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UNIVERSITY OF CALIFORNIA SAN DIEGO

Kant on the Origins of Concepts

A dissertation submitted in partial satisfaction of the requirements
for the degree Doctor of Philosophy

in

Philosophy

by

Maximilian Victor Edwards

Committee in charge:

Professor Clinton Tolley, Chair

Professor Lucy Allais

Professor David Barner

Professor Rick Grush

Professor Eric Watkins

2023

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University of California San Diego
2023

DEDICATION

For Claudi & Elena

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LIST OF ABBREVIATIONS

All references to Kant's works will cite the *Akademie* edition (1902–) by volume and page number, except references to the first *Critique*, which use the standard A/B pagination. Throughout this dissertation, I have relied upon the translations in the Cambridge edition (1992–) of Kant's works. I use the following abbreviation scheme for ease of reference:

- ApH*: Anthropologie in pragmatischer Hinsicht
fS: Die falsche Spitzfindigkeit der vier syllogistischen Figuren erwiesen von M. Immanuel Kant
JL: Jäsche Logik
KU: Kritik der Urteilskraft
LB: Logik Blomberg
LDW: Logik Dohna-Wundlacken
MAN: Metaphysische Anfangsgründe der Naturwissenschaft
ML₁: Metaphysik L₁
ML₂: Metaphysik L₂
MM: Metaphysik Mongrovius
MSI: De mundi sensibilis atque intelligibilis forma et principiis
MV: Metaphysik Vigilantius
MVM: Metaphysik Volkmann
ProI: Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können
R: Reflexionen
UD: Untersuchung über die Deutlichkeit der Grundsätze der natürlichen Theologie und der Moral
UE: Über eine Entdeckung, nach der alle neue Kritik der reinen Vernunft durch eine ältere entbehrlich gemacht werden soll
VN: Vorarbeiten und Nachträge
WL: Wiener Logik
wF: Welches sind die wirklichen Fortschritte, die die Metaphysik seit Leibnizens und Wolfs Zeiten in Deutschland gemacht hat?

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I arrive, finally, at the two people to whom I dedicate this dissertation. I met my wife, Claudi Brink, the first day I set foot in San Diego, and my life has been immeasurably enriched since that day. Claudi is, quite simply, my best friend and my favorite philosopher. No philosopher has surprised or inspired me in the ways that Claudi has, and no person has taught me as much about life. I have counted on Claudi's love and support every day, and not once have I been disappointed. There is no way I could have written this dissertation without her.

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ABSTRACT OF THE DISSERTATION

Kant on the Origins of Concepts

by

Maximilian Victor Edwards

Doctor of Philosophy in Philosophy

University of California San Diego, 2023

Professor Clinton Tolley, Chair

The aim of this dissertation is to make headway in understanding Kant's theory of cognition, and my strategy in pursuing that aim is to investigate his account of concept formation. I argue that what Kant has to say on this topic is more extensive and insightful than has previously been recognized, and that it bears directly on his theory of cognition.

To reach this conclusion, the dissertation splits into three parts. Part 1 lays out some fundamental doctrines in Kant's theory of concepts and articulates the various interpretive

approaches that have been taken to them. I show here that Kant's account of concept-formation assumes a hylomorphic account of concepts, which distinguishes them into a universal form and a given 'matter' — a set of given, intrinsically non-conceptual representations that constitute the subjective generation-base of the concept. A proper account of the origins of concepts, by Kant's own lights, must explain both the 'matter-giving' acts that bring these nonconceptual representations to consciousness and the 'form-imparting' acts that convert them into concepts.

The second and third parts of the dissertation explore, respectively, the material and formal dimensions of Kant's account of the origins of concepts. Part 2 studies the matter-giving acts that pertain to the origin of 'sensible' concepts (Chapters 3 and 4), and the concepts 'of understanding' or categories (Chapter 5). The act that Kant names *apprehension*, I argue, is the common matter-giving act underlying all sensible concepts; *reflection*, I argue, is the act that underlies the categories. This account has the revisionary implication that Kant's doctrine of imagination has its primary theoretical home within his account of *concept* formation, not, as is commonly assumed, in his account of *intuition* formation.

