

Kant's Transcendental Logic

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I, Max Edwards, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signed:

Abstract

The present work seeks to track the development of the positive doctrines of the Transcendental Aesthetic and Analytic of Kant's first *Critique* in light of his innovative vision of a possible science that he entitles *transcendental logic*. Such a logic, like its 'general' counterpart, will amount to an *a priori* exhibition of the most fundamental operations of the cognitive faculty Kant entitles *understanding*, but transcendental logic will be distinguished by its capacity to bring into view the status of the understanding not just as a capacity for thinking, but as a capacity for thinking *of objects*. If such a science is possible, Kant will have the means to explain the possibility of synthetic *a priori* judgements, passing a verdict on the metaphysical tradition that does not beg the question against its sceptical detractors.

Given the terms of Kant's account of cognition, an *a priori* thinking of objects would have to involve a conceptual determination of the pure intuitions of space and time. Given, in addition, the status of such forms of awareness as mere formalisations of empirical consciousness, an *a priori* thinking of objects will itself be a formal manifestation of the necessary relation between discursive thinking and a sensible given. Now, a logical investigation of the understanding will only disclose facts about the necessary form of such a relationship if the understanding plays a prediscursive role in making objects available for thought – as the metaphysical deduction urges. The Transcendental Deduction, in connecting the conditions of self-conscious thought with those of self-conscious experience, and both with fundamental concepts Kant entitles the 'categories', goes a significant way towards showing that the understanding plays just such a role. Although its success is only partial, the Deduction should thus be seen as the first realisation of the idea of a transcendental logic.

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Introduction

Kant announces the project he is to undertake in the Transcendental Analytic of the *Critique of Pure Reason* by way of the provisional formulation of the idea of a science (A57/B81).¹ Such a science, Kant tells us, will uncover and study the manners in which ‘...we think objects completely *a priori*’ (A57/B81), and this science will be called *transcendental logic*. Given that Kant goes on to designate the entirety of both the Transcendental Analytic and Dialectic under the title ‘Transcendental Logic’, it seems clear that he thought of himself as capable of systematically establishing the reality of this imagined science; thus, an understanding of transcendental logic and an understanding of the Analytic and Dialectic will be mutually informing. In the present work I will be concerned to shed light on some of the central doctrines and concerns of the early part of the Analytic, and will for this reason use an understanding of transcendental logic as an entry point into these doctrines, while also referring back to them in the attempt to shed light on the nature of transcendental logic itself.

Once our interpretative focus is centred on Kant’s conception of transcendental logic, many questions emerge. What would an *a priori* thinking of objects be? And why must Kant’s formulation of the idea of a science of such thought remain *provisional* at the point at which he introduces it? If it is provisional at the point of its introduction, when, if at all, does it acquire reality? Indeed, what would it be to establish the reality of such a science? And what would it matter? Which parties would be inimical to the idea of such a science, and why? It is impossible to pursue these questions without attending to the texts that Kant designates under the title ‘Transcendental Logic’, and for this reason my account of the nature of transcendental logic in what follows will be bound up with an interpretation of the metaphysical and transcendental deductions, as well as the Transcendental Aesthetic. A transcendental logic, I argue, would be an *a priori* study of the most fundamental operations of the human intellect, distinguished by its capacity to bring into view necessary features of the relationship between the intellect and the sensible given insofar as empirical cognition is to be possible. Now, whilst few

¹ In this and what follows, I follow the standard ‘A.../B...’ device in referencing the pagination of the two editions of the first *Critique*.

theorists would deny that there *are* necessary features of this relationship, the claim that facts concerning those features can be established through any kind of *logic* – a formal study of the most fundamental operations of the understanding – is controversial. Logic, it might seem, affords us insight into the formal structure of one half of the relation between intellect and sense – logic tells us about how the understanding must be in order for judgement to be possible, and a study of sense shows us how our receptive capacities must be for sensible experience to be possible. Neither such study, it might seem, can tell us anything about the nature and form of the relation between these two disparate spheres needed for empirical knowledge-claims to be possible. Now, a transcendental logic would be possible only if this picture were subverted. In particular, it would need to be shown that the intellect itself plays a pre-discursive role in making sensible objects available for its own activities, for it is only if this were the case that it would be possible to read of facts about the necessary form of the connection between the intellect and the sensible given just through a formal account of the operations of the intellect. Kant, I suggest, articulates this constraint on a transcendental logic in the metaphysical deduction, and partially meets it in the transcendental deduction.

The thesis splits into four chapters. In the first, I show that Kant's critique of metaphysics requires an interrogation of '*a priori* concepts of objects', which interrogation he entitles 'transcendental philosophy'. Such a concept, I argue, would be capable of contributing to the truth-value of an *a priori* judgement in virtue of facts concerning not its logical form, but its relation to objects. Given the terms of Kant's theory of cognition, however, a concept could only function in such a manner if it were capable of determining 'pure intuition'. The idea of transcendental logic, as a study of conceptual determination of pure intuition, is accordingly formulated.

Given that such a reading of Kant's project relies heavily on the doctrine of pure intuition, the second chapter is devoted to an interpretation of this doctrine. I claim that Kant's arguments that empirical intuition possesses *a priori* form are persuasive, and provide an interpretation of his conception of *a priori* awareness of such form according to which such awareness is simply a formalisation of

empirical intuition, made possible by an abstraction from the sensational features of the empirical manifold. Thus, a conceptual determination of pure intuition would simply manifest the formal structure of any relation between empirical judgement and empirical intuition.

In the third chapter I analyse Kant's arguments in the metaphysical deduction. These arguments, I suggest, are fruitfully viewed as further contributions to the formulation of the idea of a transcendental logic. The metaphysical deduction argues that a recognisably 'logical' investigation will only be capable of disclosing the formal structure of the relation between empirical intuition and judgement if the understanding be conceived as playing a prediscursive role in making sensible objects available to its own conceptualising activities. The categories are presented as the concepts that would govern such a prediscursive function.

Of course, to envisage a prediscursive function is not to establish it. Kant's first serious argument for thinking that such a function is indeed operative in the human intellect is made in the Transcendental Deduction, and the final chapter is accordingly spent in an interpretation and evaluation of this argument. I present an account of the two-step argumentative strategy of the B-Deduction, presenting in the process a novel conception of the fought-over notions of apperception, figurative synthesis, and the formal intuition of space. I argue that Kant successfully demonstrates a prediscursive function for the 'mathematical' category of quantity, but that his argument leaves the 'dynamical' categories, especially that of cause, untouched. Nevertheless, the partial success of the Deduction is sufficient for the idea of transcendental logic to be said to have received its first true realisation. The systematisation of this realisation is a task for the *Analytic of Principles*.

Chapter 1: Transcendental Philosophy

The aim of this chapter is to present an account of the guiding concerns that lie behind the strategies and doctrines Kant adopts in what is generally regarded as the constructive part of the *Critique of Pure Reason*, inclusive of the Transcendental Aesthetic and the Transcendental Analytic. Such orientation is perhaps especially necessary for an understanding of Kant since, more so than the majority of his modern predecessors, he took himself to be asking hitherto unasked questions, and pioneering a new philosophical sub-discipline in his pursuit of answers. In particular, he took himself to be the first philosopher explicitly to inquire into the conditions under which metaphysical cognition is possible, and designated this new branch of investigation *transcendental philosophy*.² As I intend to display in what follows, an understanding of this self-conception sheds light upon the nature of the problem, concerning the status and possible application of *a priori* concepts, that drives the development of Kant's 'transcendental logic'. Having clarified this problem, the purpose of subsequent chapters will be to interpret and evaluate Kant's solution.

The chapter falls into two parts. In the first, I introduce transcendental philosophy with reference to the critique of metaphysics as an enquiry into the 'origin, domain, and objective validity' of *a priori* concepts of objects, clarifying this notion by developing an account of conceptual apriority that draws on Kant's account of apriority at the level of judgement. In the second part, I introduce key aspects of Kant's account of cognition, and show how, given the requirements of this account, *a priori* cognition of objects seems *prima facie* impossible. However, this appearance is illusory, and I close by showing how the terms of Kant's account in fact both leave space to make sense of the idea that *a priori* cognition of objects is possible, and afford a viable strategy for investigating the claim that such cognition is actual.

² Given that Kant saw himself as the first philosopher to undertake a critique of pure reason, the fact that he took himself to be the first philosopher explicitly to enquire into the conditions of metaphysical cognition follows from his characterisation of the aim of his critique at Axii as a principled attempt to come to a verdict concerning '...the cognitions after which reason might strive **independently of all experience**, and hence the decision about the possibility or impossibility of a metaphysics in general'.

1.1 A Priori Concepts of Objects

‘The real problem of pure reason is now contained in the question: How are synthetic judgements *a priori* possible?’ (B19)

The purpose of the present section is to shed light on this statement of the guiding problem of the first *Critique*. In order to do so, I will set Kant’s question against the backdrop of his conception of transcendental philosophy and its relation to the critique of metaphysics, introducing, as I proceed, an array of Kantian terminology that will be of importance later on.

As is well known, Kant sets out in the *Critique* to adduce a principled verdict concerning the (human) possibility of metaphysical cognition.³ What are the considerations that might throw the possibility of metaphysics into question, and what would it be to pursue an answer here? Metaphysics makes claims that purport to characterise objects of possible experience, and, in its most extravagant manifestations, claims that purport to characterise entities that transcend the bounds of possible experience. Now, the latter of these pretensions may seem the more obviously problematic – and Kant subjects it to excoriating critique in the Transcendental Dialectic – but there is also standpoint from which even the former ambition may seem presumptuous, and it is this precisely this standpoint

³ Because it is a term that we will be using with some frequency, something should be said at the outset about the term ‘cognition’ as it features in the *Critique*. I suggest that we may discern no less than *three* uses to which Kant puts the term. Sometimes Kant uses it to mean i) something very like knowledge. A cognition in this sense is a judgement that is truth-*apt*, truth-*evaluable*, and has been determined to be true. A plausible case for the presence of this sense of the term is made by Stephen Engstrom (2006, 21) – though we will remain neutral as to whether this constitutes for Kant the ‘basic usage’ of the term, as he claims. On another use of the term – that which appears to be signalled at Bxxviii – cognition means ii) *objectively valid* judgement. Kant never explicitly characterises objective validity in the *Critique*, and there is room for disagreement as to what he takes it to mean. According to Henry Allison (2004, 88 – he is seconded here by Béatrice Longuenesse, 1998, 82), objective validity simply amounts to the ‘capacity to be true or false’, but this is too inclusive. Claims that transcend the boundaries of possible experience are not objectively valid for Kant, but what is lacking is not a *capacity* to bear a truth-value, but the capacity of human subjects to determine their truth-value. Thus, we should rather say that objective validity requires that a judgement be truth-*apt* and truth-*evaluable*, but that objective validity, unlike knowledge, does not require that the judgement has yet been determined as true or false. Finally, as Clinton Tolley points out (forthcoming 2012, 12), since Kant *defines* ‘thinking’ as ‘cognition through concepts’ (A69/B94), and since thought does not require objective validity, Kant sometimes operates with a still weaker sense of cognition on which iii) a cognition is a judgement that is truth-*apt*, but not necessarily truth-*evaluable*, the truth-value of which, *a fortiori*, does not need to have been determined. In the present context, I take Kant to be enquiring into the conditions of possibility of metaphysical cognition in both senses i) and ii), whilst treating the status of metaphysics as cognition in sense iii) as both unproblematic and uninteresting.

that Kant occupies and proceeds from in the Transcendental Aesthetic and Analytic. We may access this standpoint through a consideration of the speculative nature of metaphysical methodology: metaphysics does not arrive at its claims *via* observation of or extrapolation from empirical data, or indeed any of the methods characteristic of the empirical sciences, but proceeds instead through *a priori* speculation. One might therefore come to wonder whether the methods of metaphysics are not fundamentally unsuited to the achievement of its aims: how could a branch of enquiry that refuses to relate itself to experience hope to arrive at secure cognition of the objects of experience? Kant's realisation is that an answer to this question itself lands us in a species of metaphysical enquiry, for we must ask ourselves what sort of relation must obtain between the human intellect and the objects of experience in order for the aspiration to cognise those objects on the basis of intellection alone to appear to be anything other than baffling. Kant entitles this metaphysical enquiry into the possibility of metaphysics 'transcendental' enquiry:

'I call all cognition transcendental that is occupied not so much with objects but rather with our *a priori* concepts of objects in general.' (A11-12/B25)

Metaphysics, in its traditional guise, presents itself, unlike transcendental philosophy, as a form of cognition that *is* concerned primarily with objects, be they supersensible or experiential. In advancing its putatively objective claims, it avails itself of *a priori* concepts of objects; thus, in order to investigate what it would be for such claims to hold, we need to investigate these concepts. In particular, we need to address the question of what would be needed for such concepts to attain *a priori* application:

'And here I make a remark the import of which extends to all of the following considerations, and that we must keep well in view, namely that not every *a priori* cognition must be called transcendental, but only that by means of which we cognise that and how certain representations... are applied entirely *a priori*.' (A56/B81)

Thus transcendental enquiry aims to deliver *a priori* cognition of the conditions that must be met in order for *a priori* representations to hold of objects. In his effort to pursue transcendental philosophy, Kant, unlike the practitioner of traditional metaphysics, does not proceed on the unexamined assumption that his chosen mode of enquiry is capable of delivering secure cognition. Rather, he announces his enquiry as proceeding from a *provisional formulation of the idea of a science* (A57/B81); the question of whether such an idea can be made good is not to be settled in advance of an attempt to spell out the requirements of the idea. Nonetheless, we are told that, if it can be made good, the science in question will deliver an account of the ‘origin, the domain, and the objective validity’ of the representations that it studies (A57/B81); and these results will directly inform a verdict on the origin, domain, and objective validity of metaphysics itself.

In order to sharpen our understanding of transcendental enquiry we need to sharpen our understanding of the objects of its study. That is, we need a better understanding of what *a priori* concepts of objects are for Kant. This breaks down into two questions: in virtue of what is a concept *a priori*, and in virtue of what is a concept a ‘concept of an object’? We will begin with the question concerning apriority, and gain some insight into objectivity along the way.

What makes a concept *a priori*? Given that Kant’s account of apriority in the first *Critique* is parsed primarily in terms of judgements, we can answer our question by asking first what makes a judgement *a priori*. According to Kant, to think a proposition ‘...along with its necessity’ and treat it as holding with strict (exceptionless) universality, is to make an *a priori* judgement (B3-4). The reason that Kant takes necessity and strict universality to constitute ‘...a mark by means of which we can securely distinguish a pure cognition from an empirical one’ (B3) has to do with his conception of the type of data that experience can provide:

‘Experience teaches us, to be sure, that something is constituted thus and so, but not that it could not be otherwise.’ (B3)

For this reason, merely attending to the sort of data supplied in experience could never justify us in thinking a proposition along with necessity and strict

universality, for such a judgement purports to characterise facts concerning, not what is, but what must be. There is thus a principled epistemic gulf between such judgements and the type of evidence experience can provide, and they qualify for this reason as *a priori* – ‘independent of all experience and even of all impressions of the senses’ (B2).

Now, how do we move from this account of judgemental apriority to an account of conceptual apriority? One natural suggestion is as follows: given that Kant defines a concept as a ‘predicate for a possible judgement’ (A69/B94), we should say that concepts that are capable of featuring predicatively in claims made with strict universality and necessity inherit the apriority of such judgements. However, although it latches onto something of importance, this proposal, as stated, cannot be right. To see why, we need to introduce Kant’s famous distinction between analytic and synthetic judgements.

In order to introduce this distinction, more needs to be said about Kant’s conception of judgement. In the opening of the ‘metaphysical deduction’ (A66-70/B91-95), Kant presents judgement as constituting the ‘only use’ the human intellect can make of concepts. It effects this use by enacting ‘functions of unity’, whereby ‘...many possible cognitions’ are ‘...are drawn into one’ (A69/B94). Thus, for example, the judgement ‘All bodies are divisible’ draws the separate judgements ‘All of these entities are bodies’ and ‘All of these entities are divisible’ into one cognition. This unification is achieved through a subordination of concepts to one another. All concepts, for Kant, possess both an *extension* and an *intension*.⁴ A concept’s intension is the set of ‘marks’ that collectively determine the features that an object must possess in order to be characterisable by that concept (the grasp of which will, in the ordinary case, constitute a discriminatory capacity on part of the subject to recognise the relevant objects as falling under the relevant concept).⁵ A concept’s extension is the set of concepts that ‘fall

⁴ In the following I seek to clarify Kant’s pronouncements about judgement in the metaphysical deduction by drawing on the discussion of extension and intension in §§7-15 of the *Jäsche Logic* (1800/1992, 95-99; 593-597).

⁵ The connection between grasp of a concept’s marks and possession of a recognitional capacity – such that a ‘definition’ of a concept, that is an exhaustive exhibition of its marks, is at once the

under' it by relating to it as species-concepts to a genus-concept. Now, to subordinate concepts to one another is to represent one concept as part of the extension of another. In the present case, the concept <body> is represented as falling under the concept <divisible>. For this reason, divisibility is recognised in the judgement as one of the marks that constitutes the intension of <body> – that is, a feature the recognition of which may contribute to a recognition of an object as a body.⁶ Thus, instead of separately judging a set of objects to be bodies and to be divisible, in co-opting divisibility as one of the marks of <body> by representing <body> as part of the extension of <divisible>, I make it possible to recognise the objects as bodies *through* recognising them as divisible, and thereby draw two cognitions into one. 'These objects are therefore mediately represented by the concept of divisibility.' (A69/B93-4)

According to Kant (A6/B10-A10/B14), an exclusive and exhaustive distinction may be drawn between two types of judgement: *analytic* and *synthetic* judgements. This distinction divides judgements along two axes, in terms of i) the manner in which their truth-value may be determined, and (correlatively) ii) the type of knowledge they potentially afford. In an analytic judgement, the predicate-concept is always '...already thought in' the subject-concept (A7/B11). That is to say, the status of the predicate-concept as a mark that co-constitutes the intension of the subject-concept is always already secured before the judgement is made. This is because the predicate-concept is one of the fundamental marks that must be at least implicitly ('confusedly') grasped in order for it to be possible to be operating with the subject-concept at all; it is thus, on pain of my failing to grasp the concept in even the most elementary respect, '...a part of the manifold I always think in it' (A7/B11). The analytic judgement simply makes explicit a certain feature of this basic recognitional capacity. For this reason, in order to determine whether the judgement is true one needs to establish whether the

articulation of a recognition capacity – is effectively brought out by Katherine Dunlop in her recent 2012, esp. 100.

⁶ This connection between possession of an intension and capacity to fall under a concept shows that there may be an exception to the claim that all concepts possess an intension. As Tolley points out (forthcoming 2012, 23-27), the maximally general concept available to human cognition (if there is one) will contain all other concepts under itself, but will not itself fall under any other concepts. Accordingly, it will not possess an intension. Tolley claims that there is such a concept – the concept of an object.

predicate-concept *is* indeed a part of this fundamental recognitional capacity, and to do this one is not obliged to consult the objects the judgement concerns – one does not conduct empirical research on bachelors to determine whether they are unmarried men.⁷ Rather, one proceeds *via* the principle of contradiction (A151/B191) – the judgement will count as analytically true iff its contrary is contradictory. The rationale for this principle may be brought out as follows. If ‘Not all bachelors are unmarried men’ could be true, it would be possible to recognise something as a bachelor without thereby recognising it as an unmarried man, and thus <unmarried man> could not constitute part of the recognitional capacity required for any possible operation with the concept of a bachelor. Given that the truth of an analytic judgement is determined solely by ascertaining facts about the logical form of the concepts involved, and does not require any consultation of the state of the objects the judgement concerns, the knowledge potentially afforded by analytic judgements is *clarificatory* rather than ampliative – knowledge that lays bare the marks possessed by concepts, without amplifying our knowledge of the objects that those concepts determine.

