops, 2003 and Henrich, 1989.

through the application of them to the sensible manifold that experience is possible.[60] Alternatively, the transcendental unity of apperception is sometimes thought to serve as both the answer to the *quaestio facti* and the premise of the transcendental deduction. Henrich (1989, p.43), for example, appears to make this claim. In the case of the regressive interpretation, on the other hand, the *quaestio facti* is thought to be empirical in nature: it is the 'fact of objective experience' or the 'fact of knowledge' from which the deduction of the categories proceeds.[61]

Kant's later discussion of Locke presents a problem for these readings, however, and in particular for the progressive reading.[62] Here, Kant appears to consider Locke's 'attempted physiological derivation' of the categories to be one possible means of addressing the *quaestio juris*, and rejects it on the grounds that it 'concerns a *quaestio facti* [and so] cannot strictly be called deduction'. Instead, Kant claims, 'I shall … entitle it the explanation of the *possession* of pure knowledge':

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[60] For examples of commentators who take the *quaestio facti* to be concerned with the *a priori* origins of the categories see Allison, 2001, p.82: 'The concern of the *quid* or *quaestio facti* is thus with the mode of origination of a concept. More specifically, it is with whether a concept has an *a priori* or an empirical origin. The underlying assumption is that the former mode of origination is at least a necessary condition for any non-empirical use of a concept; and in the *Critique of Pure Reason* it is the so-called Metaphysical Deduction that supposedly establishes such an origin for the pure concepts of the understanding by deriving them from the logical functions of judgment. Accordingly it is in the Metaphysical Deduction that the *quid facti* is addressed in the first *Critique*'. See also Proops, 2003. Proops argues that, since the *quaestio facti* in the legal analogy usually concerned a question of origin the *quaestio facti* in the case of the deduction of the categories should also be concerned with a question of origin: 'in *most* deductions the first step to be taken in justifying one's claim would have been to establish one's *parentage*' (Proops, 2003, p.220) and 'The Deduction's *factum* is not merely a fact in which certain claims originate. Although it is *at least* that, it is, in addition, a fact specifically *about origins*, namely, the fact that the concepts of cause, substance, and so forth, have origins that are a priori' (Proops, 2003, p.220-221). For an example of a commentator who takes the *quaestio facti* to be concerned with the fact of transcendental apperception see Henrich, 1989, p.43.

[61] See, for example, Ameriks, 1978.

[62] This passage also poses more serious problems for the progressive reading in that it appears to suggest that the origins of the categories are not *a priori*. I think, however, that the threat is mitigated by Kant's claim that experience is the '*de facto*' mode of origin, with the implication being that experience may help us to arrive at a conscious awareness of these concepts, but that it does not serve as their ultimate origin.

> Such an investigation of the first strivings of our knowledge, whereby it advances from particular presentations to universal concepts, is undoubtedly of great service. We are indebted to the celebrated Locke for opening out this new line of enquiry. But a *deduction* of the pure *a priori* concepts can never be obtained in this manner; it is not to be looked for in any such direction. For in view of their subsequent employment, which has to be entirely independent of experience, they must be in a position to show a certificate of birth quite other than that of descent from experience. Since this attempted physiological derivation concerns a *quaestio facti*, it cannot strictly be called deduction, and I shall therefore entitle it the explanation of the *possession* of pure knowledge. (A86-87/B119)

Similarly, Kant writes in a later note that: '[t]he *quaestio facti* is the way in which one has first come into the possession of a concept' (Ak 18:267, trans. Guyer, 2005). If an explanation of our possession of the concepts that make up the categories of the understanding responds to the *quaestio facti*, then it does not seem to be the case that an answer to the *quaestio facti* is essential in responding to the *quaestio juris* at all. Put differently, it does not seem that the response to the *quaestio facti* serves as the premise of the transcendental deduction. As a result, some commentators have argued that the *quaestio facti* is entirely distinct from the question of the premise of the transcendental deduction. Guyer claims, for example, that the *quaestio facti* 'refer[s] to empirical evidence for the legitimate employment or "objective reality" of *merely empirical concepts*' (2010, p.119, emphasis added), and is not, therefore, relevant in the context of *a priori* concepts. Similarly, Senderowicz argues that 'in the context in which they are asked, Kant does not conceive the '*quaestio facti'* and the '*quaestio juris'* as two questions which both need to be addressed within the same epistemic enterprise' (Senderowicz, p.73).[63] In the case of *a priori* concepts, Senderowicz

[63] See also Senderowicz, 2005, p.73: 'a priori concepts are revealed to the mind by abstracting them from empirical objects. The empirical objects from which one abstracts are given with their conditions of objectivity. The data from which one abstracts is, in other words, a priori laden. But although such a method reveals to the mind that it is possible to remove the properties 'which experience teaches' from the objects of experience and to be left with some general features of these objects, it cannot account for the *lawfulness* of a priori use that is an essential part of the content of the abstracted concepts.'

argues, we can arrive at an awareness of the *a priori* structure of experience by means of an abstraction from its contingent sensible properties (i.e. by means of a Lockean abstraction), but this cannot tell us anything about the origin of those concepts which, because they are supposed to apply necessarily in experience, cannot lie in experience itself.

Neither of these two lines of interpretation is entirely satisfactory, however. In order to remain consistent, both seem to require that we overlook a key Kantian claim. When we equate a response to the *quaestio facti* with the premise of the transcendental deduction, it seems that we must ignore the claim that Locke's 'attempted physiological derivation concerns a *quaestio facti*'.[64] On the other hand, however, if we limit the *quaestio facti* to the project of accounting for 'the *possession* of pure knowledge', we cannot simultaneously make sense of Kant's legal analogy, according to which a response to the *quaestio facti* should play a central role. Neither, it seems, can we make sense of Kant's claim that the Lockean 'explanation of the *possession* of pure knowledge' (A87/B119) is nevertheless *useful* with respect to *a priori* concepts.[65] (A86/B119).

These difficulties can be resolved, I propose, in the following way. Firstly, I suggest that the *quaestio facti* should be conceived more broadly, as concerning

[64] In fact, Proops rejects Henrich's account on precisely these grounds; the transcendental unity of apperception cannot serve as a response to the *quaestio facti*, Proops argues, because a *quaestio facti* is in need of a proof, and no proof of the transcendental unity of apperception can be found in the KrV. See Proops, 2003, p.220: 'a *factum* stands in need of a proof. Consequently, to complete his interpretation Henrich would need to show how the Unity of Apperception could be established by means of a proof'.

[65] See A86/B119: 'Such an investigation of the first strivings of our faculty of knowledge, whereby it advances from particular perceptions to universal concepts, is undoubtedly of great service. We are indebted to the celebrated Locke for opening out this new line of enquiry'.

empirical states of affairs.[66] This does, I think, have at least some textual support. Kant's claim, for example, is not that Locke's account concerns *the quaestio facti* but only *a quaestio facti*: 'Since this attempted physiological derivation concerns **a** *quaestio facti* [*eine quaestionum facti*[67]], it cannot strictly be called deduction' (A87/B119). In this case, it is possible to make sense both of the demand that the *quaestio facti* be resolved, and of the characterisation of the explanation of the possession of pure concepts as concerning a form of *quaestio facti*. The story that I give about the way in which I arrive at a particular concept concerns empirical states of affairs and, therefore, a *quaestio facti*. Not all forms of *quaestio facti* have to do, however, with the story of my acquisition of concepts – that, for example, fire is the cause of heat is also a matter of empirical fact. Thus, when Kant claims that there is a demand that the *quaestio facti* be resolved, we need not think that the relevant *quaestio facti* concerns our acquisition of the pure concepts of the understanding.

Secondly, I suggest that Kant does not intend that a response to the *quaestio facti* must serve as the premise of the transcendental deduction. It is not necessarily the case then, as Allison and Proops argue that it is, that the Metaphysical Deduction responds to a *quaestio facti* (in fact, that it does not is already implied by my claim that the *quaestio facti* is concerned with empirical matters of fact). Proops in particular argues that the Metaphysical Deduction must serve as a response to the *quaestio facti* on the basis of Kant's claim that ''[j]urists, when speaking of rights and claims, distinguish in a legal action the question of right (*quid juris)* from the

[66] See, for example, Ak 20:275: '[t]he principle, that all knowledge derives from experience alone … concerns a *quaestio facti*, and the fact is admitted without hesitation, but whether it can also be deduced from experience alone … this is a *quaestio juris*'

[67] In the A-edition this is: '*eine quaestio facti*'.

question of fact (*quid facti)*; *and they demand that both be proved*' (A84/B116, emphasis added). In fact, however, Kant's claim here is not that *a response to the quaestio juris* requires a response to the *quaestio facti,* but only that the *legal process* requires that both are resolved. In order to make sense of this distinction, it is helpful to return to the contemporary legal analogy. There, the *quaestio juris* and the *quaestio facti* are divided according to who takes responsibility for answering them: as discussed, in the case of the *quaestio juris*, it is ultimately the judge that is responsible, while in the case of the *quaestio facti*, it is a matter for the jury. This is, presumably, because no definitive rules can be given for determining matters of fact - they always involve some degree of empirical judgment and, therefore, some degree of uncertainty. In order to support her claim that a particular charge is warranted, the judge may draw upon one or more matters of fact, but these will be distinct from *the quaestio facti* that the jury will attempt to answer (which will result in a judgment of guilty or not-guilty). This same principle applies, I suggest, in the case of Kant's transcendental deduction of the categories. If I want to assert that 'fire causes heat', I will need to be in a position to respond to two kinds of question: I will need to show that I am justified in employing the concept of cause at all (and, perhaps that I am justified in employing it in this particular case), but even if I can show that I am justified in doing so, I will still need to show that my statement is *true*. Moreover, it is possible for me to determine the legitimacy of the judgment – fire and heat are extended in time, objects extended in time are subject to the category of substance, substances stand in causal relations to one another – without determining the truth of the judgment -perhaps fires are not in fact among the various causes of heat. Even after the arguments of the Transcendental Deduction have been made, then – even after I have shown that the category of causality is valid – there will still be a *quaestio facti* to answer in relation to any particular claim (i.e., a judgment of true or not-true). Even if I have determined the validity of the problematic concept of causality by way of a transcendental deduction, in order to determine the truth of the judgment I must nevertheless make an appeal to matters of empirical fact (i.e. I must resolve the *quaestio facti*). Conversely, no amount of empirical evidence will be sufficient to determine the truth of the judgment 'fire causes heat' unless I have established my right to employ the concept of causality (unless, that is, I have resolved the *quaestio juris*). Most importantly for my purposes here, responding to this *quaestio facti* will not be a matter for the philosopher, just as responding to the legal *quaestio facti* is not a matter for the judge. While transcendental logic does supply rules for the application of the categories in experience,[68] and thus has the advantage that it can be shown to apply to objects *a priori*,[69] making use of these rules, as will be seen in chapter three, nevertheless entails that we make judgments about matters of fact (for example that smoke always succeeds and never precedes, fire) for which no further rules can be prescribed. Determining the truth of such a judgment will therefore be a

[68] See A135/B174: 'Transcendental philosophy has the peculiarity that besides the rule (or rather the universal condition of rules), which is given in the pure concept of the understanding, it can also specifiy *a priori* the instance to which the rule is to be applied.". A further implication is that it is arguable that a complete response to the *quaestio juris* entails the arguments of the Analytic of Principles. For a more detailed account of this position see Thielke, 2006. Thielke argues that it is this prescription of rules for the application of the categories that distinguishes them from the so-called usurpatory concepts: 'The legitimate status of the categories stands in contrast to the usurpatory concepts "fate" and "fortune", since as Kant aims to show, the categories can be schematized while 'fate' and 'fortune' cannot.' (Thielke, 2006, p.456)

[69] See A135/B175: 'the advantage, which it possesses over all other didactical sciences, with the exception of mathematics, is due to the fact that it deals with concepts which have to relate to objects *a priori* and the objective validity of which cannot be demonstrated *a posteriori*'

matter for what Kant calls 'mother-wit' (A133/B172) – a judgment that is made on an individual basis or, perhaps, reached by a consensus of the scientific community.[70]

2.6 The quaestio juris and mathematics

Before concluding this chapter and turning to Maimon's criticisms of Kant's arguments in the Transcendental Analytic, I would like briefly to consider Kant's discussion of the *quaestio juris* in the context of mathematics. In a particularly intriguing passage from the introduction to the Transcendental Deduction, Kant suggests that a transcendental deduction of the form that he intends to carry out with respect to the categories, has already been carried out with respect to the concepts of space and time:

> [A]lthough it may be admitted that the only kind of deduction of pure *a priori* knowledge is along transcendental lines, it is not at once obvious that a deduction is indispensably necessary. We have already, by means of a transcendental deduction, traced the concepts of space and time to their sources, and have explained and determined their *a priori* objective validity. Geometry, however, proceeds with security in the knowledge that it is completely *a priori*, and has no need to beseech philosophy for any certificate of the pure and legitimate descent of its fundamental concept of space. (A87/B119-120)

It seems very likely that Kant is referring to the arguments of the Transcendental Aesthetic, where the status of space and time as *a priori* forms of intuition is supposed to have been established. When Kant writes that he has 'traced the concepts

[70] In fact, Kant himself alludes to this when he writes, in the Analytic of Principles, that 'judgment is a peculiar talent which can be practised only, and cannot be taught. It is the specific quality of so-called mother wit; and its lack no school can make good. For although an abundance of rules borrowed from the insight of others may indeed be proffered to, and as it were grafted upon, a limited understanding, the power of rightly employing them must belong to the learner himself; and in the absence of such a natural gift no rule that may be prescribed to him for this purpose can ensure against misuse. A physician, a judge, or a ruler may have at command many excellent pathological, legal, or political rules, even to the degree that he may become a profound teacher of them, and yet none the less, may easily stumble in their application. For, although admirable in understanding, he may be wanting in natural power of judgment.' (A133-134/B172-173).

of space and time to their sources, and … explained and determined their objective validity', the claim is that he has shown the object of the concepts of space and time to be *a priori*: he has 'traced' the origin of the concept and found that this origin lies in the subject, in the *a priori* form of intuition.[71] By Kant's own admission, however, a transcendental deduction is not strictly necessary in the case of mathematics because mathematical judgments are supposed to be self-evidently true *a priori*. It seems that there are two implications of this passage. There are implications for certain extreme regressive readings insofar as Kant's claim that a transcendental deduction is not strictly necessary because of the *a priori* truth of mathematical judgments suggests that the transcendental deduction of the categories, since Kant *does* deem it necessary, cannot proceed on the presupposition of synthetic *a priori* judgments in metaphysics or the natural sciences.[72] A second implication has to do with the nature of the *quaestio juris*. While the strategy in the case of the transcendental deduction of the categories is to show that concepts that are usually thought of as somehow derived from experience, in fact have their origin in the understanding, and in the activity of the understanding in unifying the manifold,

[71] It is interesting to note here that Kant talks of transcendental deduction primarily in terms of the origin of concepts: in the case of space, the origin of the concept is supposed to be the pure form of intuition. In the case of the Transcendental Aesthetic, however, a resolution of the *quaestio juris* entails that we say something about the origin of the *object* to which the concept is to apply, and not to the concept itself. This further reveals, I think, that the project of transcendental deduction need not necessarily rest upon determining the origin of *concepts* as Kant appears to think that it is, but instead on determining the legitimacy of *judgments*.

[72] This also, I think, poses problems for the interpretations that Melissa McBay Merrit offers (see McBay Merrit, 2010). According to McBay Merrit, the arguments of the Transcendental Aesthetic serve as a transcendental deduction because it identifies a corresponding intuitive content: 'The Transcendental Expositions, then, show that the concepts of space and time – as presented in the Metaphysical Expositions – do indeed refer to something real, something that actually exists' (2010, p.10). As I have argued, however, *that* the concepts of space and time have objective validity is already supposed, Kant thinks, to be self-evident in the case of mathematics. If all that the Transcendental Aesthetic has achieved is to establish this fact, then it remains unclear exactly what work it is really doing.

Kant's strategy in the transcendental deduction of space and time is, I propose, entirely the reverse. The conceptual foundations of mathematics are usually taken to derive, if they derive from anything at all, only from further, conceptual principles: in Kant's terms, mathematics is generally thought to be an analytic as opposed to a synthetic science. Kant's innovation, then, is to show that the warrant in the case of mathematical judgments is not in fact conceptual but intuitive: that the conceptual foundations of the *a priori* science of mathematics derive from something that is non-conceptual – the forms of intuition. In this way, then, the arguments of the Transcendental Aesthetic, insofar as they serve as a transcendental deduction of space and time, serve to establish the possibility of a particular kind of judgment: the synthetic *a priori*, and to show that mathematics constitutes a body of this kind of knowledge.[73] By extension, then, we can consider the arguments of the Transcendental Deduction, too, to establish the possibility of a body of synthetic *a priori* knowledge: the foundations of natural science. The transcendental deduction of the categories, then, establishes the *fact* of the objective validity of the categories, but in doing so it also establishes the conditions on the possibility of that fact. An analysis of Kant's claims about the nature of the transcendental deduction of space and time reveals, then, that the method of transcendental deduction serves a dual purpose: it establishes both *that* a particular concept or judgment is objectively valid (this is implied by Kant's claim that a transcendental deduction is not strictly

[73] This reading is supported, I think, by Kant's claim that 'In the course of this investigation [the Transcendental Aesthetic] it will be found that there are two pure forms of sensible intuition, *serving as principles of a priori knowledge*, namely space and time.' (A22/B36, emphasis added); and his description of the aims of the transcendental exposition of space: 'Geometry is a science which determines the properties of space synthetically and yet *a priori*. What, then, must be our representation of space, in order that such knowledge of it may be possible?" (A40/B40) and of time: "our concept of time explains the possibility of that body of *a priori* synthetic knowledge which is exhibited in the general doctrine of motion.' (A32/B49).

necessary in the case of mathematics) *and how* or *why* a concept or judgment is objectively valid (as is implied by his characterisation of the arguments of the Transcendental Aesthetic as a form of transcendental deduction) – a distinction that will later become important in understanding Maimon's posing of a *quaestio juris* in the context of mathematics.

2.7 Conclusion

There are two conclusions which I would like to draw on the basis of the above, and which will be key in the remainder of the dissertation:

1. A transcendental deduction serves two purposes: 1) it establishes *that* a particular concept or judgment has objective validity and 2) it establishes *why* or *how* that concept has objective validity. For this reason, then, a *quaestio juris* can be seen to pose two questions: it concerns the fact of objective validity, but it also concerns the conditions of its possibility.

2. The *quaestio facti* and the *quaestio juris* must both be resolved if the truth of a judgment is to be determined. A response to the *quaestio juris* is not necessarily dependent on a response to the *quaestio facti*, however, and it is therefore possible to determine the legitimacy of a judgment independently of its truth.

Further, however, my hope is that the above discussion will help to make sense of the diversity that characterizes the various interpretations of Maimon's skeptical arguments, which I will consider in chapters three and four. To assess Maimon's claims from the standpoint of a contemporary Kantian can be difficult because there is no singular Kantian standpoint from which to do so. We cannot make sense of Maimon's claim that Kant's transcendental idealism remains susceptible to skepticism along the lines '*quaestio juris*' unless we know which of the above forms of *quaestio juris* he has in mind. When Maimon raises the *quaestio juris* with respect to a concept, does he have in mind the objective validity of the application of concepts or judgments? And is the *quaestio juris* primarily a question of possibility, or of validity? Similarly, when he raises the *quaestio facti*, is he concerned with the question of how we come to acquire concepts within experience, with the derivation of the categories of the understanding from the pure forms of judgment, with the supposed objectivity of experience, or with the question of the *a priori* nature of the application of the categories? My intention in the next two chapters is to answer these questions, and to show that Maimon's skepticism does in fact pose a serious problem for Kant.

Chapter Three: Maimon's *quaestio facti* as a form of critical skepticism

At the end of the last chapter I concluded that the success of Kant's transcendental deduction of the categories need not necessarily rest upon a complete response to the *quaestio facti*. Skepticism about the legitimacy of concepts (which I will call critical skepticism[74]) is distinct from skepticism about the truth of any particular judgment which employs that concept (which I will call empirical skepticism). On Kant's argument in the introduction to the Transcendental Deduction, empirical concepts maintain their legitimacy even though we can never be certain that our application of them is correct. The concept of the Yeti, for example, may be subject to empirical skepticism – we may doubt that such a creature exists - while at the same time being resistant to critical skepticism – we may be justified in applying the concept because there are empirical warrants for doing so (the degree to which these warrants should be considered adequate is, in the terms of Kant's legal metaphor, a matter for the jury). Similarly, in the case of judgments involving the categories, these judgments can be legitimate and not, therefore, susceptible to critical skepticism, while at the same time being susceptible to empirical skepticism: we might, for example, hold that the category of causality is legitimate while at the same time remaining skeptical about the correctness of particular causal judgments – which is, after all, simply a matter of judgment. If we want to define this distinction more precisely, I suggest that the following general rule may prove helpful. In the case of empirical skepticism –

[74] It should be noted that my use of the term 'critical skepticism' here differs from 'critical skepticism' as characterised by Breazeale. See 1.3 of this dissertation.

i.e. skepticism of the form *quaestio facti* – a completed induction, or the totality of possible experience or of empirical facts, should be sufficient settle the matter. The skeptic about the existence of the Yeti should be considered an empirical skeptic because the totality of possible experience should provide us with a decisive answer one way or the other; the Yeti either exists or it does not. In the case of critical skepticism, however, the matter remains undecided *even if we are presented with the totality of possible experience*.[75] If I am skeptical about the objective validity of the concept of fate, for example, no amount of empirical evidence will be sufficient to reassure me because the relevant warrants cannot *in principle* be given to me in experience.

What really matters to Kant, as I hope I have shown in chapter two, is not empirical skepticism – he is not concerned with the question of whether fire causes heat – but critical skepticism – i.e., the question of whether we are justified in employing the category of causality at all. A consequence of this, and one which will prove important in the context of the present chapter, is that one does not necessarily have to respond to the *quaestio facti* in order to respond to the *quaestio juris*;[76] i.e., one does not have to show that our particular causal judgments are true – that they correspond to actual instances of causality - in order to determine that the application of the concept of causality is in general valid. Indeed, one need not necessarily hold

[75] Hume himself appears to make a similar point. See *Treatise of Human Nature* 1.3.6: 'It may be thought, that what we learn not from one object, we can never learn from a hundred, which are all of the same kind, and are perfectly resembling in every circumstance. As our senses shew us in one instance two bodies, or motions, or qualities in certain relations of success and contiguity; so our memory presents us only with a multitude of instances, wherein we always find like bodies, motions, or qualities in like relation. From the mere repetition of any past impression, even to infinity, there never will arise any new original idea, such as that of a necessary connexion; and the number of impressions has in this case no more effect than if we confined ourselves to one only'.

[76] This is a point that Henrich himself makes with respect to the Kantian legal analogy. See Henrich, 1989, p.36: 'It is important to realize … that the *quaestio juris* can be answered in a satisfactory way even if the *quaestio facti* meets with insurmountable difficulties'

that there are in fact any actual instances of causality at all, just as one can remain an empirical skeptic about the Yeti while at the same time holding that the concept has objective validity.

If Maimon's skepticism is to pose a real problem for Kant, it therefore seems that the skeptical concerns that it raises must be of the critical as opposed to the merely empirical kind; armed with the totality of possible experience, or armed with a completed induction, we should still not be in a position to respond to the Maimonian skeptic. While Maimon's skepticism is of the form *quaestio facti*, then, it must, if it is to be successful in undermining Kant's anti-skeptical arguments, be of the kind that *does* have consequences for Kant's response to the *quaestio juris*. In this chapter I argue that Maimon's skepticism is indeed of the critical as opposed to the merely empirical kind, insofar as a failure to resolve Maimon's *quaestio facti* does have implications for Kant's transcendental deduction of the categories, i.e., for his ability to respond to the *quaestio juris*.

3.1 The application of concepts in experience and the 'fact of experience'

Maimon mentions the *quaestio facti* explicitly only twice in the VT, and on both occasions his concerns appear to constitute empirical, as opposed to critical, skepticism insofar as he is concerned with the truth as opposed to the validity of judgments involving the categories. The claim appears to be that Kant gives us no reliable means of distinguishing between instances where a category (and in particular the category of causality) applies, and instances where it does not:

> I come now to the question *quid facti*? Kant mentions this merely in passing, but I hold it to be of great importance with respect to the deduction of the categories. Its meaning is this: how do we know from our perception that b succeeds a that this succession is necessary, whereas the succession of the very same b upon c (which is

> equally possible) is accidental? Kant indeed notes (and rightly) that the answer to this question depends only on the power of judgment and further that no rules can be given for this. (VT, GW II, 70-71)

> if I perceive something preceding and something necessarily following it (without looking to their matter, but to the particular determination of succession in general), then I judge that the succession of these objects one after the other is objective (whether the perception is itself correct amounts to the question *quid facti*? It is based only on the power of judgment and no further rules can be given for this) (VT, GW II, 128)

Maimon claims here that the *quaestio facti* is 'of great importance with respect to the deduction of the categories'. In both of the above passages, however, the *quaestio facti* with which Maimon is concerned seems to be one that is tangential to the deduction of the categories: that is, its resolution does not appear to serve as a premise of the transcendental deduction. Maimon himself seems to acknowledge this when he writes that 'Kant indeed notes (and rightly) that the answer to this question depends only on the power of judgment and no further rules can be given for this' and that 'whether this perception is itself correct amount to the question *quid facti*? It is based only on the power of judgment and no further rules can be given for this.', echoing Kant's own claim that determinations of truth or falsity are a matter for 'mother-wit'(A133/B172).[77] Why, then, does Maimon think that the *quaestio facti* nevertheless *does* pose a serious problem for Kant?

[77] Beiser, I think, (and to a lesser degree Peter Thielke – See Thielke, 2008) misinterprets Maimon on this point. According to Beiser, Maimon's claim is that Kant's transcendental deduction of the categories ultimately fails because Kant cannot give a complete account of when the categories should and should not be employed, so that we cannot be certain that our application of the categories is, in any instance, *correct*. See Beiser, 2003, p.236-237: 'Hume pointed out and Kant conceded, all that experience ever shows is constant conjunction. This means that in any specific case, we cannot be sure that the category of causality really does apply to our experience'. As I have argued, however, the success of the transcendental deduction is not, at least not straightforwardly, dependent upon Kant having established the *certainty* of particular causal judgments.

3.1.1 Kant's argument in the Prolegomena

The tendency in the secondary literature has been to argue that in raising doubts about the truth of particular kinds of empirical judgments, Maimon does ultimately seek to undermine the validity of the categories by placing the premise(s) of the transcendental deduction in question.[78] The claim is that Maimon takes Kant to merely presuppose the actuality of synthetic *a priori* judgments in the foundations of natural science (see for example Freudenthal, 2003 and Bransen, 1989), or that Maimon acknowledges that the categories are conditions on the possibility of objective experience, but doubts that our perceptions do in fact amount to objective experience (see, for example, Thielke, 2008 and Senderowicz, 2003). It is usually argued, however, that Maimon's argument rests upon misunderstandings about the nature of Kant's argument in the KrV. In particular, Paul Franks has argued that Maimon's understanding of the arguments of the Transcendental Analytic, like that of many of the other early post-Kantians, was heavily influenced by Johann Friedrich Schultz who was, in turn, heavily influenced by Kant's *Prolegomena.*[79] The arguments of the *Prolegomena* are, by Kant's own admission, regressive, or analytic, in contrast to the supposedly progressive, or synthetic, method of the KrV.[80] While in the KrV the application of the categories is shown to be a condition on the possibility of experience in general, in the *Prolegomena* it is shown to be a condition only on a particular kind of judgment, namely judgments of experience. 'While all judgments of experience', Kant writes, 'are empirical (i.e., have their ground in immediate sense

[78] See, for example, Thielke, 2008, Senderowicz, 2003; Freudenthal, 2003; Franks 2003; Bergman, 1967, chapter 4; and Bransen, 1989, chapter 4.