The final part explores the three 'logical acts' to which Kant famously traces the universal form of concepts: comparison, reflection, and abstraction. Chapter 6 deals with the relationship between comparison and schemata; Chapter 7 situates the doctrines of reflection and abstraction within Kant's account of the unity of apperception; Chapter 8 draws on the findings of Chapter 7 to make good on the suggestion that the categories of understanding originate in reflection.

The result is an account that clarifies key doctrines from Kant's published works and also yields a heterodox conception of both the nature of concepts and the relationship between intellect and sensibility. On the account I propose, Kantian concepts are not mere rules or dispositions: they are mental representations of properties, whose content is fixed prior to and independently of the

judgments in which they can feature. And the faculty of understanding, I argue, is much more intimately connected with the faculty of sensibility than has been supposed. Though my reading stops short of collapsing the distinction between understanding and imagination, it makes the case that understanding depends not merely causally but constitutively on the faculty of sensibility, and that the traces of sensibility can be detected both in the essence of the faculty of understanding and in the contents of its pure concepts.

Introduction

The topic of this dissertation is Kant’s theory of concepts, and, more specifically, his account of concept formation. These focal points are unusual in Kant scholarship. Of course, no serious discussion of Kant’s theoretical philosophy can afford to say nothing about these topics, but they are seldom treated as research topics in their own right. In the secondary literature, there is no book-length treatment either of Kant’s theory of concepts broadly construed or his account of concept formation in particular.¹ Likewise, while the term ‘concept’ must be one of the most frequently occurring terms in Kant scholarship, there is only a small handful of articles that directly target Kant’s theory of concepts in general and his account of concept formation in particular.²

It therefore behooves me to justify this choice of topic, and that is the main goal of what follows. In Section 1, I aim to motivate two proposals: first, that Kant has *much more* to say on the topic of concept formation than has generally been realized; secondly, that what he does say on this topic promises to help us make progress in understanding his theory of cognition. In Section 2, I advertise the main finding of the study to follow and break down the chapter-by-chapter plan.

¹ Now, some very influential monographs contain extremely rich treatments of concepts — for example Aquila (1989) and, perhaps especially, Longuenesse (1998). R. Lanier Anderson’s important recent study (2015) devotes more space to the theory of concepts than any other work in English, but it does not set that theory as its topic: its topic is the distinction between analytic and synthetic judgments as it pertains to Kant’s criticism of rationalists metaphysics; concepts enter the picture only as they help make headway with that fundamental topic.

² Some highlights of this modest literature include Aquila (1974), Ginsborg (2006), Newton (2015).

1. Why Concepts, and Why Concept Formation?

In this section, my main aim is to suggest that Kant's theory of concept formation is a fertile research topic, both because what Kant says on the matter is considerably more extensive and interesting than has typically been thought, and because a study of this topic promises to shed light on important issues in his theory of cognition.

1.1 Two Pressures

Kant's theory of concepts is subject to two competing theoretical pressures. Kant, as is well-known, draws a sharp distinction, within the human mind, between sensibility — the receptive capacity for receiving representations through affection, which issues in intuitions — and understanding — the spontaneous faculty for bringing forth representations from itself, which issues in concepts. Now, this strict separation of faculties has to serve two intellectual projects at once. On the one hand, it is central to Kant's argument for transcendental idealism. But on the other hand, it is the constantly emphasized framework within which Kant's positive theory of cognition unfolds. And these two theoretical contexts create competing pressures. The argument for transcendental idealism requires a radical separation of intuition and concept; the account of cognition requires that they be brought sufficiently close together that they can stand in intentional and epistemic relations.