Now, in contrast to analytic judgements, the predicate-concept of a *synthetic* judgement is not always already thought in the subject-concept, as evidenced by the fact that the contrary of a synthetic judgement is never contradictory. That is to say, no amount of analysis could ever unearth the predicate-concept as one of the marks co-constituting the recognitional capacity required for any use of the subject concept whatsoever. Thus, in co-opting the predicate-concept as a mark of the subject-concept by recognising the subject-concept as part of its extension, I ‘...add to the concept of the subject a predicate that was not already thought in it at all’ (A7/B11). So, for example, in the judgement ‘All bachelors are depressed’, I *provisionally* add the property of being depressed to the intension of <bachelor>; that is, I make it possible, on this occasion, to recognise something as a bachelor *through* recognising it as being depressed. This addition is provisional, because for the purposes of other synthetic judgements, the concept withdraws back into its fundamental intension, as evinced by the fact that ‘Not all bachelors are

⁷ As Allison helpfully construes the present point, reference to the object is ‘otiose’ in establishing the truth-value of an analytic judgement (2004, 91).

depressed’ does not acquire the character of a contradiction (and thus the relevant concepts may ‘belong together, though only contingently...’ (A8/B12)). Now, this temporary enlargement of our concepts is possible only if we go beyond them, to some third thing in which bachelorhood and depression are found together; the synthetic judgement gives discursive expression to the discovery of this togetherness. Thus, deciding the truth-value of a synthetic judgement unavoidably requires us to consult the state of this third thing, and this means determining the state of the object(s) the judgement concerns. For this reason, our temporary amplifications of concepts have the potential to leave in their wake permanent amplification of our knowledge of objects.⁸

We are now in a position to see why the criterion of conceptual apriority we considered above cannot be correct. According to that criterion, any concept suited to figure as the predicate in an *a priori* judgement is thereby *a priori*. However, analytic judgements bear the marks of apriority: that an analytic judgement is thought with strict necessity and universality is exhibited in the fact that the mere attempt to advance the claim that it is subject to exception – through the assertion of its contrary – collapses in contradiction. But any concept that is one of the basic marks of another concept may feature predicatively in an analytic judgement, and many such concepts we would pretheoretically recognise as empirical. So, for example, the concept <dog> is clearly a mark of the concept <Labrador>; consequently, ‘All Labradors are dogs’ is an analytic judgement. Hence the concept <dog> is capable of featuring predicatively in an *a priori* judgemental setting; but neither common nor Kantian sense treats <dog> as an *a priori* concept.

⁸ This reading is perhaps counterintuitive, and would require a more extended treatment of Kant’s doctrine of conceptual marks for a full defence. Nevertheless, it does seem to be the best way of making sense of Kant’s claim that the synthetic judgement ‘adds’ something *to the concept*, since it would be implausible to say that the synthetic judgement adds anything to the *extension* of the subject-concept: the extension of a concept is not at issue when it features in subject-position. But aside from contributing to the intension, it is hard to see how else it would be possible to ‘add’ to a concept. It should be noted that the present account complements, and was partially inspired by, Engstrom’s account of the distinction between discursive and intellectual cognition in terms of the requirement on the former alone that it ‘depart from’ without ‘abandoning’ its concept, in order that it should secure outside it ‘...a concept that is not already thought in the original yet suited to it’ (2012, 12).

However, an important point concerning the relation between concepts and analytic judgemental contexts has emerged, which can be brought out if we return to the idea of an *a priori* concept *of an object*. Because they may be established solely through attention to logical form, analytical judgements do not propel the intellect out of itself, towards a world of objects. Since reference to the determined object is in this respect otiose in establishing the truth-value of an analytic judgement, it is not in virtue of its relation to the object that the predicate-concept is capable of influencing the truth-value of the judgement. Given this, the status of concepts *as* concepts *of objects*, though presupposed, is neither secured by nor exhibited in their featuring predicatively in analytic judgements: it is only their logical form *qua* concepts that is exploited.

Now, it is true of many of the concepts that constitute the very mixed fabric of human cognition that their capacity to feature predicatively in *a priori* judgements is exhausted by their capacity to feature in analytic judgements. For such concepts, then, their status as concepts of objects must be secured and exhibited in an empirical judgemental context. However, Kant believes that there are certifiably *a priori* judgements that do not exhibit the marks of analyticity. Such synthetic *a priori* judgements, he claims, are present in mathematics, physics, and, apparently, in traditional metaphysics (B14-19). Now, we have seen that the status of a concept as an object-directed representation is directly relevant to its capacity to feature in a synthetic judgement: given the ineliminable reference to the object involved in establishing the truth-value of a synthetic judgement, it is precisely in virtue of its relation to an object that a concept is capable of influencing the truth-value of such a judgement. Thus, as is not the case with analytic judgements, the status of a concept *as* a concept of an object *is* secured and exhibited by its featuring predicatively in a synthetic judgement. Therefore, concepts that are capable of figuring in synthetic *a priori* judgements are concepts whose status as concepts of objects is exhibited and secured in an *a priori* judgemental context. For this reason, I suggest that concepts whose object-directed status can only be exhibited in empirical judgemental contexts be counted as empirical concepts of objects, and concepts whose object-directedness can be exhibited within *a priori* judgemental contexts be counted as *a priori* concepts of

objects. The materials for transcendental enquiry are thus easy to uncover: as necessity is the mark of judgemental apriority, so capacity to feature in synthetic *a priori* judgements is the mark of conceptual apriority.

This clarifies why Kant's enquiry is not directly concerned with *true* synthetic *a priori* judgements. What we need to understand is how a concept could play a role in determining the truth-value of an *a priori* judgement chiefly in virtue of facts about its relation to an object rather than its logical form. Given this, a concept may very well exhibit its object-directedness in an *a priori* judgemental setting by rendering the relevant judgement *false*. Thus all that is required is that synthetic *a priori* judgements possess a truth-value, not that they be true. If we elucidate the possibility of such judgements we will have done all we need to elucidate the possibility of *a priori* concepts of objects. We will then be in a position to pass a verdict on which tenets of the metaphysical tradition, if any, survive transcendental critique.

1.2 Conceptual Apriority: A Problem, and an Outline of a Strategy

What are the metaphysical concepts that lay claim to conceptual apriority? Thanks to Hume, we can at least number <cause> as such a concept. The familiar metaphysical thesis that every event has a cause is, according to Kant, plainly synthetic (B19-20): the judgement that some event does not have a cause is not beset by contradiction, and hence the concept <cause> cannot be a mark of <event>. Therefore, the concept must be capable of securing and exhibiting its status as an object-directed representation from within an *a priori* judgemental setting. Later on, Kant will claim that there are a host of other metaphysical concepts that behave in the same manner, and will attempt, in the metaphysical deduction, to present a principled and exhaustive list of such concepts. However, for the purposes of motivating the critique of metaphysics, this is not necessary: all that is needed is that we pretheoretically recognise that there are *some* metaphysical concepts that pretend to *a priori* status. If conceptual apriority is shown to be problematic, and if it is obvious that metaphysical cognition is at least partially dependent on *a priori* concepts, then we will join Kant in regarding

transcendental critique as an appropriate theoretical investigation of the cognitive credentials of metaphysics.

But why think that conceptual apriority *is* problematic? In order to answer this question, we need to think through the requirements of conceptual apriority in more detail, and this requires us to think more about what it would be for a concept to manifest its relation to an object in an *a priori* setting. This question in turn is fruitfully approached *via* a consideration of what is generally involved, for Kant, in the judgemental representation of an object, and in order to make progress here we need to introduce a fundamental Kantian category: ‘intuition’. The significance and role of intuition comes into view when it is emphasised that for Kant, the objects of judgement must always be given independently of the act of judgement. It is of a piece with Kant’s oft-repeated claim that the human intellect is essentially discursive (e.g. B135, B138/39, B145) – essentially bound in its activity to the categorisation and explanation of an autonomously present empirical world – that judgement should rely for its actuation on the presence of an independently given object; and the avenue *via* which this givenness is brought about is intuition (A50/B74). Intuition is the representational upshot of our passive capacity to be affected by objects, and is said by Kant to constitute a singular and immediate representation of its object (A19/B33; A320/B376-77; 1800/1992, 91; 589). The ‘use’ that the understanding makes of concepts in judgement is that of determining intuition, where to determine an intuition is to subsume it under a concept. Thanks to the immediate relation of intuition to its object, the judgement, in subsuming the intuition, achieves a mediate relation to the intuited object (A68-9/B92-4). The aspiration to determine intuition through concepts is indeed partially constitutive of the judgemental stance: it is to intuition, Kant declares, that all thought as a means is directed as an end (A19/B33).

As we have seen, experience for Kant teaches us what is, never what cannot be otherwise. Now, intuition is perfectly constituted to act as the vehicle through which this teaching is imparted, since, as stated, in addition to immediacy, it is constituted by singularity. This singularity consists in its relating the subject to a single state of affairs; thus, if a subject were disposed to treat the intuition as

material for cognition, distilling the experiential lesson taught through the intuition, it would appear that the cognition accordingly made available would take the form 'X is the case', and not 'X could not be otherwise'. And now we have a problem for conceptual apriority. We have seen that for a concept to determine an object is for it to subsume an intuition through judgement. Now, in order to determine an object in an *a priori* judgemental setting, a concept must, as it were, help to fulfil the aspiration of the judgement to hold with necessity and universality; and this would mean contributing to the determination of data concerning what must be. But given singularity, it would seem that the type of data to which an *a priori* judgement must relate – concerning what must be – cannot be present in the material that it must determine – intuition. It would seem therefore that, given the nature of intuition, and given the interaction of intuition and concept necessary for cognition, no concept is capable of securing and exhibiting its status as object-directed within an *a priori* judgemental setting. Indeed, the very idea of a synthetic *a priori* judgemental setting now seems untenable, for it requires, *per impossibile*, the presence to mind of a type of data that intuition could not provide. It might seem, therefore, that Kant must either give up his account of cognition, or abandon as hopeless the attempt to elucidate the possibility of synthetic *a priori* judgements. However, Kant does not need to pursue such a course; and to see why, we must provisionally introduce the distinction between pure and empirical intuition.

According to Kant, the ordinary course of human experience is composed of empirical intuition, where empirical intuition is understood as a singular and immediate representation that relates to its object 'through sensation' (A20/B34). Such intuition is, to be sure, incapable of issuing in the sort of data – concerning what must be – that would be necessary for *a priori* object-determination; this is just another way of putting the point that concepts such as cause can never be 'expressed empirically'. However, empirical intuition – the 'matter' of which is sensation – also bears a certain characteristic 'form'. This form, Kant claims, can neither be constituted nor produced by sensation, but must rather 'lie ready... in the mind *a priori*' (A20/B34), and pure intuition furnishes an *a priori* acquaintance with this *a priori* form. Now, given that pure intuition relates the

subject to the absolutely universal form of (human) intuition, it supplies data concerning what *must be*, not simply concerning what is; hence pure intuition, unlike its empirical counterpart, *does* provide appropriate material for *a priori* object-determination. Thus, Kant's conception of intuition does not forestall transcendental enquiry after all: the interrogation of *a priori* concepts as to origin, domain, and objective validity must now proceed upon the basis of an investigation of the possibility of conceptual determination of pure intuition. As Kant says,

‘...since there are pure as well as empirical intuitions (as the transcendental aesthetic proved), a distinction between pure and empirical thinking of objects could also well be found.’ (A55/B79-80)

This is not the somewhat facile claim that, since a distinction between pure and empirical representation is to be discerned at the level of intuition, it might also be present at the level of intellect. The pertinence of pure intuition is rather that it gives us a way of envisaging what a pure thinking of objects would involve, and it is thanks to the fix that pure intuition gives us on the idea of *a priori* object-determination that we are able provisionally to formulate the idea of a science that studies the modes of *a priori* relations between concepts and objects (A57/B81). Such a science Kant entitles *transcendental logic*.

Conclusion

In this chapter, I have sought to show how the critique of metaphysics, the interrogation of *a priori* concepts of objects, and the inquiry into the possibility of synthetic *a priori* judgements all come together in the first *Critique*. Kant is concerned to determine the human possibility of metaphysical cognition, and since metaphysics avails itself of *a priori* concepts of objects, transcendental philosophy, which enquires into the origin, domain, and objective validity of such concepts, is the appropriate instrument of this critique. Given in turn that such concepts must be capable of featuring in synthetic *a priori* judgements – in order that they manifest their status as object-directed representations within an *a priori* judgemental setting – transcendental philosophy will be coterminous with the

investigation of the possibility of synthetic *a priori* judgement. In the second part I considered the prospects of this project in light of the lineaments of Kant's theory of cognition, establishing that synthetic *a priori* judgement, no less than empirical judgement, would have to involve a conceptual subsumption of intuition. This generates a *prima facie* problem: given its singularity, how could intuition provide the type of data – concerning what must be, and not simply what is – to which such judgements would need to relate? At this point the notion of pure intuition – as an intuitive acquaintance with the absolutely necessary form of empirical intuition – emerged as a viable candidate for precisely the sort of awareness needed to underwrite synthetic *a priori* judgement. Thus the idea of a transcendental philosophy becomes the idea of a transcendental logic: a science that studies the relations between *a priori* concepts and pure intuition.

Now, if the foregoing account of Kant's philosophical strategy is correct, then our grasp of the rationale and doctrines of Kant's transcendental logic will only be as strong as our grasp of the notion of pure intuition. Therefore, in the next chapter, we will need to address Kant's arguments for the existence of pure intuition, and his account of its status. And for this we will need to turn to the first part of the *Critique*, the Transcendental Aesthetic.

Chapter 2: Pure Intuition

It was the contention of the previous chapter that our understanding of the project that Kant pursues under the title ‘transcendental logic’ will only be as firm as our grasp of his doctrine of pure intuition. For this reason, the present chapter will be devoted to an interpretation of this doctrine. Given this task, our primary focus will be the Transcendental Aesthetic, since that is the passage of text in which the doctrine is explicitly set forth. As is well known, Kant argues there that human sensory experience is underwritten by an *a priori* acquaintance with space and time. Not only does Kant argue that space and time constitute the forms of sensibility, the receptive capacity through which intuitive awareness is possible, he also claims that they are themselves the objects of an *a priori* intuitive awareness, an awareness which, in the case of space, is marshalled and exploited by geometry. We will be concerned to interpret these two claims, reconstructing and evaluating the arguments by which they are mounted, and providing an account of the relationship between them. Having achieved these goals, we will be in a position to understand the role that pure intuition must play in Kant’s provisional formulation of the idea of a transcendental logic.

The chapter falls into three parts. Focussing chiefly on the representation of space, in the first part I present an interpretation and evaluation of some of the key arguments by which Kant seeks to motivate the claim that space constitutes an *a priori* form of sensibility. I situate Kant’s arguments in opposition to a ‘relational’ conception of intuitive form, and show how Kant seeks to undermine this conception as it applies to the experience of space. I also attempt to show that Kant’s arguments in the so-called ‘metaphysical exposition’ section exhibit a degree of interconnectedness that is frequently underappreciated in the secondary literature: specifically, a customary exegetical template according to which the first two expositions concern the apriority, the second two the intuitive nature of the representation of space, is at least potentially misleading. Once we appreciate the structure of the metaphysical expositions, as well as their relation to the preamble section, there are grounds to take seriously Kant’s case for regarding space as an *a priori* form of sensibility. In the second part, I introduce Kant’s

doctrine that space, as well as the form by which empirical intuition is organised, is also the object of an *a priori* intuitive awareness, and enquire into the relationship between these two doctrines. This is a complex issue the full treatment of which requires a degree of acquaintance with the doctrines of the Transcendental Analytic that cannot be assumed at the present stage of analysis. Nonetheless, I briefly propose an admittedly incomplete account on which pure intuition is the result of a phenomenological abstraction from the sensational matter of empirical experience. In the brief final part, I articulate a sense in which this conception of pure intuition requires us to think of the subject matter of transcendental logic not as some special species of object-cognition, but rather as the necessary form of the relationship between empirical judgement and empirical intuition.

2.1 *A Priori* Form in the Transcendental Aesthetic

The transcendental aesthetic, Kant tells us, is a ‘science of all principles of *a priori* sensibility’ (A21/B35), and sensibility is the passive capacity whereby the human mind is affected by objects, the characteristic representational upshot of such affection being intuition (A19/B33). Of course there are many questions to ask about this characterisation – what would a principle of ‘*a priori* sensibility’ be? Why suppose that human sensibility is characterised by any such principle? And, moreover, even if such principles are present in human sensibility, why suppose that they should be amenable to scientific scrutiny? These are all questions that Kant addresses, and we will investigate his answers in due course. For the present, however, we can address another query. We might wonder whether Kant’s enquiry at this stage is properly termed ‘transcendental’, given its focus on sensibility and intuition. As we have seen, Kant introduces transcendental philosophy as a study of *a priori concepts*, not intuitions. It might therefore be thought that his decision to entitle his study of sensibility ‘transcendental’ represents a correction of his earlier, restrictive description of transcendental enquiry. Another possible strategy – commonly employed in other contexts⁹ – is

⁹ For example, in explanations of the fact that the metaphysical expositions purport to exposit the ‘concept’ of space. See Vaihinger 1892, 1976, Kemp Smith 1923, Paton 1936, as cited in Falkenstein 1995, p. 63, and also, more recently, Janiak 2009.

to think of Kant's initial characterisation as using the term 'concept' in a very loose sense, simply to mean 'representation', so that transcendental enquiry is simply a study of *a priori* representations of objects in general. The first explanation lands Kant with an inconsistency; the second removes this inconsistency, but only by attributing to him a misleading use of technical vocabulary. However, neither of these strategies is necessary. As we saw previously, Kant, driven by the requirements of his conception of cognition, recognises that the possibility and even intelligibility of an *a priori* relation of concepts to objects is dependent on the possibility and intelligibility of *a priori* intuition. Indeed, it is of a piece with Kant's doctrine that both intuitions and concepts are inescapably necessary for cognition (A51/B75) that a study of the cognitive relation of concepts to objects should bring with it a study of intuition and of the relation of intuitions to concepts. Given this, an interrogation of the notion of *a priori* intuition is a necessary prelude to transcendental logic, and it is for this reason that transcendental aesthetic earns its title as 'transcendental'. Kant meant exactly what he said in his initial characterisation of transcendental philosophy, and transcendental aesthetic can be seen as both the precondition and the first stage of such enquiry. Not only is it indispensable for the provisional formulation of the idea of a science of *a priori* thinking of objects (A57/B81), it also seeks to establish a series of doctrines with reference to which such a science will proceed.

It is fruitful to view the Transcendental Aesthetic (hereafter just 'the Aesthetic') as comprised of four sections, with each mounting separate though related contentions. It begins with a preamble section which introduces a variety of technical terms and presents a case for thinking that human sensibility is characterised by an *a priori* form. Next are two sets of 'Expositions'. In the first set, the 'Metaphysical Exposition', Kant presents a number of arguments for thinking that the form in question is constituted by two *a priori* intuitions: one of time, the other of space. In the 'Transcendental Exposition', Kant seeks to lend further plausibility to this proposal by arguing that it is only on the supposition that our awareness of space and time is (originally) *a priori* and intuitive that we can explain the apodictic cognition made available by geometry on the one hand

and certain principles of Newtonian mechanics on the other. In the final section, ‘conclusions from the above concepts’, Kant seeks to draw a number of conclusions from the preceding discussion about the ontological status of space and time. In what follows, we will be concerned chiefly with the preamble section and the Metaphysical Exposition. We will be focussed on the task of clarifying and evaluating Kant’s claim that human experience is possessed of an *a priori* form.