[79] See Franks, 2007; Franks, 2003, p.216; Franks, 2005, pp. 177-180

[80] See *Prolegomena,* Ak. IV, 263.

perception) … all empirical judgments are not judgments of experience' (*Prolegomena* §18). Judgments of experience, then, are a particular subset of empirical judgments. Kant contrasts these with what he calls 'judgments of perception' (ibid.):

> Empirical judgments, so far as they have objective validity, are judgments of experience; but those which are only subjectively valid, I name mere judgments of perception. The latter require no pure concept of the understanding, but only the logical connection of perception in a thinking subject. But the former always require, besides the representation of the sensuous intuition, particular concepts originally begotten in the understanding, which produce the objective validity of the judgment of experience. (*Prolegomena*, §18)

Judgments of experience make reference to a supposedly objective state of affairs (e.g. the sun warms the stone), while judgments of perception make reference only to subjective perception (the stone is warm). The claim is that the categories are employed in judgments of experience, but not in judgments of perception. According to Franks, Maimon thus takes Kant to merely presuppose that "we make judgments of experience, … which claim necessary and universal connections among sensible appearances" and to show that 'we could not make judgments of experience … unless we presupposed universal principles' (Franks, 2003, p.218). If the categories are valid insofar as their employment is a condition on the possibility of objective knowledge, then in order to doubt the objective reality of the categories Maimon need only claim that there are no true judgments of experience but only judgments of perception: to doubt 'whether we possess experiential propositions' (VT, GW II, 186). While we may think that we are justified in claiming that the sun warmed the stone, he argues, in fact we are only ever justified in claiming that we experienced the heat associated with the sun followed by the warming of the stone.

3.1.2 Kant's arguments in the Analogies

Considered in light of the arguments of the Analytic, however, Maimon's argument is generally thought to be problematic. Here I will briefly summarize the arguments of the Analytic, and of the Analogies in particular, before considering how Maimon's skepticism might apply to them. As discussed in chapter two, by the end of the Transcendental Deduction the adherence of all possible objects of experience to the principle of natural causality is supposed to have been established (either absolutely, according to progressive readings, or conditionally, according to regressive readings). The arguments of the Transcendental Deduction alone do not help us in determining the validity of particular employments of the concept, however, because we do not yet know what constitutes an object of experience: as Kant will later argue in the Transcendental Dialectic, for example, the application of the concept of substance to the subject is illegitimate because the concept can be legitimately applied only to objects that are extended in time, and we have no experience of the subject as extended in this way.[81] The Analytic of Principles is therefore intended to address this problem by establishing rules for the legitimate application of the categories, and the Analogies, specifically, are supposed to establish rules for the application of the categories of relation, including that of causality.[82]

Kant's argument in the Second Analogy is that '[a]ll alterations take place in conformity with the law of the connection of cause and effect' (A189/B232): we are entitled to apply the category of causality, then, whenever an alteration of a substance

[81] See KrV B412-413

[82] It is for this reason that Thielke argues that the *quaestio juris* is not satisfied in the Transcendental Deduction itself, but only after the arguments of the Principles. See Thielke, 2006.

occurs, or wherever there is taken to be objective as opposed to merely subjective succession. In order to prove that this is the case, Kant argues that the perception of objective as opposed to merely subjective succession is itself dependent upon the application of the category of causality; all perceptions are successive, and succession alone does not therefore necessarily entail alteration, or objective succession.[83] In order to distinguish objective succession (alteration) from subjective succession, we make use of the schematised category of causality - where the temporal relation between presentations is thought as necessary (i.e. where one must always precede and the other follow), the succession is taken to be objective; where it is thought to be contingent, the succession is taken to be merely subjective. Suppose for example, Kant argues, that I have two distinct experiences: one as I move around a house, viewing it from different angles, and another of a ship moving downstream. In the former case, although my perceptions are successive, I do not judge there to be an alteration in the house itself, but only in my perception of it. In the latter case, where my perceptions are again successive, I instead judge there to be an alteration in the ship itself - I take it to have moved downstream. In both cases all that I am presented in intuition is subjective succession. How, then, can I distinguish between objective alteration and mere subjective succession? Kant's claim is that I can do so only on the basis of the application of the category of causality (meaning that the category of causality necessarily has objective validity): if I take a temporal sequence to be determined with respect to which perception precedes and which succeeds (i.e. which is the cause and which the effect) then I judge the succession to be objective. If, on

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[83] See A189/B234: 'The apprehension of a manifold of appearance is always successive. The representations of the parts follow upon one another. Whether they also follow one another in the object is a point which calls for further reflection, and which is not decided by the above statement'

the other hand, I hold the relation between preceding and succeeding perceptions to be merely contingent, then I judge that the succession is merely subjective. In the case of the house, I could have moved around it differently, so that my perceptions of it arrived in a different temporal order. In the case of the ship, however, I could not: my perceptions of objective succession are somehow constrained.

Clearly a denial of judgments of perception will not, therefore, be sufficient to respond to the arguments of the Analogies, since even the judgment that 'the stone became warmer' will necessitate the application of the categories of relation, without which experience of objects such as stones and fires, which are taken to exist externally to us, would not be possible at all. In order to remain skeptical about the application of the category of causality in light of the arguments of the Analogies, then, it seems that Maimon must hold that we do not have objective experience at all; Maimon's claim must be that because our judgment that a particular temporal sequence is determined as opposed to contingent, is dependent upon induction, Kant remains susceptible to Humean skepticism.

Let us suppose, then, that this is in fact the Maimonian position. It may be the case that we are mistaken in thinking that there is such a thing as alteration at all; that all we are ever really presented with is contingent, and therefore subjective, succession; and that we are never justified in applying the concept of causality.[84]

[84] See, for example, VT, GW II, 187-188: 'Kant proves the reality of the concept of cause (or the necessity with which *b* follows *a*, but not the other way around, i.e., succession according to a rule) as follows: apprehension of the manifold of appearance is always successive (whether this is subjective or objective). So the objective can only be distinguished from the subjective by the perception that in the former case the sequence is necessary in accordance with a rule, but in the latter it is merely contingent. Now I maintain that a necessary sequence in accordance with a rule is not to be found in perception, i.e., I deny the fact: if a sequence is supposed to be necessary because I am unable to perceive one sequence while perceiving another, then it could not be distinguished from a merely contingent sequence, since the perception of one sequence during the perception of another is impossible in this case too.'

Since, for Kant, experience just is this determination of objective states of affairs by way of the application of the categories of relation to merely subjective succession, to deny that the categories of relation do in fact have such an application is to deny the 'fact of experience'. [85] Put in the terms of the Kantian example, with respect to the category of causality it may be that our perception only ever resembles that of the house, and not that of the boat: that there is no objective alteration. On this reading, then, Maimon is said to be skeptical either about the 'fact of experience' or the 'fact of synthetic *a priori* knowledge'.[86]

The success of this line of argument, however, is questionable. In order to see why this is the case it is, I think, helpful to draw on a distinction that Wayne Waxman makes with respect to the aims of the Analogies.[87] Waxman distinguishes his own reading, which he claims establishes the 'objective reality' (2003, p.64) of the concept of causality, from what he argues is a dominant but misguided reading, which takes the arguments of the Analogies to be concerned with establishing the 'epistemic indispensability' (ibid.) of the relevant concept. This latter reading (which I will call the 'epistemic reading') attempts to make sense of the Analogies in isolation from other arguments that Kant makes in the Analytic and which are concerned with objective reality. My intention here is not to argue in favour of one or other of these readings, but the distinction can, I think, help to shed light on the ways in which

[85] See B218-219: 'Experience is an empirical knowledge, that is, a knowledge which determines an object through perceptions. It is a synthesis of perceptions, not contained in perception but itself containing in one consciousness the synthetic unity of the manifold of perceptions. This synthetic unity constitutes the essential in any knowledge of *objects* of the senses'.

[86] For examples of the former see Senderowicz 2003 and Bergman, 1967. For examples of the latter see Freudenthal, 2003, p.148: 'Maimon's criticism of Kant's answer to the *quid facti* (i.e. whether we have synthetic judgments *a priori*) can be summarized thus: Suppose that we have *a priori* knowledge of necessary general principles or laws of nature; how could we know that the empirical cases we observe are instantiations of these?'.

[87] See Waxman, 2003, p.63.

Maimon's skepticism can, and cannot, pose a problem for Kant. On the epistemic reading, Kant responds to the Humean skeptic by showing that the application of the relevant concept is a condition on the possibility of objectivity insofar as it is only on the basis of the application of the concept that we are able to distinguish between subjective and objective at all. The Humean position is that an objective but non-causal succession (or a non-causal alteration in a temporally extended substance) is possible, and the argument of the second Analogy is therefore anti-skeptical insofar as it establishes that the skeptical position already presupposes the objective validity of the concept of causality. Clearly, on this reading, Maimon's skepticism as I have presented it so far need not pose a problem for Kant. As Thielke argues, 'it seems that Kant would agree with Maimon that there can be no *inference* from the subjective order of sensations to an objective order of states of the world' (2001b, p.443). Similarly, proponents of certain forms of the regressive reading will believe Kant's arguments to be equally unaffected by Maimon's skepticism. Lau, for example, holds Kant to establish second-order objective validity only on the basis of first-order objective validity: Kant's arguments concern the necessary implicit structures of our knowledge claims and do not, therefore, depend upon the objective *reality* of the relevant concepts.[88]

On Waxman's own reading, however, the arguments of the Analogies *are* intended to establish the objective reality of the relevant concepts, and a skepticism about this objective reality should therefore be of concern to Kant. Waxman's argument hinges on the Kantian claim that time cannot itself be perceived.[89] This, he

[88] I have made use here of the distinction between objective reality and objective validity that is advanced by Aaron Bunch (See Bunch, 2010).

[89] See A189/B233.

argues, implies that temporal and spatial properties can themselves be determined only on the basis of the application of the relevant concepts, so that the presentation of *any form of temporal succession* is already indicative of the objective reality of the concept of causality:

> ‘principles of pure understanding like the Analogies are supposed not simply to be valid of nature but to create it; that is, they not only hold of our experience of objects (as with Hume) but are constitutive of the objects themselves which make such experience possible. (Waxman, 1993, p.71)

Maimon’s skepticism is of relevance to this line of argument, then, but does it really pose a problem for it? It seems not. If Kant’s claim is that *a priori* concepts of the understanding are the means by which the synthesis of the sensible manifold in the imagination is first possible (i.e. that without this synthesis there could be no temporal determination at all), then Maimon appears to be mistaken in thinking that objects (or objective succession) might not be instantiated in experience: their instantiation in experience is already a condition on the possibility of even subjective succession. In neither case, then, does Maimon’s *quaestio facti* appear to constitute a truly critical skepticism. In the case of the epistemic reading, the question of the objective reality of objects is tangential to the question of their validity. On Waxman’s reading, the question of the objective reality of objects is bound up with the question of their validity, but Maimon fails to acknowledge that the arguments of the Analogies are supposed to ensure this objective reality.

3.2 The reality of the category of causality

So far it has seemed that Maimon’s *quaestio facti* line of argument does not pose significant problems for Kant – Maimon either misconstrues the aims of the Transcendental Analytic insofar as he takes it to be concerned with the objective reality of the categories, as opposed to their validity, or he misrepresents the arguments insofar as he fails to acknowledge that the categories are involved even at the level of intuition. I propose, however, that further examination of Maimon's argument reveals that his concerns extend beyond the instantiation of objects in experience, and that his skepticism *does* pose problems for both epistemic and ontological readings of the Analogies. Moreover, this line of skeptical argument, since it concerns the conditions of objectivity apples to *both* regressive and progressive readings.

In a passage which follows from his initial discussion of the *quaestio facti*, Maimon writes:

> Kant derives the concept of cause from the form of the hypothetical judgment in logic. But we could raise the question: how does logic itself come by this peculiar form, that if one thing *a* is posited, another thing *b* must necessarily also be posited? ... we do not come across it at all in this context where predicates are stated categorically of the subject and properties of the essence …So we have presumably abstracted it from its use with real objects, and transferred it into logic; as a result we must put the reality of its use beyond doubt before ascribing reality to it as a form of thought in logic; *but the question is not whether we can use it legitimately, which is the question quid juris, but whether the fact is true, namely that we do use it with actual objects*. (VT, GW II, 71-72 emphasis added)

This passage, among others, casts doubt, I suggest, on Senderowicz's claim that Maimon does not hold that 'Kant's conceptual *scheme of objectivity* is refutable, i.e., that there are other, conceivably true, schemes of objectivity, but rather that the concepts of *objective experience* and *objective judgment* might prove empty' (2003, p.177), and on Thielke's related claim that 'it is important to realize that Maimon does not deny that the concept of causality has any legitimate *meaning*; his point is only that we cannot demonstrate how it can be justifiably applied to particular instances.' (2008, p.604). As this passage reveals, the fact which ultimately stands in need of proof in order that the validity of the categories be determined is not the fact of the instantiation of categories of the understanding, but the fact of their being categories of the understanding at all. Maimon's claim is that, while certain *a priori* concepts or forms of judgment might determine how the manifold is taken up in conscious experience, we have no means of knowing that the concept of causality, at least as Kant defines it, is one of these.

Maimon's argument here depends upon a further line of argument that remains relatively underdeveloped in the VT and which concerns Kant's Metaphysical Deduction. In the introduction to that chapter, Kant claims that general logic contains 'the absolutely necessary rules of thought without which there can be no employment whatsoever of the understanding' (A52/B76). The aim of the Metaphysical Deduction is to show that the categories correspond to these universal forms of judgment. Once the Transcendental Deduction has determined that objects of experience, too, must conform to these forms if they are to be cognized by the subject, the objective validity of the categories will have been established. The argument of the Metaphysical Deduction is, therefore, key: if the categories correspond to, or derive from, basic and necessary forms of thought, then the synthesis of the manifold of intuition must occur by way of those forms of thought, and the categories must have objective validity. If, on the other hand, the categories can be shown not to be pure, but instead to derive from experience, then Kant's claim that they are employed in (or correspond to logical forms that are employed in) the original synthesis of the manifold, will be at best questionable; how can a form of thought that derives, at least in part, from experience nevertheless be employed prior to that experience and, further, be a condition upon it? And what right do we have to suppose that it has objective as opposed to merely subjective validity? Maimon's skepticism, I propose, exploits this weakness.

In order to establish that the category of causality has objective validity, we must determine that it corresponds to an *a priori* form of thought, namely the form of the hypothetical judgment. While Maimon agrees with Kant that the causal judgment does correspond to the form of the hypothetical judgment, he is skeptical about the objective reality of the hypothetical judgment itself. [90] If the hypothetical form of judgment is to be basic, Maimon argues, then we should employ it in the full range of judgments and not just those that are empirical. In fact, however, it seems that we make hypothetical judgments only with respect to empirical states of affairs:

> In the pure *a priori* sciences, such as mathematics, we never come across them [hypothetical judgments]; although I can say things like, 'if a straight line is the shortest between two points' this is only a peculiar manner of speaking, that in this case does not mean anything in particular (because it is tantamount to saying 'a straight line is…', which would in fact be a categorical judgment). It follows that hypothetical judgments must have been adopted *per analogiam* from somewhere else, where they do seem to mean something. But we come across such hypothetical judgments only in our judgments about natural events; and if this too is denied by claiming that in fact we do not have any judgments of experience (expressing objective necessity), but only subjective judgments (that have become necessary through habit), then the concept of a hypothetical judgment would be and would remain merely problematic. (VT, GW II, 183-184)

Hypothetical judgments are not made in the *a priori* sciences, and Maimon's argument is therefore that the legitimacy of hypothetical judgments is itself uncertain. We are, Maimon thinks, equally entitled to attribute the hypothetical judgment, as Hume attributes the causal judgment, to a psychological phenomenon – habit, or the association of ideas – as to an *a priori* form of judgment: '[i]t is merely an association

[90] See, for example, VT, GW II, 184: 'But we come across such hypothetical judgments only in our judgments about natural events; and if this too is denied by claiming that in fact we do not have any judgments of experience (expressing objective necessity), but only subjective judgments of experience (that have become necessary through habit), then the concept of a hypothetical judgment would be and would remain merely problematic'.

of perceptions,' Maimon writes, 'not a judgment of the understanding (VT, GW II, 73).[91] Maimon reiterates this point in the *Wörterbuch,* where he addresses 'the Kantian' directly:

> With regards to the natural sciences, one can apply only the forms of identity and contradiction a priori to objects [given] a posteriori (because they are valid of all objects in general). They therefore have their reality before the objects to which they are to apply. In contrast, the general forms have no reality in advance of their use, in which they are related to determinate objects. They therefore first attain their reality through their use; this use must therefore first be proven as fact. If one believes that David Hume is justified in doubting the use of these forms, so is he also justified in doubting their reality. Now the means by which we arrived at [these concepts] can be explained, however, through the principle of association. Consequently, you are not justified in taking their reality in the understanding as a new principle. Finally, your explanation is circular, in that you take these forms to be necessary conditions of experience, which you presuppose as fact, so that you can prove the reality of these forms. You must therefore show that the principle of association does not suffice to explain these forms. You must further show that these forms already have their reality in the understanding *a priori*. Or you must prove the fact, that we use them with objects of experience; if you want to overthrow the skeptical system. (*Wörterbuch*, GW III, 46-49)

Our ascription of reality to the form of the hypothetical judgment therefore depends upon our establishing the validity of its employment in empirical judgments: in showing, that is, that causality is a feature of *experience*. But this is precisely what the arguments of the Metaphysical Deduction, together with those of the Transcendental Deduction, are supposed to prove.[92]

In itself, we might think that Maimon's objection concerns a relatively minor point: it pertains to the details of Kant's table of categories, and a response to it is possible by way of relatively small adjustments rather than a complete reformulation

[91] See VT, GW II, 184.

[92] See also *Logik*, GW V 24: 'it is well known that the *Critique of Pure Reason* deduces the transcendental principle of causality from the logical form of the hypothetical judgment. Now, however, I have shown that this form has no meaning other than the categorical meaning, and that it is used in logic merely as a result of a deception with respect to its use'.

of the Kantian project.[93] It turns out, however, that the problem that Maimon identifies with respect to the category of causality is symptomatic of a wider issue. In the 'Short Overview of the Whole Work', Maimon writes that '[t]he table of the logical forms in judgments, and hence the table of categories as well, seem to me to be suspect' (VT, GW II, 183-184):

> What are assertoric and what apodictic judgments, and how are these kinds of judgments distinguished from one another? If mathematical axioms are assertoric judgments (because … we do not have any insight into the ground of their necessity *a priori*), then there are in fact no apodictic-categorical judgments because the axioms themselves are certainly categorical, but they are not apodictic. (VT, GW II, 184)[94]

By the time that he begins to develop his logic, Maimon is skeptical not only about the form of the hypothetical judgment, but about all forms of judgment with the exception those of quality.[95] Moreover, Maimon claims that it is not possible to derive transcendental from general logic, and that general logic should instead be derived from transcendental logic:[96]

> To conceive of these logical forms as containing their exact determinations in themselves, and as therefore independent of transcendental principles, has the consequence, that some of these forms have received no determinate meaning … and others [have received] an incorrect meaning. (*Logik*, GW V, 20-21)

> They [the critical philosopher] should first have searched for the reality of the principle of causality in transcendental logic; they would then have found that consciousness of its use cannot provide any proof of its reality, in that it can be

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[93] Maimon is by no means the only commentator to have questioned Kant's table of categories. For an assessment of Kant's table of categories with respect to more recent developments in logic, see Strawson, 1966, pp.45-47.

[94] In the *Antwort*, which was published in the same year as the VT, Maimon again appears to extend his skepticism beyond the category of causality, writing that 'a distinction needs to be made between the genuine logical forms and what are passed off as such forms in the logic books' (*Antwort,* p.62-63)

[95] See KA, 146, GW VI, 158: 'only the division of judgments according to their quality is a fundamental division'.

[96] It is worth noting that Kant himself acknowledged that the infinite judgment was particular to transcendental logic, and that in general logic the infinite and affirmative judgments are identical (see A71-72/B97) My claim here that Maimon holds that general logic derives from transcendental logic is at odds with Roubach's reading. See Roubach, 2003.

> explained as a deception of the imagination. This principle therefore remains a mere thought without any possible presentation, consequently the promised form also has no meaning' (*Logik*, GW V, 24)[1].

The *Logik* and the *Kathegorien des Aristoteles* (KA), both published in 1794, contain a more systematic analysis of the categories. In the KA, where he provides a 'Propaedeutic to a New Theory of Thought', Maimon addresses the categories of quantity, relation and modality in order to show that they are not, as Kant claim, basic, but instead merely derivative. Judgments of quantity, he claims, for example, 'have no philosophical origin and are taken from their use in general life. They are, in fact, abbreviated derivations or combinations of several judgments without any quantity' (KA, GW VI, 170). A complete account of Maimon's argument is, I think, unnecessary here, and requires an explanation of his 'principle of determinability', which I will not consider fully until chapter five.[97] My claim, however, is that Maimon's skepticism concerning the 'fact of experience', *when taken together with* his skepticism concerning the *a priori* status of the categories, does pose a serious threat to the Kantian project; if general logic is to be derived from transcendental logic, as Maimon thinks it must, then it must be proven that we do in fact employ the categories in the synthesis of the manifold – in Maimon's terms, we must determine 'whether the fact is true, namely that we do use [the relevant category] with actual objects' (VT, GW II, 72).

3.3. An alternative account of causality

With this amended account of Maimon's *quaestio facti* in mind, I turn now to a reconsideration of Kant's argument in the Analogies. Maimon sets the Kantian a

[97] See 5.2 of this dissertation.

challenge: to prove that we do in fact employ the category of causality in the constitution of objectivity, or experience. The reality of the categories is itself to be the basis for their enumeration. Proof of this reality cannot therefore depend upon the *a priori* status of the categories, or forms of judgment, and the arguments of the Analogies, in themselves and independently of the arguments of the Analytic more generally, must therefore determine the objective validity of the categories. As Waxman (2003) argues, on certain regressive readings the Analogies *can* be considered in isolation from the rest of the KrV. Perhaps, then, the Analogies themselves can provide a response to the Maimonian skeptic. The claim in the Analogies is that it is only by way of the concept of causality (i.e., the determination of perceptions with respect to which precedes and which succeeds) that experience of external objects is possible at all. If I do not apply this particular concept to my perceptions, it is argued, then I will take them to be merely subjective as opposed to objective. Maimon's skepticism can, I suggest however, respond even to these lines of argument. Maimon is skeptical about the Kantian account of causality insofar as he does not think that Kant is right in thinking that we *do* distinguish in this way in experience between cause and effect.[98]: 'we can only recognize the relation of cause and effect within objects of experience, but … we cannot have any cognition of the terms of this relation, i.e. which the cause is and which the effect' (VT, GW II, 222). In support of this claim, Maimon provides the following example: 'a body *a* moves towards a body *b*, collides with it, and sets it in motion as well' (VT, GW II p.220) According to the Kantian definition, the motion of *a* should be considered the cause

[98] Paul Franks, too, argues that Maimon is ultimately skeptical about Kant's definition of causality. See Franks, 2003.

of the motion of *b* because the perception of the motion of *a* necessarily precedes the perception of the motion of *b*. Maimon argues, however, that the motion of *a* is not in fact the cause of the motion of *b*, because it is only the *impact* of *a* and *b* that causes the motion of *b*: ‘had the motion of *a* begun only on its contact with *b*, then the motion of *b* would have had to have followed no less than it did in the present case, where the motion of *a* began prior to this contact’ (VT, GW II, 221). It is only at the exact point of impact, then, that the motion of *a* can be considered the cause of the motion of *b*. At this point, however, the two bodies are treated as one, with the kinetic energy divided between them upon their (re-)separation. Cause and effect, then, do not straightforwardly follow on from one another in the way that Kant thinks that they do: while in applied mathematics the transfer of energy between *a* and *b* is, for the sake of convenience, treated as an ‘impulse’ – energy being transferred from one object to another - in fact at the (infinitely small) moment of impulse there are not two bodies at all, or a distinct cause and effect, but instead only one, singular body.

Maimon instead offers an alternative to the Kantian account of causality: in order that we perceive that an alteration occurs in an enduring substance (i.e. in order to think that a succession is objective) the difference between successive states must be minimal. Maimon refers to this as the ‘principle of continuity’ (VT, GW II, 139):

> when we notice that something happens suddenly (without continuity), if for example a small child were to instantaneously turn into a giant, then we cannot persuade ourselves that it is the same thing and has only altered, rather we think they are different things (in this case where the difference is so great, the similarity does not matter); it is just as impossible for us to believe that Peter and Paul are the same person because the universal concept of person is identical in both of them, and were we to see before us first Peter and then Paul in his place, we would not judge that Peter had become Paul, but that Peter had disappeared and Paul taken his place (without us knowing how). This leads us to search for the cause of this appearance, i.e. the continuity in it, and to fill in the gaps in our perceptions in order to make them into experiences. *For what else is understood by the word “cause” in the doctrine of nature than the development of an appearances and its resolution, so that*

> *between it and the preceding appearance the desired continuity is found*. (VT, GW II, 139-140, emphasis added)[99]

If I am presented with minimal perceptual alterations, then I will attribute these to a single substance. If, however, I am suddenly presented with a discontinuity in this alteration, then I will not attribute this change to the same underlying substance. Perhaps I will instead assume that I have been presented with a different substance entirely – that I am now looking at a different object. Or I will attribute this sudden dramatic alteration to an external cause. This Maimonian alternative to the Kantian account may not be particularly convincing, but it is important to note that we do not have to accept the Maimon alternative in order to accept his general line of argument: if we can think of alternative means by which we might perhaps attribute objectivity to perceptions then we have no reason to favour Kant's account over any other.

3.4 Conclusion

In the introduction to the chapter, I argued that Maimon's *quaestio facti* argument could be considered successful if it amounted to a form of critical as opposed to merely empirical skepticism. On several different readings, Maimon's skepticism fails as a challenge to Kant, either because it does not constitute a form of critical skepticism, insofar as it concerns the correctness of particular applications of the concept as opposed to its validity, or because it fails to recognize the progressive nature of the arguments of the Transcendental Deduction. I propose, however, that

[99] See also VT, GW II, p.142-143: 'Since representations are always successive we cannot know whether the objects succeed one another in themselves as they do in our subject … But we can recognise this by means of the following distinguishing mark: when we find an appearance whose determination cannot be made continuous with the preceding determination of the very same appearance but only with that of another appearance, then we judge that the determinations do not follow one another (in the very same determinable) but that they are simultaneous (in difference determinables)'.

Maimon's argument as I have presented it here *does* constitute a form of critical skepticism and that it poses a serious problem for the Kantian project. The form of skeptical argument that Maimon presents concerns the legitimacy of the concepts themselves, as opposed to the correctness of any particular application of them. The claim is that there is no clear rational or empirical basis on which to determine the reality, and therefore the legitimacy, of the categories. If the reality of the categories is to be determined rationally then it must be determined that the form of the hypothetical judgment, for example, is necessarily employed in all rational thought – that it does not itself derive from experience, as Hume holds that it does. Alternatively, if the reality of the categories is to be determined empirically, then it must be shown that all experience is necessarily of the kind that requires their application: '[Kant] must further show that these forms already have their reality in the understanding *a priori*. *Or [he] must prove the fact, that we use them with objects of experience;* if [he] want[s] to overthrow the skeptical system.' (*Wörterbuch*, GW III, 48-49).[100]

[100] An understanding of Maimon's *quaestio facti* has, I think, important implications for our understanding of §1 of Fichte's 1794 *Wissenschaftslehre*, which Fichte himself claims serves as a response to the Maimonian skeptic. There, Fichte exploits key Maimonian insights – that transcendental logic does not derive from general logic but general logic instead derives from transcendental logic; and that the subject/object distinction therefore has its origins in the imagination, in order to respond to Maimon's own skeptical concerns. If we cannot straightforwardly derive experiential concepts from the pure form of thought itself, then we will need to identify a principle for their discovery. And this is exactly what Fichte finds, in the *Grundlage*, in the unity of the experiencing subject. For this reason, I think that it is misleading to take Fichte to be responding, as Thielke takes him to be (see Thielke, 2001a) to Maimon's concerns about Kant's cognitive dualism.