In the *Transcendental Aesthetic*, Kant 'isolates' the receptive faculty of sensibility in order to adduce the 'elements' that sensibility contributes to cognition. And Kant argues there that sensible representations have a distinctive form, which is imparted by the sensible faculty itself,

not the intellect. What this means is that sensible representations — intuitions — are intrinsically different from intellectual representations. It is not simply that intuitions and concepts have different origins (the former coming about through sensibility, the latter through understanding). Even if we ‘abstracted’ from their ‘seat in the mind’, (as Kant says we can in ‘logical reflection’) and considered them merely as representations, differences between them would remain: the distinctive form of an intuition means that it represents its objects in a distinctive *way*. Kant puts this point, in his general remark on the Aesthetic, by insisting that the difference between the sensible and the intellectual is a difference of ‘origin *and* content [*Inhalt*]’ (A44/B62).

This claim has dialectical bite. For the Leibniz-Wolffian school held that the distinction between the sensible and the intellectual is ‘merely logical’:

The Leibnizean-Wolffian philosophy has therefore directed all investigations of the nature and origin of our cognitions to an entirely unjust point of view in considering the distinction between sensibility and the intellectual as merely logical, since it is obviously transcendental, and does not concern merely the form of distinctness or indistinctness, but its origin and content

A44/B61–62

For the Leibniz-Wolffians, there is no intrinsic, content-level difference between sensible and intellectual representation. The difference between these two kinds of representation is, rather, an extrinsic difference: one and the same content is represented ‘indistinctly’ at the level of sensibility and ‘distinctly’ at the level of intellect. We represent a complex content ‘distinctly’ when we are conscious of its more basic elements in isolation from one another; and the claim is that complex sensible contents are ‘confused’ because sensibility does not, on its own, sufficiently distinguish these contents into their elements. Those same contents are distinctly conceived when the intellect separates them into their elements. The ascent from sensing to conceiving, on this picture, brings

with it a transformation in our consciousness, but no corresponding transformation in the representations of which we are conscious.

But why is Kant making this seemingly technical point at the culmination of a text that is supposed to argue for transcendental idealism? The answer is that the Leibniz-Wolffian school combines this conception of the sense-intellect distinction with a further claim about the objects of intellectual representation, and on that basis arrives at a realist account of the objects of sensibility. For this school assumes that the intellect knows things as they are in themselves, and since sensibility confusedly represents the very same content as the intellect, it follows that sensibility likewise represents things as they are in themselves, albeit confusedly. Now, at this point in the Critique, Kant has not said a word about the intellect, so he is not in a position to engage the Leibnizean claim about the objects of intellection. Instead, he attacks transcendental realism by attacking its operative conception of the relationship between the sensible and the intellectual. Even granting that the intellect knows the constitution of objects as they are in themselves, sensible content is *not* indistinctly represented intellectual content, which means that ‘even if we could bring this intuition of ours to the highest degree of distinctness we would not thereby come any closer to the constitution of objects in themselves’ (A43/B60). The difference between the sensible and the intellectual, after all, is one of ‘origin and content’. Perhaps the intellect grasps the ultimate nature of reality, or maybe it does not; be that as it may, whatever ontological insight is present at the level of intellect cannot simply be recovered from sensibility.

Later in the Critique, in the Amphiboly, Kant suggests that this ‘merely logical’ conception of the distinction between sensibility and intellect is common to all systems of transcendental realism, including Lockean empiricism:

In a word, Leibniz **intellectualized** the appearances, just as Locke totally **sensitized** the concepts understanding... Instead of seeking two entirely different sources of representation in the understanding and the sensibility..., each of these great men holds on only to one of them, which in his opinion is immediately related to things in themselves, while the other does not nothing but confuse or order the representations of the first.