2.1.1 The Preamble

The preamble section is designed to motivate the idea that human sensibility possesses an *a priori* form, which transcendental aesthetic may isolate and study. To this end, Kant introduces an array of technical language and goes on to mount the notorious claim that ‘that within which the sensations can alone be ordered and placed in a certain form cannot itself be in turn sensation’, from which he concludes that the form in question must ‘all lie ready... in the mind *a priori*, and can therefore be considered separately from all sensation’ (A20/B34). To the extent that this argument is designed to establish a self-standing source of plausibility for Kant’s project, it is widely regarded as a failure. According to Sebastian Gardner, although the considerations that it adduces are plausible, the argument adverts to doctrines that Kant is not in a position fully to spell out until the Transcendental Deduction (1999, 72). Meanwhile, according to Lorne Falkenstein, the argument is so inconclusive that it should not be regarded as an *argument* at all: rather,

‘...Kant’s claims in §1 of the Aesthetic are best treated as the goals of a research project – goals that the immediately following sections of the Aesthetic will seek to realise.’ (1995, 137)

In what follows, I will agree that the argument, as it stands, is inconclusive. However, the argument is not so weak as not to deserve the name. Moreover, its incompleteness – due, I will argue, to the assumption of a contentious conception of form – need not await the Transcendental Deduction for remedy: rather, it is implicitly addressed in the immediately following section of text, the

Metaphysical Exposition. However, before we can mount these claims, we will need to address the array of technical terminology that Kant introduces in the opening paragraphs of the preamble section. In the course of doing so, we will arrive at an interpretation of the relation as Kant sees it between empirical intuition and sensation.

Empirical Intuition and Sensation

The section opens with an introduction of intuition. Intuitions are representations acquired through the way in which we are affected by objects, hence attributable to *sensibility*, the receptive faculty through which alone objects are given to the human mind. *Sensations* are the effect on our representational capacity insofar as we are affected by objects, and that intuition which relates to its object through sensation is to be called empirical (A19/B33-A20/B34).

Now, we might wonder at this point how a representation can relate to its object ‘through’ something whilst still being ‘immediate’. In order to sharpen this query we need to sharpen our understanding of the immediacy of intuition. Kant says little to clarify his operative conception of immediacy; however, he does go into some detail about what a *mediate* representational relation would involve, in the course of clarifying the mediacy of conceptual representation in the opening section of the metaphysical deduction:

‘Since no representation pertains to the object immediately except intuition alone, a concept is thus never immediately related to an object, but is always related to some other representation of it (whether that be an intuition or itself already a concept). Judgement is therefore the mediate cognition of an object, hence the representation of a representation of it.’ (A68/B93)

In the first sentence, we are told that a mediate representation of an object is always related to some other representation of the object as a condition on its being related to the object itself. In the second sentence, we are told that the relation in question is one of *representation*: a mediate cognition is such that, in order to stand in a relation of representation to an object, it must stand in a relation of representation to another of the subject’s mental states. Therefore, an

immediate representation is one for which this does not hold: a representation such that its capacity to represent an object is not dependent on its capacity to represent another of the subject's mental states. Now, when Kant tells us that empirical intuition relates to its object 'through' sensation, it is plausible to think that he is making a remark about the representational relationship between intuition and object. If he were intending to make a remark instead about the *causal* relationship between the two, then, given that the human intellect is not creative of its objects, it would be a far more natural use of language to reverse the terms of the statement and claim that the *object* relates to *intuition* 'through' sensation. If, however, we read him in this way, then it is hard not to think of the sensation as some (potentially obstructive) intermediary standing between the intuition and the object. Consider the following familiar use of 'through': 'in order to get to Richmond I need to go through Twickenham.' In making this claim, I am giving record to the fact that Twickenham is separate from my current location – it stands between my current and final location. Now, if we read this use of the term into Kant's claim about empirical intuition, then we have a picture on which sensations stand between intuition and object, as a separate psychological entity 'through which' intuition must pass in order to represent its object. However, it is hard to make literal sense of this idea – of sensation as a separate port in the representational 'journey' of intuition to object – except by reading it as the claim that intuition must represent sensation in order to represent its object. But of course if we accept this reading, and if we accept the above construal of immediacy, then we make nonsense of the claim that intuitions relate to their objects immediately.

The above difficulty can be resolved if we reject the claim that *qua* representational state, intuition is separate from sensation. If we treat sensation instead as *constitutive* of intuition – so that empirical intuition is just a specific sort of configuration of sensation – then sensation will no longer stand between intuition and object. This reading is not made impossible by Kant's use of the term 'through': we can think of intuition as representing its object 'through' sensation in the same way that a government communicates its decisions 'through' its representatives: just as the representatives in question may themselves be

members of the government, so sensation may constitute empirical intuition. This interpretation of the relationship between sensation and empirical intuition may be parsed with reference to what Kant elsewhere calls the ‘manifold’ of intuition (e.g. A79/B105). Every intuition, Kant claims, is composed of a multiplicity – manifold – of elements; intuitive representation occurs when a certain type of order is brought to bear upon these elements. The claim that sensations constitute intuitions is thus naturally rendered as the claim that the manifold of empirical intuition is composed of sensation.

The Sensation Argument

Now, ‘appearances’ – the objects with which intuition establishes contact – are intuited as ordered in certain characteristic relations, and this fact Kant expresses by attributing to appearances ‘form’ as well as ‘matter’. Whereas the matter of appearance is that in it which ‘corresponds to’ sensation, its form is

‘...that which allows the manifold of appearance to be <intuited as> ordered in certain relations’ (A20/B34)¹⁰

Whatever it is that makes this allowance must do so by acting as a framework ‘within which’ the matter of appearance is ordered (A20/B34), and according to Kant this cannot be sensation. Now, Kant states these claims in slogan form, but an argument can be constructed if we take our cue from his use of ‘within which’. The argument, which for ease of reference we may call the Sensation Argument, begins by stating a requirement on something’s being a form of appearances, and then claims that sensation cannot meet this requirement.

- 1) If something is to allow appearance to be ordered in certain relations (thus to constitute the form of appearances) then it must be a framework ‘within which’ those sensations corresponding to the matter of appearance can be ordered in certain relations.
- 2) No sensation could be such a framework.

¹⁰ In Guyer and Wood’s translation, the angle brackets ‘<’ and ‘>’ are employed to indicate that the text within them was added in the second edition.

3) Therefore no sensation could constitute the form of appearances.

It is important to note that Kant is not arguing as follows: all sensations must be placed within an ordering framework, therefore no sensation could be the ordering framework, since any candidate sensation – one that appeared to contain the others within itself – would itself need to be placed in an ordering framework. Rather, the argument only claims that those sensations *that correspond to the matter of appearance* need to be placed in an ordering framework; this leaves open the possibility that there could be a sensation *corresponding to the form of appearance*, which would be suited to act as the ordering framework in question. It is this possibility that the argument is designed to ward off, so it cannot premise the assumption that *all* sensations need to be placed within an ordering framework. How does the argument militate against this possibility? Given the conception of form presented in premise 1), a sensation that corresponded to the form of appearance would have to be a global, encompassing sensation within which all others were ‘contained’. Now, it is hard to imagine what such a sensation could be like, in part because it is hard to get a grip on what it would be for one sensation to be experienced as ‘within’ another. Although sensations undoubtedly exhibit certain characteristic relations, containment is not one of them; sensations are apprehended as ‘...outside and next to one another’ (A23/B38), and as simultaneous or successive (A30/B46) – but not as within one another. If we grant that we cannot imagine sensations exhibiting such relations, is Kant entitled to his strong conclusion that sensation ‘cannot’ be the form of appearance? This depends on the scope of ‘cannot’: Kant need not be read as claiming that there is no being for which sensation can constitute the forms of appearance. Kant grants that there could be beings with differently constituted sensibilities, such that objects appear to them in fundamentally different ways than they do for humans (see B72 and B150); for such beings, the matter of appearance and consequently sensation would exhibit different sorts of characteristic relation, and perhaps it would be possible for them to experience one sensation as ‘within’ another, thus leaving room for the possibility that the form of appearance could itself be sensation. This possibility, however, is of little relevance to Kant’s project, which is expressly concerned to investigate the way in which objects are given, ‘...at

least for us humans' (B33). Moreover, if we can grant that the above argument has at least lent plausibility to the more restricted claim that the form of appearances for *humans* cannot be (or correspond to) sensation, then we will have conceded enough for Kant's purposes, since he is seeking only to motivate the idea that there could be an aspect of our experience of objects that is not grounded in sensation.

If the form of appearance is not to be found in sensation, then it is '...pure (in the transcendental sense)', which is to say that '...nothing is to be encountered' in it that '...belongs to sensation' (A20/B34). Given that sensation is the (sole) effect of an object on the capacity for representation, if the form of appearance does not belong to sensation then its presence in our experience cannot be attributed directly to the influence of objects; accordingly – assuming that objects and the human mind are the only two causes by which something could end up in our experience – Kant holds that this form '...is to be encountered in the mind *a priori*'. Thus, Kant claims that the form of appearances, rather than corresponding to sensation, is, or corresponds to, the '...pure form of sensibility' which '...is also called pure intuition' (A20/B34-35).

The Incompleteness of the Argument

Falkenstein (1995, 136-37) poses a formidable challenge to the above argument. As we have seen, the argument is designed to motivate the claim that certain aspects of our sensory experience of objects do not owe their presence in experience to the objects themselves. However, according to Falkenstein, the argument could only lend support to this claim through an equivocation on the term 'sensation'. As Kant introduces it, sensation is the effect of an object on our representational capacity. However, in the argument, he treats sensations as individuated solely by their degree of intensive magnitude, that is, their phenomenological vividness, or 'degree of influence on the sense' (A165/B208). But why should these two senses of 'sensation' be equivalent or even co-extensive? *If* the sole effect of an object on our representational capacity is individuated exclusively by intensive magnitude, then the question as to whether the form of appearance is to be attributed to the object reduces to the question as to whether

relations of order between sensations as intensive magnitudes can be grounded in sensations so understood, and Kant argues that they cannot. But why suppose that mental items characterised exclusively by intensive magnitudes *are* the only effect of an object on our representational capacity? Until we have argued for this claim, we will have done nothing to rule out the possibility that the object directly communicates its formal properties to the perceiving subject, as an effect on the mind that is wholly separate from the array of intensity values that correspond to the object's matter. Therefore, we will have done nothing to motivate the claim that some aspect of our experience of objects cannot be the effect of those objects.

Now, two points need to be raised in Kant's favour here. First, it should be noted that Falkenstein reads Kant as if, having made life easy for himself, he simply treats it as definitional that the form of appearance cannot be grounded in sensation – but, as we claimed above, it is possible to recognise an *argument*, based on the requirements that must be met by a form of appearances, for the claim that sensations as intensive magnitudes cannot correspond to the form of appearances.

A second and more important point needs to be made, concerning the place of the present argument within the broader project of the transcendental critique of metaphysics. Transcendental aesthetic, as we emphasised above, is the first step towards a transcendental evaluation of metaphysics. Given this, we should view the account of cognition that Kant sketches in the preamble section as, to some extent, a codification of the very standpoint against which metaphysical, and indeed transcendental enquiry, seem impossible and even unintelligible – namely, that of Hume. In particular, to claim that objects can only effect the mind by causing sensations conceived of as intensity values is to mimic the Humean thesis that impressions – characterised solely by force and vivacity – constitute the fundamental unit of sensory experience. If Kant can adopt the commitments of a recognisably Humean standpoint and *still* motivate the claim that there could be such a thing as pure intuition – and consequently such a thing as a conceptual determination of pure intuition – then he will have shown us that neither transcendental nor metaphysical cognition are precluded just by the very terms of

such a standpoint. It is true that his account of sensation begs the question against a standpoint according to which objects directly communicate their form to the human mind; but it is hard to see why the proponent of such an account of the relationship between mind and world should be especially hostile to metaphysics.

For these reasons, Kant's argument warrants evaluation on its own terms, in spite of the incompleteness that Falkenstein correctly identifies. Viewed in such a light, however, a more serious incompleteness emerges. The first premise of the argument presented above propounds a conception of form according to which sensations can only exhibit certain relations if they are experienced as existing 'within' an all-embracing, global framework. We can call this the framework conception of form. This conception, for which Kant provides no argument, is by no means uncontroversial. According to Locke, for example, sensations do not need to be experienced as falling within an overarching framework in order to exhibit certain relations; rather, matters are the opposite way around: for Locke, as for Leibniz, we first experience sensations as standing in certain relations, and then construct, through extrapolations from these relationships, an encompassing framework within which the sensations may be situated. We may call this the relational conception of form. For relational theorists, then, the form of appearances, even if not itself sensation, certainly 'belongs to' sensation, and will not count as 'pure in the transcendental sense'. Thus, even granting that Kant's argument is successful on the assumption of a framework conception of form, it will do little to persuade somebody who is not already won over to this conception.

It is worth emphasising how important this conception will be to Kant's overall argument. Although Kant in the preamble effectively equates the *form of sensibility* with *pure intuition*, the claim that our experience of objects as standing in certain relations is to be attributed to some form of intuitive awareness is far from uncontroversial, and is certainly not entailed by the claim that the form of appearances is *a priori*. Kant, of course, does not leave this problem unaddressed: one of the chief goals of the Expositions is to *argue* for the intuitive character of the form of sensibility. We might wonder, however, whether these arguments are illicitly buttressed by a framework conception of form. We saw above that an

intuition is understood by Kant as containing a (potentially infinite) manifold of elements within itself. Thus, as long as we presuppose a framework conception of form, intuition will seem a natural candidate to play the representational role required of the framework within which appearances are encountered as standing in certain relations. But whilst it may take little to argue for an equation of the form of sensibility and pure intuition on a framework conception of form, none of this would convince a relational theorist without further argument. Therefore, if Kant does not provide argument for his operative conception of form, then not merely the preamble, but the entire argument of the Expositions, will remain inconclusive.

In the Metaphysical Expositions it is argued that the characteristic relations that appearances are intuited as bearing to one another, to which Kant had alluded in the preamble, are *spatiotemporal*, and that pure intuitions of space and time constitute the framework within which these relations may be encountered. It might seem, therefore, that the Metaphysical Expositions, like the preamble, simply assume the framework conception of form, and thus do nothing to remedy the incompleteness left in the wake of the Sensation Argument. However, as we will see, the Expositions *do* contain an argument, to be found in the first exposition, for the conception of form with which they operate. Moreover, the incompleteness of the Sensation Argument, whilst damaging, is not terminal to its tendency to motivate transcendental aesthetic as a science of *a priori* sensibility. Kant has at least established the conditional conclusion that *if* a credible – though admittedly controversial – conception of form appropriately characterises our sensible experience of objects, *then* the form of appearances cannot be grounded in sensation, but must be pure in the transcendental sense.

2.1.2 The Metaphysical Expositions

The metaphysical expositions argue that the presence within our sensory experience of spatiotemporal relations can only be explained on the supposition that humans possess an *a priori*, intuitive awareness of space and time, with these representations constituting the framework within which spatiotemporal relations may be apprehended. Part of the rationale for treating spatial and temporal

relations as *explananda* lies in their necessary ubiquity: as the second exposition seeks to show, there is no possible experience that, denuded of its spatiotemporal content, would still count as an experience of objects.¹¹ Thus, spatiotemporal relations must count as amongst the most fundamental relations that objects can exhibit within sensory experience, and inquiring as to whether these relations are permitted their place in experience by objects or by the nature of the human representational capacity will therefore be a natural starting point in the search for an *a priori* form of sensibility. In the following, we will interpret some of Kant's key arguments, as well as addressing questions concerning the interrelation of the expositions. Following exegetical tradition, the chief focus of the following will be on the representation of space rather than that of time, and I will proceed by supposing that whatever results Kant establishes about the representation of space can be supposed to apply, *mutatis mutandis*, to the representation of time.

In the first exposition, Kant seeks to bolster the conception of form that had been left presupposed in the preamble. He does this by arguing that a relational conception of form could not explain the presence in sensory experience of spatiotemporal relations. According to Kant's framework conception of form, spatial properties and relations are only present within experience to the extent that they are experienced as falling within an encompassing spatial framework. According to Locke and Leibniz, however, matters are precisely the opposite way around: out of a series of primitive experiences of objects as standing in certain relations – as next to, alongside, before, or after one another – we abstract away from the objects that feature in such experiences (Leibniz) or imagine an indefinite repetition of such experiences (Locke), and thence form a representation of an encompassing framework within which the relations in question may be placed. On such a picture, then, appearances need not await placement 'within' a framework in order to be 'allowed' to be intuited as standing in spatiotemporal relations, and a theorist who held this picture would consequently eschew the terms in which Kant sets the project of the Aesthetic. Thus Kant actively engages such a theorist in the first argument, contending that the very experiences the

¹¹ This reading of the Second Exposition, which requires a certain degree of poetic license in interpreting Kant's use of the terms 'represent', and 'think', is due to Falkenstein 1995, pp. 186-189.

relationist appeals to as grounding the representation of space are in fact already dependent on the representation of space:

‘...the representation of space cannot be obtained from the relations of outer appearance through experience, but this outer experience is itself possible only through this representation.’ (A23/B38)

In order to clarify and evaluate Kant’s grounds for this claim, we should distinguish two senses in which an experience may depend on, or presuppose a representation. Suppose that Kant’s argument against the relationist started from the claim that a full specification of the content of the experiences to which the relationist appeals would make ineliminable reference to space, since relations such as *alongside* are implicitly spatial. This would establish one sense in which the experiences in question presupposed or depended on the representation of space. However, from presupposition in this weak sense it does not follow that the experiences depend on space in the stronger sense that space must act as the global framework within which the relevant relations may be experienced. A recognisably relationist position could grant to Kant that experiences of relations such as *alongside* presuppose space in the weaker sense whilst denying that space is required in the stronger sense. Such a theorist could appeal to the fact that weak presupposition does not in general bring with it strong presupposition: for example, we may grant that the relation *brighter than* involves implicit reference to colour, but it does not follow from this that our capacity to experience one shade as brighter than another is dependent on our capacity to locate both within some all-embracing ‘colour-space’.¹² Thus, to the extent that Kant is simply assuming that presupposition in the strong sense is required to explain presupposition in the weak sense, his argument both begs the question against the relationist, and rests on a demonstrably false principle about the relationship between the two forms of dependence.

However, as Warren (1998) has pointed out, nothing in Kant’s argument requires us to read him as committed to any such principle. Kant levels a very specific

¹² I am indebted, for this example, to the discussion in Falkenstein 1995, pp. 170-71, and Daniel Warren 1998, p. 200.

claim about space and spatial relations, and does not commit himself to any general position on the relationship between the experience of relations of type-X and the experience of a framework within which X-type relations take place. That is to say, Kant needn't adopt a framework conception of form across the board. His claim is simply that objects must be experienced as ensconced within a broader space in order to be experienced as standing in spatial relations or exhibiting spatial properties. This claim certainly has phenomenological plausibility on its side: it is at least true that our ordinary experience of spatial relations takes place in this manner. Perhaps the second argument of the Metaphysical Exposition can be read as seeking to bolster this phenomenological case. There Kant claims that the embeddedness of objects within a broader space is a necessary rather than contingent feature of human experience: according to the second exposition, it is not possible to take an object out of space and for there to be any object left for a possible experience. And yet taking the objects out of space is *precisely what the relationist analysis of space needs to do*.