Chapter Four: Maimon's *Quaestio Juris* and the limits of rational determination

In the preceding, I have argued that Maimon's *quaestio facti* constitutes a distinct post-Kantian form of skepticism, and that this skepticism poses significant problems for Kant. To the degree that my arguments succeed, then, the central aim of the dissertation has already been accomplished. The aim of the present chapter, however, is to consider a further, and closely related, line of Maimonian skeptical argument: his *quaestio juris*. Maimon's *quaestio juris* and his *quaestio facti* are often taken to be two forms of skepticism (indeed, in chapter two I identified questions of the form '*quid facti*' with empirical skepticism, and questions of the form '*quid juris*' with critical skepticism). As will be seen, however, while Maimon's *quaestio juris* employs skeptical arguments, rationalism, as opposed to skepticism, is the intended outcome. Broadly speaking, Maimon is skeptical about the possibility of objectively valid mathematical and perceptual judgment on the presupposition of Kant's discursivity thesis, and, since he is convinced that we do in fact make objectively valid perceptual and mathematical judgments, he rejects the discursivity thesis. The *quaestio juris* that Maimon raises is thus of the 'how possible', as opposed to the 'what right' form discussed in chapter two.[101] A broader aim of this project will be to

[101] See 2.4 of this dissertation. This is most clearly illustrated by a footnote to the VT (GW II, 363-364): 'For Kant … the meaning of the question *quid juris?* is this: we know from experience that we connect forms of thought determined *a priori* with objects determined *a posteriori* in a necessary way, but so long as we cannot discover anything *a priori* in the objects, this is impossible, and so this connection a mere illusion. So what is this *a priori* that justifies us in treating it as real? As for me, I also take a fact as ground, but not a fact relating to *a posteriori* objects (because I doubt the latter) but a fact relating to *a priori* objects (of pure mathematics) where we connect forms (relations) to intuitions; and because this undoubted fact refers to *a priori* objects, it is certainly possible, and at the same time actual. *But my question is: how is it comprehensible?*' (emphasis added).

show that Maimon's *quaestio juris*, and the denial of discursivity that it involves, lays the foundations for a possible response to the *quaestio facti* such, I argue, as can be seen in the early formulations of Fichte's *Wissenschaftslehre*.[102] For the purposes of this chapter, however, my aim is to reconstruct this Maimonian line of argument, and to determine in what sense, and to what degree, it necessitates a denial of discursivity.

The structure of Maimon's *quaestio juris* closely resembles that of Kant's own response to a form of *quaestio juris,* namely the question of the validity of the categories. In the Transcendental Deduction, Kant establishes (at least the possibility of) the objective validity of the categories by arguing that what I will call 'intentional content' is, and must be, already rationally or conceptually structured: that this rational structure is 'a condition under which every intuition must stand *in order to become an object for me*' (B138).[103] Importantly, however, on Maimon's reading at least, Kant does not hold that it is possible, even in principle, for a discursive intellect such as our own to account for intentional content in *purely* rational terms: the understanding operates by way of concepts, and synthetic knowledge is warranted extra-conceptually. Maimon, like Kant, argues, by way of a *quaestio juris*, that perceptual content must already be rationally structured if it is to constitute intentional content. Maimon takes himself to differ from Kant, however, in that he holds that the understanding is active in determining the supposedly extra-conceptual, that is, both the spatiotemporal form, and the matter, or sensible content, of intuition.[104] Maimon therefore summarizes his own position as follows:

[102] See conclusion of this dissertation.

[103] By 'intentional content' here I mean to emphasize the fact of the content's being *for me*, i.e. an object (in the broadest sense) of conscious thought for a subject.

[104] Maimon's argument here therefore resembles recent debates in philosophy of perception concerning the role of so-called non-conceptual content. See, for example, McDowell, 1996. Maimon's position

> Kant maintains that the categories are conditions of experience, i.e., he asserts that without them we would have perceptions, but not experience (necessity of perception). By contrast … *I maintain that logical forms, along with the conditions of their use (given relations of objects to one another), are conditions of perception itself.* (VT, GW II, 214-215, emphasis added)

The question of whether this characterization of Kant's account of the relationship between concepts and intentional content is correct is one that has generated a great deal of debate in recent philosophy of perception. A wide range of positions have been attributed to Kant, including conceptualism (e.g. McDowell, 1994), non-conceptualism (e.g. Hanna, 2008), and various positions in between these.[105] Some of these readings, and in particular that advanced by Waxman (2013), are much closer to Maimon's own position than Maimon himself thought Kant to be. It is far beyond the scope of this dissertation to take any particular stand on this matter. My intention, then, is not to determine whether or not Maimon's characterisation of the Kantian position is correct, but instead only to understand the nature of Maimon's rationalism and the motivations for its adoption, with a view, ultimately, to understanding how this introduction of the infinite intellect might allow us to address the problem of the *quaestio facti*.

Maimon's position, then, is that rational explanation should, in principle, have universal legitimacy (although it remains to be seen whether there is a basis for distinguishing genuine, objective valid or productive, forms of rational determination from illegitimate or merely subjective forms of rational determination - I will consider this in chapter five). Let us call this thesis the 'principle of complete rational

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differs significantly from that of McDowell, however, in that Maimon *does* think that objectively valid mathematical and perceptual judgments are warranted extra-conceptually. He is able to take this stance because rational determination is not, in his eyes, equivalent to conceptual determination, as will be seen.

[105] For a detailed discussion of this debate see Ginsborg, 2008.

determination' (hereafter PCRD), and define it as follows: for any determination that is to constitute intentional content, it should be possible, in principle, to identify a rational ground. Maimon's argument can thus be summarized, I propose, as follows:

1) If sensible content is to become intentional content then it must warrant judgment
2) All judgments, even mathematical and perceptual judgments, are rationally warranted
Therefore: within the realm of the sensible intentional, rational explanation has universal scope

In this chapter I aim to reconstruct Maimon's *quaestio juris* and to make sense of the claim that its resolution requires that we adopt the PCRD. [106]

Before I do so, however, I would like to distinguish the reading I offer here from a number of other (dominant) lines of interpretation. My hope is that, as I present it here, Maimon's *quaestio juris* is less vulnerable than these readings to some common lines of criticism. Maimon's argument in support of the PCRD – that even mathematical or perceptual judgments are rationally warranted – is often characterized in the secondary literature (as I characterize it above) as a rejection of the discursivity thesis.[107] Maimon does indeed explicitly reject discursivity. In the KA, for example, he claims to 'reject merely discursive thought completely'(KA, X, GW VI, 10). There is however a danger in characterizing Maimon's line of argument

[106] My interpretation is here at odds with that of Franks and Thielke, who hold that Maimon's skepticism concerning the *quaestio facti* is a *consequence* of his 'dogmatic rationalism', or what Franks calls his commitment to infinite intelligibility. See Franks, 2003, and Thielke, 2014, p.84

[107] See in particular Thielke, 2001a.

in this way. In the contemporary context, to talk about Kantian discursivity is to talk about the distinct *sources* of knowledge – understanding and sensibility, or spontaneity and receptivity.[108] This is to a large extent a product of the centrality that Allison places on the discursivity thesis, which he characterises in these terms.[109] It is tempting here, then, as often happens in the secondary literature, to formulate Maimon's skepticism in terms of this dualism of faculties – specifically, as concerning the possibility of interaction between them – or of the possibility of reconciling spontaneity with receptivity. The problem, so this reading goes, is that faculties that are as distinct as understanding and intuition are supposed to be, should not be able to interact in a way that would make experience possible. Thus Beiser writes, for example:

> The most striking problem posed by Kant's dualism, Maimon argued, is that it seems impossible for such heterogeneous faculties as sensibility and understanding to interact with one another. The understanding is a purely intellectual faculty, which is active and beyond space and time; and sensibility is a strictly empirical faculty, which is passive and within space and time. But if these faculties are so unlike, then how do they interact? (2003, p.235)

And Thielke:

> 'Behind the discussion of space and time' he writes, 'lies the more central issue of the *heterogeneity* of the faculties which […] forms the core of Maimon's objections to Kant. At stake is the question of whether *separate* faculties can nevertheless interact so as to produce experience.' (2001, p.90)

On this reading the Maimonian solution is to deny that there is any real distinction between the faculties: there is no sensible given, because there is no

[108] See A15-16/B29-30: 'there are two stems of human knowledge, namely, sensibility and understanding, which perhaps spring from a common, but to us unknown, root. Through the former, objects are given to us; through the latter, they are thought. Now in so far as sensibility may be found to contain a priori representations constituting the condition under which objects are given to us, it will belong to transcendental philosophy.'

[109] See Allison, 2004.

distinct faculty of receptivity and the understanding is in fact entirely productive of reality.[110] Let us call this the 'cognitive dualism' reading.

One problem with reading Maimon in this way is that we run the risk of attributing to him a form of 'rational psychology' of the kind that Schulze's skepticism appears to presuppose, and against which Kant warns us in the Paralogisms.[111] The ascription of concepts such as substance or causality to entities that are not extended in time is illegitimate, and it is therefore a mistake to think that an 'interaction' between distinct faculties must adhere to the usual metaphysical laws of physical interaction. More importantly, however, it appears to attribute a transcendent status to the faculties – one which Kant himself, as Franks argues (2003), is explicit in rejecting; he writes in the introduction to the KrV for example, that sensibility and understanding, may 'perhaps spring from a common, but to us unknown, root'. (A15-16/B29-30). If Maimon's *quaestio juris* is to pose a serious problem for Kant, it cannot therefore concern the distinct origins of the sensibility and understanding, but must instead reveal problems that are internal to Kant's transcendental idealism; it must be made on the basis of what is available to us in experience and not on the basis of an inference to transcendent states of affairs. Fortunately, it is, I think, possible to read Maimon's skepticism as internal to the Kantian framework in this way.[112] Further, I think that Maimon's own criticisms of

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[110] Maimon's treatment of the given is sometimes also thought to be a consequence of his treatment of the thing in itself. See, for example, Herrera, 2010. While Maimon is skeptical about the Kantian thing-in-itself, I think that his rejection of a determinate is a product of more than this skepticism, for the reasons discussed here.

[111] See A381-383

[112] It is interesting to note here that Maimon himself appears to allow for the possible of a given *even in the case of an infinite understanding*: 'the given intuited by an infinite understanding is either an *objectum reale*, signifying something present in the infinite understanding, but not thought by it (*this does not contradict its infinity because this consists only in the ability to think everything that is thinkable and the given is by its nature not thinkable*); or the given is a mere idea of the relation of the

Schulze's skepticism mean that we should.[113] Maimon criticizes Schulze precisely because he attributes a transcendent status to the subject/object distinction, which suggests that Maimon himself was aware of the problems associated with these lines of argument.

While Allison's account constitutes one way of characterising Kant's discursivity thesis, an examination of Kant's use of the term allows of a subtly different reading. Kant's refers to 'discursivity' relatively infrequently in the KrV. Where he does use the term, however, it is used not (or at least not directly) to designate knowledge that involves distinct faculties, or distinct sources of content, but instead to designate thought that happens by way of concepts. In the Metaphysical Deduction Kant writes, for example:

> [t]he knowledge yielded by understanding, or at least by the human understanding, must therefore be by means of concepts and so is not intuitive, but discursive. Whereas all intuitions, as sensible, rest on affections, concepts rest on functions. By 'function, I mean the unity of the act of bringing various representations under one common representation. (A68/B93).

The claim here is that the human understanding can itself act only insofar as it subsumes an already given perceptual manifold under concepts. This identification of discursivity with merely conceptual thought occurs again in the Postulates, where Kant writes that 'other forms of intuition than space and time, other forms of understanding than the discursive forms of thought, *or of knowledge through concepts*, …' (A230/B283), the implication again being that a discursive intellect is

concept to something outside it, which in itself is merely a modification of the understanding.' (VT, GW II, 251, emphasis added).

[113] See 1.3.1 of this dissertation.

one that merely subsumes under concepts;[114] and, most importantly for the purposes of this chapter, in the Discipline of Pure Reason:

> 'in algebra by means of a symbolic construction, just as in geometry by means of an ostensive construction (the geometrical construction of the objects themselves), we succeed in arriving at results which discursive knowledge could never have reached *by means of mere concepts*' (A717, B745, emphasis added).[115]

> 'in the above [just cited] example, we have endeavoured only to make clear the great difference which exists between the discursive employment of reason *in accordance with concepts* and its intuitive employment by means of the construction of concepts' (A719/B747).

It is at least possible, I suggest therefore, to conceive of a rejection of discursivity that does not involve any appeal to transcendent states of affairs, such as the claim that sensibility and intuition are ontologically, or as Franks puts it 'really' as opposed to merely 'modally', distinct (2003, p.209). When Maimon claims to 'reject merely discursive thought completely', we should, I propose, conceive of this rejection of discursivity as a denial that the capacities of the human understanding are limited to the purely conceptual. Maimon rejects discursivity because he does not think that we are able to account for the possibility of mathematical and perceptual judgments if we suppose that the capacities of the understanding are merely conceptual; such judgments, if they are to be objectively valid, Maimon argues, are dependent upon the understanding's having what I will term an 'extra-conceptual' capacity.[116] Since Maimon thinks that we do make objectively valid mathematical

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[114] See also A256/B311: 'we cannot in the least represent to ourselves the possibility of an understanding which should know its object, *not discursively through categories*, but intuitively in a non-sensible intuition' (emphasis added);

[115] See also A719/B747: 'It would therefore be quite futile for me to philosophise upon the triangle, that is, to think about it discursively'

[116] In fact, as will be seen, concepts are, for Maimon, mere abstractions that do not have a legitimate application: it is only the relation between concepts that has objective validity.

and perceptual judgments, he therefore concludes that our intellect cannot be merely discursive.

If I am to make the case for this reading, however, there is a particularly well-known passage from the VT that I will need to make sense of. In chapter two, Maimon appears to equate the *quaestio juris* with the Cartesian mind-body problem:

> If we want to consider the matter more carefully, we will find that the question *quid juris*? is one and the same as the important question that has occupied all previous philosophy, namely the explanation of the community between soul and body. (VT, GW, II, 62)

As it is characterised here, it seems that the problem *is* primarily one of interaction between distinct substances. As Franks puts it, Maimon appears to 'misrepresent [Kant's dualism] as a new version of the Cartesian real distinction, with all the attendant and perhaps insoluble problems about the possibility of interaction' (2003, p.212). An examination of the remainder of the passage lends support, however, to an alternative reading. Just a few lines later, Maimon writes that: 'the question of the explanation of the soul's union with the body reduces to the following question: how is it conceivable that *a priori* forms should *agree* with things given *a posteriori*?' (VT, GW II, 62-63). Here, the question is not how distinct faculties interact, but instead how *a priori* concepts can be instantiated in objects given *a posteriori*, or, alternatively, how the *a posteriori* can warrant judgment. Maimon's argument is that it is only by reference to a non-discursive employment of the understanding that we are able to make sense of extra-conceptual warrant.

What, then, is this extra-conceptual capacity of the understanding? And in what sense can it warrant judgments and thus determine intentional content? Maimon's position, as I hope to show here, is that it is only be way of 'ideas of the understanding', which exceed what can be given or constructed in intuition, and what can be arrived at by way of concepts, nevertheless serve to warrant mathematical, experiential and perceptual judgments, and thus play a constitutive role in determining intentional content. Maimon's argument in favour of the constitutive role of ideas of the understanding is made on the basis of the insufficiency of sensible content itself in warranting perceptual judgment, and the insufficiency of mathematical construction in warranting mathematical judgment.

4.1 If sensible content is to become intentional content then it must warrant judgment

The first premise of Maimon's argument - that sensible content must warrant judgment if it is to become intentional content - remains relatively implicit, and Maimon offers little in the way of support for it. It does, I think however, have its basis in the KrV. In the Transcendental Deduction, for example, Kant can be seen to employ precisely this line of argument; if perception is to be unified – if it is to be taken up in thought and to be thought as belonging to a singular subject (i.e. if it is to constitute intentional content) - then there must be an act of judgment by way of which it is taken up. It is beyond the scope of this chapter to offer a complete reconstruction of Kant's argument in the Transcendental Deduction, but the following passages are, I think, sufficient to support my claim here. That synthetic unity is a condition on the possibility of (at least a certain kind of) intentional content is argued for in §17 of the Transcendental Deduction, where Kant writes:

> The synthetic unity of consciousness is, therefore, an objective condition of all knowledge. It is not merely a condition that I myself require in knowing an object, but is a condition under which every intuition must stand in order to become an

> object *for me*. For otherwise, in the absence of this synthesis, the manifold would not be united in one consciousness. (B138, emphasis added)

That this synthetic unity can only occur by way of judgment is then argued for in §20:

> The manifold given in a sensible intuition is necessarily subject to the original synthetic unity of apperception, because in no other way is the *unity* of intuition possible (§17). *But that act of understanding by which the manifold of given representations (be they intuitions or concepts) is brought under one apperception, is the logical function of judgment*. (B143, emphasis added)

The claim here is not only that judgment is a condition on the possibility of objective knowledge, but that consciousness of the manifold itself is dependent upon judgment; if perceptions are to become content *for me,* then I must judge with respect to them. It is, as discussed in chapter two, by means of this line of argument that the objective validity of the categories is supposed to be established; the categories correspond to the forms of judgment by means of which we judge with respect to the manifold, i.e., by means of which synthetic unity in the manifold is possible and, therefore, by means of which sensible content can stand as intentional content.[117] These categories can therefore be applied legitimately to intentional intuitive content.[118]

The closest Maimon himself seems to get in the VT to an explicit commitment to judgment as a condition of intentional content is a passage in chapter two, where he writes that an object of thought:

> requires two parts: 1) Matter of thought … 2) Forms of thought, i.e., those universal rules or conditions themselves *without which the given can still be an object (of intuition) but not an object of thought: for thought is judging* (VT, GW II, 48, emphasis added)

[117] I have deliberately left open, here, the question of whether the matter of intuition is, for Kant, already spatiotemporally structured prior to this act of synthesis. See 3.1.2 of this dissertation.

[118] See Pippin, 1976, p.158-159: ‘A manifold, just as a manifold, is always “uninterpreted”, and becomes interpreted only when “thought”, only when the rule is applied’.

In the introduction to the VT, Maimon has already claimed that 'all human activities are, as such, simply more or less thinking' (VT, GW II, 1), and the claim in the above passage that 'thought is judging', and that in the absence of judgment 'the given can still be an object (of intuition) but not an object of thought' is, I think therefore, equivalent to the Kantian claim that judgment is a condition on an intuition being an object *for me*.[119] If content (e.g. a 'given' content or an intuition) is to become intentional content - i.e. content *for me*, then I must judge with respect to it.[120]

4.2. The Transcendental Schematism and experiential judgments

It seems, then, that Maimon and Kant are in agreement that it is only by warranting judgment that perceptual or mathematical content can become intentional content (i.e. content *for me*). Maimon takes himself to differ from Kant, however, in that he holds that judgments can only be rationally warranted, and that intentional content must therefore, ultimately, be rationally grounded. Since synthetic judgments are warranted extra-conceptually, the determination of intentional content must therefore involve a non-discursive employment of the understanding.

Maimon's denial of discursivity takes its lead from an argument that Kant himself makes in the Schematism. If the aim of the Transcendental Deduction is to determine that the categories are objectively valid insofar as they are conditions on the possibility of objectivity itself, then the aim of the Analytic of Principles, of

[119] I do not offer a defence of this thesis here and am content, for the purposes of this project, if I am able to show only that the conditional holds, i.e. that *if* premise 1 holds, *then* the PCRD has universal scope within the realm of the intentional.

[120] This is, I think, further supported by Maimon's later claim in the *Logik*, that: 'Logic is the science of thought. Thinking is the activity of the subject, by way of which, under the presupposition of the identical unity of the subject in the consciousness of the manifoldness of the objects given to thought, an objective unity of this manifold is manifest'. (*Logik*, GW V, 70)

which the Schematism is a part, will be to determine exactly what should serve as a warrant for the application of the categories in experience, i.e. what should count as objective. This should have the advantage both of securing a domain of legitimate application for the categories, and of excluding the legitimacy of their application in other domains (in theology for example). Kant's Schematism chapter in particular serves as an explanation of *how* it is that concepts which are to have a subjective origin can nevertheless apply, and apply *a priori*, to objects that are given in experience (i.e. given *a posteriori*). '[I]n all subsumptions of an object under a concept', Kant writes, 'the representation of the object must be *homogeneous* with the concept; in other words, the concept must contain something which is represented in the object that is to be subsumed under it' (A137/B176). In order that there be an intuitable warrant for the application of the categories, it is necessary that they be schematized: that the imagination produce, by means of them, a spatiotemporal schema which is in some sense homogeneous with the representations themselves. [121] Since the concept is *a priori*, it cannot entail any empirical content. its schema, and its application cannot therefore be warranted by (i.e. it cannot apply directly to) the matter of intuition. Kant is able to account for the possibility that *a priori* concepts are employed in empirical judgments, however, because he holds that the categories apply to temporal determinations and that, since time is an *a priori* form of objects, the schema is both constructible *a priori* and homogeneous with the *a posteriori* intuition. In this way, then, an *a posteriori* intuition can warrant the application of an

[121] It is sometimes claimed that the categories are already in some sense schemata. See, for example, De Boer, K., 2016. It is my view, however, that Kant's claim in the introduction to the Analytic of Principles, that the categories are conditions of all conceivable experience, while alternative forms of intuition to those that we possess remains possible, suggests that the categories themselves must stand independently of the particular forms of intuition that we possess, and must therefore be independent of the particular schemata offered in the KrV.

a priori concept; the imagination is able to construct the relevant schema (i.e. the temporal form) in accordance with the concept, and the schema can then be compared to the empirical intuition.[122] Because empirical intuitions are already spatiotemporally structured (as has been argued in the Transcendental Aesthetic), the schema and the empirical intuition are homogeneous and the judgment can be warranted on the basis of their (formal) identity. Maimon thus characterizes Kant's *quaestio juris* as follows:

> for Kant … the meaning of the quaestio juris is this: we know from experience that we connect forms of thought determined a priori with objects determined *a posteriori* in a necessary way, but so long as we cannot discover anything a priori in the objects, this is impossible, and so this necessary connection a mere illusion. So what is this a priori that justifies us as treating it as real? (VT, GW II, 363).[123]

And:

> this determination of the effect by the cause cannot be assumed *materialiter* (as when I say: a red thing is the cause of a green one, and the like) because then the question arises: *quid juris?* i.e. how is it conceivable that *a priori* concepts of the understanding like those of cause and effect can provide determinations of something *a posteriori*; these determinations must rather be assumed *formaliter*, i.e. with respect to the common form of these objects (time) and their particular determinations in this form (the one as preceding and the other as following) because then these concepts of cause and effect are determinations of something *a priori*, and hence determinations of the objects themselves (since objects cannot be thought without these concepts). (VT, GW II, 41)

[122] See A135-136/B175: 'Transcendental philosophy has the peculiarity that besides the rule (or rather the universal condition of rules), which is given in the pure concept of understanding, it can also specify *a priori* the instance to which the rule is to be applied. The advantage which in this respect it possesses over all other didactical sciences, with the exception of mathematics, is due to the fact that it deals with concepts which have to relate to objects *a priori*, and the objective validity of which cannot therefore be demonstrated *a posteriori*, since that would mean the complete ignoring of their particular dignity. It must formulate by means of universal but sufficient marks the conditions under which objects can be given in harmony with these concepts. Otherwise the concepts would be void of all content, and therefore mere logical forms, not pure concepts of the understanding'.

[123] See also VT, GW II, 64: 'According to the Kantian system it is inconceivable by what right we connect a concept of the understanding (of necessity) to determinations of an intuition (of temporal sequence). Kant certainly tries to get around this difficulty by assuming that space and time and their possible determinations are *a priori* representations in us, and therefore that we can legitimately ascribe the concept of necessity, which is *a priori*, to determined succession in time, which is also *a priori*.'

Maimon's position, however, is that the application of the categories to *a posteriori* intuitions remains problematic because the relevant schema entails more than can be given by means of the form of intuition alone. Thielke offers a helpful analysis of Maimon's argument here. Thielke discusses Maimon's skepticism with respect to the category of causality in particular. While he has an epistemic reading of the Analogies[124], the argument that he advances is applicable to both forms. The problem arises because the criterion for the application of the category of causality is (supposed to be) the irreversibility of presentations. Kant discursivity thesis, however, leaves him unable to specify *how* irreversibility should be determined: 'In what way, Maimon asks, can we account for the constraint upon which the irreversibility thesis depends? What exactly is it that constrains us to consider a succession as irreversible?' (Thielke, 2001b, p.446). The application cannot depend upon the order of the presentations, since (on Thielke's epistemic reading) the whole point of Kant's argument in the Analogies is to show, against Hume, that objective order is '*imposed upon* the order of succession' (Thielke, 2001b, p.443). This, however, leaves only two options: either the application of the category of causality is made on the basis of the *matter* of intuition, or the application of the concept is entirely arbitrary. Kant's argument in the Schematism is that the matter of intuition *cannot* serve as a warrant for the application of the categories precisely because of the discursivity thesis – because it is merely given. The application of the category can only be, therefore, arbitrary.

The ontological interpretation of the Analogies avoids the problem that Thielke identifies to some extent, but the problem, I suggest, resurfaces at another

[124] See 3.1 of this dissertation

level. On the ontological reading, the imagination must produce a spatiotemporal manifold on the basis of rules either that it prescribes for itself, or that are prescribed for it. If the imagination either prescribes rules for itself or has rules prescribed for it by the understanding, the application of the concept of causality must be merely arbitrary and completely independent of the matter of intuition. On the other hand, however, it is difficult to see how the rules for the application of the concept of causality could be given along with the matter of intuition. The matter is, after all, merely sensible and not intellectual – it should not be capable of giving rules for its own synthesis. Again, then, it seems that the application of the category of causality must happen either entirely arbitrarily, or according to rules that are completely independent of the matter of intuition, so that intuition adds nothing to the *truth* of causal judgments, but only to our conscious awareness of them; if I say, for example, that 'fire causes heat', this *particular* judgment is not arrived at by way of experience, but is in fact already a condition on the possibility of experience and only brought to consciousness through it. Maimon's position, then, is that those judgments by way of which perception can become intentional content *already* involve some reference to the matter of intuition. It is not sufficient, therefore, if perceptual content is to become intentional content, that judgments are made with respect to temporal form; in order that perceptual content become intentional content it seems that we must first judge with respect to the matter of intuition.

4.3 Perceptual judgment and empirical concept acquisition

So far, the *quaestio juris* has arisen with respect to a particular subset of judgments - those that involve *a priori* concepts. The problem arises with respect to these concepts in particular because, as discussed in chapter two, the concepts are heterogeneous with the intuition. The Schematism is required, then, in order to make sense of the possibility of warranting the application of these concepts experientially; spatiotemporal schemata are produced by way of the understanding and compared to the objects of experience which, too, are spatiotemporal. This is possible because space and time are *a priori* forms of intuition, and the production of spatiotemporal schemata is therefore possible. Maimon's position, however, is that a *quaestio juris* arises even in the case of empirical concepts. How, then, should we make sense of this claim?

On first glance, it does not appear that there is any problem of heterogeneity in the case of empirical concepts; because the concept is derived from experience it already contains the relevant empirical determinations. I arrive at the concept of snow, for example, by way of repeated exposure to a coincidence of a number of intuitable properties: coldness, whiteness, etc. My concept of snow just is a coincidence of these properties, then, and there is no problem of heterogeneity when I come to apply the concept in the future. The *quaestio juris* that Maimon has in mind in the case of empirical concepts, however, pertains not to our application of them, but instead to their *acquisition*. In order that I am able to acquire the concept 'snow', the particular determinations that make up the concept (coldness, whiteness, etc.) must first form part of the intentional content of my experience. Maimon's position, however, is that in order that these empirical determinations form part of the intentional content of my experience, it is first necessary that I judge with respect to them. I must be in a position to distinguish cold from hot, for example. As will be seen, Maimon's argument is that a non-discursive employment of the understanding (in the form of ideas of the understanding) is a condition on the possibility of judging with respect to particular sensible determinations.