A271/B327

Locke and Leibniz of course differ profoundly at the level of epistemology. Locke, on Kant's reading, treats sensible representation as the epistemological paradigm, whereas for Leibniz it is intellectual representation. Very roughly, Locke holds that ideas formed by the intellect derive their epistemic credentials from the fact that the intellect simply 'orders' and combines simple ideas of sensation and reflection, whereas for Leibniz, it is sensible representations whose epistemic credentials are derivative: 'confused' sensible ideas are epistemically significant only insofar as they can be rendered distinct by the intellect. The two thinkers thus disagree on which actions of the mind have fundamental epistemic significance: for the former it is sensing; for the latter it is conceiving. But neither thinks that understanding and sensibility are 'entirely different sources of representation' in the sense that they create representations that differ in both origin *and* content.

What we are seeing, then, is that both Kant's argument for transcendental idealism, and the viability of his historical narrative about the originality of the Critical system, depend on his drawing a sharp, extra-logical distinction between intuition and concept: a distinction that ramifies not just at the level of 'origin' but also at the level of 'content'.

At the same time, however, Kant's theory of *cognition* requires him to bring intuition and concept into close proximity to each other. For famously, Kant insists that both intuition and concept are required for cognition, that cognition only occurs through a co-operation of the faculties of sensibility and understanding. Cognition is a composite state that contains both

intuition and concept. Through it, the mind's concepts are 'made sensible' — which is to say that we 'add an object to them in intuition' — and, likewise, its intuitions are made 'understandable' — which is to say that we 'bring them under concepts'. And intuitions can only be 'brought under' concepts when there is a relation of 'correspondence' or 'homogeneity' between the two, such that what is 'contained' in the former is also 'contained' in the latter. In cognition, the very object that is 'given' through intuition is 'thought' through the understanding.

At the very least, then, Kant's theory of cognition requires the possibility of what we can call 'intentional convergence' between intuition and concept, such that the two qualify as representing the same object, their different kinds of 'content' notwithstanding. And this semantic relationship between intuition and concept underwrites a further epistemic relation between them. For while Kant's account of cognition is, I think, best read in a semantic rather than epistemological register — i.e. as describing a specific and distinctive form of representational content (thus a semantic achievement) rather than any special kind of knowledge or epistemic achievement — Kant also develops an account of the epistemically significant attitudes of 'holding true' [*Fürwahrhalten*] that constitute states of belief and knowledge. An attitude of holding true can constitute knowledge only if (together with satisfying further conditions) it is based upon 'objective grounds', and Kant is plausibly read as including intuitions among the objective grounds for beliefs (Chignell 2007: 327; Hanna 2005: 263). And if that is right, then intuitions can not only converge on the same objects as concepts; they can also provide a justificatory basis for believing certain propositions.

All of this would be very easy to accommodate if the distinction between intuition and concept were 'merely logical'. If intuition and concept were simply different 'vehicles' for the same kinds of representational content, the fact they can stand in semantic and epistemic relations

would be no mystery. But Kant's insistence on the radical distinctness of intuition and concept, as required by his idealism, makes it hard to see how they could come together in the manner required by his theory of cognition. The worry here is that one part of Kant's theory requires him to bridge a duality that another part of his theory requires him to make unbridgeable.

1.2 *The Emergence of Conceptualist Readings*

It is fruitful, I think, to view the emergence of 'conceptualist' readings of Kant's account of intuition in terms of the philosophical pressures just described. Conceptualists about intuition hold that, on Kant's position, intuitions depend for their existence on some use of concepts. To use McLear's helpful terminology, conceptualism about intuition can be thought of as a species of 'intellectualism', which is the broader claim that intuitions constitutively depend upon some exercise of the intellect (whether or not the relevant intellectual act involves an application of concepts). For an entire generation of Kant scholarship, *the* debate in Kant's theoretical philosophy was whether Kant was a conceptualist about intuition.