It should be noted that Kant's argument in the first exposition is advertised not just as an argument against the relational conception of form, but also as an argument for supposing that the representation of space is not of empirical origin. Now, our previous analysis of the Sensation Argument puts us in a position to see why Kant should take himself to have fulfilled both ambitions at a single stroke. Having refuted the relational conception of form as it applies to our experience of spatiotemporal relations, Kant is now in a dialectical position to mobilise the results of the Sensation Argument from the preamble section. Given that sensations conceived as intensity values cannot act as the framework within which appearances can stand in certain relations, and given that, in order to stand in spatiotemporal relations, we have now established that appearances must indeed fall within some framework, it follows that the spatiotemporal framework within which objects are experienced as in space and time cannot derive from sensation. For this reason, the presence of space and time within our experience cannot be ascribed to the influence of objects. Given the Sensation Argument, to refute the relational conception of form as it applies to space and time is *ipso facto* to establish that space and time are pure in the transcendental sense.

It is customary to divide the four arguments of the Metaphysical Exposition into two apriority arguments (the first and second expositions), and two arguments for the intuitive character of our awareness of space and time (the third and fourth expositions).¹³ However, the analysis we have developed shows that this treatment is in danger of oversimplifying matters, at least to the extent that it implies that the considerations of the third and fourth arguments are insulated from those of the first and second. One of the chief premises of the third argument, which is re-iterated in the revised version of the fourth argument in the second edition, is that the parts of space are given as *within* space; rather than independently constituted building blocks out of which we may fashion a discursive representation of space, individual places are given as falling within a single, all-encompassing space. But this is just to state the framework conception of form as it applies to space. Thus, Kant has been setting the stage for the so-called ‘intuition arguments’ as early as the preamble, and the first and second expositions, as much as they are concerned with apriority, are likewise intended to argue for the truth of a central premise of the third and fourth expositions.

2.2 The Two Faces of *A Priori* Sensibility

The expositions seek to establish two important senses in which the representations of space and time are *a priori*, and so far we have only familiarised ourselves with one of the relevant senses, namely that according to which space is pure in the transcendental sense. On this conception, space plays an organisational role within human experience: it is the framework responsible for the most fundamental set of relations in which sensations can be placed, and is consequently that which makes possible an experience of objects as standing in spatial relations. The apriority pertinent to the status of space as organising principle may be called *apriority of origin*: given the Sensation Argument, as well as the refutation of the relational conception of form in the first and second expositions, it follows that space could not play its organisational role unless its presence in experience be ascribed to the form of our representational capacity, rather than the causal impact of objects. But in addition to its role as formal

¹³ See, for example, Gardner 1999, p. 75, as well as the treatment in Allison, 2004, pp. 99-112.

principle that determines our experience of empirical objects, space is the object of an *a priori* representation that makes no direct reference to empirical objects. This space, the possibility of which is affirmed in the second exposition, is the space of the geometers:¹⁴ it is the space that the transcendental exposition declares to be ‘...encountered in us *a priori*, i.e., prior to all perception of objects’ (B41), the space of which, according to the Preamble, we have an awareness ‘...even without an object of the senses or sensation’ (A31/B35). We might call the relevant apriority here *apriority of content*: whereas our ordinary awareness of spatiality, when space is functioning as organising principle, is bound up with our awareness of the empirical objects whose form space determines, we are also capable of a representation of space in which no direct reference is made to empirical objects – that is to say, a representation possessed of a non-sensory content as well as origin.

These two senses of the apriority of space correspond roughly to the two terms that Kant uses in the Aesthetic to characterise *a priori* sensibility: *form of sensibility*, and *pure intuition*. As form of sensibility space plays its organisational role, formally determining sensibility’s representational signature, intuition. As object of pure intuition, space is the subject matter of the apodictic cognition of geometry. Of course, Kant supposes that these two spaces – the form of sensibility and the object of pure intuition – are one and the same: it is for this reason that he takes geometry to be capable of synthetic cognition concerning the necessary spatial characteristics of empirical objects. It should be noted, however, that it is not obvious what account should be given of how the status of space as form of sensibility relates to our possession of a pure intuition of space. It is certainly not clear that space as *a priori* form automatically requires or guarantees space as the object of *a priori* intuition, and vice versa. From the fact that X plays an organisational role within experience, it does not in general follow that we are capable of an *a priori* awareness of X, still less an *a priori* awareness of X that makes no reference to its organisational role. In the first place, there are limits to the self-scrutiny of reason: transcendental schemata, for example, are said by Kant

¹⁴ This claim – that the objectless space of the Second Exposition is the space studied by geometry – has recently been affirmed by Michael Friedman (2012, 243).

to play a crucial organisational role within our experience (A137/B176 – A147/B187), but we should not assume just on this basis that we are capable of *a priori* insight into these schemata, since schematism is ‘...a hidden art in the depths of the human soul’ (A141/B180-81). Moreover, X may not exist over and above its organisational role, in which case a representation that abstracted from this role would no longer qualify as a representation of X. Thus there seem to be no grounds to infer from the existence of space as form of sensibility to the existence of space as object of pure intuition. Moreover, it is at least not obvious that we should suppose that an *a priori* representation of X is only possible if X plays some organisational role within human experience, and so space as object of pure intuition does not obviously guarantee space as *a priori* form. For this reason, it is worth pursuing the question of how the two faces of *a priori* sensibility – space as *a priori* form and as object of pure intuition – relate to one another. This a complex question that cannot be fully pursued here,¹⁵ but in the following I would like briefly to suggest an account that regards pure intuitive awareness of space as the formalised product of an abstraction from empirical intuition. In the following section, something will briefly be said about the significance of such a conception for the enterprise undertaken in transcendental logic.

The pure intuition of space presents to the subject a manifold of uninterpreted spatial points – points which are apprehended by the subject as possible points of occupancy for an indefinite variety of entities without thereby being apprehended as occupied by ‘...an *actual* object of the senses or sensation’ (A21/B35, my italics). This pure intuition is neither antecedent to nor independent of sensory experience; rather, I suggest, it is arrived at through a kind of phenomenological abstraction from ordinary experience. An account of this process of abstraction is to be found in the Anticipations of Perception:

‘Now from the empirical consciousness to the pure consciousness a gradual alteration is possible, where the real in the former entirely disappears, and a

¹⁵ It will be taken up in significantly more detail in Chapter 4.

merely formal (*a priori*) consciousness of the manifold in space and time remains...’ (A165/B208)

The alteration in question occurs through a diminution of the ‘intensive magnitude’ – the phenomenological vividness, or ‘degree of influence on sense’ – by which Kant takes sensations to be individuated (A165/B208-A169/B211). Thus, pure consciousness of space is attained through a de-sensualisation of the empirical manifold, until all that remains is the spatial manifold in which the sensations are originally given. Whereas our ordinary awareness of space is consciousness of a space populated by empirical objects, our *a priori* consciousness is merely formal, because it is a consciousness of the material *potential* of space that abstracts away from the material *actuality* of space. That is to say, it is an awareness of a space that could be the framework ‘within which’ the material of sensation is contained, but it is no longer an awareness of a space that is already actualising that function.

Now, as will emerge later (4.2.2), the diminution of sensation is only the first stage in the abstractive process by which a pure intuition of space is made possible, and the present account should thus be regarded as pending completion. For present purposes, it suffices to flag one upshot of the present account, concerning the relation of sensation and space. The account of the genesis of pure intuition that has been sketched allows us to maintain that space and sensation are originally given as intertwined. Just as space apprehended in isolation from sensation is an abstraction, so Kant is performing an abstraction when later he treats sensation in isolation from spatiality, as a mere modification of the subject, though the abstraction here is taxonomical rather than phenomenological (A320/B376). De-spatialising intuition is like focussing only on the sonic qualities of a person’s voice; de-sensualising space is like listening away from the sound of the voice and attending only to the semantic content communicated. The possibility of these abstractions does nothing to change the fact that in conversation, voice and meaning are heard as intertwined, just as, in empirical experience, sensation and space are bound up together.

2.3 Pure Intuition and Transcendental Logic

Pure intuition does not emerge out of some autonomous faculty of intellectual insight. It is rather an outgrowth of our ordinary experience of an empirical world of objects. Connected to the fact that pure intuition is an outgrowth of empirical intuition is the fact that the space with which pure intuition establishes contact is none other than the space of which we are ordinarily aware, only considered in its purely formal aspect. In its origin and its content, pure intuition is thus parasitic upon empirical awareness. Indeed, pure intuition is simply a thematisation of the formal structure that implicitly characterises any episode of empirical experience. This will be of importance for transcendental logic.

The pure intuition of space does not constitute a separate species of intuition of space. In particular, pure intuition does not relate the subject to a special species of content that is not present in empirical intuition: it simply formalises and thematises empirical content. For this reason, an *a priori* thinking of objects, which will relate concepts to pure intuition *via a priori* judgement, will not relate the subject to any distinctive species of content. Thus, transcendental logic will not exhibit a form of thinking that is divorced from ordinary thinking, taking place in relation to some special content *via* some special faculty. Rather, in the same way that pure intuition is a formalisation of empirical intuition, so an *a priori* thinking of objects will be a formalisation of empirical thinking of objects, which will trace out the pure form of the relation that must obtain between empirical judgement and empirical intuition for cognition to be possible. In this way, then, transcendental logic, rather than adducing some exalted species of object-cognition, will exhibit the necessary lineaments of the cognitive relation of mind and world.

Conclusion

It was shown in Chapter 1 that Kant, given the commitments of his conception of cognition, would not be in a position so much as to formulate the idea of a transcendental logic without the doctrine that sensible experience has a necessary formal aspect, available to *a priori* intuitive awareness. Only such an awareness

could supply the data to which synthetic *a priori* judgements must be related. Thus, an interpretation and evaluation of this doctrine is a necessary requirement of engagement with Kant's project, and the present chapter has sought to meet this requirement. In the first part, I argued that Kant's argument in support of a framework conception of intuitive form – on which the fundamental spatiotemporal features of experience are present in experience only to the extent objects are apprehended as ensconced within a broader spatial framework – does not beg the question against its relationist component, and has phenomenological plausibility on its side. Given the plausibility of the Sensation Argument – on which no intuitive framework could owe its presence in experience to the impact of objects – Kant's arguments for thinking that the spatiotemporal form of experience is attributable to the form of the human sensible capacity rather than the impact of objects should be taken seriously. In the second part I modulated from an evaluative to an interpretative emphasis, and presented an account of the relation between the two faces of *a priori* sensibility on which it is the formal presence of space within empirical experience that makes possible our non-empirical awareness of space in pure intuition, suggesting that the 'diminution of sensation' as described in the Anticipations of Perception is a partial description of the abstraction by which such a transition is achieved. In the final part, I sought to articulate the significance of all of this for transcendental logic. Given the formal nature of pure intuition, the *a priori* thinking of objects will not take place in splendid isolation from ordinary empirical judgement; rather, it will be a presentation of the necessary form of any intellectual activity that relates itself to a sensible given.

With this background in place, we are now in a position to proceed to the Transcendental Analytic, in which Kant seeks to give to the idea of transcendental logic its fullest articulation, and its first realisation.

Chapter 3: The Categories

In the metaphysical deduction of the categories (as Kant refers back to it at B159), Kant further articulates the idea of a transcendental logic, by attempting to demonstrate what its fundamental concepts would be, were it established as a science. Such concepts he entitles the categories, and are presented in a table that transcendental logic, if actual, could brandish with the same pride as ‘general’ logic brandishes its table of judgements. In the present chapter we will be concerned to understand what it is about the status and function of the categories that leads Kant to associate them so closely with the idea of a transcendental logic. It will be argued that, for Kant, it is only the categories that could afford an *a priori* comprehension of the understanding as a faculty, not just for thinking, but for thinking *of objects*.

The chapter divides into two parts. In the first, I develop an analysis of the metaphysical deduction in which Kant is viewed as arguing that the categories must play a prediscursive role in making objects available for conceptualisation if we are to understand how it could be the case that the formation of a judgement is, *ipso facto*, the mediate representation of an object. As I proceed I present an account of the distinction and relation between general and transcendental logic, as well as introducing a Kantian notion that will be of immense importance in the next chapter: synthesis. In the second part, I demonstrate the weakness of the metaphysical deduction if considered as a self-standing argument for supposing the categories to exist, in order to bring into sharp focus the explanatory challenge that Kant will face in the Transcendental Deduction.

3.1 The Metaphysical Deduction

In the metaphysical deduction Kant presents a transition from a table of judgements to a table of ‘categories’. With this transition comes a transition from two types of logic, which is to say a transition from one theoretical attitude to the intellect and its activities to another. In order to understand this transition, we need an account of the logical standpoint from which it begins – that of the general logician – and an account of the intellectual forces that could propel one

to move through this standpoint into that taken in transcendental logic. For this reason, the present section begins with an account of general logic, and presents on this basis an account of how the transition to transcendental logic could seem necessary. General logic, I suggest, presupposes a conception of judgement that it can neither elucidate nor defend; Kant's doctrine of synthesis, his deduction of the categories, and his articulation of a transcendental logic, are propelled by an attempt to explain this conception without leaving the province of an *a priori* characterisation of the understanding and its activities.

3.1.1 General Logic

General logic abstracts from all content of cognition – that is to say, from all relation of cognition to objects (A55/B79). It asks no questions about the origins of our representations or the nature of their relation to objects, and, indeed, it provides no general account of what it is for cognition to be related to an object (A55/B79-A57/B81). This is not to say that general logic is blind to the fact that cognition is related to objects – its guiding conception of judgement need not deny this much. Indeed, if we suppose that the account of judgement articulated in the opening phase of the metaphysical deduction, according to which judgement is ‘...the mediate cognition of an object’ (A68/B93), is one available to the general logician, then it is clear that the general logician may take for granted the idea that judgements essentially relate to objects. Now, as we will soon show in more detail, what is distinctive of the account of judgement presented in the preamble section of the metaphysical deduction is that it remains silent, and asks no questions, about the nature of this relationship. This clarifies the manner in which general logic abstracts from all content of cognition: general logic brackets such questions, and instead pursues questions about the formal structure of judgement – the nature of conceptualisation, the logical form of judgements, and the syllogistic relations between judgements – that may be answered even absent an account of the nature of the relation of judgements to objects.

Now, given this abstraction, we might wonder to what extent general logic brings into view the nature of *cognition* at all. At B137, Kant characterises cognitions as consisting in ‘the determinate relation of given representations to an object’, and,

given that this is so, it is hard to see why a science that asks no questions about the nature of this relation should qualify as in any respect an inquiry into the nature of cognition. However, Kant also characterises cognition as a ‘whole of compared and connected representations’ (A97), and it is clear that general logic can gain a purchase on the nature of cognition so conceived.¹⁶ It should be noted that this characterisation of cognition could read in two ways. On one reading, ‘cognition’ could be taken to refer to a system of judgements, so that the compared and connected ‘representations’ that comprise the whole of cognition are the individual judgements that comprise a putative body of knowledge.¹⁷ It is clear that, on such a reading, general logic has every right to claim to be concerned with the nature of cognition. In exhibiting ‘the logical form in the relation of cognitions to one another’ (A55/B80),¹⁸ that is, the syllogistic patterns that govern truth-preserving inference, general logic adduces *a priori* constraints on the acts of comparison and connection by which individual judgements must be related to one another so as to compose a putative body of knowledge. However, a second reading is also possible, on which ‘cognition’ designates an *individual judgement*, and the compared and connected representations are the sub-judgemental elements – concepts – that must be related to one another so as to constitute the judgement as a unified whole.¹⁹ Now general logic can also legitimately concern itself with cognition in this latter sense. Without giving a general account of the relation of representation and object, general logic can claim to enumerate the most fundamental ‘functions of unity’ by which concepts may be connected such as to constitute judgements. It is this employment of

¹⁶ These two characterisations of cognition are by no means inconsistent. Nor does each state an independent condition that a representation must meet in order to qualify as cognition. Rather, they constitute two distinct modes of presentation of the same phenomenon. As we will see, the aim of transcendental logic is to achieve a viewpoint upon judgement from which these two modes become one.

¹⁷ This is the customary reading. Such a reading is relied upon very heavily by Engstrom, 2006, p. 8 in motivating the ‘unity’ condition that he claims characterises the ‘self-understanding’ of cognition.

¹⁸ For this passage to do the work presently required of it, we must suppose that by ‘cognitions’ Kant here means individual judgements, rather than bodies of knowledge.

¹⁹ It is not clear that Kant needs to choose between these two readings. If such a benign ambiguity is indeed present in Kant’s use of ‘cognition’ here, it would dovetail neatly with Longuenesse’s contention (1998, 35-58) that the ‘threefold synthesis’ as Kant characterises it in the A-Deduction is intended to apply both at the level of individual intuitions and over an entire course of experience. With respect to the entire course of experience, the threefold synthesis is geared towards cognition in the former sense considered above, and with respect to individual intuitions it is geared towards cognition in the sense currently under discussion.

general logic to which Kant appeals in the metaphysical deduction. To sum up these two roles, we may say that general logic studies the relations of representations to one another insofar as those relations are apt to generate cognition. (This is consistent with supposing that a full account of *why* such relationships should generate cognition is not available to the general logician, given that general logic does not inquire into the nature of the relation of representations to the object.) It studies the *representational* relation of concepts to one another insofar as those concepts are to constitute judgement – judgement being the ‘representation of a representation’ (A68/B93) – and it studies the *inferential* relations of judgements to one another insofar as those judgements are to constitute a putative body of knowledge.

With its purely formal focus on the mental operations by which representations may be compared and connected such as to constitute cognitions, general logic affords *a priori* cognition of the nature of the understanding, the intellectual faculty through which such operations are performed. Through its account of the functions of unity in judgement, general logic can exhibit the formal operations governing conceptualisation on the one hand and inference on the other as implicitly present in the act of judgement, thus revealing judgement as the paradigmatic action of the understanding:

‘We can, however, trace all actions of the understanding back to judgements, so that the understanding in general can be represented as a faculty for judging.’ (A69/B94)²⁰

For this reason, an exhibition of the functions of unity governing the combination of concepts to form a judgement will not simply elucidate a localised function of the understanding, but will shed light on the very nature of intellectual activity as such.

‘The functions of the understanding can therefore all be found together if one can exhaustively exhibit the functions of unity in judgement.’ (A69/B94)

²⁰ This reading of the present passage is of course due to Longuenesse. An elaborate working out of the claim that the form of judgement is implicitly present within the logical operations governing both conceptualisation and inference is to be found in Part Two of her 1998.

Thus, the table of judgements that general logic presents constitutes the ‘clue to the discovery of all pure concepts of the understanding’ (A66/B91). Whereas general logic is concerned only with ‘the mere form of thinking’ (A54/B78), *pure concepts* ‘contain’ the ‘form of thinking *of an object* in general’ (A51/B75, my italics). Thus transcendental logic, in its attempt to uncover the necessary formal structure of any relation of the intellect to the objects of experience, will be concerned to enumerate the pure concepts of the understanding, and the table of judgements will act as a clue to guide this project. A prior comprehension of the formal nature of the mental activity that thinking is – as provided by general logic – will guide our attempt to specify the necessary form of the relation of such activity to the objects it strives to determine.