On at least some readings, Kant thinks that empirical difference is something which can be given sensibly; my experience of red is distinct from my experience of green because the sensible experience is different – I do not have to form a concept of this difference in order to perceive the different sensible qualities, but am able to perceive the qualities themselves directly. In fact, the *concept* of difference, for Kant, is a concept of reflection – a concept which we arrive at only by way of comparison of already acquired concepts, and intuitions that already constitute intentional content (A260/B316). Maimon does not think, however, that the Kantian account can explain how it is that particular empirical determinations become intentional content. It is for this reason that he argues that the concepts of reflection, which play a relatively minor role in the KrV, have logical priority with respect to the categories: that they are 'the highest (most universal) forms of thought' (VT, GW II, 130). Maimon's argument depends, in part, upon the claim that my ability to form a concept of a particular empirical determination is dependent upon my ability to compare that determination to other, similar, determinations, and in doing so to recognise the ways in which it differs. In order that 'redness' itself stand as intentional content such that I can form an empirical concept of it, in other words, I first need some frame of reference; I can form of concept of 'red' only if I am also presented, or at least have been presented, with a not-red:

> When a perception, for example red, is given to me, I do not yet have any consciousness of it; when another, for example green, is given to me, I do not yet have any consciousness of it in itself either. But if I relate them to one another (by means of the unity of difference), then I notice that red is different from green, and so I attain consciousness of each of the perceptions in itself. If I constantly had the

> representation red, for example, without having any other representation, then I could never attain consciousness of it. (VT, GW II, 131-132)

So far this is not necessarily incompatible with Kant's own position: perhaps it is true that we are unable to acquire an empirical concept of a particular sensible determination unless we have also been presented in intuition with its negation, but this does not in itself mean that a rational ground must underlie the sensible difference. Perhaps, in other words, it is sufficient, in order that I acquire an empirical concept of red, that I am presented in intuition with red and with green.

It is at this point, however, that Maimon's raises his *quaestio juris*: 'if I say that red is different from green,' he writes, 'then the pure concept of the understanding of the difference *is not treated as a relation between the sensible qualities* (for then the Kantian question *quid juris*? remains unanswered)' (VT, GW II, 32, emphasis added). Maimon's position, then, is that the difference between two empirical determinations, e.g. red and green, that is itself a condition on our being able to acquire concepts of them, cannot be sensibly given.[125] This claim is central to Maimon's rejection of discursivity. The difference cannot be arrived at in reflection, by way of the comparison of the relevant concepts in the way Kant describes in the Amphiboly, because the difference is itself supposed to be a condition on our ability to acquire the relevant concepts in the first place. This being the case, however, if the difference cannot be given sensibly either, then it seems that Kant's discursive model of the intellect is ill-equipped to account for the possibility of perceptual judgment and thus perceptual intentional content. Maimon supports the claim that difference cannot be given sensibly as follows:

[125] Maimon's arguments here bear similarities with the arguments Hegel later makes in the *Phenomenology of Spirit* (See Hegel, 1807, pp.58-66).

> if I judge: red is different from green, then I imagine first red in intuition and then green; afterwards I compare the two with each other, and from this the judgment arises. But how are we to make this comparison comprehensible? It cannot happen of its own accord during the representation of red and the representation of green; it does not help if someone says the imagination reproduces the first representation along with the second because they cannot flow together into one representation; and even if this were possible there would still be no comparison and for the very same reason. (VT, GW II, 44-45)

If I am presented in intuition with red and green I am not yet, merely by way of this successive presentation, presented with the difference between them. I am not yet, then, in a position to experience them as different. In order to do so, I must somehow compare them: I must hold them together in thought simultaneously in order to become conscious of the difference. In order for this to happen sensibly as opposed to conceptually, however, the different sensible qualities would have to be presented to me simultaneously and in the same space. We cannot, however, represent the sensible qualities in this way.[126] The sensible content cannot itself, therefore, warrant a judgment of difference; there must instead be an act of *thought* by way of which comparison of the sensible qualities is possible.

Maimon's position, then, is that the means by which red and green (or any other perceivable differences) are differentiated must be formal as opposed to material. There are two possibilities, therefore. Either judgments of difference with respect to empirical content are warranted intuitively, in which case sensible difference is determined by formal, as opposed to material, intuitive determinations, or such judgments are warranted rationally, i.e., by determinations of the

[126] In fact, Maimon thinks that this is the case with respect not only to sensible content, but also to sensible form: 'it is even more striking with disjunctive judgments: for example, a triangle is either right-angled or oblique-angled; if we suppose that this judgment becomes possible in the first place by means of intuition, then we must first bring a right-angled and then an oblique-angled triangle into intuition. But how can this judgment be comprehended, for these predicates are mutually exclusive and yet it is supposed to be possible to think both at the same time in the same subject?' (VT, GW II, 45)

understanding.[127] I will consider the former possibility shortly. I want first here though to, briefly consider the implications of the latter. Since, on Maimon's account at least, empirical judgments of difference are a condition on the possibility of empirical concept acquisition, the relevant warrant in the case of judgments with respect to empirical content cannot itself be conceptual. If the understanding is to warrant judgments with respect to empirical content, (and unless we are to hold that empirical judgments can be warranted on the basis of *a priori* concepts alone) a non-discursive employment of the understanding must therefore be possible.

4.4 All mathematical judgments are rationally warranted

Since Kant's discursivity thesis precludes, at least in the case of the human intellect, a non-discursive employment of the understanding, let us suppose, then, that the former of these two possibilities most closely resembles the Kantian position: that judgments pertaining to the sensible content of intuition are warranted by the *a priori form of intuition*. In fact, as the following passage reveals, Maimon himself takes this to be the Kantian position:

> 'if I say that red is different from green, then the pure concepts of the understanding of the difference is not treated as a relation between the sensibilities … but rather … *(according to the Kantian theory) as the relation of their spaces as a priori forms*' (Maimon, VT, GW II, 32, emphasis added).

Formal, as opposed to sensible, intuitiable properties may serve as a warrant in the case of perceptual judgment in the same way that they do in the case of experiential

[127] See VT, GW II, 112-113: 'in themselves (abstracted from their a priori forms, time and space), intuitions can no more be described as identical than as different (here the Kantian question: quid juris? is totally unanswerable), unless it is with respect to their differential elements, as I have shown above. We can apply these concepts only to the form of intuitions, or on my account, to their differentials, and by this means to the intuitions themselves. So only a priori concepts or ideas can be judged identical or different, and intuitions can be judged only by means of their forms, namely in terms of whether they are in one and the same time and space or not'.

judgments (i.e. judgments involving the categories). Space and time, although *a priori*, are supposed on the Kantian account to warrant judgments that could not be warranted on the basis of the understanding alone. Moreover, since space and time are *a priori* in the sense of being introduced by the subject, it is possible for the subject to construct a schema which is identical in form to the object to which the particular concept is to be applied.

That space and time play this role (i.e. that they introduce empirical determinations) can be seen most clearly in the arguments of the Amphiboly, where Kant draws upon the role of the pure forms of intuition in warranting judgment as a means of rejecting the Leibnizian principle of the identity of indiscernibles. According to this Leibnizian principle, 'it is not true that two substances can resemble each other completely and differ only in number' (1686, §9).[128] The Leibnizian claim, then, is that two conceptually identical entities cannot constitute two numerically distinct entities. Kant's strategy, in keeping with the strategy of the Amphiboly more generally, is to show that the Leibnizian position depends upon a 'confusion of the empirical with the transcendental employment of understanding' (A260/B316). The claim is that the same concept of reflection (in this case the concept of identity) can be applicable to two objects considered as objects of thought, while at the same time being inapplicable to those same objects considered as objects of intuition:

> If an object is presented to us on several occasions but always with the same inner determinations (*qualitas et quantitas*), then if it is to be taken as object of pure understanding, it is always one and the same, only one thing (*numerica identitas*) not many. But if it is appearance, we are not concerned to compare concepts; even if

[128] Kant also makes a similar claim in the Analogies. See A263/B319: 'But if it is appearance, we are not concerned to compare concepts; even if there is no difference whatsoever as regards the concepts, difference of spatial position at one and the same time is still an adequate ground for the *numerical difference* of the object, that is, of the object of the senses'.

> there is no difference whatever as regards the concepts, difference of spatial position at one and the same time is still an adequate ground for the *numerical difference* of the object, that is, of the objects of the senses. (A263/B319)

As a consequence, Kant claims, Leibniz's 'principle of the identity of indiscernibles (*principium identitas indiscernabilium*) certainly could not be disputed' (A264/B320), *but only with respect to objects of pure thought*, and not with respect to appearances. Importantly, this ambiguity is shown to arise because of the role of the pure forms of intuition in warranting judgment:[129]

> since they are objects of sensibility, in relation to which the employment of the understanding is not pure but only empirical, plurality and numerical difference are already given us by space itself, the condition of outer appearances. For one part of space, although completely similar and equal to another part, is still outside the other, and for this very reason is a different part. (A264/B320).

Kant's response to Leibniz here is concerned with numerical difference, i.e. difference in place, and the claim is that two conceptually identical entities (which should already, therefore, be identical with respect to their *a posteriori* sensible determinations) can nevertheless constitute two numerically distinct entities. It remains conceivable, however, that the same argument could be made with respect to the supposedly *a posteriori* sensible qualities: formal difference may also underlie sensible differences such as that between red and green, and so warrant empirical judgments of difference and allow for the possibility of empirical concept acquisition.[130]

[129] For a detailed discussion of Kant's argument here, see Beiser, 1987, and Warren, 2008.

[130] It is sometimes thought that intensive magnitude, which Kant introduces in the Anticipations of Perception may be a candidate for this form of warrant (See Beiser, 1987, p.296).

4.4.1 Maimon's philosophy of mathematics

Kant is able to maintain that empirical concept acquisition is compatible with the discursivity thesis, then, because he maintains that non-rational *a priori* determination is possible, i.e., that the pure forms of intuition warrant judgments that cannot be warranted on the basis of the activity of the understanding alone. As it stands therefore Maimon's *quaestio juris* is not yet sufficient to require that we abandon Kantian discursivity: an appeal to a non-conceptual employment of the understanding is not yet necessary. It follows that if we are to conceive of Maimon's *quaestio juris*, as often happens, as primarily a problem of receptivity, then it need not pose serious problems for Kant.[131] My position here, however, is that Maimon's *quaestio juris* is not, primarily, concerned with the question of the given, or the compatibility of spontaneity and receptivity. Instead, Maimon's claim is that *even in the case of mathematical judgments* a *quaestio juris* arises, and that a non-discursive employment of the understanding must be presupposed if we are to make sense of the possibility even of these judgments. My reading is, I think, supported by the following passage from Maimon's *April 1789 letter*:

> The importance of this question [*quid juris*] makes it worthy of a Kant; and if it is given the scope that you yourself give it, it demands: how can something *a priori* apply with certainty to something *a posteriori*? In this case the answer or *deduction* that you give is completely satisfying, as [only] the answer of a Kant can be. But if the scope of the question is enlarged, it demands: How can an *a priori* concept apply to an intuition *even to an a priori intuition*? (GW VI, 424, emphasis added).[132]

[131] Indeed, it has often been argued, and in particular in contemporary philosophy of perception, that Kant should be considered a 'conceptualist' in just the way described above – the sensible content of intuition is thought to be already somehow conceptually determined. For a discussion of this see Ginsborg, 2008.

[132] See also VT, GW II, 362: 'For Kant … the meaning of the question *quid juris*? is this: we know from experience that we connect forms of thought determined *a priori* with objects determined *a posteriori* in a necessary way, but so long as we cannot discover anything *a priori* in the objects, this is impossible, and so this necessary connection a mere illusion. So what is this *a priori* that justifies us in treating it as real? As for me, I also take a fact as ground, but not a fact relating to *a posteriori* objects

Here, Maimon appears satisfied with Kant's response to the *quaestio juris* insofar as *a priori* concepts apply to *a priori* formal determinations in the object, but holds that the *quaestio juris* arises again, this time within the realm of the *a priori*. The problem is that of how *a priori* concepts can be related even to *a priori* forms of intuition.

In order to make sense of Maimon's argument, I turn now to an examination of his philosophy of mathematics. While there has been some discussion of Maimon's philosophy of mathematics (Freudenthal's 2006 analysis is especially helpful), its role in Maimon's *quaestio juris* has tended to be neglected, with Mier Buzaglo's (2002) analysis standing as notable exception.[133] Maimon's 'grasp of mathematics', Buzaglo claims 'places him on a par with the leading mathematicians of his generation.' (2002, p.37), and his criticisms of Kant therefore reflect his familiarity with the central mathematical debates and developments of the time. In particular, Maimon was concerned with the development of the differential calculus, and with the

(because I doubt the latter) but a fact relating to *a priori* objects (of pure mathematics) where we connect forms (relations) with intuitions; and because this undoubted fact refers to *a priori* objects, it is certainly possible, and at the same time actual. But my question is: how is it comprehensible?'.

[133] Thielke, for example, characterizes Maimon's *quaestio juris* purely in terms of the given. See Thielke, 2014, p.229: 'The problem, Maimon argues, is that even if the forms of intuition – space and time – are taken to be *a priori* features of sensibility, the *content* of intuition is merely brutely given: it is something we simply encounter in our dealings with the world. But this means, Maimon claims, that we cannot give any account of how *a priori* forms of the understanding can be applied to the sensible content, since the two elements are so heterogeneous'. While Thielke does acknowledge Maimon's criticism of Kant's formal dualism (see, for example, Thielke, 2003), he does not link this to Maimon's *quaestio juris*. There are other exceptions: in particular Simon Duffy (see Duffy, 2014) and Richard Fincham (See Fincham, 2015). While Duffy's account is helpful in understanding Maimon's theory of mathematics in relation to Kant's, however, he does not provide an account of why Maimon thinks that we need an alternative to Kantian dualism beyond the claim that 'as long as sensibility is regarded as an independent source of cognition to the understanding, the possibility of applying concepts to sensible intuition cannot be comprehended. The connection between the two can only be explained by demonstrating that they both derive from the same cognitive source.' (Duffy, 2014, p.229). Fincham provides a more detailed analysis of Maimon's *quaestio juris* with respect to mathematics. While he claims that Maimon rejects 'Kant's account of space and time as *a priori* forms of intuition which specifically *precede* material content' (2015, p.1038) however, he again does not give an account of why this should be the case. Instead, Fincham argues that Maimon's *quaestio juris* sets out from the presupposition of *a priori* mathematical knowledge and argues that such knowledge is possible only if it is, ultimately, analytic as opposed to synthetic.

possibility of non-Euclidean geometries: as Buzaglo argues, Maimon 'innovatively advanced the possibility of mathematically fertile non-Euclidean geometries well before Gauss' (2002, p.37).

Maimon's position is that while spatiotemporal representations can aid us in our comprehension of mathematical propositions, they do not themselves warrant those propositions; they do not, in other words, determine their validity.[134] This is, of course, at odds with the Kantian account, according to which mathematical judgments are synthetic precisely because they are intuitively warranted; an *a priori* construction in intuition corresponds to the relevant mathematical concept and warrants mathematical judgment. There are, as John Callanan has argued (2014), two ways of understanding the Kantian position here. On many accounts, the mathematical concept is somehow supposed to precede its construction in space and time. The imagination, guided by the understanding, produces a spatiotemporal schema on the basis of the mathematical concept, and the schema then serves to warrant mathematical judgments that could not have been warranted on the basis of the concept alone (let's call this the 'concept construction' interpretation). In the case of

[134] Mier Buzaglo provides a helpful analogy here. See Buzaglo, 2002, p.42-43: 'When we fit a Venn diagram to an Aristotelian syllogism and determine the validity of the argument form by inspecting the diagram, an intuition that is not empirical and is not connected with the color of the circles or even their size, we are connecting logic with intuition. However this connection does not raise the *quid juris* question. What we see in the diagrams reflects the situation with respect to the validity of the syllogistic form tested, but the validity of the forms is not essentially based on the diagrams'. Aristotelian logic is not supposed to be warranted by its expression in the Venn diagram, but only made more easily comprehensible through it. The truths that we arrive at by way of the Venn diagram are independent of this construction. On the Kantian conception, mathematical judgments are unlike the expression of Aristotelian logical by way of a Venn diagram in that they are supposed to be warranted by way of intuition; they are synthetic because they necessarily involve space and time, which are themselves irreducible to the merely conceptual. As will be seen, however, Maimon's ultimate position is that the construction of mathematical objects in intuition does not itself serve as a warrant in the case of mathematical judgments, but instead serves merely to make truths which are already entailed by pure mathematics, comprehensible to us, in the same way that the Venn diagram can help to make Aristotelian logic comprehensible.

the concept of the triangle, for example, the mathematical concept ('an enclosed three-sided figure') does not itself warrant any judgment about the sum of its angles. Once the concept of the triangle has been constructed in intuition, however, it becomes apparent that the sum of its interior angles is 180°. Thus Freudenthal claims, for example, that for Kant, 'construction … mediated between the concept of the understanding and intuition' (2006, p.5), and Lachterman that:

> A "constructed" concept is a corresponding structure made present by imagination in temporal intuition (i.e., arithmetical number) or in spatial intuition (i.e., geometrical figure). *Salient here is the alterity of intuition vis-à-vie understanding*. (Lachterman, 1992, 501, emphasis added)

As Callanan argues, however, it is also possible to interpret the method of geometrical construction as a process of concept acquisition (2014, p.580).[135] In this case, the mathematical concept (which already includes all the relevant mathematical determinations) is only arrived at by way of a mathematical construction, i.e., the production of the mathematical object by way of the imagination: 'we must represent an empirical or mental image of a triangle in order to acquire the concept of a triangle' (Callanan, 2014, p.582). In the case of the triangle, then, the concept *already* entails that the sum of the internal angles is 180° because we only arrive at the concept by way of the construction (let's call this the 'concept acquisition' interpretation). Maimon's argument applies, I think, to both of these readings: on the

[135] Kant's claim (discussed in chapter two) that a form of transcendental deduction has already taken place with respect to the concepts of space and time, lends support, I think, to Callanan's reading. As I argue in chapter two, the aim of the transcendental deduction that occurs in the Transcendental Aesthetic is to establish the possibility of a particular form of synthetic *a priori* judgment (the mathematical judgment), and the method of transcendental deduction in general takes the form of a tracing of the origin of an *a priori* concept. In the case of mathematical judgments, the *a priori* status is already presupposed, and the purpose of the transcendental deduction should therefore be to establish that the concept is not 'pure', that is does not arise purely on the basis of the activity of the understanding, and that the mathematical judgment is, therefore, synthetic.

concept construction interpretation, the claim will be that a construction in intuition made on the basis of the concept is insufficient to explain the possibility of legitimate mathematical judgments. On the concept acquisition interpretation, the claim will be that the construction in intuition is not sufficient to account for our *possession* of the fully determined concept of the mathematical object.

4.4.2 Mathematical judgment and geometrical construction

Maimon's *quaestio juris* with respect to mathematics is thus concerned with our ability to warrant mathematical judgments intuitively, or by way of construction in intuition. In Maimon's view, Kant presupposes that the mere fact of the apriority of space and time is enough to account for our ability to account for the objective validity of mathematical judgments. 'Even if they are *a priori*,' Maimon argues however, 'intuitions are still heterogeneous with the concepts of the understanding, and so this assumption does not get us much further' (Maimon, VT, GW II, 64). In order to understand the exact nature of Maimon's argument, it is useful to consider the role of schemata in mathematical judgment. As discussed, schemata facilitate synthetic judgment in general by acting as a mediator between concepts (especially where those concepts are *a priori*) and intuitions. In the case of experiential judgments, the temporal schema can be matched to intuition because it, too is temporal, and judgments can therefore be made about the objects of intuition. In the case of mathematical concepts, the application of the concept to objects of experience happens, too, by way of schemata. If I judge that a clock is circular, for example, this happens because I am able to produce the image of a circle by way of the schema of the concept 'circle', and, because this schema is homogenous in a relevant way with the object of experience, I am able to legitimately apply the concept to the intuition. Mathematical *judgments*, however, are made independently of the empirical object to which the mathematical concept is to applied. When we talk of a mathematical object, then, we do not refer to the object of experience to which the mathematical schema is applied (e.g. the clock), but to the schema itself (the circle as an abstract construct). Mathematical judgments are thus warranted by schemata, and will be objectively valid if the schema proves sufficient to warrant them. Even if, in other words, I am never presented with a triangle in experience, I will nevertheless be able to make legitimate mathematical judgments about it.

If objectively valid mathematical judgment is to be possible within the Kantian framework, it therefore seems that all mathematical concepts must be amenable to spatiotemporal schematization (on the concept construction interpretation), or that the construction in intuition should be sufficient to account for the acquisition of the concept (on the concept acquisition interpretation). It is for this reason that Kant is often said to be a constructivist with respect to mathematics: mathematical judgments must be intuitively warranted, and mathematical concepts have objective validity, therefore, only if they can be constructed in intuition.[136] This is true whether we take the construction to be a source of geometrical concepts, or whether we take geometrical construction to be guided by the understanding. The claim that construction in intuition warrants mathematical judgment is also key to Kant's characterisation of mathematical judgments as synthetic *a priori*; mathematical judgments are *a priori* because they are warranted by objects that are independent of experience, (the schema of the circle as opposed to the circular clock

[136] For a discussion of this see, for example, Engelhard and Mittelstaedt, 2008 and Posy, 1984.

or the circle drawn on paper) and they are synthetic because the mathematical object is nevertheless in some sense extra-rational - it cannot be constructed by the understanding alone.

Maimon's central argument is that not all mathematical concepts *are* amenable to schematization in Euclidean space, and that, since we nevertheless employ those concepts in objectively valid mathematical judgments, the Kantian framework must be amended. Neither conceptual nor intuitive warrant is, in other words, sufficient to account for the possible of certain key geometrical judgments, and a non-discursive employment of the understanding must be supposed if we are to make sense of our mathematical knowledge. An argument of this kind has been made more recently with respect to non-Euclidean geometry – the claim is that Kant is not able to account for the objective validity of non-Euclidean mathematical judgments because the objective validity of these judgments is dependent upon the relevant mathematical objects being amenable to construction within the particular space-time that we experience (i.e. within Euclidean space-time), and because we are not in a position to construct these objects in Euclidean space. Non-Euclidean mathematical judgments are nevertheless thought to have objective validity, and it thus seems that the Kantian framework requires modification.[137] As discussed, Maimon does have something to say about the possibility of non-Euclidean geometry, and he goes so far as to suggest that legitimate judgments can be made about non-Euclidean mathematical objects.[138] What makes Maimon's argument particularly interesting in

[137] The degree to which non-Euclidean geometry poses a problem for Kant is a much debated issue, and one with which it is beyond the scope of this chapter for me to engage. For a helpful discussion of the issue see Hagar, 2008.

[138] See, for example, VT, GW II, 148: 'If Euclid had assumed false axioms instead of his metaphysically true ones, then I am sure that he would not, because of this, have bequeathed a lesser or worse work to the world than the one that we now possess. For example, if I assume that the outer

light of this debate, however, is that he thinks that construction in intuition cannot warrant mathematical judgments *even within Euclidean geometry*. It is with this latter claim that I am interested in this chapter. Maimon discusses a number of, what he takes to be, unconstructible schemata. These include the geometrical (in particular the asymptotes of a curved line), and what is sometimes termed the 'pure mathematical' (e.g. √2).[139] The majority of his efforts, however, are devoted to the issue of the constructability of the circle, which is a significant point of contention between Kant and Maimon.[140] A full analysis and defence of Maimon's position requires a more detailed engagement with the history of geometry than can be accomplished within the context of this chapter, and an analysis of this kind has already been provided by, among others, Freudenthal (2006). My aim here, however, is to show the way in which Maimon's arguments, if successful, serve to undermine Kant's discursivity thesis, and to provide an outline of the basis for Maimon's claims.

In the VT, Maimon talks of two kinds of mathematical concepts, with one describing the '*essentia nominalis*' (nominal essence) of the mathematical object, and the other describing its *essentia realis*' (real essence) (VT, GW II, 38-39). In 'any arbitrarily assumed concept', Maimon writes, 'the determination of its *essentia nominalis* leaves its *essentia realis* still doubtful until it has been presented in intuition' (ibid.). If we have the real concept, or definition, of a mathematical object

angle of a triangle is not the sum of the two opposite inner angles, but is equal to the sum plus half of it, the it would necessarily follow that the angle at the centre of a circle would not be twice (as it actually is) but three times as big as the angle at the circumference, and so on'. Buzaglo has a helpful analysis of this (see Buzaglo, 2002, p.52-53).

[139] See Buzaglo, 2002, who characterizes the problem of the *quaestio juris* in mathematics as one of a duality of 'pure mathematics' and geometry.

[140] There is some uncertainty surrounding the exact chronology of the debate. Freudenthal argues, for example, that Maimon altered his position in the published version of the VT in response to the criticisms that Kant raised in his *Letter to Herz* (Ak. XI, 51-52). See Freudenthal, 2006.

the possibility of its construction in intuition is already supposed to be bound up with that concept or definition. On the concept-acquisition reading, then, we might say that the real concept or definition *already contains all the relevant determinations* in a way that a merely nominal concept or definition does not. On the concept-construction reading, the real concept will not itself contain the relevant mathematical determinations, but the concept should be such that any construction made in accordance with it will yield the relevant determinations. In cases where we have a merely nominal concept, or definition, the reality of the mathematical object will remain, in Maimon's terms, merely problematic because the concept remains, in an important way, underdetermined. On the concept-acquisition reading, the concept does not give us a mathematical object but merely combines some properties of an as-yet undefined mathematical object. On the concept-construction reading, a mathematical construction is not possible because the concept is underdetermined, i.e. it encompasses too great a range of possible mathematical objects. Maimon's claim is that the concept or definition that we possess in the case of the circle is merely nominal – that it is not sufficiently determined so as to describe an object that is distinct from a number of other mathematical objects. Moreover, because the definition tells us nothing about the construction of the object in intuition, we have no way of determining whether any mathematical object does in fact correspond to the nominal definition:

> the understanding thinks the arbitrarily assumed concept of a circle according to a rule that it is a figure delimited by a line of such a kind that all the lines that can be drawn from a given point inside the figure are equal to one another; this is the *essentia nominalis* of a circle. However, it is still doubtful whether these conditions are also possible until it is presented in intuition by means of the movement of a line around one of its endpoints; thereupon the circle becomes an *essentia realis* (VT, GW II, 39)

> we know the meaning of the rule or condition of the circle, but we still lack a real definition, i.e. we do not know whether this rule or condition can be fulfilled or not. Should it be incapable of fulfilment, then the concept here expressed in words would have no objective reality. (VT, GW II, 50)

The circle cannot be constructed merely on the basis that 'all the lines drawn from a given point are equal to one another' in the same way that a triangle can be constructed purely on the basis of the concept of an enclosed three sided figure. This is because the circle is not composed of individual points - the ends of imaginary radii - but, instead, of one continuous line - a circumference, and yet the definition tells us nothing about how to produce this circumference.[141] As Freudenthal argues, on Kant's definition all that can be constructed are polygons of an ever increasing number of sides.[142] As a consequence, as Freudenthal puts it, 'a polygon is not conceptually distinguished from a circle' (Freudenthal, 2006, p.68). For the same reasons, neither, if we accept the concept-acquisition reading, does the concept we possess fully capture the circle as a distinct mathematical object. Nevertheless, we *do* make objectively valid mathematical judgments about circles, and in doing so we recognize the circle *as* a distinct mathematical object: it warrants its own set of mathematical judgments that are distinct from those warranted by the Polygon. How, then, are we to make sense of our ability to judge with respect to the circle? Maimon

[141] 'by this method only a few points in the circle are constructed … and not the circle itself as a continuous magnitude' (*Antwort*, p.63).