My own sense of that debate is that the conceptualist research project did not ultimately bear fruit, and that the overall consensus of the scholarly community is that conceptualism is ultimately misguided.³ But that leaves us with a question about what motivated the research program in the first place, and whether we have something to learn from those motivations.

³ Specifically, the proposal is that conceptualism about *intuition* is becoming a fringe view. Volumes like Schulting (2016) suggest that this is the direction of the literature — see also Newton's review of the volume (2018). Colin McLear's Stanford Encyclopedia of Philosophy article on the topic helpfully brings out the many domains in which conceptualism is still a live option. For example, there is still room for substantive debate about whether Kant is a conceptualist about the distinct representational state he calls 'perception' [*Wahrnehmung*] — a state he attributes to the faculty of imagination and identifies with consciousness of intuition. Growing recognition of this distinction between intuition [*Anschauung*] and perception [*Wahrnehmung*], and of the seriousness with which Kant treats the distinction — which Tolley has done more than anyone to impress (see, e.g., Tolley 2013; Tolley 2016a; Tolley 2020) — is, I think, the main

While there are certainly several primary texts that lend *prima facie* motivation to the conceptualist proposal, which its advocates have done much to develop, the roots of the program are philosophical and systematic, not exegetical. For the text that launched the entire research paradigm is John McDowell's *Mind and World* (1994). In that text, McDowell recruits Kantian language and makes several interpretive claims, but nobody, least of all McDowell, would call that text a serious exercise in Kant exegesis. Instead, McDowell is asking deep philosophical questions about the tenability of a 'minimal empiricism', on which 'deliverances of receptivity' can both constrain and justify episodes of empirical thinking. And his claim is that we can only securely hold on to this commonsensical viewpoint if we deny that sensibility makes 'an even notionally separable' contribution to cognition.

In the hands of some of Kant's most sophisticated readers, this slogan has been converted into a nuanced reading of Kant's position that has the understanding playing a 'prediscursive role' in generating intuitions. And as I have said, readers such as, especially, Béatrice Longuenesse, have substantiated this proposal through close exegesis of the relevant texts. But the philosophical suggestion at the heart of the exegetical approach, which I think does trace back to McDowell, is something like the following. If the understanding is implicated in the generation of intuitions, then we will be able to acknowledge substantive differences between intuition and concept while also explaining how the two could stand in the semantic and epistemic relations that Kant's theory of cognition requires. If the 'same function' that underlies the categories of the understanding also presides over the 'synthesis' that generates intuitions, it will be no surprise that intuitions and

substantive finding of the debate and the main reason that conceptualism about intuition no longer seems tenable to many. For it turns out that the handful of texts that seem to lend strong *prima facie* motivation to conceptualist readings of Kant's doctrine of *intuition* are in fact much more plausibly read as making claims about *perception*.

concepts are amenable to one another in the way that they must be if they are to ‘come together, necessarily relate to each other, and, as it were, meet each other’ (A92/B124).

Now, if it is true that conceptualism is an exegetical program that is born of a philosophical strategy for explaining cognition, then it is not enough merely to show that the exegetical program fails. The program emerges out of a philosophical claim about how cognition is possible, and until nonconceptualism can offer a worked out alternative account, readers who are moved by the initial motivation for conceptualism will remain unconvinced.

One option here would be to drop the claim that the faculties interact in either direction — either in the production of intuitions or the production of concepts. But an alternative strategy grants the conceptualist both the urgency of the problem *and* the fundamental strategy of attempting to solve the problem by finding signs of faculty-interaction; where this strategy would depart from conceptualism, though, would be in the direction of interaction. Conceptualism starts out from an appreciation of the challenge facing Kant’s attempt to bring sensibility and understanding together in the manner required for cognition; the conceptualist then argues that Kant can respond to this challenge if he can carve out an indirect role for the understanding to play in the genesis of intuitions. The alternative approach I propose starts out from an equally serious appreciation of the challenges facing Kant’s theory of cognition, but turns the conceptualist approach on its head. Instead of centering the topic of *intuition* formation, looking there for evidence of the kind of faculty-interaction that could make cognition possible, I will center the topic of *concept* formation and look for the key to Kant’s account of cognition there. Consistently with maintaining that concepts originate in the understanding, and moreover that they differ from intuitions at the level of content as well as origin, my aim will be to find some role for sensibility

to play in concept formation such that concepts would turn out to be precisely the kinds of representations that could stand in epistemic and intentional relations with intuitions.