3.1.2 From General to Transcendental Logic

Kant encourages us to view the transition from general to transcendental logic as one that is naturally encouraged by an interaction with the former, since, as becomes increasingly clear, general logic presupposes a conception of judgement that it can neither elucidate nor protect from sceptical attack. In the preamble section of the metaphysical deduction (A67/B92-A70/B95), Kant, speaking through the mouthpiece of general logic, characterises judgement as the mediate cognition of objects, or the representation of a representation. Judgements constitute the only use that the understanding can make of concepts, enacting ‘functions of unity’ that relate concepts to one another in such a way that the concepts may determine objects. In the example that Kant gives, the judgement ‘All bodies are divisible’ relates the concepts <body> and <divisible> by representing <body> as comprising part of the extension of <divisible>. That is to say, the concept <body> is represented as standing for a sub-class of those entities that bear the ‘marks’ that collectively constitute the intension of the concept <divisible>. Given the status of concepts as mediate – representations that only relate to objects by representing other of the subject’s mental states – their representational status is transparently exhibited through their predicative role in judgement, in which the necessity of representing another representation in order to relate to the object is unmistakable. For this reason Kant characterises concepts

as predicates ‘for a possible judgement’. Now, in his Table of Judgements, Kant will attempt to present an exhaustive account of the possible functions of unity that judgements may implement, and will thus determine the necessary forms by which a representation may manifest its conceptuality. What is of note for now, however, is the relation to an object that Kant takes these functions of unity to confer, for Kant claims that, thanks to its predicative determination by the concept <divisible>, the concept <body> ‘...in turn is related to certain appearances that come before us’, and thus the concept <divisible> counts as mediately representing these objects (A68-69/B93/94).

Now, this claim presents problems for general logic. While general logic can tell us about the formal structure of the functions of unity, it can tell us nothing about why we should suppose that to implement such functions is, *ipso facto*, to relate concepts to appearances that come before us. Why should conceptual manipulation draw us any nearer to empirical objects? This does not seem to be a question that can be answered just by exhibiting the necessary form of conceptual manipulation. Indeed, if the ‘us’ before whom the objects are supposed to appear is taken to refer to humans *qua* thinking subjects, general logic cannot even tell us why we should suppose that appearances are apt to come before us at all. Because general logic is restricted in its focus to the relation of representations to one another, and does not treat of their relation to objects, it can do nothing to explain or defend the conception of judgement from which it proceeds, and thus does nothing to explain why cognition as a whole of compared and connected representations should also constitute a determinate relation of representations to objects. To move from general to transcendental logic is just to experience this explanatory omission as problematic and to seek to resolve it.

But *should* we experience this explanatory omission as problematic, or even as an *omission* at all? What is preventing us from thinking of the suitedness of empirical objects to judgemental determination as a primitive datum, which neither requires nor admits of further explanation? To answer this question, it will be fruitful to review Kant’s dismissal in the Transcendental Deduction of what he calls a ‘preformation-system of pure reason’ (B167). The preformation system is

proposed as an account that makes intelligible the possibility of a ‘necessary agreement of experience with the concepts of its objects’ (B166). Now, it should be noted that the possibility we have been trying to make intelligible is more basic than this: we are asking why we should suppose so much as a *relation* between experience and the concepts of its objects, much less an *agreement*. Nevertheless, the attitude that the preformation theorist takes towards the question of agreement is comparable to the attitude to the question of relation currently under consideration. According to such a theorist, the question of agreement can be answered simply by asserting that the most fundamental concepts of the objects of experience are

‘...subjective predispositions for thinking, implanted in us along with our existence by our author in such a way that their use would agree exactly with the laws of nature along which experience runs...’ (B167)

Kant’s response here is instructive. One might imagine an objection to this picture that ran along broadly Cartesian lines: such an account secures the intelligibility of the agreement of concepts and objects, but only at the cost of epistemic alienation, for how do we know that ours is the situation engineered by a benevolent ‘author’ and not a malicious demon? But Kant refuses to allow that the pre-formation system even makes intelligible a relation of *reference* between concepts and objects, still less one of agreement. Addressing the account the preformation theorist gives of the relation of cause and effect, Kant avers that

‘...I would not be able to say that the effect is combined with the cause *in the object* (i.e., necessarily), but only that I am so constituted that I cannot think of this representation otherwise than as so connected.’ (B168, my italics)

The preformation-theorist characterises objects in a way that leaves it mysterious how they could have an immanent presence within experience. He merely postulates a certain order amongst a realm of nature and then asserts that a corresponding order characterises the subjective course of human experience; ‘agreement’ is the product of this relation of correspondence between two

externally related systems. But for Kant an account of objects that sheds no light on the possibility of their entering into experience throws the mind out of touch with the world, making it unintelligible how statements could so much as be about objects, let alone true of them.

To assert that the amenability of objects to judgemental determination is a brute fact is, similarly, to refuse to give an account of objects that sheds any light on how they could be present for the human mind. We accept the account of the logical forms of judgements, and simply declare that objects are the sorts of things that may be represented through such forms, thus adopting a new preformation system, this time designed to safeguard, not agreement, but simply relatedness, between experience and concepts. Perhaps there have been epochs in philosophical and world history in which such a declaration would have been effective, but the age of criticism that Kant claims to inhabit eschews all dogmatic assertion, and would consequently suspect the holiness and majesty that the present account seeks to extend to the subject-object relation (Axin). In particular, sceptics – a ‘kind of nomads who abhor all permanent cultivation of the soil’ – would sooner assert that the human mind is stuck in a subjective circle of representations than accept a relation between judgement and objects as a matter of brute fact.

What is needed to engage this cognitive scepticism is i) an account of how the same objects that affect our sensibility can be present ‘before’ the human intellect, and ii) an argument for supposing that the objects so present are susceptible to judgemental determination – that is, such that an act of judgement is, *ipso facto*, a mediate representation of them. In order to ward off suspicion of a preformation system, the argument in ii) should be presaged by the account in i) – that is, it should be some fact about the way in which objects come before the mind that explains their susceptibility to judgemental determination. It is to serve just such an explanatory strategy that Kant introduces his doctrine of synthesis.

3.1.3 Synthesis

We saw in the Aesthetic that an object is given when sensibility delivers a spatiotemporally ordered manifold of sensations. Existing in such a form, intuition is able to manifest the givenness of an object. However, according to Kant, more is required if the intuited object is to present itself as the possible referent of a thought. In addition to its presence as a spatiotemporal array of sensation, the manifold must

‘...first be gone through, taken up, and combined in a certain way for a cognition to be made out of it. I call this action synthesis.’ (A77/B103)

Synthesis, we are told, is effected by the ‘imagination... a blind though indispensable function of the soul... of which we are seldom even conscious’ (A78/B103). However, the understanding is not entirely estranged from the synthetic operations of imagination, for we are told that ‘...to bring this synthesis to concepts is a function that pertains to the understanding, and by means of which it first provides cognition in the proper sense’ (A78/B104). In what follows, we will see that Kant’s account of the relationship between synthetic activity and the understanding plays a central role in his account of the relatedness of judgement and object. We will also see that the claim that the understanding brings synthesis ‘to concepts’ is subject to two importantly different, but by no means incompatible, interpretations. In order to show this, we will begin with a closer investigation of the claim that synthesis is a condition on an object’s being available for thought.

Having claimed that synthesis is required for cognition to be ‘made out of’ the manifold of intuition, Kant alludes to the ‘analysis of representations’. Now, according to Longuenesse, (1998, p.11) the process that Kant in the Critique entitles ‘analysis’ is referred to in his logic lectures under the title ‘reflection’, and concerns the origin of concepts ‘as to their mere form’ (1800/1992, 94-95; 592-93, 94; 591). Operating with this equation, we can pursue the claim that the cognitive accomplishment that Kant claims presupposes synthesis is empirical concept-formation, and we can focus on the details of Kant’s account of this process in the

logic lectures in order to see why Kant should make such a claim. For Kant, the process of reflection involves three moments: comparison, abstraction, and reflection itself. The process begins by noting the co-presence of a number of elements within a series of intuitions (comparison), it continues by disregarding the differences between the manifolds of the various intuitions (abstraction), and it culminates in a representation of the abstracted elements as (in some sense) necessarily belonging together (reflection). To view the elements as necessarily belonging together is not to view them as incapable of belonging with any other elements, nor is it to view their co-presence as a necessary feature of any possible experience or course of experience. Rather, it is to view their co-presence in experience as authorised by a mind-independent object or event, instead of merely expressing the subjective character of my stream of consciousness. For this reason, the reflected elements are co-opted as the ‘marks’ that constitute the intension of a concept: that is, the properties by which an experienced entity reveals itself as being an object (or event) of the relevant kind.

So why should analysis presuppose a synthetic combination of the manifold out of which it forms concepts, as Kant effectively claims at A77-8/B103, and more explicitly re-iterates at B132? The answer is that analysis thematises, endorses, and encodes, but does not constitute, the connectedness of the manifold. So synthesis is needed to constitute and connect the manifold in such a way that it may proffer materials for conceptualisation. Thus, we have satisfied requirement i) above: for an object to ‘come before’ the mind, that is, for it to present itself to the intellect in such a way as to permit conceptualisation, the manifold of intuition must first be subject to synthesis. We have also arrived at our first interpretation of the manner in which the understanding brings synthesis ‘to concepts’: operating analytically, the understanding brings the *synthetic product* to concepts, by reflecting the connections exhibited in the synthesised manifold under empirical concepts.

From here, the way to ii) emerges if we suppose that synthesis implements certain fundamental forms of connection. Given that analysis simply thematises connections in the manifold, and given that synthesis determines the connections

upon which analysis may focus, it follows that if there are fundamental forms of synthetic connection then there will be fundamental types of analysis, and hence fundamental types of concept. The next step is to suppose that a number of these fundamental types of synthetic connection must be present in the manifold, themselves connected in certain characteristic ways, for the manifold to supply an object for thought. If this is so, then, given the connection between types of synthesis and types of analysis, there will be some configuration of concept-types that exhibits the manner in which different forms of synthetic connection must interact in order for the manifold to present an object for thinking. Now, if we can show that *the logical functions of judgement govern the relevant set of conceptual relations* – i.e. those relations between concepts that manifest the necessary relations between different forms of synthetic connection – then it will emerge that to make a judgement is just to exhibit the formal structure of the manifold of intuition. A judgement would be a discursive *manifestation* of the necessary formal structure of objects, and thus it would emerge that the appropriate sort of relatedness between objects and representations – that required for cognition – would indeed be secured just in the implementation of the logical functions of judgement.

Now, if the logical form of the relation of concepts to one another *just happened* to testify to the formal structure of the manifold of intuition, we would simply be landed with a sophisticated preformation system. But the isomorphism of logical and objective form is not to be put down to some happy conformity of two independently constituted structures; rather, Kant's claim is that

‘The same function that gives unity to the different representations in a judgement also gives unity to the mere synthesis of different representations in an intuition...’ (A79/B104-5)

To make a judgement is thus to deploy the very same formal operations by which the manifold is constituted such as to supply a possible object of conceptualisation. Now, Kant claims that the fundamental functions of synthesis, no less than the logical forms of judgement, give expression to ‘the pure concept of understanding’ (A79/B105). As an explanation of how it is that an activity conducted by the

imagination could be expressive of the most basic forms of *understanding*, we can propose a second interpretation of the claim that the understanding brings synthesis ‘to concepts’. Here the understanding brings the *synthetic process* to concepts, by compelling the imagination to introduce only those forms of connectedness that are required for the manifold to supply an object to thought. Following Longuenesse (1998, 49-50), we can substantiate this second reading by treating Kant as operating with two senses of the term ‘concept’ – a ‘concept’ in the present sense is not a universal representation as generated by analysis, but a *rule* that serves to govern synthetic activity.²¹ Thus, the understanding insinuates itself into the very process of synthesis, bringing the synthesis to concepts in the same way that one brings an unruly child to order. This gives a transcendental dimension to the general logical portrait of the understanding as a faculty for judging. General logic was able to show us that the operations characteristic of what Kant calls the ‘logical use of the understanding’ – i.e. conceptualisation, judgement, and inference – may be understood as orientated towards, or implicitly present within, the act of judging. But now we see that in its pre-discursive function, as that which gives unity to the synthesis of the manifold, thus constituting the material for any logical use of the understanding, the understanding is also geared towards judgement.

Now, those pure concepts that express the nature of the understanding considered in its pre-discursive aspect Kant calls the categories. Since such concepts express the most fundamental forms of synthetic connection, and given that those forms are implicitly testified to by the fundamental forms of concepts, Kant claims to be able to read off a table of categories from the table of judgements.

3.1.4 The Categories: Forms and Representations

At this point more should be said about the nature and status of the categories. Kant refers to them chiefly as ‘pure concepts of the understanding’ (e.g. A79/B105). This characterisation is ambiguous. If we read the term ‘of’ as possessive, we will read it as the following claim:

²¹ Such a distinction is made plausible by statements such as the following: ‘...as far as its form is concerned ...[a concept] is always something general, and something that serves as a rule.’ (A106)

- i) The categories are *a priori* concepts that the understanding *possesses*.

If not, it is open to us instead to read Kant's characterisation as follows:

- ii) The categories are *a priori* concepts that *describe* the understanding.

Now, in fact, we need not choose between these two readings. As i), the categories constitute the prediscursive cognitive function that the understanding implements in any episode of synthetic activity upon the intuitively given manifold. As ii), the categories constitute a general, reflected representation of *that function itself* – rather than concepts as rules, they are now concepts as discursive representations, formed by the transcendental logician as a representation of the very cognitive functions that they ordinarily implement. (This reading is foregrounded in Kant's claim that the cognitive function that the categories constitute, when 'expressed generally, is called the pure concept of the understanding'. (A79/B105))

The categories are also '...concepts of an object in general, by means of its intuition is regarded as determined with regard to one of the logical functions for judgement' (B128). To the extent that categories are the instruments *by means of which* intuition is regarded as determined with respect to a logical form,

- i) The categories determine/constitute the formal mechanisms by means of which the manifold is constituted in such a way as to present a possible object of thought.

However, to the extent that they are 'concepts of an object in general',

- i) The categories are the marks that constitute the intension of a discursively formed concept of the necessary formal features of an object in general.

Once again, we need not choose: as iii), the categories are the formal mechanism by which objectivity is introduced into sensible experience, as iv), they are representations, formed discursively in transcendental logic, of the necessary results of implementing such formal mechanisms.

Thus, the ambiguity between categories as forms of representation (see i) and iii)), and categories as themselves discursive representations (see ii) and iv)), is a product of the standpoint taken in transcendental logic. It is transcendental logic that names and lists the categories. Just as general logic names and lists the logical forms – forms by which we ordinarily operate without having named them – so transcendental logic enumerates and names the synthetic functions by which ordinary cognition is made possible. Now, in the case of the categories, a failure to notice this fact is dangerous. Transcendental logic performs characteristic conceptualising procedures upon the pure function of synthesis: it compares, reflects, and abstracts this process, and the result is the list of the categories. But because the categories, as they appear in the transcendental logical table, are discursively formed concepts, which may figure in characteristic ways within judgement, it does not follow that their original function in any manner resembles that of standard empirical concepts.

3.2 The Dialectical Status of the Argument

The metaphysical deduction treats judgement, conceived as a mediate cognition of objects, as something that needs to be explained. Given that it is not an option simply to assert without further argument that objects are the sorts of things that are susceptible to judgemental determination, Kant seeks to develop an account of the way in which objects are present for the mind that explains why they should be mediately cognised through judgement. In rejecting a preformation style account, Kant is not propelled solely by the threat of scepticism: first, the denizens of a critical age, sceptical or otherwise, are united in their opposition to the gesture of explanatory refusal that lies behind any preformation system; second, Kant believes that, in the particular case of the relation of judgement and object, a preformation system leaves the mind radically alienated from objects. Scepticism, however, constitutes a dramatisation of what is at stake in Kant's

project, since if Kant cannot improve upon the preformation system, then the sceptic would sooner embrace a subjectivist construal of judgement than cleave to the conception of judgement as a species of objective cognition. Thus, a good way of measuring the success of Kant's argument in the metaphysical deduction is to consider its dialectical traction with this brand of scepticism.

The argument of the metaphysical deduction, if treated in isolation, could do little to persuade Kant's sceptical opponent. Following Allison, we can express this verdict through the charge that Kant has not yet done enough to motivate the claim that, in addition to its 'logical use' in the implementation of judgemental functions, the understanding possesses a 'real use', that is, an 'objectifying function' by which it brings about unity in the intuited manifold (2004, pp. 152-156).²² For this reason, although Kant's account is an improvement on a preformation system, it could quite reasonably be rejected as ill-motivated, as the following seeks to bring out.

According to the reading that has been developed, Kant's claim that the understanding, by means of the categories, governs the synthesis of the intuited manifold is part of an attempt to explain the relation of judgement and object in a manner that goes beyond what is offered in preformation-style accounts.

However, even if one both accepts this explanatory constraint, and accepts that Kant's explanation meets it, he will not have *established* his claim until he has shown that it embodies the only, or at least the best, explanation of the relation between judgement and object, and the metaphysical deduction provides very little in this direction. Kant announces the doctrine of synthesis with the claim that it is only 'the spontaneity of thought' that 'requires that this [i.e. the intuited] manifold first be gone through, taken up, and combined in a certain way in order for cognition to be made out of it' (A77/B102). But this is hardly an argument. It

²² The contrast between a 'real' and 'logical' use of the understanding derives from the Inaugural Dissertation (Kant 1770/1992, p.394), but may be seen as implicitly present within the metaphysical deduction since the section in which Kant presents the table of judgements is headed 'On the logical use of the understanding in general' (A67/B92). **It should be noted that Allison proceeds as if the metaphysical deduction does *nothing* to motivate the claim that the understanding has a real use, since for Allison the burden of establishing that claim is assumed wholly by the ensuing sections of text, especially the Transcendental Deduction. In what follows we will disagree with this claim.**

does not tell us *why* the spontaneity of thought requires that the manifold be ‘gone through’ etc. – why shouldn’t sensible representation already possess the unity required for cognition to be made out of it? Granted, we would have to say more about how this is so in order to avoid a preformation system, but Kant’s comments do not seem to preclude our pursuing such an explanation. Indeed, explanatory strategies of such a form were not unfamiliar to Kant. For example, on one reading of Hume’s position, associationism is the view that ‘the human mental repertoire consists solely of mental states (perceptions, in the Humean vocabulary) that are sensations or very much like sensations’, and that ‘mental processing requires no resources beyond what perceptions are able to provide’ (Pereboom, 1995, p. 3). Thus for Hume, to the extent that impressions are to provide ‘objects’ for conceptualisation, they will not do so by means of any kind of synthesis. Moreover, even if we accept that some extra-sensible differentiation of the manifold *is* needed for cognition, Kant has not shown us why the relevant differentiation can only be brought about by the understanding – why should the imagination, unaided by the understanding, not be capable of this?

Conclusion

It is time to recapitulate. In the first chapter, we saw that, for Kant, the question as to whether metaphysics is possible reduces to the question as to whether *a priori* concepts of objects are possible. Concepts would earn this status if they were capable of manifesting their nature as object-directed representations from within an *a priori* judgemental setting, and this would mean determining pure intuition. In the second chapter we investigated the nature of pure intuition, and discovered that for Kant pure intuition is a representation of a space and time depopulated of empirical objects, arrived at through phenomenological abstraction from empirical experience, and geometrical construction upon the formal manifold of spatiotemporal points that such abstraction leaves intact. With the doctrine of pure intuition in hand, the idea of a science of *a priori* thinking of objects becomes formulable, since such a thinking would consist in a determination of pure intuition by *a priori* concepts. Given that pure intuition is just an abstracted manifestation of the necessary formal structure of empirical

intuition, we know that a determination of such intuition would not amount to a separate species of thought of a separate species of objects; rather, it will be a manifestation of the necessary form of the cognitive posture involved in any effort to determine the empirical manifold through empirical judgement – an exhibition of what Kant elsewhere calls ‘...the pure thinking in every experience’ (A96). In the present chapter, it was suggested that the metaphysical deduction is best seen as further adumbration of the idea of transcendental logic. There Kant demonstrates that the possibility of a transcendental logic is bound up with the possibility of a ‘real use of the understanding’. If the understanding played no role in making objects available for its conceptualising activities, then it would not be essentially related to objects in the manner that transcendental logic requires: that is to say, its relatedness to objects could not be read off from a formal description of its operations. Of course, the understanding may well be apt to represent objects, but an explanation of why the formal structures that it implements are such as to represent objects could not be found within a description of its formal activities. All this is to say, there could be a science of *a priori* thinking (general logic), but no science of *a priori* thinking of objects (transcendental logic). Kant’s doctrine of synthesis is introduced to spell out what such a real use of the understanding might be, thereby connecting the idea of such a use with the conceptual determination of pure intuition; the Categories are introduced as the putative results of a possible science of the real use of the understanding. Nonetheless, Kant has not at this point done nearly enough to justify his doctrine of the real use of the understanding, and hence the idea of transcendental logic, though it has received fuller articulation, is still far from realisation.