[142] See Freudenthal, 2006, p.65: 'Suppose we use this definition of the circle as a rule of construction. The procedure is as follows: To take a "distance" (the Greeks had no word for "radius") and to mark a number of equidistant points from the center. These points will all be on the circumference of the circle, but they do not yet form the "line" required. They have to be connected to form a line. It is, however, a straight line which is uniquely determined between any two points. (Postulates 1 and 2 in *Elements* book I which guarantee the possibility of drawing a straight line and also imply that it is unique.) If all points equidistant from the center are thus connected, and if, to choose the simplest rule of construction, they are also equidistant from each other, we obtain a rectilinear figure, e.g. a regular polygon but not a circle. However, at all the points assigned (which are the vertices of the polygon) it indeed satisfies the definition of a circle.'

holds that the Kantian framework must be amended – we must possess an *idea* of the circle that extends beyond both our concept of it, and our construction of it in intuition. Our understanding must therefore have a non-intuitive yet extra-conceptual capacity if we are to make sense of our ability to make objectively valid mathematical judgments about circles. We must possess *ideas* of mathematical objects: 'concepts of objects which cannot be presented in intuition because they involve infinity [in the case of the circle, infinite radii of equal magnitude] and yet can be infinitely approximated' (Freudenthal, 2006, p.63).[143]

In his *Letter to Herz* Kant attempts to respond to Maimon's claim. The definition of the circle is not merely nominal, Kant argues, but instead real:[144]

> prior to the practical proposition: 'to describe a circle by moving a straight line around a fixed point', the possibility of a circle is not merely *problematic*; rather the possibility is *given* in the definition of the circle; this is because it is constructed by means of the definition itself, i.e. presented in intuition … For I can always draw a circle freehand with chalk on the board and put a point in it, and I can just as well demonstrate all the properties of the circle in this circle … I assume that the points of the circumference are at an equal distance from the centre. (Ak XI, 53)

Kant's claim, then, is that we are able to construct a circle in intuition on the basis of the concept alone, even without rotating a straight line around its endpoint. If I draw a circle freehand, I understand that it is a circle insofar as the radii are *supposed* to be equal, even if this is not in fact achieved in the physical construction. Maimon remains unconvinced by the Kantian response, however. Later, in the

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[143] It is important to note that Freudenthal's claim here is not that the object itself (e.g. the circle) cannot be presented in intuition, but that the object *as a mathematical object* cannot be presented, or constructed, in intuition.

[144] See Ak XI, 52-53: 'it is not necessary with Mr Maimon to admit *ideas of the understanding*. In the concept of a circular line, nothing more is thought than that *all* straight lines drawn from it to a single point (the centre) are equal: this is a merely logical function of the universality of judgment in which the concept of a line constitutes the subject and refers merely to *each* of the lines, not to the *totality* of the lines that can be described on a plane to a given point'.

Antwort, rather than distinguishing between two kinds of *concept*, Maimon instead distinguishes between two kinds of *construction*: 'object-construction' and 'schema-construction', which he further identifies with 'mechanical' and 'geometrical' methods of construction respectively.[145] The geometrical / mechanical distinction does not have its origins in Maimon's work, but instead in that of the ancient mathematicians, and receives attention in Descartes' *Geometry* (1637, p.40), to which Maimon briefly refers (*Antwort*, p.69-70). In a geometrical construction, the mathematical object is produced *a priori* in its entirety and in accordance with its concept. In a mechanical construction, the mathematical object is constructed by means other than its concept. Put differently, we might say that we can produce a mathematical object mechanically without any understanding of it as a mathematical object. The geometrical construction, however, always involves an understanding of the object as already mathematical, and the construction merely represents mathematical properties that are already implicitly understood. Thielke provides the following helpful example (see Figure 1 for a diagrammatic representation of the mathematical bisection):

> we can bisect line AB "mathematically" [i.e. geometrically] by constructing two circles with centres at A and B and with radii equal to AB, and then drawing a line between the two points where the circles intersect. When we carry this out on paper, we consider the actually drawn figure according to the pure rules of construction, and as a result treat the figure as a *pure* [*a priori*] intuition. But we can also bisect line AB "mechanically," and make use of exactly the same actual figure, if we use a compass to determine specific magnitudes: employing this method, we would start by estimating a likely candidate for a midpoint, and then using the compass to make a cut on AB with A as the endpoint; we would then use the same compass opening to make a similar cut using B as the endpoint; if the cuts do not line up, we repeat the process, honing in on the midpoint. (Thielke, 2014, p.231)

[145] See Maimon, *Antwort*, pp.62-71.

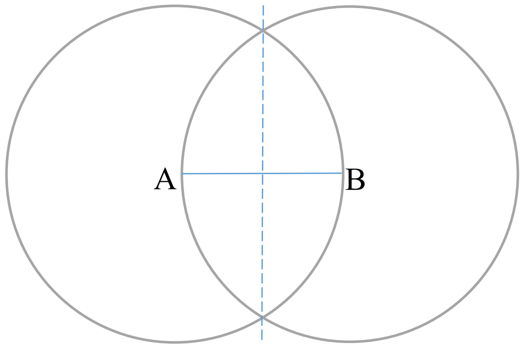

Figure 1: Mathematical bisection of the straight line

It is possible to bisect the line AB mechanically in a number of ways without having any mathematical knowledge. In doing so, we must make reference to a particular straight line. In the mathematical bisection, however, we find a general means of bisecting *any* straight line, and we do so on the basis of our mathematical understanding. Put differently, we might say that we able to make the bisection on the basis of the *idea* of the line, or in Kantian terms, on the basis of its *schema,* where in the case of mechanical bisection we determine something only about whatever particular empirical line we happen to be presented with. Similarly, then, in the case of the mathematical (or geometrical) construction, we make use of our insight into the *concept* of the mathematical object, and its relation to the concept of other mathematical objects, in order to produce the mathematical object. In the case of the mechanical construction, we do not. The mathematical or geometrical construction is thus a schema-construction because it allows us to apply the mathematical concept of the object and so to make objectively valid mathematical judgments. The mechanical construction on the other hand does not serve as a schema for the *mathematical* object (although it may perhaps serve as a schema for a particular kind of empirical object) and it cannot in itself, therefore, account for our ability to make objectively valid mathematical judgments. If mathematical judgments are to have objective validity, therefore (and Maimon believes that they do), then all mathematical objects should be capable, in principle, of being geometrically as opposed to merely mechanically constructed. If we do not possess, however implicitly, the schema (the method of geometrical construction) for a particular mathematical object, then we may be able to produce it mechanically, but we will never be able to recognize it, i.e. we will never be in a position to judge it *as a mathematical object*. The object that is produced by way of this procedure is not in itself mathematical, but only becomes so when we compare it with the schema of the mathematical object and find it to be identical. Maimon's position, then, is that the Kantian account of the construction of the circle in intuition is a mere object-construction and not a schema-construction: it does not 'make the concept of the circle possible in the first place, but merely shows the it is possible' (VT, GW II, 43). It remains insufficient, therefore, to account for the possibility that we make objectively valid mathematical judgments about circles.

4.5 Ideas of the understanding, concepts of the understanding, ideas of reason, and fictions of the imagination

Having considered the grounds on which Maimon proposes a rejection of the discursivity thesis, I turn now to Maimon's positive account of the role of the non-discursive employment of the understanding in warranting judgment and thus in determining intentional content. Maimon's positive account of the non-discursive role of the understanding and its relation to discursive knowledge is both complex and obscure, and I am therefore able to provide only a brief sketch of it here. In essence, Maimon's response is to propose a form of mathematical Platonism in place of Kant's mathematical constructivism.[146] I have already hinted, in the above, at the form this Platonism takes: ideas of the understanding exceed what can be conceptualised or intuited. Maimon's further claim is that ideas of the understanding express logical relations themselves, where discursive thought can express these relations only mediately by way of a fictitious non-relational.[147] The circumference of the circle must be composed of a number of lines, as opposed to a number of points, if it is to be constructed in intuition (i.e. it must be a 'continuous quantity' (*Anwort*, 69)). A line, Maimon argues however, 'must be in some way measurable' (*Antwort*, 70), i.e. it must have some determinate magnitude. Construction in intuition is not possible in the case of the circle, therefore, because each point on the circumference must have no magnitude if the mathematical object is to be a circle as opposed to a polygon. The circle can be thought as idea, however, insofar as it can be thought in terms of pure relation, and independently of the magnitude that must be introduced as soon as we attempt to construct the circle in intuition. Ideas of the understanding, then, express logical relations themselves where intuitions and concepts can do so only mediately, by way of an introduction of a fictitious non-relational such as determinate space or determinate time. In construction, imagination, by way of the introduction of a fictitious determinate magnitude or quantity, makes what are merely relational qualities comprehensible. In Bergman's terms, ideas of the understanding are thus mathematical truths expressed in merely qualitative as opposed to quantitative terms

[146] Maimon is thus often said to pre-empt a number of more recent developments in the philosophy of mathematics, and in particular those of Russel, Hilbert, Cassirer and Frege (see Buzaglo, 2002, 50-58)

[147] Maimon's ideas of the understanding are thus reflected in Deleuze's 'virtual'. See Voss, 2011 and Smith, D 2009 and 2010.

(1967, p.62).[148] We can form neither a concept nor an intuition of these merely qualitative mathematical relations because our concepts already involve some introduction of the fictitious – i.e., the introduction of some determinate magnitude. Mathematical ideas can therefore be approximated ever more closely in intuition (and thus ever more closely conceptualised) by determining the relation between the (infinitely divisible) parts of the mathematical object ever more closely, but at the limits of this construction or conceptualisation, the mathematical object ceases to be spatiotemporal.[149] 'An idea of the understanding', Maimon writes therefore, 'is the material completeness of a concept, insofar as this completeness cannot be given in intuition.' (VT, GW II, 75). As has been seen, in the case of geometry the introduction of determinate spatial magnitude precludes the complete construction of the mathematical object in accordance with its idea. Maimon makes a similar claim, however, with respect to arithmetic. On the Kantian account, arithmetic constitutes a body of synthetic *a priori* knowledge because the number series must be constructed in time.[150] On Maimon's view, however, 'The concepts of the natural numbers are merely relations and do not presuppose real objects because these relations are the objects themselves' (VT, GW II, 190). The real mathematical object – the mathematical object as an idea of the understanding – is the mathematical *relation*. The reduction of this relation to the natural number is, like the reduction of

[148] Note that this coincides with Maimon's claim, discussed in chapter three, that judgments of quantity are not basic but derivative, and that only qualitative forms of judgment are genuine (See 3.2 of this dissertation).

[149] It is worth noting that it is this claim, that geometrical judgments are warranted independently of the construction of the mathematical object in Euclidean space, that opens up, for Maimon, the possibility of non-Euclidean geometry. As Bergman puts it, for Maimon 'extension in space is accidental to the laws of geometry' (1967, p.60).

[150] See Engelhard and Mittelstaedt (2008, pp.256-257) for a detailed discussion of Kant's claim here.

geometrical relation to determine spatial magnitude, fictitious – a product of the imagination:

> For example, the number 2 expresses a ratio of 2:1 at the same time as it expresses the object of this relation; and if the latter is necessary for consciousness, it is certainly not necessary for its reality. All mathematical truths have their reality prior to our consciousness of them.' (VT, GW II, 190).

Maimon therefore suggests a reformulation of the Kantian discursive model. He contrasts the 'subjective order of all the operations of the mind', which coincides with the Kantian model, with the 'objective order considered in itself' (VT, GW II, 81-82). It appears to us (subjectively), Maimon argues, that what I have termed intentional content first arises by way of the synthesis of a merely given sensible matter in intuition, at which point the content becomes intentional insofar as it is thought. This is because it is by way of this spatiotemporal representation that discursive thought and, therefore, knowledge, becomes possible. Reason, insofar as it seeks unified knowledge, attempts to unite these concepts in a totality, which, on the Kantian account, results in the antinomies. In fact, Maimon argues however, intentional content must be determined, ultimately, by ideas of the understanding, which are only partially amenable to conceptualisation.[151] Thus Maimon argues that:

> The objective order considered in itself is … the following:
> 1. Ideas of the understanding, that is to say the infinitely small of every sensible intuition and its forms, which provides the matter to explain the way that objects arise.
> 2. Concepts of the understanding, and
> 3. Ideas of reason
>
> (VT, GW II, 81-82)

[151] 'Accordingly, I view the understanding as merely a capacity for thought, that is, for producing pure concepts by means of judging. No real objects are given to it as material for it to work on. Its objects are merely logical and they only become real objects in the first place by means of thought. It is an error to believe that things (real objects) must be prior to their relations.' (VT, GW II, 190)

Ideas of the understanding warrant judgment, but judgment is itself always discursive; it occurs, that is, by way of concepts. In its attempt to fully conceptualise experience, reason attempts to produce a totality of concepts, with ideas of reason, and the resulting antinomies, being the outcome.[152] Ideas of reason are therefore products of an attempt to represent discursively what can only be represented as idea. Ideas of reason, then, have no objective validity. Ideas of the understanding, however, *do* have objective validity insofar as they are not illegitimate extensions of concepts but themselves warrant judgment and so are constitutive of intuitive content.

4.5.1 Maimon's rejection of pure space and time

I have not yet said anything about an important line of Kantian argument. Maimon's claim that the 'material completeness' of the mathematical concept does not involve spatial or temporal magnitude is at odds with Kant's claim, in the Transcendental Aesthetic, that space and time in themselves and independently of either content or conceptualisation, constitute pure manifolds. On the Maimonian account, spatial and temporal magnitude is a 'fiction' (*Wörterbuch*, GW III, 44).[153] that is introduced to

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[152] See VT, GW II, 81-82: 'The subjective order (with respect to our consciousness) of all the operations of the mind is the following:
1. Sensibility (which certainly does not provide consciousness itself, but rather the matter for consciousness)
2. Intuition. The ordering of homogeneous sensible representations under their *a priori* forms (time and space); from this consciousness arises, although certainly no thought.
3. Concepts of the understanding (categories); from this a thought arises, i.e. the representation of a unity in the manifold.
4. Ideas of reason. Totality of the concepts of the understanding.

The objective order considered in itself is, on the other hand, the following:
1. Ideas of the understanding, that is to say the infinitely small of every sensible intuition and its forms, which provides the matter to explain the way that objects arise.
2. Concepts of the understanding, and
3. Ideas of reason, whose use has already been explained'

[153] Maimon thus refers to the imagination as the 'faculty of fictions'. See *Wörterbuch*, GW III, 36): 'Fiction is the most general meaning of an operation of the imagination, by way of which a non-objective necessary unity of the manifold in an object is manifest'

represent conceptual difference, and the idea of an ‘empty’ space and time, or a spatiotemporal manifold devoid of any sensible content, is thus a mere abstraction - ‘a transcendent representation without any reality’ (VT, GW II, 179).[154] If this is to be the Maimonian position, however, then Maimon must address the arguments that Kant makes in the Transcendental Aesthetic: he must provide us with reasons to doubt Kant’s claim that space and time *are* independent of their contents.

In the Transcendental Aesthetic Kant argues that ‘we can never represent to ourselves the absence of space, though we can quite well think it as empty of objects’ and that space ‘must therefore be regarded as the condition on the possibility of appearances, and not as a determination dependent on them’ (A24/B38-39). The claim here is that our ability to produce a pure spatiotemporal manifold by way of the imagination, taken together with our inability to imagine a non-spatiotemporal object, reveals the transcendental priority of space and time: objects can only appear to us insofar as they appear in space and time, and space and time therefore precede, and are independent of, their contents. Maimon is skeptical about Kant’s claim here for two reasons. The first is that Maimon does not think that we are able to deduce anything about the *necessary* form of objects on the basis of our experience of them as spatiotemporal. Maimon argues by way of the following analogy (VT, GW II, 340-342): we are conscious of the fact that a bottle gives its liquid contents their form because we experience those contents independently of the bottle and observe that under these different circumstances those same contents have a different form.

[154] See *Wörterbuch*, GW III, 69: ‘The location of a body is its relation to other bodies, just as the point in time of an incident is the relation of itself to the preceding and succeeding instants. Indeed, we have no concept of absolute location and point in time; and yet one thinks each body as in an absolute location, and each instant at an absolute point in time, that is, the imagination transforms the relative concepts of space and time into absolute concepts’.

Suppose, however, that we had never experienced wine without a bottle nor a bottle that did not contain wine. We would have no means of determining that the bottle itself was the source of the form, and would be equally justified in thinking that the wine itself determined its own form, or that it determined the form of the bottle. Maimon argues that this is the position in which we find ourselves with respect to the relation of space and time to their contents. We never experience space and time independently of their contents, nor the contents independently of space and time, and we are not, therefore, in any position to determine that the form is imposed upon the matter of intuition by the subject as opposed to dependent on the matter itself. 'We recognize merely that up to now we **have had** no intuition without time and space, but not that we *cannot have* any intuition without them' (VT, GW II, 342).

A further argument is made on phenomenological grounds. Kant is wrong, Maimon argues, in thinking that the production of a pure manifold in imagination is possible. The representation of space and time as given manifolds already requires, he claims, diversity amongst the sensible matter of intuition, and this in turn already requires that there *is* a sensible matter: '[i]f there were only a uniform intuition' Maimon argues, 'then we would not have any concept of space, and hence no intuition of space either' (VT, GW II, 18). Suppose, for example, that we were presented in intuition with a homogeneous block of red. Maimon's claim is that our intuition could not, under these circumstances, be considered spatial – we would not have any concept of left or right, for example, and any attempt to ascribe spatial properties under these circumstances would require reference to some external markers of spatiality (i.e. some further intuitable difference). It cannot be the case, Maimon argues therefore, that space and time are pure manifolds that are independent of their contents.

Thielke (2003, p.95) highlights a number of potential problems with Maimon's argument here. Firstly, Kant's division of outer and inner sense seems capable of accommodating the Maimonian thought experiment. Kant need only argue that, while a homogenous sensible intuition would indeed lack spatial qualities, it would therefore be an example of inner, as opposed to outer, sense, perhaps not even an intuition at all. More importantly, Thielke argues, Kant's claim is only that 'space is a necessary condition for the possibility of outer intuitions, and [he] could readily allow that diversity plays a role in constituting empirical intuitions' (ibid.). While I agree with Thielke that, as a skepticism about the *a priori* status of space and time Maimon's argument fails, I disagree with the conclusion that Thielke draws – that Maimon's argument is therefore unsuccessful – insofar as I do not agree that Maimon intends his thought experiment to serve as an argument in favour of this kind of skepticism. Maimon can concede that the representation of objects in space and time is a condition of intuition, without having to concede that space and time as pure forms themselves introduce diversity. As I have argued above, Maimon need only establish that space and time cannot themselves introduce the required diversity. If this is indeed Maimon's aim, however, then the Kantian lines of response that Thielke identifies already make enough of the necessary concessions to vindicate the Maimonian position: if 'diversity also plays a role in constituting empirical intuitions' (Thielke, 2003, p.95) as Thielke claims, then doubts can be raised about the role of the manifold of space and time in differentiating between otherwise identical sensible content, and the Kantian response to Leibniz is weakened. Similarly, if an intuition that is homogeneous in terms of its contents thereby ceases to be spatial and becomes only an inner intuition, then Maimon's point has been made for him: spatiality itself adds nothing in the way of diversity: diversity is instead a condition on spatiality, and Maimon's claim that ideas of the understanding (i.e. ideas of pure relation) underlie spatiotemporal representation, remains coherent. Ultimately, however, while Maimon's argument here serves as an interesting alternative to the Kantian viewpoint, it seems far too speculative to serve as a decisive proof of the PCRD (in the same way that Kant's own psychological argument is far too speculative to serve as decisive proof of the ideality of space and time): it is impossible to determine the possibility of empty spatiotemporal intuition or the spatiality or otherwise of a homogeneous manifold in this way because we simply cannot know to what degree we have unknowingly introduced some empirical content into the supposedly pure or homogeneous products of our imagination.

These does not appear to be among the most convincing of the Maimonian lines of argument, then, but it is worth noting that they do not necessarily need to be. Maimon's denial that space and time themselves constitute a pure manifold is sometimes presented as though it were key to Maimon's argument in favour of rationalism.[155] As I hope to have shown in this chapter, however, it is Maimon's arguments concerning the possibility of geometrical construction and of perceptual judgment that are supposed to do the bulk of the work in convincing us of the non-spatiotemporality of mathematical objects, and not his arguments concerning the possibility of pure intuition. It is enough, then, that Maimon is able to identify vulnerabilities in the Kantian account and to present viable alternatives, and in doing

[155] In addition to Thielke, 2003, see also Voss, 2011

so to pre-empt some possible lines of Kantian response. To this extent, Maimon's arguments here can, I think, be considered successful.

4.6 Conclusion

Against some contemporary readings I have argued that when Maimon claims to reject Kant's discursivity thesis, this is primarily a claim about the role of the understanding in human cognition, and not about the interaction between concepts and intuitions. While Kant holds that understanding is merely discursive, operating solely by means of concepts, Maimon's position is that the non-discursive employment of the understanding is a condition on the possibility of objectively valid synthetic judgment, whether experiential, perceptual or mathematical. Further, I have argued, against those accounts that characterise Maimon's *quaestio juris* as a problem of applying concepts to *a posteriori* content, that Maimon's philosophy of mathematics, which concerns the application of concepts even to *a priori* forms of intuition, is key to Maimon's *quaestio juris* line of argument. What Maimon terms 'ideas of the understanding', which exceed what can be fully intuited or fully conceptualised, serve as conditions on the possibility of synthetic judgment and are therefore constitutive of intentional content.

In this way, the PCRD which is the outcome of the Maimonian *quaestio juris,* mitigates some of the more pressing problems which arise as a result of the *quaestio facti*: while we are not yet in a position to establish which formal explanations are valid and which are not, we are at least justified in *seeking* a complete formal explanation. In order to understand how this might be the case, it is helpful to re-examine the skeptical problem that is posed by Hume, and which Maimon reformulates from within the Kantian framework. In chapter two I argued that Humean skepticism arises because there is no empirical warrant for the application of concepts such as that of causality: these concepts appear to be defined by determinations that cannot themselves be given in experience. As Kant's treatment of Hume reveals, however, an implicit premise of Humean skepticism is that the formal conditions of objectivity can be given: that is, that they can be materially determined.[156] Kant is therefore able to respond to the Humean skeptic by rejecting this premise; our *experience* of objectivity requires that objects are formally, as opposed to materially, determined. Objectivity is not, in other words, given, but must instead be constructed. We are able to establish the validity of judgments which employ the categories, therefore, because although they are not warranted materially, by some determination that is given in intuition, they can nevertheless be warranted formally, insofar as experience of objects already presupposes formal determination.[157] This happens in the case of the category of causality by way of the arguments of the analogies: experience of a temporally extended realm of objects is dependent upon the application of the categories of relation, so that the ground of objective temporal relation is not material but formal. We are therefore warranted in applying the category of causality to temporally extended objects because it is only by way of causal judgments that such objects are first possible. Maimon, too,

[156] I have used 'non-rational determination', as opposed to 'material determination' throughout. This encompasses material determination (i.e. determinations that are not introduced by the subject), but also formal but non-rational determinations (i.e. the Kantian forms of intuition).

[157] See, for example A94/B127: 'David Hume recognised that, in order to be able to ['obtain knowledge which far transcends all limits of experience'], it was necessary that these concepts should have an *a priori* origin. But since he could not explain how it can be possible that the understanding must think concepts, which are not in themselves connected in the understanding, as being necessarily connected in the object, and since it never occurred to him that the understanding might itself, perhaps, through these concepts, be the author of experience in which its objects are found, he was constrained to derive them from experience, namely, from a subjective necessity'.

addresses a *quaestio juris* by showing that rational determination is already a condition on the possibility of experience; ideas of the understanding are conditions on the possibility of intentional content. On the Maimonian account, however, this rational determination is not only a condition on the thought of a particular kind of objectivity, but is instead a condition on the possibility of sensible intentional content in general:

> Kant maintains that the categories are conditions of experience, i.e., he asserts that without them we would have perceptions, but not experience (necessity of perception). By contrast … *I maintain that logical forms, along with the conditions of their use (given relations of objects to one another), are conditions of perception itself.* (VT, GW II, 214-215, emphasis added)

We are therefore at least entitled to *seek* the rational grounds of intuition, even if we cannot yet determine what those rational grounds might be, and Maimon's rationalism thus provides at least the materials for a response to the *quaestio facti.* In the next chapter, I will turn to Maimon's 'dogmatic rationalism' and, in particular, to the 'principle of determinability' which Maimon introduces as a means of distinguishing valid from invalid judgments, and legitimate from illegitimate concepts, and so builds upon the conclusions of the present chapter.

Before I do so, however, I would like here to note some qualifications with respect to the above conclusions. Firstly, Maimon's conclusions hold only insofar as we accept the initial premise that it is only by way of judgment that sensible content can become intentional content. As discussed, this premise has its origins in the KrV, and Maimon does not devote any significant efforts to defending it. It is conceivable, then, that judgment is not the sole, or even the primary, means by which sensible content can become intentional content.

A further qualification concerns the meaning of the PCRD, which should, I propose, be distinguished from what Paul Franks calls a ‘commitment to infinite intelligibility’ (2003, p.202), and from the ‘principle of sufficient reason’. Franks first introduces the thesis of infinite intelligibility in relation not to Maimon but to Kant, and defines it as follows:

> things are intelligible without any limit whatsoever. For every thing, there is a sufficient reason, and the series of reasons neither goes on forever, nor turns in a circle, nor terminates arbitrarily; instead the series of reasons ends with an absolute reason that is self-explanatory, or wholly beyond the need for explanation (ibid.)

Kant is committed, Franks claims, both to the thesis of finite intelligibility and to the thesis of infinite intelligibility: ‘The world as it is known by God, and the world as viewed from the standpoint of morality, is infinitely intelligible ... But the world as theoretically known by us is finitely intelligible.’ (2003, p.204). Kant’s claim, according to Franks, is that the particular forms of finite, human, knowledge, such as spatiality and temporality, are merely contingent, and do not themselves adhere to the principle of sufficient reason: ‘[i]t is conceivable that another species of finite rational beings could have quite different forms of sensibility, and there can ultimately be no explanation why our sensibility has just the forms it has’ (Franks, 2003, p.204). The world perceived from the point of view of the infinite intellect, however, is entirely necessary: the infinite intellect can account for the complete determination of reality entirely on the basis of a first principle. As will be seen in chapter five, Maimon is, ultimately, committed to the thesis of infinite intelligibility insofar as he thinks that objectivity has a singular, universal and necessary structure, and that the particular rational structure of our experience is therefore determined according to this necessary structure of objectivity. A commitment to the PCRD, however, need not in itself mean a commitment to infinite intelligibility insofar as it entails that ‘for every thing there is a sufficient reason' (or sufficient reasons), *but not* that 'the series of reasons ends with an absolute reason that is self-explanatory, or wholly beyond the need for explanation'. We might, for example, think that the spatiotemporal properties of objects are completely rationally determined (so that full cognisance of these rational determinations should be sufficient to warrant all possible knowledge about them), without holding that there must be a sufficient reason for spatiotemporality itself, or the particular determinations thereof. In other words, the thesis of absolute formal determination does not entail that rational determinations themselves adhere to the principle of sufficient reason, and it therefore remains compatible with finite intelligibility as Franks characterises it here.

Chapter Five: ‘dogmatic rationalism’

At this point, it is useful to take stock. Maimon has argued along two distinct lines. On the one hand, he has rejected the possibility of non-rational determination, and has therefore adopted the thesis of complete formal determination: mathematical and perceptual judgments are warranted by ideas of the understanding - products of a productive, non-discursive (i.e. extra-conceptual) activity on the part of the understanding. The validity of pure formal, or rational, explanation has therefore been established. On the other hand, however, Maimon has argued that Kant’s attempts to ground pure formal explanation in functions of the understanding that are accessible to thought (thereby allowing concepts which relate to genuine kinds of formal determination to be distinguished from those concepts which do not) fails insofar as the table of judgments turns out to itself depend upon abstraction from experience. Maimon’s *quaestio juris* has revealed formal explanation to be valid, then, but his *quaestio facti* means that we have no means of determining which forms of explanation are correct and which are not: we should be equally entitled to attribute temporal succession to fate or fortune as we are to attribute it to causality.

Maimon’s ‘dogmatic rationalism’ is intended to respond to this problem. His aim is to develop a first principle by which legitimate judgments are to be distinguished from illegitimate judgments. Moreover, this principle should be transcendental, as opposed to pure: it should capable of accounting not just for what he calls ‘symbolic knowledge’ but also for ‘real thought’; it should be capable, in other words, of accounting for metaphysical and not merely logical possibility. Maimon finds such a principle in the ‘principle of determinability’. The aim in this chapter is to provide an account of the principle of determinability, to situate it within the Maimonian system, and to consider how it helps to address the problems that Maimon identifies in the KrV.