Immediately, the proposal that sensibility plays some important role in concept formation looks like it will face less of an uphill battle than the conceptualist proposal that understanding presides over intuition formation. After all, Kant presents the Transcendental Aesthetic as the first chapter in the ‘doctrine of elements’ — a doctrine that isolates the various ‘elements’ that together make up cognition. Kant’s goal in the Aesthetic is to ‘isolate’ sensibility in order to ask what fundamental contribution it makes to cognition, and anybody who read the text without prior theoretical commitments would accept that he identifies *intuition* as the answer to that question. In the very first paragraph of the Aesthetic (A19/B33), he explicitly declares that ‘[sensibility] *alone* affords us intuitions’! But the awkwardness of maintaining that Kant effectively re-writes the Aesthetic in the Analytic does not have an obvious parallel for the proposal that sensibility plays a role in concept formation. Indeed, this proposal could help us explain why Kant proceeds in the order that he does: he only introduces the faculty of understanding after the Aesthetic, we could press, precisely because concept formation will not be fully intelligible until we have an understanding of sensibility.

1.3 Does Kant Have an Account of Concept Formation?

Of course, spelling out this proposal will require us to explain how the understanding could be a spontaneous faculty given that it depends in some important way on sensibility. This is the mirror image of the challenge the conceptualist faces in accounting for the sense in which sensibility is a purely receptive capacity.

But some readers will worry that the proposal faces even more fundamental problems. The suggestion that we can make meaningful progress in understanding Kant’s theory of cognition by turning to his account of concept formation will strike many readers as far-fetched for the simple reason that it is far from obvious that Kant has much to say on the topic. Aside from some brief remarks in hand-written notes and lecture transcripts — in which Kant asserts that concepts arise through the three ‘logical acts’ of *comparison*, *reflection*, and *abstraction* — it is not obvious that Kant ever confronts the topic directly in published works.⁴ Moreover, Kant’s remarks on the logical acts have seemed to many readers to be among the least original⁵ and the least plausible of his doctrines — indeed, they have seemed to many readers to be so obviously inadequate that there is a tendency to deny that they are ultimately intended as an account of concept formation *at all*.⁶ Some readers even go as far as to claim that Kant simply does not have an account of concept formation and is not interested in the topic.⁷

I will not undertake to pass judgment here on the doctrine of the logical acts. My own view is that this doctrine is extremely complex and philosophically rich — so much so that I will devote two entire chapters of this dissertation to understanding the doctrine and showing how it interacts with and explains more familiar tenets of Kant’s theory of cognition. Instead of dealing with those issues now, what I want to do is address the claim that Kant does not deal with the topic of concept formation in published works. To refine the claim that I want to rebut here: I will address the claim

⁴ Notwithstanding occasional allusions to the topic, as for example at *EE* 20: 211–212n.

⁵ See, for example, Heiss: ‘Kant... in his logic lectures and his logic text (more or less) repeats the traditional theory of concept formation by abstraction’ (Heiss 2014: 275).

⁶ See especially Ginsborg (2015) and Pippin (1982). We will discuss interpretive tendencies of this sort in more detail in Chapter 2.