Kant should not be castigated for this, however. As I have argued, the metaphysical deduction is best regarded as an adumbration of doctrines that he will not seek to vindicate until the Transcendental Deduction. Accordingly, it is to the Deduction that we now turn.

Chapter 4: The Transcendental Deduction of the Categories

The transcendental deduction represents Kant's attempt to vindicate his doctrine of the real use of the understanding, thus motivating transcendental logic as the preeminent science by which to secure *a priori* cognition of the object-directedness of judgement. It goes without saying that a full treatment of this iconic text would extend far beyond the bounds of the present work. For this reason, I restrict myself almost exclusively to the second-edition deduction, and make do with an extremely partial treatment even of this text. The chapter splits into two parts. In the first, I address Kant's doctrine of apperception, and suggest that the doctrine is subject to two significantly different but complementary readings, as concerning self-consciousness in relation either to a *complex thought*, or a course of *conscious awareness*. These readings, I suggest, open up two strategies by which Kant may bolster his case for thinking that the categories are objectively real: he may argue that an intuition must be amenable to the categories insofar as it is to be part of a complex thought, or he may argue that it must meet this condition just insofar as it is to be present in conscious experience. Both strategies need to be pursued, I suggest, for Kant to vindicate his doctrine of the real use of the understanding, and I argue that he does indeed pursue precisely these strategies in the two parts of the Deduction. I conclude this part with a schematic interpretation of Kant's execution of the first strategy. The second part is devoted to a fuller account of Kant's execution of the second strategy. I argue that Kant in the second part of the Deduction needs to show that the synthesis of apprehension, which governs the conscious uptake of empirical intuition, is itself expressive of a 'figurative synthesis', which subjects it to conditions of unity that may be regarded as expressed in the categories. In order to show how he mounts this argument and determine its degree of success, I therefore develop an interpretation of figurative synthesis, or *synthesis speciosa*, following Longuenesse in treating the discussion of 'formal intuition' at B160-61n as the key to an understanding of this doctrine (1998, p.216). Nonetheless, my reading will differ sharply from that she develops: rather than constituting a determination of the form of intuition itself, figurative synthesis plays its role in the argument

because it is a geometric manifestation of the limitative operations by which specific spatiotemporal regions are empirically determined.

4.1 Apperception and the Categories

The present section is devoted to developing a schematic interpretation of the first part of the Deduction that sheds light on why Kant felt that a second part was needed for the completion of his project. I will suggest that Kant's principle of the analytical unity of apperception is subject to two distinct but consistent readings, the one claiming that 'I think' expresses the form of a thinker's self-awareness in relation to a *complex thought*, the other claiming that such a construction expresses the form of a subject's mode of self-awareness in relation to a *course of conscious experience*. Co-ordinate with these two readings are two distinct strategies by which to introduce the categories into the argument, one connecting the categories with the intellectual synthesis that constitutes judgement, the other connecting the categories with the apprehensive synthesis by which objects are first presented to conscious awareness. I suggest that Kant needs to pursue both strategies in order to show that the categories, as subjective conditions of thinking, possess objective validity, and I claim further that Kant should be regarded as pursuing the former strategy in the argument's first part, and the latter in its second. As a first step towards motivating these claims, we will begin with a discussion of the principle of the analytical unity of apperception.

The analytical unity of apperception is often taken to amount to the claim that every representation is such that, in order to be a cognitively significant mental state, it must be capable of being accompanied by the 'I think'.²³ Though Kant famously holds this doctrine (B131-32), he at no point explicitly equates it with the analytical unity of apperception, and in fact there are grounds for thinking that this is not Kant's view. As has often been observed, Kant holds that the principle of the analytical unity of apperception is itself plainly analytic. Operating with

²³ This assumption is implicit in Pereboom's treatment of the principle (1995, 17), although Pereboom argues that a separable and more promising claim, much like the one that will be ascribed to Kant below, is doing effective work in Kant's argument in the first half of the deduction. The assumption that the connection between representation *per se* and possible self-ascription is at least a significant part of the content of the principle is also implicit in Paul Guyer's criticisms of Kant on this point (1987, 140-2).

the assumption that Kant means by the principle the claim we are currently considering, commentators often criticise Kant at precisely this point, pointing out that the claim that every representation must be capable of being self-ascribed in order to possess cognitive significance is not obviously true, and is obviously not analytic.²⁴ But given that Kant *does* hold the principle to be analytic, and plainly so – it is, he says, ‘...*to be sure*, itself identical, thus an analytic proposition...’ (B135, my italics) – we must question interpretations such as the present on which Kant treats as obvious a claim that is at least contentious. In fact, there is no reason why Kant should consider the connection between representation and possible self-ascription to be expressible in an analytic judgement. Rather, this claim should be read as a substantive commitment on Kant’s part, issuing from his commitment to transcendental idealism. Transcendental idealism requires that possible objects of knowledge be characterised in such a way that the possibility of their coming before the human mind is, as it were, secured in advance. Now, given inner sense – the temporally governed mode of self-awareness by which the mind intuits its own states as appearance (A22-23/B37) – representations, no less than objects, are possible items of knowledge, and so must, as Gardner puts it, ‘...be conceived within the domain of a thinking subject’ (1999, 146). As Gardner also emphasises, this is a conception of representations that a transcendental realist (such as Hume) would be at liberty to reject (1999, 146). Thus, assuming that Kant’s claims about the connection between self-ascription and representation are motivated by his transcendental idealism, and assuming that he grants that Hume at least grasps the concept <representation>, it is doubtful that he took the connection between representation and self-ascription to be expressible in an analytic judgement. If this is so, we must look for the principle elsewhere.

I suggest that we view the principle of the unity of apperception as making a claim about the relations between actually self-ascribed representations, and not any broader claim about the connection between representation *per se* and self-ascription. The claim is that, for a number of self-ascribed representations to hang together as the components of a single complex thought, or a single course of

²⁴ Again, see Pereboom (1995, 17), and Guyer (1987, 140-2).

conscious experience, two conditions must be met. First, the ‘I’ that self-ascribes each of these representations must in all cases be the same. This may be motivated by the familiar observation that if one thinker thinks ‘A’ at one time, and another thinks ‘B’ at another time, the complex representation ‘AB’ will not thereby have been thought. Likewise, in relation to conscious experience, it does not follow from the fact that one person hears one set of notes being played, and another person another set, that anybody has had a unified experience of the symphony. The second condition is that this unity of self must be manifest to the thinker in every isolated act of self-ascription. For representations to form part of a complex thought or course of experience, they must ‘all together belong to a self-consciousness’, or equivalently, ‘stand together in a universal self-consciousness’, in order that they ‘throughout belong to me’ (B132-33).²⁵ Now, if the second condition were not met, although each simple representation would ‘belong to a self-consciousness’, they would not *stand together* in this self-consciousness, and so would not *throughout* belong to it. That is to say, we would have a replication, within the sphere of a single consciousness, of exactly the problem we considered above. Although, unlike in the previous case, the thinker of each simple representation *A* and *B* would *in fact* be the same, this fact must be co-opted by the subject if it is to recognise *A* and *B* as standing together in its own consciousness; until it has done this, it will be no closer to entertaining the complex thought *AB* than were the two thinkers in our previous example. This point can effectively be parsed in terms of Allison’s distinction between a ‘unity in consciousness’ and a ‘unity for consciousness’ (2004, 182). For separate representations to stand together with the unity required of a complex thought, then i) they must be part of what is in fact the same consciousness (unity in consciousness), and ii) their co-presence in the same consciousness must be recognisable to the self-ascribing subject (unity ‘for’ consciousness). Thus we

²⁵ This talk of cognitive ‘belonging’ is also present in the A-Deduction: ‘Without consciousness that that which we think is the very same as what we thought a moment before, all reproduction in the series of representations would be in vain. For it would be a new representation in our current state, which would not *belong* at all to the act through which it had been gradually generated...’ (A103, my italics). Kant’s account of the insufficiency of reproductive synthesis for complex representation may be seen as an attempt to motivate this second aspect of the principle of the analytical unity of apperception, and to do so in such a way as to advertise his doctrine of synthesis as the best possible explanation of how this condition is to be met.

might say that the analytical unity of apperception needed to meet the logical requirements on a single complex thought or course of experience has both an external and internal aspect. It must be the case, as a matter of fact, that each simple representation transpires within the same consciousness, and this external unity must be accessible to the subject from the inside, in order for the representations to hang together for consciousness, and not merely in consciousness.

It is noteworthy that Kant takes intuition itself to be subject to the analytical unity of apperception:

‘That representation that can be given prior to all thinking is called intuition. Thus all manifold of intuition has a necessary relation to the **I think** in the same subject in which this manifold is to be encountered.’ (B132)

Given that thinking just is ‘cognition through concepts’ (B94), the capacity of conceptual representations to feature within ‘I think...’ constructions needs no explanation. Since Kant holds that cognition requires intuitions as well as concepts, however, he must also hold that there is a sense in which intuitions themselves are capable of featuring in such constructions. But intuitions can be given prior to all thinking, and so their capacity to feature in ‘I think...’ constructions cannot simply be read off from their presence in experience. Given that Kant takes it that intuition must always be on hand to supply the material for cognition, he nonetheless insists that the manifold of intuition bears a ‘necessary relation to the **I think**’. That is to say, although the content of intuition is not thinkable just in virtue of the givenness of intuition, that content must always be capable of being thought, through articulation within an ‘I think...’ construction, in order for intuition to be on hand to play its cognitive role.

The significance of the application of the principle of the analytical unity of apperception to intuition itself can be brought by the following considerations. In our previous characterisation of the principle, we modulated freely between presenting the principle as an account of what is necessarily involved in a *complex thought*, and an account of what is necessarily involved in a *course of conscious*

experience. But at this point we should sharply separate these two construals. Kant might reasonably treat it as analytic that a complex thought requires a single subject aware of its identity across different acts of self-ascription of thought elements. From this claim, it is a consequence that, if intuition is to feature as part of a complex thought, its content must be expressible within an ‘I think...’ construction. However, the claim that a unified *course of experience* requires a single thinking subject aware of its own identity becomes controversial when intuition is treated as falling under the analytic unity of apperception. From this claim, it is a consequence that, if intuition is to feature as part of a unified course of experience, then its content must be thinkable. Now, whilst the claim that intuition, in order to feature in thought, must be thinkable, might be regarded as unproblematic and even tautologous, the claim that, in order to contribute to a unified course of experience, intuition must be thinkable, is extremely contentious and certainly not analytic.

These two readings of the analytical unity of apperception and its application to intuitive representations yield two strategies that Kant might follow in order to introduce the categories into the argument. We will focus on each in turn.

First, Kant might argue that the categories are a condition of the thinkability of intuitive content, by claiming that articulation of intuitive content within an ‘I think...’ construction is necessarily governed by the categories. That is, he might argue that the content of an intuition only becomes thinkable when, for example, I treat the intuition as presenting me with a substance possessing accidents, standing in potential causal relations with a community of other such substances, *etc.* If he can show this, he will have shown that the categories are conditions governing the possibility of analytical unity of apperception in relation to a complex thought. Now, Kant’s arguments in §§16-20 are plausibly regarded as aiming at just this result, as the following brief commentary on that region of text is intended to display. §16 treats the analytical unity of apperception in regard to a complex thought as in need of explanation, and contends that such unity ‘...is only possible under the presupposition of some synthetic one’ (B133). This claim is plausibly designed to shed light on the second aspect of the analytical unity of

apperception. We can only explain why I am aware, in self-ascribing a single thought element, that I am the same subject to which the other relevant thought-elements may be ascribed, by supposing that my awareness of one thought-element is to be explained by my consciousness of an ongoing synthesis that I am performing upon the entire set of elements. §17 argues that it is only this synthetic construction that makes possible objective reference: that is to say, the thought elements do not possess any autonomous objective purport independently of their presence in a complex thought (B137).²⁶ §19 contends that *judgement* is precisely the synthetic activity of which we are aware in self-ascription of complex thoughts, and thus the ‘I think’ emerges as the form of awareness of a judging subject engaged in judgemental activity. §19 further contends that judgement is essentially geared towards the representation of objects, and thus that the ‘subjective unity of consciousness’ described in §18, whereby we are aware of the contingent order of our sensations without thereby incurring any commitments as to the state of the empirical world, falls without the purview of the ‘I think’. Given that apperceptual awareness in relation to a complex thought has now been established to be an awareness of judgement, and given that judgement is essentially object-directed, the categories emerge in §20 as the most fundamental concepts of objects by means of which the manifold of empirical intuition may be determined so as to stand in accord with the logical functions constitutive of judgemental synthesis. Thus, with relation to a complex thought, the categories emerge as comprising the most fundamental interpretative framework by which intuitive content may be raised to apperceptual awareness.

Now, this argument would undoubtedly require considerably more elucidation than provided above, not to mention critical evaluation, in order to be regarded a success. Unfortunately, such a treatment falls beyond the scope of the present work. For present purposes, however, what should be noted is that even if Kant is able to establish his intended conclusion, there is a clear sense in which the categories will remain merely subjective conditions of thought. To advert to the terms of §24, the synthesis that they prescribe will remain purely intellectual: they

²⁶ This may be seen as an echo of Kant’s doctrine that concepts are predicates of possible judgements (A69/B94), a comparison that becomes particularly apt given Kant’s explicit introduction of the theme of judgement two sections later.

are simply the most fundamental modes in which the sensible given must be interpreted so as to provide materials for thought; but this account of the functioning of the categories does little to assure us that our fundamental modes of interpretation do not distort what is actually present in the sensible given. The question of the objective reality of the categories thus remains unanswered, and the Deduction incomplete.

Now we may examine a second possible strategy, following from the reading of the analytical unity of apperception as expressing self-awareness in relation, not to a complex thought, but to a course of conscious experience. Consider the claim that intuitions must be amenable to the ‘I think...’ construction just in order to feature as part of conscious experience. Now, if this could be established, the previous result, which seemed at the time merely to entrench our problem concerning the status of the categories, would emerge as the ‘beginning of a deduction of the pure concepts of the understanding’ (B144). For, if it is true that the categories are conditions of the articulation of intuitive content within an ‘I think...’ construction, and if it is also true that capacity to feature within such constructions is a condition of intuitions constituting part of a course of conscious experience, then it will follow that the categories are conditions not just of the cognitive tractability of intuitions, but also of their capacity to feature within a course of conscious experience. *This* result could quieten anxieties about cognitive *rapport*: if we take the term ‘given’ to mean ‘given to conscious experience’, then there no longer seems room to suspect that what is ‘given’ in sensibility is not in itself subject to the categories.

It should be emphasised, however, how difficult this result would be to achieve. To see this, we should consider the form of the analytical unity of apperception, ‘I think’. The presence of ‘I’ in this construction is designed to flag the conditions on self-identity: for either a complex thought or a course of experience to be possible, the elements involved must all transpire within the same subject, and the subject must be conscious of its identity in this respect. The presence of ‘think’ in the construction is designed to express the *mode* in which this self-recognition takes place: the subject recognises itself as thinker, and recognises the thought-

components or experienced elements as the content of its thinking. Now we may ask the question, Why should the subject grasp its self-identity through a grasp of its status as a thinker? When it is grasping its self-identity in relation to a complex thought, the answer seems obvious: it cannot grasp a representation as part of a thought without thinking it. But what about self-identity in relation to a course of experience? With regard to concepts, it is uncontroversial that the mode of self-awareness in question should involve thinking, assuming that we read the Deduction having already accepted Kant's claim that '...the understanding can make no other use of these concepts than that of judging by means of them' (B93). For if this is the case, then it follows that concepts could make no appearance in a course of experience otherwise than by featuring in judgements; consequently they would be subject to a cognitive mode of apperceptual awareness just to the extent that they were capable of featuring in experience. But why should we accept that *intuitions* must be subject to such a mode of awareness just insofar as they are to feature as part of a unified course of experience? What prevents us instead from thinking that, *qua* features of experience, intuitions are subject to a non-cognitive form of apperceptual awareness – perhaps expressible through some adverbial construal of their sensational features that made no direct reference to external objects? Certainly we cannot rule this out just through an acceptance of Kant's account of apperceptual awareness in relation to a complex thought. It would be perfectly consistent to accept that intuitions must stand under the 'I think' insofar as they are to feature as parts of a complex thought, but to maintain that they are subject to some non-cognitive mode of apperceptual awareness insofar as they are to feature as parts of a unified course of experience.

Kant's argument will thus need to take an entirely new course if it hopes to establish this second, more significant result. Kant needs to show that, to the extent that they are on hand to be recognised as given elements of a course of experience, intuitions are already amenable to a cognitive mode of apperceptual awareness. This will require a shift in emphasis from the conditions under which an intuition may be thought to the conditions under which an intuition may be given. It is precisely this shift that is signalled at §21:

‘In the sequel it will be shown from the way in which the empirical intuition is given in sensibility that its unity can be none other than the one the category prescribes to the manifold of a given intuition in general...’ (B144-45)

So Kant will revisit his doctrine of sensibility in order to demonstrate that, just by virtue of its sensible presence as an element of a course of experience, the intuition is already susceptible to the cognitive mode of apperceptual awareness to which it is explicitly brought in thinking. This will dispel the impression that the dominion of the understanding over sensibility is despotic: although the category ‘prescribes’ a form of unity, the intuition, even prior to its appropriation within thought, is already suited to exhibit just this form of unity. Thus the categorial prescription is not the imposition of some alien form, but an articulation of the nature of the intuition just *qua* sensible element of experience. To establish this result, Kant will need to show that the synthetic activity over which the categories preside is not merely intellectual, but *figurative*: that is, a synthesis that does not merely govern the articulation of intuitive content within a thought, but one that also regulates the incorporation of intuitive awareness into conscious experience. If Kant can show that this latter species of synthesis stands under the categories, then he will have demonstrated that the subjective conditions of thinking themselves possess objective validity.²⁷

4.2 The Completion of the Deduction

4.2.1 The Strategy

According to the present reading, Kant’s aim in the second part of the Deduction is to show that, just to the extent that they may be present in conscious awareness,

²⁷ At this point something should briefly be said about how the present interpretation meets the well-known exegetical desideratum classically argued for by Dieter Henrich (1969). According to Henrich, Kant’s pronouncements at §21 require us to read the Deduction as comprised of two substantially different and independently necessary argumentative steps (a requirement not obviously met, e.g., by readings that treat the second step of the Deduction as a trivial move from the general to the particular, applying results concerning intuition ‘in general’ to specifically human intuition). The present interpretation meets this condition by viewing the move between the two steps as propelled by a shift in emphasis, from the conditions under which an object may be thought to the conditions under which it may be given to consciousness (and in this respect follows Allison’s schema for reading the Deduction, 2004, 162). This move is crucial if Kant is to establish that intuitions are subject to a cognitive mode of apperceptual awareness just in virtue of their being given to consciousness.

intuitions are amenable to a cognitive mode of apperceptual awareness. If this reading is on the right track, then we should find, in the second part, an account of the psychological mechanisms by which representations are brought to consciousness. We find precisely this in Kant's reference at §24 to the 'reproductive imagination', '...whose synthesis is subject solely to empirical laws, namely of association... [an account of which] belongs not in transcendental philosophy but in psychology' (B152), as well as his account in §26 of the 'synthesis of apprehension', through which '...empirical consciousness of [the manifold of empirical intuition]... becomes possible' (B160). We should also find a statement, or implicit execution, of roughly the following strategy: to show that these psychological syntheses possess a necessary *a priori* form, and that facts about this form ensure that any manifold of intuition brought to consciousness in accordance with the empirical synthesis of apprehension and reproduction is already amenable to articulation within an 'I think...' construction, and hence subject to the categories. It is precisely this strategy that Kant seeks both to formulate and to motivate at §24. As is fairly common (recall his statements about 'the same function' in the metaphysical deduction), Kant formulates his strategy simply by announcing its intended result:

'This synthesis of the manifold of sensible intuition, which is possible and necessary *a priori*, can be called figurative (*synthesis speciosa*), as distinct from that which would be thought in the mere category in regard to the manifold of an intuition in general, and which is called combination of the understanding (*synthesis intellectualis*)...' (B151)

The synthesis in question will secure objective reality for the categories by allowing the understanding to '...think *a priori* synthetic unity of the apperception of the manifold of sensible intuition' (B150), and is also to be referred to as the 'transcendental synthesis of the imagination', or the productive imagination, in order that it be distinguished from the reproductive imagination with its merely empirical laws. As productive, the synthesis will 'determine the form of sense *a priori* in accordance with the unity of apperception' (B152), thus ensuring that objects are subject to the categories just in virtue of their being given to the

conscious subject. But what would such a synthesis amount to, and why should Kant even be hopeful – let alone certain – that it exists? To answer these questions, we need to look in more detail at the doctrine of the synthesis of apprehension.