5.1 Real thought and symbolic cognition

Before I turn to the details of Maimon's argument, I want here to consider an important Maimonian distinction. In chapter four, I argued that, by way of the *quaestio juris,* Maimon establishes that the understanding must play a role not only in subsuming an already determinate sensible content under concepts, but in determining the sensible content itself, insofar as perceptual judgment is to be rationally warranted. It seems self-evidently true, however, that not all thought *is* determinative. I can make claims that are false (either deliberately or mistakenly), or I can make claims that are true but which correspond to an object that cannot itself be given in intuition: I can draw conclusions, for example, about the nature of atoms, about the chemical composition of a star, or about prehistoric forms of life. On the Kantian account, the distinction between judgments and the objects to which they refer can be easily accounted for by way of cognitive dualism: concepts alone are not sufficient to determine objects, intuitions are also required, and thought about objects can therefore be contrasted with the real objects of experience. If thought is to be entirely determinative of its content (as the PCRD demands), however, then an alternative to this Kantian distinction is required: it must be possible to account for the fact that not all thought is determinative of real objects – that some thought is merely *about* objects.

The distinction between real thought and symbolic cognition plays this role for Maimon: '[i]t is by means of symbolic cognition' he writes, 'that we attain abstract concepts and compose concepts in different ways out of these so that we are able to discover new truths from those we already know; i.e. to use our reason at all' (VT, GW II, 263).[158] The distinction first appears in the VT, where an appendix ('on symbolic cognition and philosophical language') is dedicated to it. Maimon contrasts symbolic cognition with what he calls 'intuitive knowledge':[159] the production, or direct determination, of objects of experience in intuition. 'As long as one remains with intuitive cognition', Maimon writes, 'the discovery of truth takes place by means of a direct exchange, i.e., a direct substitution of thoughts for one another' (VT, GW II, 411): one can only have a thought of an object by way of an intuition of it (whether by way of perception, or by way of the imagination). Symbolic cognition, on the other hand, involves the production of concepts, or symbols, which correspond to an object of knowledge but do not themselves determine it: 'an object of symbolic cognition is: a form, or way, of thinking an object of intuition, that is itself treated as an object (but not of intuition)' (VT, GW II, 272). We assign symbols to particular intuitive determinations, Maimon argues, in the same way that we assign a particular monetary value to coins. The production of further concepts is then made possible by way of the synthesis of these symbols and, importantly, because the concepts merely represent the objects of intuition but do not themselves produce or determine them, the production of concepts which relate to objects that cannot themselves be objects

[158] Surprisingly little has been written about Maimon's account of symbolic knowledge. David Lachterman does provide an examination of the role of symbolic knowledge in Maimon's theory of mathematics. See Lachterman, 1992.

[159] See VT, GW II, 411

of intuition is possible. 'In this way we are in a position to discover the most hidden truth without much effort and, as it were, mechanically' (VT, GW II, 412); we can attain a symbolic knowledge of 100,000 for example, without having to actually experience the number in intuition; we have intuitive, or real, knowledge of 10 because we have been presented with this number in intuition, and can add the symbolic concept to itself until we have what will be a symbolic cognition of 100,000.[160] It is by way of symbolic cognition, then, that reason is able to extend beyond the boundaries of what can, practically speaking, be experienced – that it can, in other words, form *ideas*. In this way, as will be seen in chapter six, symbolic cognition allows for a resolution of the antinomies in that it allows the understanding to gain an idea (though not an intuition) of the infinite. It is by way of symbolic cognition, Maimon argues, that the differential calculus is possible: the understanding has insight into the production of the polygon, and the differential calculus exploits this insight in order to gain a discursive understanding of the production of the circle: the circle is thought as composed of an infinite number of infinitely small straight lines, with each expressing a determinate relation of the ratio of y to x, and the addition of the symbolic concepts to infinity allows for symbolic cognition of the circle.[161]

A consequence, however, is that we can sometimes produce concepts by way of symbolic cognition that do not correspond to objects of possible experience. While these conceptual 'fictions', like those of determinate space and time, can sometimes help to make ideas of the understanding discursively available, they can at other times

[160] This is a version of an example that Maimon himself gives (See VT, GW II, 273)

[161] For a more detailed account of symbolic cognition in mathematics, see Lachterman, 1992.

lead us astray.[162] In this case, we produce what Maimon calls 'arbitrary' syntheses. (VT, GW II, 103). I can *say*, for example, 'a round sadness', even though I cannot ever intuit it. It is, to use another of Maimon's distinctions, *logically* possible insofar as the concepts are not contradictory, but it is not *metaphysically* possible – it is not something that can be constructed in intuition.[163] Maimon often uses the example of a regular decahedron here; the regular decahedron is an object of symbolic cognition because we can create the concept through the combination of existing concepts (by extension, for example, of the concept of the cube as a regular six-faced solid object) which do not themselves contradict one another, but the regular decahedron is not a possible object of intuition, or at least not within the Euclidean space in which material objects are represented for us.[164] Arbitrary synthesis can also occur when repetition in experience encourages us to combine two concepts of intuitive knowledge in a further concept or judgment. As has been seen, Maimon thinks that the Kantian concept of cause is of this kind: we produce a synthesis of two concepts by way of the imagination (for example, fire and heat). By way of abstraction from various syntheses of this kind we arrive at the concept of causality. The synthesis is merely arbitrary, Maimon holds however, since nothing is thereby determined in intuition.

'[I]f it is to be of any use', Maimon argues therefore, 'symbolic knowledge must be grounded in intuitive knowledge; without this it would be a mere form

[162] For examples of useful conceptual fictions see Maimon, VT, GW II, 412: 'we occasionally arrive at symbolic combinations or formulae that have no reality, i.e. that do not correspond to any real objects, for example the imaginary numbers, the tangent and cosine of a right angle and similar things in mathematics' (VT, GW II, 412)

[163] See, for example, *Logik*, GW V, 76.

[164] See, for example, *Logik*, GW V 76. Maimon also gives the example of 'the tangent and cosine of a right angle' (VT, GW II, 412)

without objective reality' (VT, GW II, 263). Symbolic knowledge must, in other words, correspond to determinations that are constitutive of intuition. Maimon thus excludes the possibility of legitimate regulative forms of judgment, so that the categories that Kant designates dynamical, i.e. those that are supposed to have a merely regulative employment or mere discursive certainty, can no longer be considered objectively valid. We must therefore have a means of determining when symbolic knowledge corresponds to a real, productive, objective synthesis (i.e. when it approximates ideas of the understanding, or where it is warranted by them) and when it corresponds to a merely subjective synthesis. In other words, we require a means for distinguishing between real, metaphysical possibility, and mere logical possibility. The former Maimon designates 'real thought', the latter 'arbitrary thought'.[165] The goal of transcendental philosophy should therefore be to determine the objective reality of certain kinds of symbolic cognition: to determine whether they constitute 'real thought', i.e. represent really possible determinations of objects, or whether they are 'mere' symbolic knowledge. Maimon identifies a principle that he thinks should allow us to make this distinction: the principle of determinability (PoD). Real thought, Maimon argues, adheres to the PoD. Arbitrary synthesis, or mere symbolic cognition, on the other hand, does not.

5.2 The principle of determinability

The origin of Maimon's principle of determinability is unclear. As has often been pointed out, Kant himself develops a 'principle of determination', but this bears little

[165] Maimon introduces a new form of judgment – the zero (0) judgment, to designate arbitrary judgments, i.e. judgments that are only logically and not metaphysically possible, such as that of the round sadness. See *Logik*, GW V, 126

resemblance to Maimon's own principle, having to do with the application of contradictory predicates to the same subject.[166] It is generally concluded, then, that the PoD is a solely Maimonian innovation.[167] I suggest, however, that Maimon's PoD does have its origins in the KrV. In a paragraph at the end of the introduction to the Transcendental Deduction, Kant writes:

> I shall introduce a word of explanation in regard to the categories. They are concepts of an object in general, by means of which the intuition of an object is regarded as determined in respect of one of the logical functions of judgment. Thus the function of the categorical judgment is that of the relation of subject to predicate; for example, 'All bodies are divisible'. But as regards the merely logical employment of the understanding, it remains undetermined to which of the two concepts the function of subject, and to which the function of predicate, is to be assigned. For we can also say 'something divisible is a body'. But when the concept of body is brought under the category of substance, it is thereby determined that its empirical intuition in experience must always be considered as subject and never as mere predicate. Similarly with all the other categories. (B128-129)

Kant does not elaborate any further on this, but the claim appears to be that while in general logic one can say that 'something divisible is a body' *or* that 'a body is divisible', the same is not true with respect to the object of experience. My experience is only ever of a divisible body, where 'body' is the substance, and 'divisibility' the property, and not of a body divisibility, where divisibility is the substance and body the property. Transcendental logic can be distinguished from general logic, then, insofar as it relates to the content of judgments, and not to their mere form: in the case of the category of substance and accident, transcendental logic determines which of the terms should be considered substance and which property. It is difficult to know exactly what Kant intended here – while the claim makes some sense with respect to the category of substance, and of causality, it is more difficult to

[166] See A571/B599: 'of *every two* contradictory opposed predicates only one can belong to a concept. This principle is based on the law of contradiction, and is therefore a purely logical principle' (A571/B599).

[167] See, for example, Breazeale, 2013, p.44.

make sense of it with respect to some of the other categories; how would we apply this rule, for example, with respect to the category of totality? It is clear, however, that if we are to accept Kant's claim that transcendental logic determines both the form *and* the content of judgments, so that in a judgment of real thought it should be determined which is the subject and which the predicate, this can serve as a principle for distinguishing real judgments (which have their origins in transcendental logic) from merely arbitrary judgments (which conform only to what Maimon refers to as the merely negative form of the principle of non-contradiction). In this way, then, the principle of determinability may serve as a means of responding to the *quaestio facti*.[168]

Maimon first introduces his version of the principle of determinability in chapter four of the VT, where he appears to repeat Kant's own claims concerning the relation between general and transcendental logic:

> In general logic, the forms of thought are viewed in relation to an object in general (*a priori* or *a posteriori*); but in transcendental logic, they are viewed in relation to objects determined *a priori*. As a result, subject is not distinguished from predicate through any condition in general logic; whereas in transcendental logic they are distinguished by means of an *a priori* condition. (VT, GW II, 85)

On the basis of this distinction between general and transcendental logic, Maimon is able to develop the following general principle of real, or determinative, thought: '[i]f one of the constituent parts of a synthesis can be thought without reference to the other, i.e. either in itself or in another synthesis, but the other cannot be thought without reference to the first, then the first is termed the subject of the synthesis and

[168] Maimon claims, therefore, that the aim of the *Logik* is to provide a 'general criterion of real thought in what I have called the "principle of determinability" (KA, GW VI, 10)

the latter the predicate' (VT, GW II, 84).[169] According to the principle of determinability there must be a one-sided dependence of the predicate on the subject if the judgment is to be real as opposed to merely formal or arbitrary: 'if, on the other hand, [the subject and predicate are] interchangeable, a merely formal, but not a real thought, and therefore no thought object, can take place.' (*Logik*, GW V, 83). On this definition, then, it is clear exactly why Maimon does not think that causality constitutes an objective synthesis: the predicate and subject in the causal judgment can be thought independently of one another, and their synthesis might therefore occur only after our intuition of them. Mathematical judgments do, however, at least *appear* to conform to the principle of determinability: I cannot think of the concept of a square without thereby also thinking of a four-sided figure, but I can think of a four-sided figure without thinking of a square. Similarly, I cannot think of the property of being four-sided without thereby also thinking the concept figure, but I can think of the concept figure without thereby also thinking of four-sidedness.

There is a further implication of the PoD: each determination should be applicable to only one determinable, i.e., the same predicate cannot legitimately be applied to two different subjects. In support of this claim, Maimon provides the following line of argument:

> different grounds cannot have the same consequences. The reason is this: if the grounds are completely different, i.e., if to posit one is to eliminate the other, then the following is certain: if *A* is a ground (condition) of something, then *non A*, or the elimination of the ground, cannot at the same time be the ground of the same something. On the other hand, suppose they are only partially but not completely different, and so in part the same: in this case, if *A* is the ground of something, then *B* can be the ground of the same something at the same time only to the extent that it is

[169] By synthesis here, Maimon intends both judgments and concepts – he does not distinguish between these. For a detailed explanation of why this is the case, see Yakira, 2003, pp.63-73.

> identical with *A*. Then the ground of this something is neither *A* nor *B*, but is instead merely what they have in common. (VT, GW II, 90)

Maimon's argument here appears complex, but this principle in fact follows, I think, fairly straightforwardly from the PoD. If a particular subject (A) is a condition on the possibility of the thought of a particular predicate (C), then it follows that it cannot be legitimately - or really - thought with respect to another subject (B) unless that subject (B) is already identical with A. This is because AC is only a real synthesis if C cannot be thought without A, and BC is a real synthesis only if C cannot be thought without B. It follows, then, that in any predication C, *both* A and B must be thought, i.e., there can be no synthesis of AC nor of BC unless A and B are in fact identical. If I reply, for example, that perhaps B includes A along with some further determinations, then I thereby render the synthesis of BC merely symbolic, since it is possible to think of C independently of B insofar as I can think of it merely by way of A.

This is particularly counter-intuitive. It seems evident that the same predicate *does* apply to multiple subjects – the sky is blue, for example, but so are peacocks, and sapphire. Maimon's position, however, is that the fact of this multiple application of the concept is evidence of the subjective nature of the respective syntheses: blue is not a predicate of these individual objects, but instead of what is shared by them (e.g. space or figure etc.). In fact, the objects themselves are products of the imagination, i.e. of imaginative and therefore subjective synthesis, insofar as they involve a synthesis of several sensible properties which can be thought in themselves.[170] The

[170] See, for example, VT, GW II, 102-103: 'gold is a perceived synthesis of yellow colour, distinctive weight, hardness, etc. It is not a synthesis of the understanding because these characteristics can be thought without one another and hence are not in the relation of subject and predicate (the determinable and its determination); instead they are combined only because they accompany each other in time and space. I freely admit that the synthesis of the imagination must have an inner ground,

basis for the synthesis is simply that these properties occupy a singular spatiotemporal location. A hypothetical infinite understanding, however, - i.e., one which had cognisance of the complete production of the objects of intuition - would not think in terms of these kinds of objects at all:

> For example, take the objection that the predicate 'figure' belongs to every body as subject, or that a determined colour, for example red, can belong to different bodies, etc. We have only to consider these examples more closely to discover that in the first example figure is not predicated directly of body, but of its form, namely of space; and that in the second colour is as little a predicate (determination) of body in general as it is of any particular body; for what could it be a determination of? – extension, impenetrability, weight, hardness, etc.? Only those who have no insight into the nature of a determination and treat things of the imagination as things of the understanding could believe this. The gathering together of these qualities is merely a synthesis of the imagination, based on their simultaneous coexistence in time and space … but not a synthesis of the understanding: we can think a red body as little as we can think a sweet line. (VT, GW II, 92-93)

But what exactly is it that we are doing when we work backwards like this from determination to determinable? A consequence of Maimon's commitment to the PCRD is that the matter/form distinction becomes relativized. In any particular synthesis, the predicate is what is doing the determining (i.e. it is the form) and the subject is what is being determined (i.e. it is the matter). In itself, however, the subject is not straightforwardly matter, since it is already a product of a prior formal synthesis:

> The determinable in an object is the matter, and the determinable [in the object] the form. (*Logik*, GW V, 256)

> The reason must be the one that I give, namely this: the subject comprises that part of a synthesis that also constitutes a synthesis in itself; as a result it can also be thought in itself as an object without relation to the other part, the one that does not constitute a synthesis in itself; as a result it can be thought only as a constituent part of a synthesis, not in itself as an object. (VT, GW II, 377)

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i.e., an understanding that is acquainted with the inner essence of gold has to construct its concept of gold so that these properties must necessarily follow from the essence; nevertheless, for us this synthesis will always remain a mere synthesis of the imagination.'

To produce these chains of predication is therefore to carry out a kind of reverse engineering of experience by moving backwards through the determinations by way of which intentional content is produced.[171] It is to reveal, in other words, the judgments that are made with respect to intuitable content in order that it become intentional content.

5.2.1 The influence of the principle of determinability

Breazeale has argued that Fichte's 'principle of reciprocal determination' is an amended version of Maimon's principle of determinability.[172] If we think, as I have argued above that we should, that the PoD serves as a method by which to access the process of determination by way of which a given becomes an intentional content, then Maimon's aims bear a strong resemblance to the aims of §1 of Fichte's *Grundlage*, which describe the process of reciprocal determination by way of which an *Anstoß* or limitation on the activity of the I comes to be an intentional content.[173] Similarly, Oded Schechter argues that the principle of determinability was highly influential in the development of Hegel's *Aufhebung* (2003, pp.51-52). According to Schechter, Maimon 'formulated the "blueprint" which German Idealism adopted, but without his [skeptical] caveats' (2003, p.51); while Maimon remains skeptical about the possibility of distinguishing legitimate from illegitimate forms of judgment insofar as the finite intellect is dependent on a matter that is merely given, Hegel, in

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[171] Breazeale argues that this Maimonian method was a precursor to Fichte's 'pragmatic history of the human mind'. See Breazeale, 2013, chapter 4.

[172] See Breazeale, 2013, chapter 3.

[173] In addition to Breazeale, 2013, see Martin, 1997 for an example of how Fichte might be interpreted along these Maimonian lines.

that he rejects the material given, transforms Maimon's principle of determinability into a principle of speculative metaphysics.

5.3 Dogmatic rationalism, empirical skepticism

A much debated issue in the scholarship is the question of what Maimon means when he calls his a 'coalition system': a combination of 'dogmatic rationalism' and 'empirical skepticism'.[174] If Maimon's position is ultimately rationalist, and if he adopts the PCRD of necessity and in order to account for the possibility of experience, then in what sense does he remain a skeptic? Some commentators have argued that Maimon remains a skeptic insofar as he shows only that a rejection of Kantian discursivity provides a means of responding to the *quaestio juris*, but not that we should abandon discursivity. As discussed above, this requires that we conceive of the *quaestio juris* in a particular way – as concerning the validity of concepts or judgments, as opposed to as establishing conditions of the possibility of perception. More recently, it has been argued that Maimon's skepticism is a product of his dogmatic rationalism. In particular, Thielke (2014) and Franks (2003) have advanced this reading. Others have argued, as I have, that Maimon moves *from* skepticism *to* rationalism: that the Maimonian skepticism about the Kantian explanation of the possibility of perception ultimately leads to a speculative rationalism. In this case, however, how can we make sense of Maimon's characterization of his project as a coalition system?

I suggest that Maimon's coalition system is best summarized in a passage I referred to earlier from the KA:

[174] See VT, GW II, 436

> 'I reject merely discursive thought completely, as an empty fiction that has no real ground; limit my theory of thought to just real thought, and place the object of experience in doubt' (KA, x, GW VI, 10)

Maimon is a dogmatic rationalist is so far as he holds that it should be possible in principle to account for the objects of experience purely in terms of rational determination. He remains an empirical skeptic, however, insofar as this rationalism provides only a partial response to the *quaestio facti*. While Maimon, by way of the *quaestio juris*, establishes that the understanding is active in warranting perceptual judgment and so in determining intuitive content, Maimon does not think, as Kant does, that we have immediate access to the *a priori* forms that govern real (i.e. non-arbitrary) thought. While the PoD can help us in identifying arbitrary syntheses, and can, therefore, take us part way to an understanding of the process of determination by which sensible intentional content is produced, our inability to construct sensible objects in discursive, or symbolic, cognition, means that we remain unable to provide a complete account of the *a priori* conditions governing intuitive thought. We must therefore presuppose that there are objective grounds for our subjective syntheses: that there is a reason for example that heat and light are conjoined, but we have no means of determining what these are because we are merely finite, symbolic, cognisors and do not therefore have access to the grounds of objective synthesis. We can make use of certain subjective concepts, such as that of causality, in order to formulate an account, but this can only ever have subjective, and not objective, validity.[175]

[175] In fact, Maimon argues, different forms of explanation (which employ merely subjective syntheses) will appeal according to the use that we want to make of them: 'Theologians, for example (when they also want to be philosophers), naturally find more subjective interest in the Wollfian system than in other systems. A system that holds the objects of their profession to be a mere idea (in the sense in which Kant and I define this word) will not please them' (VT, GW II, 439) and 'Physicians find themselves in a desperate situation in this regard. Their subjective interest requires them to endorse the

5.4 Conclusion

Maimon's *quaestio juris* serves as a partial response to his *quaestio facti*, then, insofar as is establishes that rational explanation has, in principle, universal applicability. Further, Maimon's PoD allows us to identify certain illegitimate forms of judgment. A more robust system of transcendental philosophy such as Kant attempts to formulate in the KrV remains, however, beyond our reach as finite, discursive, cognisors, and a full response to the *quaestio facti* is not, therefore, possible. Finite, human, knowledge takes place by way of symbolic cognition, meaning that we are able to attain an understanding of objects that we are not in a position to intuit. A consequence of this, however, is that illegitimate syntheses are possible. Such syntheses produce symbolic objects that cannot in principle be objects of possible intuition. The PoD serves as a means of distinguishing real, objectively grounded, synthesis from mere symbolic, or arbitrary, synthesis. As a consequence, syntheses such as that of causality, which are based upon the relation of material content in space and time have a merely subjective as opposed to objective validity: they can stand in for the understanding and allow us to approximate real knowledge, but they do not themselves correspond to real objective determination. Beyond the science of mathematics, then, we have limited insight into the production of experience by way of determination, and remain unable, therefore, to establish a system of transcendental metaphysics.

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system of the materialists because with materialism they gain a wonderful opportunity to detail their anatomical and physiological knowledge in explaining all vital functions by mere physical mechanisms … On the other hand, they also find the very same interest in the opposite system (that of the spiritualists), namely in the assumption of an infinite wisdom and goodness that they likewise support with their anatomical and physiological knowledge' (VT, GW II, 440-441)

Chapter Six: Cognitive dualism and antinomy: Kant's challenge to Maimon

In the preceding, I have set out the skeptical challenges to which Maimon intended that his 'coalition system' should respond, and I have outlined the foundations of Maimon's own attempt to respond to these. As discussed, this distinctive set of Maimonian problems, and the Maimonian framework by which they are to be resolved (what I have called the 'Maimonian response'), had a significant influence on the early development of post-Kantian philosophy. In the remainder of the dissertation, however, I aim to reveal what I will argue is a key shortcoming in the Maimonian response, and to suggest that modifications of the Maimonian position are therefore required. The shortcomings of the Maimonian system are most acutely revealed in a challenge that Kant himself sets to Maimon in his 1789 letter to Herz. Here, after praising Maimon for the acuity of his insights, Kant sets a challenge for Maimon: he should '[deliver] a whole system. This would clearly show not only the way he thinks of the principles of *a priori* knowledge, but also the implications of his system for the solution of the problems of pure reason'. Kant's position is that Maimon will find himself unable to resolve the antinomies as a result of his rejection of discursivity:

> the antinomies of pure reason can provide a good touchstone, and may convince him of the following: that human understanding is not of the same species as divine understanding so that it can be taken to differ from it only by limitation, i.e. in degree – that unlike divine understanding, human understanding must be treated as a faculty of thinking, not of intuiting, and must always have a completely different faculty (or receptivity) of intuition at its side, or better as its matter, in order to produce cognition; and that, because intuition merely provides us with appearances and the thing itself is a mere concept of reason, the antinomies, arising entirely from the

> confusion of the two, can never be resolved unless the possibility of synthetic *a priori* propositions is deduced according to my principles (Ak. XI, 53-54)

The aim of the present chapter is to examine Kant's claim. I first consider the role of discursivity in Kant's own resolution of the antinomies – both those of the KrV and the antinomy of teleological reason that is to be found in the KU. I then turn to Maimon's treatment of antinomy. Finally, I argue that while Maimon is able to provide an account of antinomy, this account comes at the expense of a coherent account of the subject.

6.1 Discursivity and things in themselves

Before turning to these questions, it is first necessary to draw a distinction between two components of Kant's claim in his letter to Herz. As it is formulated there, Kant's claim is that Maimon will not be in a position to resolve the antinomies because his rejection of discursivity means that the *dualism of things in themselves and appearances* required in order that the antinomies be resolved is not possible within his system. Contemporary discussions of Kant's resolution of the antinomies have tended to focus upon his claim that transcendental idealism, or the denial that spatiotemporal objects are things in themselves, is key to resolving the antinomies. As discussed in chapter four, however, the important Maimonian development is not a rejection of things in themselves, but instead a rejection of discursivity. Here, then, I argue that Kant's resolution of the antinomies is not a direct result of the distinction he makes between appearances and things in themselves, but instead of his discursivity thesis, and that it is therefore Maimon's rejection of discursivity that leaves Maimon susceptible (at least in Kant's eyes) to the problem of antinomy.

6.2 Kant's resolution of the antinomies

The antinomies are four sets of two opposing, yet equally convincing, 'cosmological' proofs. Each of the antinomies corresponds to one category from each of the four sets of categories (quantity, quality, relation and modality) described in the Metaphysical Deduction. The first antinomy, for example, is concerned with the category of totality; the thesis states that '[t]he world has a beginning in time, and is also limited as regards space', while the antithesis states that '[t]he world has no beginning, and no limits in space; it is infinite as regards both time and space' (A427 / B455). Kant's argument is that in each antinomy we have no means of determining that either of the two arguments (i.e. that in favour of the thesis and that in favour of the antithesis), is preferable to the other. Moreover, to abandon either the thesis or the antithesis appears to lead reason into contradiction. In the first antinomy, for example, the thesis leads to contradictions insofar as it requires a time before time, but the antithesis also leads to contradictions insofar as it requires that we conceptualise what is fundamentally unconceptualisable, namely an infinite regress in time. Kant's argument in the Antinomies chapter is that these conflicts of reason arise as a result of the natural tendency of reason to try to establish a singular and coherent system:

> 'Human reason is by nature architectonic. That is to say, it regards all knowledge as belonging to a possible system, and therefore allows only such principles as do not at any rate make it impossible for any knowledge that we may attain to combine into a system with other knowledge' (A474 / B502).

In the case of the cosmological concepts, this leads to a belief that a complete and exhaustive explanation of sensible experience should be possible; that it is possible, at least in theory, to determine *a priori* the finitude or infinitude of the world, and the finite or infinite divisibility of its constituent parts. This demand for totality is then satisfied in different ways according to the thesis and the antithesis.

The general structure of antinomy can be seen most clearly in the first and second antinomies, where the conflict arises as a result of an expectation, on the part of reason, that it is possible to account for the sensible content of experience, the presence of which it should be outside the domain of reason to explain. Consider, for example, the first antinomy, which concerns the magnitude of the world considered as a totality. In the case of the thesis: 'The world has a beginning in time, and is also limited as regards space' (A426/B454), the demand for totality is met in the pure application of the categories; it is argued that the empirical series of spatiotemporal objects should be subsumed under the idea of the world as totality: 'When the transcendental ideas are postulated and employed in the manner prescribed by the thesis, the entire chain of conditions and the derivation of the conditioned can be grasped completely *a priori*' (A466 / B494). In practice, however, the argument of the thesis is problematic. The dependence of experience upon a sensible component means that the empirical application of the categories can never reach the level of the transcendental idea. In order that the empirical regress be brought into unity with the idea of totality, it is therefore necessary to introduce an arbitrary limit on the empirical regress; a non-temporal is thought as providing a limit to the temporal. This is, of course, problematic because it supposes that the non-temporal can stand to the temporal in a relation of time. It is also dogmatic, however, in that it introduces into the series of sensible objects of experience, an object which is not itself an object of possible experience, but which is instead merely intelligible, and it does not posit this object as an object of thought, but as an object which exists independently of the thought of it:

> The assertions of the thesis […] presuppose, in addition to the empirical mode of explanation employed within the series of appearances, intelligible beginnings; and to this extent its maxim is complex. But as its essential and distinguishing characteristic is the presupposition of intelligible beginnings, I shall entitle it the dogmatism of pure reason. (A466/B494)

In the case of the antithesis, on the other hand, the argument proceeds only on the basis of what is to be met with in experience, only allowing regress to those objects which conform to the rules of possible experience. In experience, however, the regress can only occur within space and time, and can therefore only proceed to further spatiotemporal objects. As a consequence, the regress continues indefinitely, and it is concluded that the world does not have a finite but instead an infinite magnitude. It should be noted here that while it is generally accepted that the assertion of the thesis is inherently problematic, the issue of whether or not the assertion of the antithesis is inherently problematic is more contentious. Kant claims that the antithesis is problematic because 'the propositions of the antithesis are of such a kind that they render the completion of the edifice of knowledge quite impossible' (A474/B502). In the case of the first antinomy, 'the infinity of a series consists in the fact that it can never be completed through successive synthesis. It thus follows that it is impossible for an infinite world-series to have passed away' (A427 / B455). The argument is that the antithesis is problematic because it demands a completion of the series (in that it supposes that the actuality of a particular spatiotemporal object entails the actuality of the entire series of conditions), while at the same time denying that this totality is possible.