⁷ Merritt (2015), for example, holds that the relevant passages are ‘plainly circular’ if intended as an account of concept formation and concludes, in charitable spirit, that they could not be so intended. And she goes on as follows: ‘Kant might provide an account of concept generation in another context; but I do not think that there is any one place where he does this.’ (Merritt 2015: 494).

that concept formation is not a *central* topic in published works. Many readers will happily acknowledge the occasional passage in which Kant makes a remark on the topic; what they will deny is that Kant is thinking about the topic in any direct way in the canonical texts that lay out his positive theory of cognition.

That impression is encouraged by Kant's famous distinction between the questions *quid facti* and *quid juris*, which frames the transcendental deduction of the categories. The former is a descriptive question concerning the fact from which our possession of pure concepts arises; the latter is a normative question concerning our entitlement to apply pure concepts to the objects of experience. An answer to the former question would be a 'physiological derivation' of a concept; only a 'transcendental deduction', however, could answer the latter question. It certainly looks, then, as if the topic of concept formation (as an explanation of how we come to 'possess' a concept) would belong at the level of the *quid facti*. If that is correct, then a transcendental deduction would, by contrast, ask of an already-formed concept what justification we could have for applying it. And if that is right, then neither the transcendental deduction of the categories, nor the Transcendental Aesthetic (to which Kant respectively refers as a transcendental deduction of the concepts of space and time at A87/B119-20) should be expected to tell us anything about concept formation. Moving from the Analytic of Concepts to the Analytic of Principles, while there is a general consensus that Kant moves here from justificatory to explanatory considerations, there is also consensus that what he is trying to explain in the Analytic of Principles is not how we *form* pure concepts but rather how we *apply* them to objects of spatiotemporal intuition. And so it seems that throughout the texts that articulate Kant's theory of cognition, his concern is with *justifying* concepts and with explaining how we *apply* them, not with the orthogonal 'physiological' question of how we *form* them in the first place.

But this simple picture is untenable. First of all, when we look at Kant's remarks on the methodology of transcendental deduction, it becomes very obvious that questions of origin are not exclusively 'physiological'. Consider, for example, the way that Kant retrospectively characterizes the Transcendental Aesthetic:

We have above traced the concepts of space and time to their sources by means of a transcendental deduction, and explained and determined their *a priori* objective validity.

A87/B119-20

In the Transcendental Aesthetic, we are told, Kant has traced the concepts of space and time to their 'sources'; moreover, he has done so *precisely* by means of a transcendental deduction.⁸ Sure enough, in the Transcendental Aesthetic, we find Kant making claims that obviously bear on questions of concept formation: he claims, for example, that 'in respect to...[space] an *a priori* intuition (which is not empirical) *lies at the ground of all concepts of it*' (B39). Consider, also, Kant's stated reason for maintaining that only a transcendental deduction could explain the objective validity of the categories:

Yet a **deduction** of the pure *a priori* concepts can never be achieved in this way [i.e. *via* a physiological derivation]; it does not lie down this path at all, for in regard to their future use, which should be entirely independent of experience, an entirely different birth certificate than that of an ancestry from experiences must be produced.

A86/B119

The problem with a physiological derivation — that is, its normative irrelevance — is not *that* it produces a 'birth certificate'; it simply produces the wrong *kind* of birth certificate. A

⁸ Though the status of the Transcendental Aesthetic as a transcendental deduction has been noted by several readers (for example, Merritt (2010) and Messina (2015)), I do not think that the significance of this fact has been properly appreciated. Specifically, I argue in chapter 4 that failure to think through this aspect of the Aesthetic has led readers to misinterpret Kant's arguments in the third and fourth expositions in the B-edition.

transcendental deduction differs from a physiological derivation not because it eschews questions of origin but because it looks for ‘an entirely different birth certificate’.