In the terms of §26, the synthesis of apprehension is

‘...the composition of the manifold in an empirical intuition, through which perception, i.e., empirical consciousness of it (as appearance), becomes possible.’ (B160)

So the synthesis of apprehension brings the manifold of an empirical intuition to conscious awareness through a *compositional* synthesis. Kant subsequently clarifies his conception of compositional synthesis, presenting such a synthesis as

‘...the synthesis of a manifold of what does not necessarily belong to each other, as, e.g., the two triangles into which a square is divided by the diagonal do not of themselves necessarily belong to one another...’ (B201n)

By imposing the diagonal line, composition enables a transition from conscious awareness of a square to conscious awareness of a square as containing a manifold of parts – namely triangles – and thus conscious awareness of the manifold itself. In the present example, compositional synthesis moves from an independently present representation of X to a representation of X that thematises its manifold in consciousness. Now, as we will see later, this is not the only model for composition: a compositional synthesis may instead first *make possible* a representation of X by thematising its manifold. Whichever model is in play, however, two points should at this point be emphasised. First, we should notice the relation between unity and multiplicity: although the purpose of composition is to bring a manifold of representations to conscious awareness, it can only do this by representing them as the parts out of which a single object may be regarded as composed. Longuenesse puts this point well, in connection with Kant’s discussion of apprehension in the A-Deduction:

‘But the act of apprehension is more than an act of *distinguishing*; from the outset it aims at *unifying what is distinguished*. This is what makes the manifold a manifold *of intuition*, of a singular representation...’ (1998, 38)

This immanent orientation towards unification explains Kant’s claim (once again in the A-Deduction) that the

‘...synthesis of apprehension is... inseparably combined with the synthesis of reproduction.’ (A102)

Reproduction is the mechanism by which the mind puts together the elements of the manifold in such a way as to represent them as comprising parts of a single object. Given, therefore, that apprehension is only able to present a manifold to consciousness by presenting that manifold as united, we can see why it should be inseparably combined with reproduction. To revert to our example, we might think of apprehension as the act by which we alight on a unit of synthesis – the drawing of a diagonal line such as to generate a multiplicity of triangles – and reproduction as the mechanism by which these differentiated elements are represented as united in such a way as to compose a square. The second point to note is Kant’s claim that composition is the synthesis of elements that do not necessarily belong together. In illustrating this point, he compares compositional synthesis to the connective synthesis of cause and effect (B201n). This suggests that Kant is claiming that, in compositional synthesis, the mind is at liberty to determine the elements of its synthetic activities in a way that it is not in connective synthesis. I cannot intuit the brick’s smashing the window as a causal phenomenon without synthesising the flight of the brick and the smashing of the window as cause and effect. In contrast, I do not need to represent the square as composed of triangles in order to experience it as possessing a manifold; I may instead apprehend it as composed of smaller squares, or rectangles.

Applying this account to the empirical case, the synthesis of apprehension emerges as the conscious perceptual uptake of the manifold of empirical intuition, propelled by association in the reproductive imagination. The claim that the elements of compositional synthesis do not necessarily belong together here finds

expression in Kant's claim that the synthesis of reproduction is subject '...solely to empirical laws' (B152). That is to say, facts about human physiology and culture determine both the particular items that we reproduce – the fact that we are consciously aware of the table as composed of legs and a table top, rather than smaller portions of wood – and the manner in which we associate them – the fact that I see two lovers intertwined as separate people and not a single conglomerate object.²⁸ Now, the influence of these physiological and social factors upon one's psychology may be too pronounced for one to be able to opt out of synthetic patterns with the same ease as in the previous case, where the switch from experiencing the square as composed of triangles and viewing it as composed of smaller squares posed no obvious psychological difficulty. Indeed, it may even be psychologically impossible for one to achieve an empirical equivalent of this *a priori* switch. Nonetheless, it remains true that the presence and co-presence of one set of apprehended elements in one's experience, psychologically alterable or otherwise, is to be attributed to contingencies of human physiology and culture, rather than any facts concerning the necessary form of empirical experience. Thus, at the level of empirical analysis, the synthesis of apprehension may be viewed as introducing contingent form into empirical experience, in accordance with contingent rules. But is this all there is to be said about the synthesis of apprehension? Perhaps there is more. If, in addition to its contingent form, the apprehended manifold also exhibited necessary formal features, and if its possession of those features were attributable to some synthetic operations, then we would have grounds to suppose that contingent, empirical synthesis is governed by some necessary, *a priori* synthesis. After all, it is hard to see how experience could possess necessary synthetic form on the basis of any contingent synthetic operations, for if the synthetic *process* could change, it would be hard to understand how the synthetic *product* could not. At this point, Kant's strategy is open to view. If he can show that there is such an *a priori* synthesis, and if he can

²⁸ Ginsborg (2006, 83) suggests that we think of the relevant physiological in terms of what Quine calls an 'innate standard of similarity' or 'innate spacing of qualities' (1969, cited in Ginsborg 2006, 83). Sacha Golob (2012, 6), in his illuminating recent discussion of the connection between synthesis of apprehension and the third Critique's doctrine of the 'basic measure', has suggested that Kant's unfortunately parsed example of the 'savage' perceiving a house without possessing the concept of a house (1800/1992, 33; 544-5) may be viewed as intended to display the impact of society on one's selection of basic units by which to conduct apprehensive/reproductive synthesis.

show in addition that it determines apprehended representations as *ipso facto* expressible within an ‘I think...’ construction, then he will have shown that, in addition to an empirical combination, our experience is underwritten by a *transcendental synthesis* – a synthesis that, unlike its empirical counterpart, *will* make an all-important contribution to ‘...the explanation of the possibility of cognition *a priori*...’ (B152).

It is exactly now that the doctrines of the Aesthetic come into their own, because we know from the Aesthetic that empirical experience *does* possess a necessary form – *viz.* that all intuition is temporal, and all outer intuition spatiotemporal. Now, although the Aesthetic counsels that our most fundamental experiential acquaintance with space and time is *not* the product of synthesis – their experiential presence is *given*, not *made* (A25/B40, A32/B47-8) – if any aspect of our experience of spatiotemporality *is* the product of synthesis, then such a synthesis, being responsible for necessary forms of empirical experience, will count as *a priori*. It will further count as transcendental if it subjects the manifold to conditions of the synthetic unity of apperception. It is thus precisely because of the Aesthetic’s doctrine of forms of sensibility that Kant takes the search for a transcendental synthesis to be well-motivated and likely to succeed. This is why the sentence that *ends* with the proud declaration that the understanding may ‘...think *a priori* synthetic unity of the manifold of sensible intuition’ *begins* with a reminder that ‘...in us a certain form of sensible intuition *a priori* is fundamental, which rests on the receptivity of the capacity for representation (sensibility)’ (B150).

With Kant’s strategy finally in view, the remainder of this section is divided into two parts. In the first I provide an interpretation of Kant’s doctrine of the formal intuition of space in order to shed light on his claim in §26 that there *is* an *a priori* synthesis. In the second, I reconstruct and evaluate his argument for the claim that such a synthesis is transcendental.

4.2.2 A Priori Synthesis and the Formal Intuition of Space

In order to understand the *a priori* synthesis for which Kant is searching, we must attend to the following, notorious passage:

‘Space, represented as object (as is really required in geometry), contains more than the mere form of intuition, namely the comprehension of the manifold given in accordance with the form of sensibility in an intuitive representation, so that the form of intuition merely gives the manifold, but the formal intuition gives unity of the representation. In the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it precedes all concepts, though to be sure it presupposes a synthesis, which does not belong to the senses but through which all concepts of space and time become possible. For since through it (as the understanding determines the sensibility) space or time are first given as intuitions, the unity of this *a priori* intuition belongs to space and time, and not to the concept of the understanding (§24).’ (B160-61n)

Admittedly, this passage comprises a footnote. But the footnote is appended to the section - §26 – that is advertised as the completion of the transcendental deduction (see both B144 and the title of §26), and given this textual centrality it is, I suggest, exegetically legitimate if a reading of this passage decisively informs one’s view both of the Deduction and of Kant’s view of space. Against this, Falkenstein dismisses the passage as ‘too obscure’ to ground any serious interpretation (1995, 20-21, 90-91), but it is difficult not to suspect this of being self-serving, since different interpretations will experience different regions of text as obscure or otherwise. Certainly the textual centrality of the passage means that we should postpone a verdict as to its interpretative serviceability until after we have attempted to interpret it.

A certain reading of this passage is absolutely central to Longuenesse’s interpretation of the B-Deduction (1998, 214-225), as well as that of Waxman (1991, unpublished). According to Longuenesse, Kant is asking his readers to perform a re-reading of the doctrines of the Aesthetic, with the intended result that

the space and time presented in the Aesthetic as forms of sensibility are recognised as in fact dependent on an *a priori* synthesis which, though pre-categorical, is nevertheless in keeping with the conditions of the synthetic unity of apperception, and hence expressive of a determination of sensibility by understanding. Anil Gomes has recently championed such a reading (2010), arguing that, if it models Kant's intentions at this point in the Deduction, it would explain how Kant intends to move from the claim that we must apply the categories to objects of experience to the claim that their application is legitimate, thus showing the B-Deduction to be 'fit for purpose', and a structural improvement on the A-Deduction. I agree with Longuenesse that this passage is the key to an understanding of figurative synthesis, and with Gomes that it is central to an understanding of the structure of the B-Deduction, but I disagree with both that it has any tendency to problematise a literal interpretation of the Aesthetic's doctrine of space as the form of sensibility. In what follows I will express this disagreement positively, through an elaboration of a viable alternative interpretation.

I suggest that the interpretative key to the passage lies in Kant's claim that the synthesis that the formal intuition presupposes is that 'through which all concepts of space and time become possible'. In the Transcendental Aesthetic, we are told that '...the manifold in it [space], thus also the general concept of spaces in general, rests merely on limitations' (A25/B39). The Aesthetic, then, tells us that we transition from our primordial acquaintance with space as an infinite given magnitude to a position in which to form general concepts of spaces *via* a process of 'limitation'. The Deduction is now telling us that 'concepts of space and time become possible' through synthesis of the manifold of formal intuition. Thus, I suggest that Kant is revisiting his doctrine of limitation: the synthesis of the formal intuition is a *model* of the process of limitation by which we constitute space as a possible referent for concepts; correlatively, the formal intuition itself is a model of the delimited space that we experience as the possible basis for concept-formation. This claim requires considerable unpacking, which will require us to revisit Kant's account of spatial awareness in some detail.

Horizontal and Determinate Space

When space plays its role as the form of sensibility, there is a sense in which it is *present* in empirical experience, but its presence is not that of an ordinary object amongst others:

‘The mere form of intuition, without substance, is in itself not an object, but the merely formal condition of one (as appearance), like pure space and time, which are to be sure something, as the forms for intuiting, but are not in themselves objects that are intuited...’ (A291/B347)

The claim that the form of intuition is the ‘merely formal condition’ of an object of intuition should be read as both doctrinal and phenomenological. On the one hand, it is a pillar of Kant’s transcendental idealism that space as form of intuition is a condition of the possibility of appearances; on the other hand, however, there is also a sense in which space is *given in experience* as that which makes objects of intuition possible. When space plays its role as the framework within which experience of spatial position is possible, it is present to the mind as an infinite magnitude, stretching out indefinitely in every direction; moreover, as the First Exposition argues and the Fourth reasserts, its experiential presence as an infinite magnitude is *given*, not *made*. That is to say, it is not possible for us to imagine an experience of spatial position *out of which* we may incrementally constitute space as an infinite magnitude, because every such experience already takes place within the single all-encompassing space we are supposed to be constructing. Thus, as form of intuition, space possesses an inalienable phenomenological presence as the ‘horizon’ against which we may experience objects, and is in this sense given to us not as an object, but as the formal condition of one.²⁹

Of course, our ordinary experience is of a world of objects that possess more or less determinate spatial locations, and of determinate spatial regions with reference to which those locations are fixed. That is to say, we experience space not just as the pre-objective horizon, but as a series of *extensive magnitudes* – i.e.

²⁹ This use of the term ‘horizon’ was suggested to me by Allison’s own use of that term, (2004, 113). In this connection, I also agree with Allison that Melnick’s use of the term ‘pre-intuition’ to describe our experiential access to space as horizon is apt. (Melnick 1973, 11, cited in Allison 2004, 113.)

magnitudes with a given *extent*. Now, unlike space as form of intuition, space as extensive magnitude must be constituted out of independently given parts:

‘I call an extensive magnitude that in which the representation of the parts makes possible the representations of the whole (and therefore necessarily precedes the latter).’ (A162-3/B203)

Because space itself is not originally given as composed of parts – its manifold, i.e. determinate spatial regions, rests ‘merely on limitations’ (A25/B39) – those parts cannot be regarded as primitive experiential data. Rather, our awareness of these regions must be the result of a synthetic combination out of more basic elements – that is to say, the unity of an extensive magnitude is not given in the form of intuition alone. In order for the parts of an extensive magnitude to function as materials for a synthesis out of which such a magnitude is first constructed, our capacity to represent those parts must be explanatorily prior to our capacity to represent the magnitude itself. Now, in the empirical case, Kant *explicitly* characterises this synthesis as a precondition of apprehension:

‘[Appearances]...cannot be apprehended, therefore, i.e., taken up into empirical consciousness, except through the synthesis of the manifold through which the representations of a determinate space or time are generated...’ (B201)

Space is the form of outer sense, which requires that all conscious awareness of outer objects be awareness of objects as located within a particular space. But determinate spaces are not given in the form of intuition, and so must be constructed through the very operations that govern the conscious uptake of the empirical manifold. Thus apprehension, in determining a manifold as composing a unity, is always already generating a determinate spatiotemporal region within which such a unity must be experienced. The basic synthetic elements of this construction may themselves be object-parts (the body-parts composing a person, as when that person is represented as an extensive magnitude), or objects (houses composing a street, as when the street is represented as an extensive magnitude).³⁰

³⁰ This is a point effectively brought out by Golob (2011, 5-7).

There is also a sense in which these basic elements are themselves spatial: they are given as occupying points on the pre-objective spatial horizon, but not as composing *parts* of that horizon; for this latter to be possible, their spatial connections to one another must be thematised through apprehensive synthesis. Thus we have a picture on which it is the indeterminate spatial horizon that holds open the possibility of empirical objects, and empirical objects and their parts that hold open the possibility of a determination of space.

Recall the claim of the Aesthetic that *both* the manifold in space and the general concept of spaces rest on ‘limitations’. I suggest that the synthetic operations by which spaces are determined as extensive magnitudes constitute precisely the limitations by which the manifold of space is introduced. Moreover, we are also in a position to see why those same limitative operations should make possible general concepts of space. As we saw in our treatment of the metaphysical deduction, concepts, as discursive representations, may only be formed as codifications of synthetic connections in the intuited manifold. By first introducing a manifold of parts into our awareness of space, the synthesis required for extensive magnitude makes possible specifically spatial concepts both as reflections of the synthetic operations by which individual magnitudes are constituted (the concept, for example, of a house), and as thematisations of connections between a number of such magnitudes (the concept, for example, of England).

It should be noted at this point that Kant’s account of the construction of magnitude gives him materials to respond to the associationist critic considered in 3.2, who argued that synthesis is unnecessary for the manifold of intuition to be constituted with the unity required to present a possible object for thought. Kant can now effectively refer this critic back to the Aesthetic, because the case for synthesis is now revealed as bound up with the case for space as form of intuition. If it is true that space as it is originally given does not possess a manifold, then synthesis is needed simply to conduct the limitative operations by which it is possible to experience an object as occupying a determinate spatiotemporal region. And it is clear that an experience that failed even to present the subject with

objects existing within a more or less determinate spatiotemporal region would be an impoverished basis for concept-formation.

Formal Synthesis and the Objectification of Space

We are now in a position to return to the footnote. We saw in Chapter 2 that the first step in the abstractive process from empirical to pure intuition involved the ‘diminution of sensation’ described in the Anticipations of Perceptions, whereby we depopulate the spatial horizon, attaining to consciousness of a space that is not already fulfilling its material potential of containing sensations within itself. As such, we are aware of a spatial horizon populated, not by empirical objects, but rather by undetermined spatial points. We may now see that this abstraction is not sufficient to bring space into view as the possible object of intuitive consciousness, since, in disclosing only a horizon of undetermined spatial points, ‘the form of intuition merely gives the manifold’ (B160). In order for space to come into view as an object, however, this purely formal manifold must be ‘comprehended’ as a unity, which is to say synthesised.³¹

I suggest that the synthesis in question is simply a formal manifestation of the very same apprehensive synthesis by which empirical magnitudes are constituted. This would explain Kant’s claim that such a synthesis first makes possible concepts of space: just as empirical construction of magnitude first makes possible concepts of empirical spaces and times, so formal construction first makes possible concepts of space as such. As for the claim that such synthesis in addition makes possible concepts of *time*, we do not have to look far for an explanation of this claim that would fit with the present interpretation of formal synthesis, since Kant claims in §24 that it is through attending to *nothing other than the a priori construction of magnitude* that temporal concepts, such as succession, become possible:

‘...we cannot even represent time without, in drawing a straight line (which is to be the external figurative representation of time), attending merely to

³¹ In this, space is not alone: at both A104-5 and B137, Kant claims that objectivity as such consists in a certain unity amongst a manifold of representations.

the action of the synthesis of the manifold... Motion, as action of the subject... first produces the concept of succession at all.' (B154-55)

The present reading would also shed an interesting light on Kant's reference in the opening sentence to geometry. There we are told that geometry *requires* that space be represented as object, and we are now proposing that this is possible only through *a priori* construction of magnitude out of the formal manifold. But geometry *is* a science that proceeds through *a priori* construction of magnitude (A717/B745), and so the requirement is met by geometry itself; that is to say, geometry emerges as a science that is complicit in the constitution of its own subject-matter. On this reading, then, geometry is more than a detached *study* of pure intuition, since geometric construction can be seen as the culmination of the abstractive process by which the transition from empirical to pure intuition is first achieved. Reading the synthesis in question as geometric also has the benefit of clarifying why it should be said to 'precede all concepts', since geometric cognition, unlike philosophical cognition, does not proceed 'from concepts' (A713/B741), but rather generates its concepts through intuitive construction (A234/B287). There is also a clear sense in which the synthesis in question should be called *figurative*, since the *a priori* construction of magnitude is precisely the delineation of a *figure*, such as a triangle.