The solution to these conflicts, Kant argues in the KrV, lies, at least in part, in the rejection of transcendental realism, that is, a rejection of the presupposition that things in themselves are spatiotemporal. If not only appearances, but also things in themselves are spatiotemporal, then the grounds of appearances can themselves in turn be only spatiotemporal. Given a particular spatiotemporal object in experience, then, a search for the ultimate origin of that object takes the form of a regress *in time or space*. Both the thesis and the antithesis of the mathematical antinomies presuppose transcendental realism in that they attempt to reach the ultimate ground (the condition which is not itself conditioned) by way of a regress through the conditions in time and space. In the case of the first antinomy, the origin of spatiotemporal objects is sought through a regression in time. When the position of the thesis is adopted, an unconditioned, and therefore non-spatiotemporal, is posited as standing in a relation of time to the temporal sequence. When the position of the antithesis is adopted, it is argued that no such origin can be found in the temporal regress, and it is concluded that there can therefore be no non-temporal origin and time must therefore be infinite. Similarly, the spatial extension of the world is thought as standing in a relation of space to the non-spatiotemporal in the case of the thesis, while in the antithesis the impossibility of a regression in thought to the limits of space, leads to the conclusion that there can be no non-spatial entity and space must therefore be infinite. In the case of the second antinomy, the ultimate ground of the spatial extension is sought in its constituent parts. When the position of the thesis is adopted, the regress from the spatial extension to its constituent parts is terminated arbitrarily and a non-spatial entity is posited as the ultimate ground of spatiality. When the position of the antithesis is adopted, the regress in thought from spatial extension to its constituent parts continues indefinitely and it is therefore concluded that there can be no non-spatial ground of spatial extension.

The mathematical antinomies arise, then, because we extend the conditions on the possibility of experience so that they apply to all entities, not just those of possible experience.[176] As a consequence, we conclude that any ground of experience must itself be subject to the conditions of experience, so that we are incapable of regressing to anything other than a further conditioned. ‘The whole antinomy of pure reason,’ Kant claims therefore ‘rests upon the following dialectical argument: If the conditioned [spatiotemporal] is given, the entire series of all its conditions is likewise given; objects of the senses are given as conditioned; therefore, etc.’ (A497 / B525).

In order that the antinomies be resolved, Kant argues therefore, transcendental realism must be rejected: ‘The objects of experience, then, are *never* given *in themselves*, but only in experience, and have no existence outside it’ (A492 / B521). ‘Space and time,’ Kant argues, ‘and with them all appearances, are not in themselves *things*; they are nothing but representations, and cannot exist outside our mind’ (A492/B520). If spatiotemporality is limited to objects of possible experience, then it does not follow from an ‘indefinite regress’ in experience that an infinite regress must be possible independently of experience (A468/B496).

[176] See A528/B556: ‘In representing the antinomy of pure reason through all the transcendental ideas, in tabular form, and in showing that the ground of this conflict and the only means of resolving it is by declaring both the opposed assertions to be false, we have represented the conditions as, in all cases, standing to the conditioned in relations of space and time. This is the assumption ordinarily made by the common understanding, and to it the conflict is exclusively due’.

6.2.2 *The antinomy of teleological judgment*

While the antinomies of the KrV are concerned with the metaphysical, *a priori*, structure of the world or nature, the antinomy of the KU is instead concerned with the totality of *empirical* natural laws. As such, while the antinomy can still be said to stem from the supposition of transcendental realism, the essential distinction is not between things in themselves and appearances, but instead between appearances considered as products of the kind of mechanistic natural causality which results from the transcendental application of the categories of the understanding, and, in reflection upon experience, as products of an additional, non-mechanistic causality of final causes. The antinomy is presented as follows. The thesis states that '[a]ll production of material things and their forms must be judged to be possible in terms of merely mechanistic laws' (Ak. V 387). The antithesis, on the other hand, states that '[s]ome products of material nature cannot be judged to be possible in terms of merely mechanical laws. (Judging them requires a quite different causal law – viz., that of final causes)' (ibid). The thesis appears to contradict the antithesis because taken together they appear to entail that mechanistic causality is at the same time both sufficient and insufficient to account for the empirical laws of nature.

As with the antinomies of the KrV, Kant's solution is to dissolve the opposition between the thesis and the antithesis. His argument here is that the thesis and antithesis are only contradictory if they are taken to apply to things in themselves or, in other words, where the role of judgement is taken to be constitutive as opposed to regulative. In this case, Kant argues, the antinomy can be presented as follows: '*Thesis*: All production of material things is possible in terms of merely mechanical laws. […] *Antithesis*: Some production of material things is not possible in terms of merely mechanical laws.' (Ak. V, 387). It is clear that the above propositions are contradictory since both refer to the actual constitution of objects of experience, and cannot both, therefore, be true: 'In this latter form, as objective principles for determinative judgement, the two principles would contradict one another, so that one of them would have to be false; and so an antinomy would result' (Ak.V, 387). The thesis and antithesis are not contradictory in the antinomy as it is originally presented, however, because they are not concerned with the existence of objects, but instead merely with the rules which govern empirical reflection upon an already constituted experience:

> But if we consider instead the two maxims of a power of a judgement that reflects, the first of these two maxims does in fact not contradict [the second] at all. For if I say that I must *judge* all events in material nature, and hence also all the forms that are its products, in terms of merely mechanical laws as to [how] they are possible, then I am not saying that they *are possible* in terms of mechanical laws *alone* (i.e., even if no other kind of causality comes in). (Ak V, 387-8).

The argument is that in determinative judgement, the maxim concerns how an already given manifold is to be subsumed in such a way as to produce experience. In this case, then, the synthesis can take place only according to mechanistic natural laws. In the case of reflective judgement, however, the matter to be judged already includes the given manifold, and the mechanistic laws are not in themselves, therefore, sufficient to account for the totality of empirical synthesis:

> 'we have no insight into the first inner basis [responsible] for the endless diversity of the particular natural laws, because they are contingent for us since we cognize them only empirically; and so we cannot possibly reach the inner and completely sufficient principle of the possibility of nature (this principle lies in the supersensible)' (Ak. V 388).

In §76 of the Critique of Teleological Judgement, Kant provides an explanation for the role of discursivity in allowing for a resolution of antinomies of judgement. His argument is that the antinomy arises because, for the human intellect, there is a distinction between what is possible and what is actual, or what is possible in thought and what is materially possible. In the case of a hypothetical non-discursive intellect, there could be no possibility of a non-natural causality because it should be possible to account for everything which appeared in nature purely in terms of the activity of the understanding. The distinction between actuality and possibility is itself, Kant claims, a product of the discursivity of the finite human intellect, and the antinomy is resolved by showing that the argument of the thesis and the antithesis of the antinomy in its contradictory form, wrongly presupposes the identity of possibility and actuality and, therefore, that finite experience is non-discursive. My argument in the following is that in the same way in which the mathematical antinomies are often said to provide an indirect proof of transcendental idealism, the antinomy of teleological judgement can be said to provide an indirect proof of discursivity.

How is it, then, that an identity of possibility and actuality underlies the arguments of the thesis and the antithesis in the contradictory formulation of the antinomy of teleological judgement? And in what way is the distinction between possibility and actuality dependent upon discursivity? As discussed, the contradictory formulation of the antinomy mistakes the regulative principles which determine reflection upon, or conceptual thought about, an object, for constitutive principles which are sufficient to bring about the existence of that object. In other words, it presupposes that it should be possible, at least in principle, to account for the totality of material actuality purely in terms of conceptual principles. Kant describes this as a belief that it should be possible to proceed from the universal to the particular; the belief, resulting from the confusion of regulative with constitutive understanding, is that it should be possible for the human understanding to proceed from the purely conceptual to the material. It is a mistake to believe that this is possible in the case of the human intellect, because here the role of the understanding is always to subsume an already given particular under general, or universal, laws.

In turn, this distinction between possibility and actuality is possible only on the presupposition of a discursive intellect, because it is only for a discursive intellect that there can be a distinction between a purely conceptual thought and a thought corresponding to a material actuality. In order to reveal the dependence of the distinction between possibility and actuality on the discursivity of the intellect, Kant considers a hypothetical non-discursive intellect:

> For if the exercise of these [cognitive] powers did not require two quite heterogeneous components, understanding to provide concepts and sensible intuition to provide objects corresponding to these, then there would be no such distinction (between the possible and the actual). If our understanding were intuitive rather than discursive i.e., conceptual] it would have no objects except actual [ones]. [For] we would then be without concepts (and these deal with the mere possibility of an object) and also be without sensible intuitions (which do give us something [actual], yet without allowing us to cognize it as an object). But our entire distinction between the merely possible and the actual rests on this: in saying that a thing is possible we are positing only the presentation of it with respect to our concept and to our thinking ability in general; but in saying that a thing is actual we are positing the thing itself [*an sich selbst*] (apart from that concept). Hence the distinction between possible and actual things holds merely subjectively, for human understanding. (Ak. V, 401-2)

A resolution of the antinomy can therefore proceed in the same way in which the resolution of the first antinomy proceeded. Both the thesis and the antithesis are shown to share a false premise (in this case that there is no distinction in experience between possibility and actuality, or that the human intellect is non-discursive, so that it should be possible, at least in theory, to provide a complete explanation for the existence of particular natural objects). The confusion is shown to stem from reason's demand for a complete and exhaustive account of the existence of natural objects, a demand which can never be met as a result of the discursive nature of the human understanding: 'It is indispensable [and] necessary for human understanding to distinguish between the possibility and the actuality of things, and this fact has its basis in the subject and in the nature of his cognitive powers.' (Ak 401-2). The shared premise is therefore rejected, and the thesis and antithesis no longer contradict one another. As in the mathematical antinomies, the thesis and antithesis (as they are presented in the contradictory form) are shown to presuppose a transcendent application of the understanding:

> 'What makes it so difficult for our understanding with its concepts to match reason here is merely this: that there is something which for it, as human understanding, is transcendent (i.e., impossible in view of the subjective conditions of its cognition), but which reason nevertheless treats as belonging to the object and turns into a principle.' (Ak V, 403).

As is the case with the antinomies of the KrV, then, discursivity serves to allow for a resolution of antinomy by revealing that a conflict which would otherwise be located in the object itself is instead located in the cognitive processes of the subject. In the case of the mathematical antinomies, this means that a conflict which is thought as arising within a spatiotemporal world in itself, is instead shown to arise as a result of conflicts between distinct cognitive faculties. The demand of reason for a complete account of nature is in conflict with the capabilities of the understanding, which can only bring an already given intuition under *a priori* concepts, and which can therefore only account for spatiotemporal entities in terms of further spatiotemporal entities. In the case of the antinomy of teleological judgement, a conflict which is thought as arising within a nature given in itself, is again shown to result instead from a conflict within the cognitive faculties of the subject. While reason demands a complete and exhaustive conceptual explanation of the empirical laws of nature, the human understanding is limited to merely mechanistic accounts;

reason demands an account of the actuality of natural entities in terms of their mere possibility, while, for the human understanding, possibility and actuality must always remain distinct:

> Hence the two propositions, that things can be possible without being actual, and that consequently one cannot at all infer actuality from mere possibility, do indeed hold for human reason. And yet this does not prove that the distinction lies in things in themselves [*selbst*]; there clearly is no such implication (Ak V, 402)

It seems, then, that discursivity plays an essential role in the resolution of the antinomy of judgement described in the KU. I will now turn to the question of the role which it plays in the resolution of the antinomies described in the KrV. As discussed, the resolution of the mathematical antinomies depends upon the rejection of a premise which Kant argues amounts to transcendental realism, and which is shared by both the thesis and the antithesis. 'The whole of the antinomy of pure reason' Kant argues, 'rests upon the dialectical argument: If the conditioned is given, the entire series of all its conditions is likewise given; objects of the senses are given as conditioned; therefore, etc' (A497/B525). According to the above argument, the experience of the spatiotemporal object (i.e., its being 'given' to consciousness) must also require that the entire series of conditions entailed by that object is not only given to consciousness, but given to it as conditioned, that is, as spatiotemporal. To uphold the major premise constitutes transcendental realism because it entails that spatiotemporal objects can be thought of as existing independently of either our thought or our intuition of them, and, as discussed previously, leads to antinomy because this existence must be of two contradictory natures depending upon whether it is thought as pure idea or as sensible reality. A resolution of the antinomy is possible, therefore, if the major premise is rejected. The denial that the experience of a particular conditioned spatiotemporal object entails that the series of its conditions is also given immediately to consciousness as similarly spatiotemporal or conditioned, dissolves the opposition between the thesis and the antithesis, revealing them to be merely 'dialectically contradictory' (A504/B532).

> In order properly to determine the meaning of this rule of pure reason, we must observe, first, that it cannot tell us *what the object is*, but only *how the empirical regress is to be carried out* so as to arrive at the complete concept of the object. If it attempted the former task, it would be a constitutive principle, such as pure reason can never supply. (A510/B538)

How, then, does discursivity allow for a rejection of the premise described above? As discussed previously, according to Kant, the discursive intellect differs from the non-discursive intellect in that the understanding cannot itself bring about the actuality of objects of experience, but can only determine the possibility that a particular object might appear. In the case of a non-discursive intellect there could be no distinction between possibility and actuality. This would mean that reason had a constitutive role, so that the mere positing of possible objects would also entail the actuality of those objects. As a consequence, any contradiction entailed by the idea of those objects could not be merely a contradiction in thought, but would also be a contradiction within the object itself. The contradiction involved in the thought of the object as possible (the thought of the object through the pure categories of the understanding) and the thought of it as actual (that is, as subject to the conditions of possible experience) would be inherent to objects in themselves.

On the assumption of a discursive intellect, however, the arguments of the thesis can be shown to depend upon an invalid inference from the possible thought of an object (a possibility determined through the merely regulative application of reason to the categories of the understanding) to the possibility of its actuality (or its appearance in human experience). In the case of the first antinomy, it is assumed that the thought of the world as a spatiotemporal totality can be met with in actuality, which demands that not only the thought but also the intuition is possible. In the case of the second antinomy, this means that the possibility of the thought that constituent parts of spatiotemporal extension are not themselves spatial (in the sense of being divisible) is taken to entail the possibility that this thought is actual (that it is possible to encounter the non-spatial constituent parts of spatial extension in intuition). In the case of the antithesis in the first and second antinomy, on the other hand, impossibility in general (i.e. for a hypothetical intuitive intellect) is inferred from the impossibility of actuality (the impossibility that an object be intuited in space and time). In the first antinomy, this means that the impossibility of a non-spatiotemporal in general is inferred from the impossibility of its actuality. In the second antinomy, it means that the impossibility of a non-spatial ground of spatiality is inferred from the impossibility of its actuality. Discursivity allows for a resolution of the antinomies, then, because it provides an explanation for the distinction between the conditions on the possibility of objects in general, and the condition on the possibility of objects of actuality. I hope to show later that Kant's resolution of the antinomies must entail not only that the condition on the possibility of the thought of objects is distinct from the possibility of their actuality, but also that the condition on the possibility of the latter cannot ultimately be derived from the condition on the possibility of the former.

6.2.3 The resolution of the dynamical antinomies

So far, I have considered only the first and second (mathematical) of the four antinomies of the KrV. The solution differs, however, in the case of the third and fourth antinomies, which Kant calls the dynamical antinomies. This difference is a result of a distinction which Kant makes between the nature of the application of the first and second sets of categories, to which the mathematical antinomies correspond, and of the third and fourth sets of categories, to which the dynamical antinomies correspond. I discussed this distinction briefly earlier in this dissertation (see 1.2), but it is worth considering in more detail here. Kant introduces this distinction in the B edition of the Transcendental Logic. 'While it contains four classes of the concepts of understanding,' Kant claims, the table of categories:

> may, in the first instance, be divided into two groups; those in the first group being concerned with objects of intuition, pure as well as empirical, those in the second group with the existence of these objects, in their relation to either to each other or to the understanding. The categories in the first group I would entitle the *mathematical*, those in the second group the *dynamical*. (B110).

The mathematical categories are distinguished from the dynamical categories as a result of a difference in the matter to which they apply, and, as a consequence, in the nature of their application. Because they are concerned with magnitude, the mathematical categories are said to be 'constitutive' of the objective and, as a result exhibit 'intuitive certainty' (A161/B201): the matter to which the mathematical categories are applies is always homogeneous. This is not the case, however, with the dynamical categories, the application of which is merely regulative and which 'allow of only discursive certainty' (A162/B201). The matter to which the dynamical categories are applied may be heterogeneous:

> In the application of pure concepts of understanding to possible experience, the employment of their synthesis is either *mathematical* or *dynamical*; for it is concerned partly with the mere *intuition* of an appearance in general, partly with its *existence*. The *a priori* conditions of intuition are absolutely necessary conditions of any possible experience, those of the existence of the objects of a possible intuition are in themselves only accidental (A160/B199-200)

As a consequence, the certainty of the principles which determine the employment of the mathematical antinomies can be established in intuition because they are a condition of intuition. On the other hand, the principles which determine the application of the dynamical principles cannot be established in intuition, because their application is not a condition of intuition in itself, but instead only of the thought of an object as existing, which corresponds to that given intuition.

> The principles of mathematical employment will therefore be unconditionally necessary, that is, apodeictic. Those of dynamical employment will also indeed possess the character of *a priori* necessity, but only under the condition of empirical thought in some experience, therefore, only mediately and indirectly. Notwithstanding their undoubted certainty throughout experience, they will not contain that immediate evidence which is peculiar to the former. (A160 / B199-200)

In the case of the first set of categories, those of quantity, for example, Kant writes:

> 'every appearance is as intuition an extensive magnitude; only through the successive synthesis of part to part in [the process of] its apprehension can it come to be known. All appearances are consequently intuited as aggregates, as complexes of previously given parts. This is not the case with magnitudes of every kind, but only with those magnitudes which are represented and apprehended by us in this *extensive* fashion' (A163 / B204).

In order that spatiotemporal appearances are possible, it is not enough that we are presented merely with an intuition – this intuition can only appear to us as an appearance of some determinate magnitude, and this is only possible on the condition of the synthesis of the manifold through the category of quantity. The mathematical principles, Kant claims therefore, allow of *intuitive* certainty. Their validity can be determined from the mere fact of the appearance of an intuition to consciousness.

In the case of the third and fourth categories (those of relation and modality), however, the principles are not a condition on the possibility of appearance itself, but only on determining the existence of objects through the synthesis of the manifold given in intuition. It is not the case therefore that the mere presence of an intuition to consciousness is sufficient to determine their validity, or, as Kant puts it, the principles are not intuitively certain. In that the intuition does not in itself yield experience of an object, however, and given that this is only possible on the condition that the dynamical principles determine the synthesis of presentations in intuition, Kant argues that the dynamical categories allow of a *discursive* certainty: the presence of objects, as opposed to mere intuitions, to consciousness, entails the application of the categories of relation and modality.

A further consequence of this distinction is that, while the mathematical principles are constitutive, the dynamical principles are merely regulative. Kant says in the Analogies, for example, of the categories of relation:

> These principles have this peculiarity, that they are not concerned with appearances and the synthesis of their empirical intuition, but only with the *existence* of such appearances and their *relation* to one another in respect of their existence. The manner in which something is apprehended in appearance can be so determined *a priori* that the rule of its synthesis can at once give, that is to say, can bring into being, this [element of] *a priori* intuition in every example that comes before us empirically. The *existence* of appearances cannot, however, be thus known *a priori*; and even granting that we could in any such manner contrive to infer that something exists, we could not know it determinately, could not, that is, anticipate the features through which its empirical intuition is distinguished from other intuitions. (A178/B220-1)

In other words, the principles of the mathematical synthesis are, by themselves, sufficient to produce their object (in this case an extended spatiotemporal intuition). They are, Kant claims, 'constructive': 'I can determine *a priori*, that is, can construct, the degree of sensations of sunlight by combining some 200,000 illuminations of the moon.' (A179/B229). In the case of the dynamical principles, however, the principles, because they concern the existence of objects, as opposed to merely the form of their appearance, cannot construct an object, but can only provide us with a means for determining where we can expect to find a related object in experience. The dynamical principles cannot therefore determine the sensible properties of the object which is to appear, but can instead provide only 'a rule for seeking the fourth member in experience, and a mark whereby it can be detected. It does not tell us how mere perception or empirical intuition itself comes about. It is not a principle *constitutive* of the objects, that is, of the appearances, but only *regulative*' (A140 / B222).

This distinction allows for an alternative means of resolving the dynamical antinomies. This is because the application of the mathematical principles, since they determine what can appear in intuition, must always apply to a homogeneous (spatiotemporal) matter. In the case of the dynamical principles, however, since they determine the thought of the object which accompanies the intuition, the matter for synthesis can be heterogeneous. This allows that a purely intelligible (non-sensible and non-spatiotemporal) object can serve as an explanation for the sensible objects of experience:

> All combination (*conjunctio*) is either composition (*compositio*) or connection (*nexus*). The former is the synthesis of the manifold where its constituents do not necessarily belong to one another. For example, the two triangles into which a square is divided by its diagonal do not necessarily belong to one another. Such also is the synthesis of the *homogeneous* in everything which can be *mathematically* treated. This synthesis can itself be divided into that of *aggregation* and that of *coalition*, the former applying to *extensive* and the latter to *intensive* quantities. The second mode of combination (*nexus*) is the synthesis of the manifold so far as its constituents *necessarily belong to one another*, as, for example, the accident to some substance, or the effect to the cause. It is therefore synthesis of that which, though *heterogeneous*, is yet represented as combined *a priori*. This combination, as not being arbitrary and as concerning the connection of the *existence* of the manifold, I entitle *dynamical*. (B201-202)

In the case of the first and second antinomies, the regress from the conditioned to the conditions can only ever take the form of a regress to further spatiotemporal objects, so that the unconditioned (non-spatiotemporal) cannot be found within the series: 'in the mathematical connection of the series of appearances no other than a *sensible* condition is admissible, that is to say, none that is not itself a part of the series'

(530/B558). The thesis is therefore incompatible with experience because it demands that an unconditioned (non-spatiotemporal) object be presented in intuition. In the case of the third and fourth antinomies, however, the regress is in discursive thought, as opposed to intuition, and can therefore take the form of a regression to a non-spatiotemporal object:

> Understanding does not admit *among appearances* any condition which can itself be empirically unconditioned. But if for some conditioned in the [field of] appearance we can conceive an *intelligible* condition, not belonging to the series of appearances as one of its members, and can do so without in the least interrupting the series of empirical conditions, such a condition may be accepted as *empirically unconditioned*, without prejudice to the continuity of the empirical regress. (A531/B559)

In the case of the third antinomy, for example, a non-spatiotemporal (unconditioned) cause can be thought as ground of the spatiotemporal intuition. In this case, the thesis and antithesis need not contradict one another, since the introduction of a non-spatiotemporal (non-natural) causality need not contradict the principle of the antithesis – that 'everything in the world [i.e., the realm of spatiotemporal objects] takes place solely in accordance with laws of nature' (A445/B473). In this case, then, both the thesis and the antithesis may be true:

> In as much as the dynamical ideas allow of a condition of appearances outside the series of the appearances, that is, a condition which is not itself appearance, we arrive at a conclusion altogether different from any that was possible in the case of the mathematical antinomy. In it we were obliged to denounce both the opposed dialectical assertions as false. In the dynamical series, on the other hand, the completely conditioned, which is inseparable from the series considered as appearances, is bound up with a condition which, while indeed empirically unconditioned, is also *non-sensible*. We are thus able to obtain satisfaction for understanding in the one hand and reason on the other. (A531/B559)

It seems, then, that Kant offers two means of resolving antinomy. The first method resolves the antinomy by showing that both thesis and antithesis rest upon a false premise. Kant calls this form of opposition, where the thesis and antithesis, while opposed, are not contradictory, dialectical: 'I beg permission to entitle this kind of opposition *dialectial*, and that of contradictories *analytical*. Thus of two dialectically opposed judgements both may be false; for the one is not a mere contradictory of the other, but says something more than is required for a simple contradiction' (A504/B532), and I will therefore refer to the method by which Kant resolves antinomy by showing the opposition to be dialectical, as the dialectical method. In the case of the mathematical antinomies, both thesis and antithesis are shown to share the false premise that spatiotemporal objects are things in themselves and that the unconditioned can therefore be found in the series of conditions. An alternative method is available in the case of the dynamical antinomies, however, because it can be argued that the thesis and antithesis apply to distinct entities – nature considered as a totality of sensible and intelligible (in the case of the thesis) or merely as sensible (in the case of the antithesis). I will refer to this as the metaphysical solution. The metaphysical solution resolves the antinomy by showing that the thesis and the antithesis are compatible if the thesis is taken to apply to objects of sensible intuition, and the antithesis to the merely intelligible. It is clear that the resolution of the mathematical antinomies can only proceed via the dialectical method, since the constitutive nature of the application of the categories which underlie the antinomy means that both the thesis and antithesis can only refer to the spatiotemporal. As discussed, however, the dynamical antinomies can allow of a metaphysical resolution because the thesis and antithesis can be taken to refer either to sensible or to intelligible objects.

If this is the case, however, then the dynamical antinomies pose an additional threat to Maimon's system. Not only is Maimon, as a result of his rejection of discursivity, unable to account for the distinction between conceptual and material possibility which would make a resolution of the mathematical antinomies possible, but it appears that his rejection of the thing in itself as a transcendent entity precludes a resolution of the third and fourth antinomies. Maimon's claim that, in the case of the infinite intellect, the appearance and the thing in itself coincide, together with his claim that the finite, human intellect is merely a limited form of this infinite intellect, seems to entail that antinomy must remain a feature of things in themselves. This would mean that any resolution of the antinomies would demand not only a commitment to some form of discursivity (or some alternative capable of accounting for the distinction between conceptual and material possibility), but also some metaphysical or epistemological commitment to an absolute distinction between appearances and things in themselves, a commitment which Maimon is not in a position to make without rejecting the fundamental premises of his system.

It is not immediately clear, however, whether the dynamical antinomies might not also allow of a dialectical resolution. It is often argued that Kant's method of resolving the first and second antinomies cannot be applied in the case of the third and fourth antinomies. Allison, for example, writes:

> Thus we now learn that the solution sketched above, which asserts that the antinomy is resolved because thesis and antithesis are both seen to be false, holds only for the antinomies arising from the first two or mathematical ideas and that in the case of the last two, or dynamical ideas, the conflict is resolved in a radically different manner, indeed, one which establishes the compatibility, rather than the falsity of thesis and antithesis (2012, p.17).