Let us suppose that we construct a triangle out of the formal manifold. According to the present interpretation, this process of geometric construction *is* the synthesis that first creates a 'formal intuition' of space, where the qualifier 'formal' draws attention to the formal nature of the manifold out of which the representation is constituted. Two related objections to this picture might at this point be put as follows. First, it might be charged that this process does not *objectify space* so much as it *formalises a magnitude*, and thus we have not yet constituted a representation of *space*, but merely of a triangle. Second, it might be charged that the synthetic operations in question do not bring 'unity' to the entirety of the pure manifold, but only to the three points with reference to which the triangle is constructed. These points will be addressed in reverse order.

The empirical construction of magnitude must confront a variegated array of materials. In order to construct a magnitude such as, for example, <table>, I must await a certain type of synthetic material: specifically, I will need to encounter table legs, large planks of wood, and the like. Unlike the empirical objects arrayed against the spatial horizon, however, the formal points that make up the manifold of the formal intuition are denuded of empirical content, with the result that no feature of one set of formal points will inhibit the transferral of the same synthetic procedure from that set of points to another. To be conscious of a formal procedure by which to construct a triangle in pure intuition is thus, *ipso facto*, to be conscious of a synthetic rule that has unlimited application to any set of points. This very point is put well in the A-Deduction:

‘Thus we think of a triangle as an object by being conscious of the composition of three straight lines in accordance with a rule according to which such an intuition can always be exhibited.’ (A105)

Thus, to display the amenability to geometric construction of one set of points in the formal manifold is thereby to display the amenability of the entire manifold to such construction, and hence to comprehend the entirety of the manifold as a unity.

This yields in turn a response to the first objection presented above, for it shows us a sense in which the formalisation of magnitude makes possible the objectification of space. As we have seen, to formalise a magnitude is to abstract away from the sensational matter on which ordinary synthetic construction operates, thus transforming the synthetic elements from empirical objects and their parts to purely formal spatial points. In the wake of this abstraction, the synthetic procedure attains universal applicability across the entirety of the formal manifold. Now, as we will see, this new found scope serves both to confer on triangles a formal status as objects, and to make possible an objectification of space. In order to see this, we need to provide a reading of the characterisation of objectivity that Kant provides in §17 of the B-Deduction:

‘An object... is that in the concept of which the manifold of a given intuition is united.’ (B137)³²

I suggest that this claim admits of two complementary readings, which may be seen if we distinguish two senses in which a manifold may be said to be ‘united’. On the one hand, as we have just seen, a manifold qualifies as united if there is a synthetic procedure that has unlimited application to all of its elements. The concept, as rule, that describes this synthetic procedure will thereby be that in the concept of which the manifold is united, and so will qualify as the object. In this sense, then, it is the triangle that is the object. On the other hand, however, we may also distinguish a *procedural* sense of unity: to unite a manifold is not merely to represent a synthetic procedure that could be applied to all of its elements, but actually to apply that procedure. The concept in which the manifold is united in this sense will be the concept, as general representation, that we intend to present the manifold as falling under by applying the relevant synthetic procedure. Suppose that we were to go to the trouble of continually constructing triangles in formal intuition; if this activity were to have an aim, the most obvious intention in light of which it could be rendered intelligible would be the intention to represent the whole of space as an aggregate of triangles. If this is so, then the concept of *space* rather than the concept of a triangle would emerge as that in which the manifold is united, and would thus in this sense be represented as an object.

Now, given that the formal manifold is provided by the form of intuition, and given that the form of intuition is an infinite magnitude, it follows that no synthetic operation could exhaustively determine the entire pure manifold, since it is infinite (or, at least, the form of intuition, being infinite, places no bounds on the number of points that the manifold may contain). Thus, the procedural unification needed to reflect the whole of space as an aggregate of parts can never be completed. Nonetheless, geometry ‘requires’ that space be represented as object, that is, represented as an entity that could in principle be exhaustively

³² Now, Kant makes many claims in many places about what it is for something to be an ‘object’ (see, e.g., A108-110, A189/B234-5, A199-200/B244-45). Given, however, that the above passage is taken from the same region of text as the footnote we are interpreting, it seems reasonable to treat this as giving expression to the conception of objectivity with which Kant is currently operating.

delineated through geometric construction. Why should this be so? The answer has to do with the self-conception of geometry as apodictic cognition. Geometric laws are presented as holding with necessity and universality, and to claim that a geometric law holds in such a way is just to claim that there is no possible spatial region in which the relevant law does not hold. To revert to our example, to say that the angles of a triangle add up to 180° is to say that there is no set of formal points in relation to which one could construct a triangle whose angles did not add up to 180° . Now, one could not make this claim if one thought of space as containing points in principle unreachable through iteration of a constructive procedure. Thus the conception of space as an object – an entity whose parts could be exhaustively represented through construction of magnitude – is a regulative ideal for geometrical enquiry. Now, in order to represent the whole of space as potentially susceptible to geometrical determination, I must first exhibit to myself, through construction of magnitude, the fact that *part* of space is susceptible to geometrical determination; thus, we have a fuller explanation of a claim made above, namely that geometry plays a crucial role in making possible the very representation of space that it requires.

In sum, then, I suggest that a cogent textual case can be made for regarding the formal synthesis as geometric construction, where such construction be understood as a formal manifestation of the empirical synthesis of apprehension, conducted upon a space that has been denuded of direct reference to empirical objects. This, I suggest, is a prime candidate for the *a priori* synthesis that Kant needs to complete his argument. Geometrical construction may be seen to ‘underlie’ the empirical synthesis of apprehension not by preceding it (logically or chronologically) as some separate synthesis that must first be performed in order for apprehension to be possible; rather, such a synthesis is simply a formal manifestation of what is always already at play in the synthesis of apprehension. It is, as it were, the *a priori* shadow of empirical consciousness.

4.2.3 The Transcendental Status of Formal Synthesis

The significance of the purely formal status of geometric construction is that its objects cannot acquire properties except through the manner in which they were

constructed. Geometry does not ‘find’ independently constituted formal objects which it has only to describe. It does not even find an independently constituted formal space. All that it can be said to discover is a manifold of uninterpreted formal points; it is responsible for the construction both of its objects, and of the space that its objects must occupy and delineate. Thus geometry can only discover what it has itself created. This means that the necessary features of geometric objects will reflect facts about the necessary forms of geometric synthesis. Given, moreover, that geometric construction is a formalisation of the synthesis of apprehension, and geometric objects simply an embodiment of the necessary form of empirical objects, we can infer from the necessary form of geometric objects to the necessary form of the synthesis of apprehension.

The significance of this should be obvious. If Kant can show that geometric objects possess categorial features, then he will thereby have shown that geometric construction is a synthesis that proceeds in accordance with the categories; and what is true of geometric construction is thereby true of the synthesis of apprehension. The importance of geometric construction is that there is no room for suspecting that its objects acquire their thinkable features through some invasive interpretative distortion; rather, their thinkable features can only bear testament to the manner in which they originated in intuition. I do not think it would be a distortion of Kant’s view to add ‘only’ to the following sentence:

‘...that which follows from the general conditions of the construction must also hold generally of the object of the constructed concept.’ (A716/B744)

Now, Kant’s aim in §26 is precisely to model empirical intuition on geometric construction, by showing that, as with geometric objects, the thinkable features of the empirical manifold bear testament simply to the necessary manner in which that manifold is brought into conscious awareness, rather than being generated only in the context of the intellect’s imposition of the subjective conditions of thinking.³³

³³ This, I think, is the significance for Kant of the model of mathematical cognition: it gives us a way of understanding how the thinkable features of an object may reflect the nature of its origin in experience, rather than emerging solely through discursive interpretation. For this reason, whilst I

Now, for Kant, geometric objects necessarily exhibit quantitative features, and so must be synthesised in accordance with the category of quantity. This provides the rationale for the following account of how the category of quantity may be regarded as operative in the synthesis of apprehension:

‘Thus if, e.g., I make the empirical intuition of a house into perception through apprehension of its manifold, my ground is the necessary unity of space and of outer sensible intuition in general, and I as it were draw its shape in agreement with this synthetic unity of the manifold in space. This very same synthetic unity, however, if I abstract from the form of space, has its seat in the understanding, and is the category of the synthesis of the homogenous in an intuition in general, i.e., the category of quantity, with which that synthesis of apprehension, i.e. the perception, must therefore be in thoroughgoing agreement.’ (B162)

The discovery of the category is the result of a two-stage abstraction, licensed by the necessary spatial form of outer intuition. First we abstract away from the sensational features of the experience, and represent the synthesis of apprehension as a formal synthesis in formal intuition: the drawing of a shape in accord with the synthetic unity of the manifold in space. Now we perform yet another abstraction in which, as it were, we formalise the formal description of space, by abstracting even from the formal manifold in order to bring into view at the most abstract level the nature of the unity that geometric construction imparts. This unity, Kant claims, receives its most abstract characterisation in the purely intellectual category of quantity. Thus, the very concept that comprises a fundamental interpretative category under which intuitions may be thought may also be recognised as the most formal description of the very synthesis by which the manifold of intuition is brought to consciousness. It is here that we get our first true glimpse of a real use of the understanding, of the understanding making

agree with Longuenesse (1998, 33-34) that Kant has *tempered* his fascination with the mathematical model by the time he transitions from the A- to the B-Deduction, I would deny that the focus on the logical form of judgement plays *the* ‘...decisive role’ (1998, 33) in B. For if the present interpretation is correct, the model of constructive synthesis plays an equally decisive role at a crucial point in the argument.

available for itself the very sensible material that it subsequently discovers in discursive thinking.

We have, however, no more than a glimpse. Conscious experience, for Kant, is not merely a collection of perceptions, but rather a course of *connected* perceptions (B161). Now, Kant claims that the most fundamental interpretative conditions of our thinking connections in empirical objects are *dynamical*, not mathematical (B201-2) – categories by which, for example, we think objects as causally related, and not merely as spatiotemporal quantities. Now the presence of *such* features cannot be exhibited in geometrical construction (A715/B743), and thus Kant cannot exhibit the influence of these categories in the uptake of conscious experience by the same route as he followed for the category of quantity.³⁴ Nevertheless, Kant has something approaching a research programme. If the empirical syntheses by which we are conscious of connection play a role in the determination of spatiotemporal regions analogous to that played by the synthesis of apprehension, then Kant may proceed in the same way through a formal depiction of that role and an investigation of whether the execution of this role is in necessary agreement with the dynamical categories. Although he has by this point exhausted the significance of an explicitly spatial synthesis, he may still enquire into the presence of the dynamical categories with reference to the necessary forms of time-determination. Indeed, that this is Kant's intent is clearly present in his description of the presence of the category of cause in the perception of the freezing water (B162-63). As with the category of quantity, we discern the category of cause through a two-stage abstraction: first we abstract from the sensational aspects of the experience, and depict the relevant synthesis as simply the determination of a temporal sequence, and then we abstract even from the form of inner intuition, in order to discover the category of cause as the most general description of the unity that the synthesis engenders. Kant's full execution of this strategy, which is nothing other than the attempt to bring the idea of transcendental logic to systematic realisation, takes him well beyond the Transcendental Deduction, into the heart of the Analytic of Principles. In the present work, however, we can follow him no further.

³⁴ This point about the limitations of the deduction derives directly from Allison (2004, 197-201).

Conclusion

In this chapter, I have sought to present an account of the B-Deduction that shows how Kant proceeds in two stages to argue that the categories, as subjective conditions of thought, are objectively valid. The two stages, I suggested, are distanced from one another by a shift in emphasis, a shift made necessary by the fact that the status of the categories as conditions governing articulation of intuitive content within an ‘I think...’ construction does nothing to explain why intuitions should be amenable to featuring within such constructions simply *qua* items of conscious awareness, and so does nothing to assure us that the categories are more than interpretative distortions, with merely subjective validity. Kant assuages this concern by arguing that the synthesis of apprehension required for conscious awareness has a necessary *a priori* form, reflected in the geometric construction of the formal intuition of space, and further arguing that attention to this *a priori* form discloses the presence of certain categories even in the empirical synthesis of apprehension. Given this account of Kant’s strategy, I was obliged to follow Allison (2004, 197-201) in regarding the Deduction as at most a partial success, since Kant’s strategy does not allow him to conduct a thoroughgoing legitimation of the dynamical categories. Nevertheless, I also followed Allison in suggesting that Kant may treat his deduction of the category of quantity as a kind of case study in light of which to pursue a research programme with respect to the other categories. Specifically, if Kant can establish a relationship between empirical synthesis and time-determination, and show further that conceived in this light, such a synthesis reveals the presence of the dynamical categories, then he will be able to show that the very categories by which we think connections in objects govern our intuitive consciousness of connection in the empirical manifold.

Although limited, Kant’s achievements in the Deduction should be seen as constituting the first realisation of a transcendental logic. With the deduction of a real use for the understanding, we make possible *a priori* insight into the status of the understanding not just as a faculty of *thinking*, but a faculty of thinking *of objects*. Such insight may be expressed in the terms of a *logic*, because it is an

operation of the understanding itself that conspires to engender the *a priori* suitedness of judgement and object.

Overall Conclusion

I have sought, in this thesis, to relate Kant's conception of transcendental logic to the positive doctrines of the Aesthetic and Analytic in such a way that they shine light on one another. Transcendental logic, I have suggested, emerges as the key to an understanding of the possibility of synthetic *a priori* judgements, since it would explain the possibility of the *a priori* concepts of objects such judgements presuppose. Given the terms of Kant's theory of cognition, an *a priori* concept of an object could only qualify as such if it were capable of determining pure intuition, and given moreover the nature of pure intuition, such a determination could only be a formalisation of the necessary relation between empirical judgement and the intuited manifold. Facts concerning the necessary form of this relation, however, could only be discoverable by a logic if amongst the operations of the understanding is a prediscursive determination of the given manifold that makes possible the presence to mind of a possible object of thought. Given the equation of such a function with the categories in the metaphysical deduction, therefore, the possibility of a realisation of transcendental logic hinges on the possibility of a transcendental deduction of the categories. I have suggested, *via* an interpretation of Kant's account of figurative synthesis, that this result is partially achieved – the category of quantity is proven by Kant genuinely to belong to an actual and not merely imagined transcendental logic – but that a verdict as to whether may be fully carried through must await a reading of the Analytic of Principles.

I would like to close by noting the critical, reconstructive participation in the philosophical tradition afforded by transcendental logic. At the very end of the *Critique*, Kant considers the 'history of pure reason', looking on at the crumbled edifices of traditional metaphysics from a '...merely transcendental point of view' (A852/B880). What would it be to tell the history of pure reason from a transcendental point of view? Given Kant's belief in the supremacy and uniqueness of the transcendental standpoint, such a history would undoubtedly be a history of error. But it will be more than that. The very concepts that would comprise a transcendental logic are also the stock concepts of traditional

metaphysics. Given that such concepts exhibit the necessary forms of the cognitive relation of mind and world, the history of metaphysical discovery, erroneously (self-)conceived as the history of some exalted cognition of objects, may be reconfigured as the history of the intellect's oblique comprehension of its own transcendental function: the production of a metaphysical concept may be viewed as a separable moment in this growing self-awareness. In the Analogies, having gone further towards exhibiting the stock concepts of metaphysics as the items of a transcendental logic, Kant seeks to *reconstitute* familiar tenets of metaphysics – that every event must have a cause, for example – by displaying their status as principles governing the necessary forms of objective awareness. Thus, the idea of transcendental logic gives Kant an entry point into the philosophical tradition that allows him to destroy its dogmatic edifices and reclaim its fundamental insights at a single stroke.³⁵ If such a posture can be sustained, then, even if nothing changes, everything will have.

Word Count: 32,989

³⁵ Thus, Kant's relation to the history of philosophy should be seen as anticipating the relation Heidegger sought to achieve through his 'destruction' of the history of ontology (1927/2007).

Bibliography

Primary Sources

Kant, I. (1770/1992). *Concerning the Form and Principles of the Sensible and Intelligible World*. In D. Walford and R. Meerbote, transl. and eds. Cambridge: Cambridge University Press

Kant, I. (1781, 1787/1998). *Critique of Pure Reason*. P. Guyer and A. Wood, transl. and eds. Cambridge: Cambridge University Press

Kant, I. (1783/2004). *Prolegomena to Any Future Metaphysics*. G. Zöllner, ed. P. Lucas and G. Zöllner, transl. Oxford: Oxford University Press

Kant, I. (1800/1992). *Lectures on Logic*. J. M. Young, transl. Cambridge: Cambridge University Press

Secondary Sources

Allison, H. (2004). *Kant's Transcendental Idealism*. 2nd ed. New Haven: Yale University Press

Dunlop, K. (2012). 'Kant and Strawson on the Content of Geometrical Concepts'. *Noûs*, 46(1), pp. 86-126

Engstrom, S. (2006). 'Understanding and Sensibility'. *Inquiry*, 49(1), pp. 2-25

Falkenstein, L. (1995). *Kant's Intuitionism: A Commentary on the Transcendental Aesthetic*. Toronto: University of Toronto Press

Friedman, M. (2012). 'Kant on Geometry and Spatial Intuition'. *Synthese* 186 (1), pp. 231-255

Gardner, S. (1999). *Kant and the Critique of Pure Reason*. London: Routledge

- Ginsborg, H. (2006). 'Kant and the Problem of Experience'. *Philosophical Topics* 34(1&2), pp. 59-106
- Golob, S. (28 December, 2011). 'Kant on Intentionality, Magnitude, and the Unity of Perception'. *European Journal of Philosophy* [online]. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0378.2011.00503.x/full> [Accessed 10 August, 2012]
- Gomes, A. (2010). 'Is Kant's Transcendental Deduction of the Categories Fit for Purpose?'. *Kantian Review*, 15(2), pp. 118-137
- Guyer, P. (1987). *Kant and the Claims of Knowledge*. Cambridge and New York: Cambridge University Press
- Heidegger, M. (1927/2007). *Being and Time*. J. Macquarrie and E. Robinson transl. Oxford: Blackwell
- Henrich, D. (1969). 'The Proof-Structure of Kant's Transcendental Deduction'. *Review of Metaphysics*, 22(4), pp.640-659
- Janiak, A. (14 September, 2009). 'Kant's Views on Space and Time'. [online]. *Stanford Encyclopedia of Philosophy*. Available from: <http://plato.stanford.edu/entries/kant-spacetime/> [Accessed 5 July, 2012]
- Longuenesse, B. (1998). *Kant and the Capacity to Judge*. C. T. Wolfe, transl. Princeton, New Jersey: Princeton University Press
- Pendlebury, M. (1995). 'Making Sense of Kant's Schematism'. *Philosophy and Phenomenological Research*, 55(4), pp. 777-797
- Pereboom, D. (1995). 'Self-Understanding in Kant's Transcendental Deduction', *Synthese* 103(1), pp. 1-42
- Tolley, C. (forthcoming, 2012). 'The Generality of Transcendental Logic', *Journal of the History of Philosophy*
- Warren, D. (1998). 'Kant and the Apriority of Space'. *The Philosophical Review*, 107(2), pp. 179-224

Waxman, W. (1991). *Kant's Model of the Mind: A New Interpretation of Transcendental Idealism*. New York: Oxford University Press

Waxman, W. (unpublished.) 'Apperception and the Individuality of Space and Time' [online]. Available from:
<http://philosophy.fas.nyu.edu/docs/IO/2575/waxmanml.pdf> [Accessed 10 July, 2012]