There are also reasons for thinking that Kant himself saw the metaphysical solution as the sole means of resolving the dynamical antinomies. In the following passage, for example, Kant appears to claim that these antinomies can only be resolved by positing an intelligible object (or thing in itself) and attributing the claims of the thesis to it, while maintaining that only the antithesis refers to the spatiotemporal series of conditions:

> to think an *intelligible* ground of the appearances, that is, of the sensible world, and to think of it as free from the contingency of appearances, does not conflict either with the unlimited empirical regress in the series of appearances nor with their thoroughgoing contingency. That, indeed, is all that we had to do in order to remove the apparent antinomy; *and it can be done in this way only*. (A563-4 / B591-2, emphasis added)

It is clear that the dialectical method is more problematic in the case of the dynamical antinomies. In the case of the mathematical antinomies, the shared premise (that spatiotemporal objects are things in themselves) can be fairly easily rejected once these objects are considered as appearances, and opposed to things in themselves. In the case of the dynamical antinomies, however, the denial that spatiotemporal objects are things in themselves is not in itself sufficient to resolve the antinomy, since the categories with which it is concerned can apply both to the spatiotemporal and to the non-spatiotemporal. While the antithesis, since it presupposes that the series of the spatiotemporal contains its own condition within itself, takes transcendental realism as its premise, the thesis, since it presupposes only that the unconditioned is to be found somewhere in the totality of the sensible and intelligible conditions, does not.[177] It may seem, then, that the only method available for resolving the dynamical antinomies is to refer the antithesis to objects as they appear in space and time, and the thesis to the sensible and intelligible considered as a totality. There are problems with taking this view, however. Elsewhere in his chapter on the Antinomies, Kant

[177] It is for this reason that the mathematical antinomies are often said to provide a proof of transcendental idealism, while the dynamical antinomies are not. In the case of the mathematical antinomies, the rejection of transcendental realism is a condition of a possible resolution of the antinomies. In the case of the dynamical antinomies, however, the resolution does not depend upon the rejection of transcendental realism, because a non-spatiotemporal entity can consistently be thought as the condition of a spatiotemporal entity due to the possibility of the application of the dynamical categories to a heterogeneous matter.

makes clear that he does not intend his solution to the dynamical antinomies to serve as proof of the existence of non-natural causality, or for the existence of a necessary being:

> in what has been said our intention has not been to establish the *reality* of freedom as one of the faculties which contain the cause of the appearances of our sensible world. For that enquiry, as it does not deal with concepts alone, would not have transcendental… What we have alone been able to show, and what we have alone been concerned to show, is that this antinomy rests on a sheer illusion, and that causality through freedom is at least *not incompatible with* nature (A558/B586)

> In these remarks we have no intention of proving the unconditionally necessary existence of such a being, or even of establishing the possibility of a purely intelligible condition of the existence of appearances in the sensible world. (A562 / B590)

This would seem to suggest that the resolution of the dynamical antinomies does not necessarily entail that there is a purely intelligible component to the sensible world. This becomes problematic, however, if we consider the metaphysical method to be the only means of resolving the dynamical antinomies. As they stand, the antinomies cannot be resolved simply by rejecting either the thesis or the antithesis. Similarly, if the thesis and the antithesis are no longer to be opposed then the solution cannot proceed by rejecting both on the grounds that they entail a false premise. The only method available, then, is to show that each refers to a different conception of the world. If we consider the world merely as a spatiotemporal totality, for example, we conclude that 'everything in the world takes place solely in accordance with the laws of nature' (A445 / B473). If we consider it as a totality of sensible and intelligible, however, we conclude that 'causality in accordance with laws of nature is not the only causality from which the appearances of the world can one and all be derived' (A445 / B473). Kant's claim that he is not concerned 'even [with] establishing the possibility of a purely intelligible condition of the existence of appearances in the sensible world' suggests that he must remain open to the possibility that there is no purely intelligible component to the sensible world. It seems, however, that a rejection of this purely intelligible component must result in a recurrence of antinomy. If the existence of the purely intelligible is rejected, then there is no difference between the 'world' as it is understood in the thesis and as it is understood in the antithesis. Since both must refer to the same entity, the opposition between the two reoccurs, and the metaphysical solution ceases to be a means of resolving the antinomy. In order to leave open the possibility that there is no intelligible ground of appearances, such as a noumenal causality or a necessary being, it would therefore seem that Kant must leave open the possibility of a dialectical resolution of the dynamical antinomies.

What form, then, would a dialectical resolution of the dynamical antinomies take? In his discussion of the antinomy of teleological judgement, Kant gives a clue as to how such a resolution might be possible. Here, he claims that the antinomy of reason, produced when the antinomy (which should be an antinomy only of judgement) is taken to concern the *constitution* of natural objects, arises because the understanding is limited in terms of the kinds of causality that are intelligible for it:

> Hence our reason, whose concept of causality is greatly restricted if reason has to specify it a priori , cannot possibly tell us whether nature's productive ability, which is quite adequate for whatever seems to require merely that nature be like a machine, is not just adequate for [things] that we judge to be formed or combined in terms of the idea of purposes, or whether things [considered] to be actual natural purposes (which is what we necessarily judge them to be) are in fact based on a wholly different kind of original causality, namely, an architectonic understanding, which cannot at all lie in material nature, nor in its intelligible substrate. (Ak. V, 389).

The argument, according to the metaphysical resolution of the dynamical antinomies, is that the totality of sensible conditions does not contain within itself the ground of the series, but that such a ground can be sought in the purely intelligible. The suggestion in the above passage, however, is that even the totality of sensible and intelligible may be insufficient to account for the temporal series, or that even the totality of the sensible and the intelligible series may not contain the grounds of the series within itself. This suggests that a dialectical resolution of the third and fourth antinomies is possible. Both the thesis and the antithesis may rest upon a false premise – in this case that the series of sensible and intelligible conditions exists as a thing in itself. In the case of the antithesis, there is also an additional assumption that there is no distinction between the series of sensible, and the series of intelligible, conditions. Although this solution would avoid the need for a thing in itself, it would still presuppose a discursive intellect, since it would require that there be a distinction between what is intelligible (what is possible according to mere concepts) and what is materially possible. It requires that the conceptual is insufficient to account for appearances, and that the discursive intellect must always, therefore, receive its matter from without.

6.3 Maimon's treatment of antinomy

So far, I have argued that Kant's resolution of the antinomies is dependent upon a distinction between formal and material possibility that arises as a result of the discursivity thesis. As discussed in chapter four, however, Maimon's position is that an answer to the *quaestio juris* is not possible on the assumption of a merely discursive intellect. Maimon's solution to this problem, therefore, is to reject Kant's discursivity thesis. He proposes that a non-conceptual (i.e. non-discursive) employment of the understanding serves to warrant mathematical and perceptual judgments, so that the sensible component of experience can be accounted for, at least in principle, in purely rational terms:

> '[w]e assume an infinite understanding (at least as idea), for which the forms are at the same time objects of thought, or that produces out of itself all possible kinds of connections and relations of things (the ideas). Our understanding is just the same, only in a limited way' (VT, GW II, 63)

Kant's challenge to Maimon, then, is to provide an account of how antinomy might be resolved without recourse to discursivity, and it is clear that Kant does not think that such a resolution will be possible. I turn now to Maimon's own attempt to account for, and resolve, antinomy. While I hope to provide a partial defence of the Maimonian position, insofar as I think that Maimon does have a compelling response to the problem of antinomy, and that, despite his rejection of the discursivity thesis, this resolution can take place along Kantian lines, my position will be that Maimon's treatment of antinomy reveals a deeper problem. Maimon's resolution of antinomy is, like Kant's, I argue, dependent on his claim that the understanding is *finite*: that human knowledge is merely discursive. On the Kantian account, this means that the warrant in the case of synthetic judgments is non-rational. On the Maimonian account, however, it means that, while a complete understanding of the world as a mathematical or dynamical whole is, in principle, possible, human knowledge can only every approximate but never fully attain such an understanding. There is in principle, then, for Maimon, no distinction between what is rationally possible and what is materially actual: Maimonian antinomy is resolved, in other words, only by creating a problematic division within the understanding itself.

It is important to note that not all of the antinomies will prove problematic for Maimon. Because he denies the reality of Kant's mechanistic conception of causality, for example, Maimon can dissolve the third antinomy without recourse to discursivity. Maimon does, however, dedicate a portion of the VT to a discussion of mathematical antinomy. In fact, Maimon claims to ‘extend the sphere of the ideas [of reason] (as well as the sphere of the antinomies arising from these ideas) much further because I maintain that they are to be found not only in metaphysics but also in physics, and even in the most self-evident of all sciences, mathematics’ (VT, GW II, 227). Antinomies occur, Maimon holds, wherever the concept of infinity is employed in mathematics or in dynamics. Maimon does not have recourse to Kant’s cognitive dualism in order to resolve these antinomies, but his means of resolving them does involve an appeal to sensibility.[178] As discussed, it is Maimon’s position that the truths that are revealed through the representation of objects in space and time are independent of that representation. The representation in space and time is, nevertheless, a means of making cognisable to oneself what cannot be immediately cognised by the understanding as a result of its finitude. It is this dependence on space and time, then, that results in antinomy: a complete understanding of the object requires that we are able to cognise it *as an idea of the understanding*. Our dependence on discursive cognition, however, means that we can only ever cognise it *as an idea of reason*: in terms, that is, of a totality of *concepts*. Ideas of the understanding are non-finite not in the sense that they have an infinite magnitude, but in the sense that they have no determinate magnitude. Ideas of reason, however, are infinite in the more traditional sense of the word, i.e. in so far as their production

[178] It is interesting to note that Maimon himself recognised the role that a division between understanding and sensibility played in Kant’s resolution of the antinomies. See VT, GW II, 226-227: ‘For Kant, ideas are principles of reason that by their nature demand the unconditioned for every conditioned. Since there are three kinds of syllogism (namely categorical, hypothetical and disjunctive) there are also necessarily three kinds of idea, and these are none other than the three complete categories (ultimate subject, cause, world-whole) that ground the antinomies (conflict of reason with itself, *which can be resolved only by his system of sensibility and its forms’* (emphasis added).

must occur as an infinite progression in time or space. The discursive intellect experiences the non-finite as an infinite magnitude because of the requirement, discussed in chapter four, that it introduce a fictitious magnitude into the representation of the object. The means of resolving the antinomy, then, is to recognise, as discussed in chapter four, that space and time do not themselves ground the truths of mathematics but merely make them cognisable to us, and to seek to approach ideas of the understanding ever more closely by way of ideas of reason.[179]

The natural number series is, Maimon holds, one form of mathematical antinomy. Discursive reason both sets itself a task insofar as it demands that the number series be produced in its entirety, and is unable to complete this task insofar as its completion requires an infinite amount of time.[180] From the standpoint of an infinite (non-discursive) intellect, however, the infinite number series does not depend upon infinite succession, but can be thought immediately:

> The solution to this antinomy is the following. Since our perception is tied to the form of time, we can only produce an infinite number by means of an infinite succession in time (and so we can never think of it as complete). But an absolute understanding thinks the concept of an infinite number all at once, without temporal sequence. So, what is treated as a mere idea by the understanding considered as a limited understanding, is a real object for the understanding considered as existing absolutely. (VT, GW II, 228)

Something similar is at work in the case of infinitely small numerical determinations. A non-discursive understanding can think such determinations immediately. The discursive understanding, however, must already introduce a

[179] See VT, GW II, 443: 'Finite reason approaches ever closer to infinite reason to infinity. The idea of its complete attainment is the idea of their union'

[180] See VT, GW II, 227-228: 'the complete series of all the natural numbers cannot be an object given in any intuition; it can only be an idea by means of which the successive progress to infinity is treated as an object. Here reason comes into conflict with itself because it treats as an object something that according to its conditions can never be given as an object'.

determinate non-relational magnitude into pure mathematics in the form of the natural numbers.[181] As an idea of reason, then, the irrational number (e.g. $\sqrt{2}$) is conceptually unattainable since its conceptualisation requires an infinite approximation:

> We can approach [irrational roots] ever more closely by means of infinite series (according to the binomial theorem, or with the help of a *series recurrens*), and yet we are convinced *a priori* that we will never find their exact value because they cannot be either whole numbers or fractional numbers, and hence cannot be numbers at all. In this case reason falls into an antinomy because it prescribes a rule according to which this number must definitely be found, and at the same time proves the impossibility of accomplishing this. (VT, GW II, 229)

In physics, the antinomies again arise as a result of the necessity that objects be represented in space and time. In this case, however, the antinomies pertain to dynamics as opposed to pure mathematics. Maimon introduces three such antinomies. The first concerns the possibility of absolute movement. If we are to judge that a body (*a*) moves, we must compare it to another body (*b*) that does not move. If the position of *a* changes with respect to *b*, then we judge that *a* has moved. In order, however, to determine that it is in fact *a* that moved and not *b*, we will have to determine the position of both to a third body (*c*) …

> But just as *a* has altered its relation to *c*, so has *c* altered its own relation to *a*, and therefore we have no ground for thinking this motion as actually in *a* rather than in *c*, and hence we must assume yet another body, for example *d*, and so on to infinity. In this case we have an antinomy because we can never think the motion as actually in *a*, and yet see ourselves forced to suppose for the sake of experience that this is true; in other words reason commands us to assume an absolute motion, but we cannot do so because the concept of motion can only be thought as relative. (VT, GW II, 230)

The second concerns the movement of a wheel. Suppose that I draw a line from the centre of a rotating wheel to its circumference and that I then pick a point along this line (for the purposes of this thought experiment, we will have to imagine that the wheel is rotating freely as opposed to around an axle). The closer the point is to the

[181] See 4.5.2 of this dissertation.

circumference, the greater the speed at which it travels will be. At the centre of the circle, the speed will be equal to zero, and yet I cannot think that there is a point within the circle that does not move at all: ‘We have another antinomy in this case because an infinitely small movement is thought as an object and at the same time not as an object of experience’ (VT, GW II, 231).

While Maimon does not address the Kantian antinomies directly, then, we can nevertheless formulate a response on his behalf: the mathematical antinomies that Kant formulates are a product of the introduction of a fictitious temporal or spatial magnitude with respect to the ideas of the understanding, as a condition on the possibility of discursive cognition of them. Maimon’s resolution of these antinomies can therefore proceed along Kantian lines. The grounds of experience are not themselves subject to the conditions of experience; space and time are not properties of ideas of the understanding, and infinite space and time are fictions. The infinite, then, is a condition on the possibility of perception, and yet we cannot make it into an object of perception but can only approach it ever more closely by way of extension of our concepts into infinity in symbolic cognition.[182] ‘All of this makes clear’ Maimon argues, ‘that for us the infinite (the ability to produce it) is indeed a mere idea; but that it nonetheless can be and is in a determinate way actual so that the antinomies this gives rise to can only be resolved in my way’ (VT, GW II, 238).

Maimon therefore defines his resolution of antinomy as follows:[183]

> For me the solution [of the antinomies] rests on this: that the understanding can and must be considered in two opposed ways. 1) As an absolute understanding (unlimited

[182] The resolution of the antinomy therefore requires, Maimon claims, that we ‘make our thought always more complete, so that the matter ever approaches the form into eternity, and this is the resolution of the antinomy’ (*Wörterbuch*, GW III, 187)

[183] According to Atlas, Maimon was influenced, in his response to antinomy, by Maimonides. See Atlas, 1948.

> by sensibility and its laws). 2) As our understanding, in accordance with its limitation. So the understanding can and must think its objects according to two opposed laws. (VT, GW II, 227)

Elsewhere, Maimon resolves these antinomies into one singular 'antinomy of thought' (*Wörterbuch*, GW III, 186-187): in order that the understanding be cognisant of its own rational processes, it must apply them to a matter that is taken as merely given and which, therefore, is always represented in space and time. Yet in order that it have full cognisance of its rational activities, the understanding must think the object as entirely produced, i.e., not as materially given. Antinomies arise, then, as a result of these competing demands:[184]

> Thinking in general consists in the relation of form (a rule of the understanding) to a matter (the given that is to be subsumed by it). Without matter one cannot achieve consciousness of the form, so that matter is a necessary condition of thought, that is, for real thought of a form or rule of the understanding, a matter, to which it relates, must be given; on the other hand, however, the completeness of the thought of an object requires that nothing be given, but everything thought. (*Wörterbuch*, GW II, 186) [185]

6.4 Weaknesses of the Maimonian response to antinomy: the problem of the subject

How successful is Maimon, then, in overcoming the problem of antinomy? While Maimon is able to resolve what he calls the 'antinomies of the understanding', it

[184] Bransen argues (1989, pp.94-98) that Maimon's antinomy of thought can be expressed in terms of the *quaestio facti* / *quaestio juris* distinction; in order that we have knowledge, it is necessary that it is in some sense given as fact, on the other hand, however, in order to resolve the *quaestio juris*, it is necessary that there is no given, and that the object is a product entirely of thought. Thus the *quaestio juris* and *quaestio facti* are in tension and cannot both be satisfied within the same act of knowing.

[185] There is some debate about the degree to which Maimon's 'antinomy of thought' can be seen to have influenced, and to bear resemblance to, the notions of 'infinite striving' in Hegel and Fichte. See, for example, Bransen (1989, p.179), who argues that there are important differences between these doctrines, and Bergmann (1967, chapter XII: Maimon and Fichte).

seems that this resolution comes at the expense of the coherence of his system and, in particular, the coherence of his account of the subject. Kant's resolution of the antinomies is complete insofar as he is able to dissolve the opposition between thesis and antithesis by rejecting what turns out to be a shared premise, namely transcendental realism. Maimon does not dissolve the antinomies, however, but instead makes antinomy internal to the understanding. Knowledge, even if it is warranted extra-conceptually, nevertheless takes the form of a relation of concepts, which are, in turn, acquired by reflection upon a spatiotemporal manifold. The spatiotemporal representation itself already presupposes, however, that the idea of the understanding is not thought in its entirety. The antinomy is 'resolved', therefore, to the extent that the thesis and the antithesis are merely two ways of thinking about experience: as idea of the understanding and as idea of reason. It is sometimes thought that the infinite intellect is *merely* as a product of the imagination: an idea that we project onto our experiences and towards which we can strive.[186] In particular, these commentators have pointed to the following passage from the VT:

> We *assume* an infinite understanding (*at least as idea*), for which the forms are at the same time objects of thought, or that produces out of itself all possible kinds of connections and relations of things (the ideas). Our understanding is just the same, only in a limited way. (VT, GW II, 64-65, emphasis added)[187]

As I hope I have shown by way of the arguments of chapter four, however, the infinite intellect cannot be merely an idea insofar as it is a condition on the possibility of perception in general. It is, as Paul Franks puts it, a 'transcendentally necessary

[186] For a more detailed discussion of the Maimonian infinite intellect, and in particular its possible origins in Spinozism, see Socher, 2006, chapter three. For a discussion of the constitutive vs regulative status of the infinite understanding in Maimon's thought, see Beiser, 1987, 294-295

[187] See also VT, GW II, 237: 'for us the infinite (the ability to produce it) is merely an idea; but … it nonetheless can be and is in a determinate way actual so that the antinomies that it gives rise to can only be resolved in my way'.

condition for a satisfactory solution to Kant's problems' (2003, p.205).[188] It is not enough, then, merely to set it as a *goal* for the finite understanding.[189]

The status of the infinite understanding therefore remains ambiguous. On the one hand, infinite intelligibility is set as a task for the finite understanding: we can approach complete formal determination ever more closely, but we can never attain it because our thought is discursive – i.e., it is conceptual and always therefore requires a 'given' matter that is organised in spatial and temporal relations. On the other hand, however, infinite intelligibility is a condition on the possibility of perception, and, therefore, of discursive knowledge.[190] Our intellect must therefore be *both* finite and infinite: *both* discursive and non-discursive. We might formulate the problem alternatively, in the following way. The outcome of Maimon's *quaestio juris*, is that it should not be possible for a determination that does not have a rational ground to constitute intentional content: complete rational determination is a condition on the possibility of intentionality. Nevertheless, it seems that the (non-rational) activities of the imagination *are* constitutive of intentional content insofar as we are in a position to experience our conceptualisations or intuitions as incomplete.

[188] Beiser makes a similar claim. See for example, Besier, 1987, p.286: 'it is necessary to postulate Leibniz's and Malebranche's idea of an infinite understanding that is present within our finite understanding and that creates not only the form but also the content of experience. Only such an idea resolves the problem of the deduction, Maimon argues, because it alone surmounts Kant's problematic dualism'.

[189] See VT, GW II, 248: 'The possibility of each and every thing presupposes the possibility of both a more general and a more particular thing; as a result, in the series of subordinated things to which the given belongs, both a progress and a regress to infinite pertain to the complete possibility of a thing: this makes the idea of an infinite understanding a necessary one'.

[190] Although Kant himself considers the possibility of a distinct, non-discursive, form of intellect in the KU, Maimon's account differs in that, while for Kant the infinite intellect remains a merely hypothetical entity, for Maimon it is a condition of human experience.

It seems, then, that the problem remains: Maimon's account rests upon a contradictory account of the subject. Maimon is forced to reintroduce the form / matter distinction, or the distinction between formal and material possibility, into his rationalist system, since it is only by way of this distinction that a resolution of antinomy is possible. In doing so, however, Maimon creates a division within the subject, between its real (infinite), and ideal (finite) aspects. This is, I think, the essence of Hegel's criticism of Fichte in the *Differenzschrift*. My concern here is not to determine whether or not Hegel's assessment of Fichte is accurate, nor whether his criticisms are fair, but Hegel's criticisms do apply, I think, at least to the Maimonian system. Hegel writes:

> the end of the system is untrue to its beginning, the result is untrue to its principle. The principle was Ego=Ego; the result is Ego not = Ego. The former identity is an ideal-real one; form and matter are one. The latter is merely ideal, form and matter are divided; the identity is a merely formal synthesis (*Differenzschrift* p.138)

The above passage could just as well have been written about Maimon; Maimon's resolution of antinomy requires the non-identity of the finite with the infinite understanding, yet the very possibility of there being an antinomy at all depends upon their identity. Infinite intelligibility is not merely to be set as a goal: we must already presuppose infinite intelligibility if we are to make any sense of the system that Maimon presents. Complete rational determination is never in fact achieved within his system, however: we have only finite determination and an infinite striving towards an infinite conceptualisation that can never be attained.

6.5 Conclusion

It seems, then, that while Maimon is partially successful in his attempt to further the Kantian project by way of a *quaestio juris*, the infinite or non-discursive understanding that he introduces in order to account for the possibility of perceptual and mathematical knowledge leaves him results in a problematic dualism within the faculty of the understanding itself. Sensible representation in space and time (and discursive knowledge, therefore) is supposed, on the Maimonian account, to be a product of finite conceptualisation. Yet, as argued in chapter four, a non-discursive understanding is already supposed to be a condition on the possibility of perceptual or mathematical judgment. Maimon must hold that the understanding is *both* finite and infinite: it must be finite in order that the objects are given to it as opposed to merely thought by it, and it must be infinite insofar as it represents conceptual differences in space and time.

Conclusion: Critical Rationalism?

My aim, in the course of this dissertation, has been to provide a detailed account of Maimon's skepticism and to argue that it constitutes a compelling form of post-Kantian skepticism. My claim that Maimon's skepticism is *post-Kantian*, argued for in chapter one, is made on the grounds that it does not presuppose transcendental realism, and is not therefore susceptible to a number of anti-skeptical lines of argument that are afforded Kant as a result of his transcendental idealism, and which he is often thought to develop in the KrV. My claim that Maimon's skepticism is *compelling* is supported by the arguments of chapter three. Maimon's skepticism as it is often construed constitutes a form of what I have termed 'empirical' as opposed to 'critical' skepticism: it pertains, in other words, to the degree of confidence with which we can make assertions about empirical states of affairs. I argue that such accounts fail to capture the full force of Maimon's skepticism. I instead present Maimon's as a form of critical skepticism, concerning the validity of both the categories and the forms of judgment, which an appeal to empirical matters of fact, however certain we may be with respect to those matters, cannot in principle resolve.

My efforts in the latter half of the dissertation were devoted to an examination of another Maimonian line of skeptical argument, one which I argue provides the materials for a possible response to the problem of the *quaestio facti*. This Maimonian line of argument, which I term 'Maimon's *quaestio juris*', concerns the compatibility of Kant's discursivity thesis with the possibility of objectively valid synthetic judgment. Maimon's position is that we do make objectively valid mathematical and perceptual judgments, and that we cannot account for the possibility of these forms of judgment unless we reject Kant's discursivity thesis: unless we suppose, that is, that the understanding has an extra-conceptual capacity. Maimon's *quaestio juris* is often said to identify problems of interactivity between the faculties, or of reconciling receptivity with spontaneity. This reading is vulnerable to a number of lines of criticism insofar as it appears to depend upon misunderstandings about the nature of Kant's discursivity thesis. My intention in chapter four was to present an alternative formulation of this Maimonian line of argument: Maimon's claim is that a non-discursive (i.e. non-conceptual) employment of the understanding is a condition on the possibility of objectively valid mathematical and perceptual judgments. The role of the understanding in warranting perceptual and mathematical judgment allows for a possible response to the *quaestio facti* insofar as objective warrant is not, in principle beyond the reach of the understanding. Ideas of the understanding are accessible to us insofar as they warrant judgment, and can be approximated, although never attained, conceptually.

At this point, however, Maimon's own position remains unstable for two reasons. Firstly, while Maimon's rationalism means that we can approximate ideas of the understanding ever more closely by way of concepts, we have no way of determining (and in particular in the case of natural science) when we are in fact doing so, as opposed to employing illegitimate forms of synthesis, because the operations of the understanding, which are determined according to absolute conditions of objective thought, remain beyond our reach. Secondly, Maimon's denial of discursivity leaves us with what seems to be an incoherent account of the subject. The question of how we might respond to this instability (and of how German Idealism can be understood as an attempt to address this instability) is a matter for further research. I would like here, however, to offer some suggestions as to the form that this research might take.

There is, I think, an important way in which Fichte can help us with respect to the problem of the *quaestio facti*: through the introduction (or re-introduction) of subjectivity as the highest principle of objective determination. In the *Grundlage*, Fichte makes the following claim:

> The skepticism of Maimon is ultimately based on the question of our right to apply the category of reality. This right can be derived from no other — we are absolutely entitled thereto. The fact is, rather, that all other possible rights must be derived from this; and even Maimon's skepticism inadvertently presupposes it, in that he acknowledges the correctness of ordinary logic. — But we can point out something from which every category is itself derived: the self, as absolute subject. Of every other possible thing to which it may be applied, it has to be shown that reality is transferred to it *from the self*: — that it would have to exist, provided that the self exists. (*Grundlage* I, 99)

Because Maimon cites the thought of an object in general as the ground of *a priori* determination, knowledge of the *a priori* determines of objectivity lies beyond the reach of the finite intellect. Maimon is mistaken, Fichte argues however, in thinking that *a priori* determination is determined by the form that the *object* must take. Instead, the *a priori* form of experience is determined by the necessary form of subjectivity. In fact, Fichte argues, that subjectivity is the highest principle from which all knowledge derives is already implicit in the KrV:

> That our proposition is the absolutely basic principle of all knowledge, was pointed out by *Kant*, in his deduction of the categories; but he never laid it down specifically *as* the basic principle. (I, 99-100)

If the thought of an object in general is to be the first principle of the system of knowledge, as Maimon believes that it should, the *quaestio facti* remains unanswerable. Only an infinite, and not a finite, intellect has access to the object as an object of pure thought, and thus to the supposedly absolute conditions of objective thought in general. If, as Fichte argues however, the first principle of the system of knowledge is the subject itself, then an examination of the structures of subjectivity will also serve as an examination of the necessary structures of objectivity: it will allow us to draw conclusions about what the world must be like if self-consciousness is to be possible.[191] Fichte's claim is that the legitimacy of the categories does not derive from their being conditions on the possibility of the thought of an object, but instead in their being conditions on the possibility of the thought of the subject. In the Transcendental Deduction, the subject (in the form of the original unity of apperception) plays this role insofar as synthesis according to the rules of thought is shown to be a condition on the possibility of subjectivity. In Fichte's view, however, the *particular* categories that we employ are themselves conditions on the possibility of subjectivity, and therefore derive not from abstract forms of judgment, but from acts of the imagination by way of which the cognition of subjectivity can be constructed. In this way, then, the subject itself must be the ground of the *legitimacy* of transcendental judgments.

My hope, then, is that this dissertation contributes both to debates that are internal to the Maimons scholarship, and to debates that have broader philosophical implications. I have attempted here to present Maimon's as a compelling form of post-Kantian skepticism, and to make sense of the relationship between this

[191]See *Grundlage*, I, 100: 'Our principle has been overstepped, in the sense ascribed to it, by *Spinoza*. He does not deny the unity of empirical consciousness, but pure consciousness he completely rejects. … He separates *pure* and *empirical* consciousness. The first he attributes to God, who is never conscious of himself, since pure consciousness never attains to consciousness; the second he locates in the specific modifications of the Deity. So established, his system is perfectly consistent and irrefutable, since he takes his stand in a territory where reason can no longer follow him; but it is also groundless; for what right did he have to go beyond the pure consciousness given in empirical consciousness?'

skepticism and Maimonian rationalism. I also hope, however, that in doing so I have helped to make a case for the wider significance of Maimon's skepticism, both in the context of the history of philosophy (in particular in the development of German Idealism), and in the context of contemporary philosophy of perception.

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