Let us consider also the way in which Kant introduces the doctrine of *synthesis*. This doctrine is woven into more or less every page of both the Analytic of Concepts and the Analytic of Principles. But in the first paragraph that introduces the doctrine, Kant claims that it is through synthesis (rather than analysis) that concepts ‘arise [*enstpringen*]... as far as the **content** is concerned’ (A77-78/B103). This paragraph concludes by insisting that synthesis ‘is the first thing to which we have to attend if we wish to judge about the first origin [*Ursprung*] of our cognition’ (A77–78/B103). Given the way in which this doctrine is introduced, it is hard to see how we could acknowledge the centrality of the doctrine of synthesis while also denying that Kant is moved by questions of concept formation.

Still, it must be acknowledged that the logical acts — comparison, reflection, and abstraction — do not appear by name in the Analytic. But this observation does not entail that the topic of concept formation is peripheral to the Analytic. For, first of all, there is a plausible case to be made that the doctrine *does* show up in the Analytic, simply under a different name. Specifically, I will press the claim in the third part of this dissertation that Kant’s rich discussion of ‘synthesis of recognition in a concept’, in the A-Deduction, reprises all of the central elements of his doctrine of the logical acts. But, second of all, there is *much more* to Kant’s theory of concept formation than his doctrine of the logical acts.

In the Jäsche Logik and elsewhere, Kant distinguishes between the *matter* and the *form* of a concept. As we will see in more detail in Chapter 1, the matter of a concept is a set of non-conceptual representations. Concepts come into being when, *first*, a matter is brought to consciousness, and, *second*, this matter is subject to the logical acts of comparison, reflection, and

abstraction. We can thus distinguish between two stages in the origin of a concept: the initial, ‘matter-giving’ stage, at which a set of representations is brought to consciousness, and a second, ‘form-imparting’ stage, at which those representations are subject to comparison, reflection, and abstraction. In the Jäsche Logic, Kant marks this distinction, distinguishing the origin of a concept ‘as to form’ from its origin ‘as to matter’. Not only that, he aligns this distinction with the disciplinary border between ‘logic’ and ‘metaphysics’: whereas logic characterizes the ‘formal origins’ of concepts, the ‘origin of concepts with regard to matter... is considered in metaphysics’ (*JL* 9: 94).

Now, there is evidence that the discipline Kant calls ‘metaphysics’ in the logic lectures is the same as the discipline he refers to as ‘transcendental logic’ in the first *Critique*.⁹ Since questions of material origin are ‘metaphysical’ questions in the sense of the logic lectures, we should therefore not be surprised to find Kant discussing such questions in his own constructive work of transcendental logic. And that is precisely what I will propose. Specifically, I will argue throughout Part 2 of this dissertation that the doctrine of ‘apprehension’, a mainstay of the Transcendental Analytic, is precisely intended to explain the origin of concepts as to matter.

For all of these reasons, it is my conviction that Kant’s theory of concept formation is hiding in plain sight. It is, I think, *the* central topic of the Transcendental Aesthetic, the Transcendental Deduction, and the Analytic of Principles. It will take the entire dissertation to bear out this contention; I hope here just to have said enough to give it some *prima facie* motivation.

⁹ For example, consider what Kant has to say in the Vienna transcript about the distinction between infinite and affirmative judgments: ‘In logic, this matter seems to be a subtlety. But in metaphysics it will be important not to have passed over it here’ (*WL* 24: 930). Now compare this statement with the parallel statement in the first *Critique*: ‘[I]n a transcendental logic **infinite judgments** must also be distinguished from **affirmative** ones, even though in general logic they are rightly included in the latter and do not constitute a special member of the classification’ (A71–2/B97).

2. Breakdown of Chapters

Given that i) the topic of concept formation is one that Kant does in fact address, in rich detail, and given also that ii) Kant's views on this topic promise to teach us important lessons about his theory of cognition, it is at the heart of the present dissertation. Through a study of both the material and formal origins of concepts, I will argue that the understanding *does* indeed substantively depend on sensibility in the formation of concepts. Throughout this dissertation, I will argue that Kant's account of concept formation entails a specific conception of the relationship between human understanding and sensibility, on which discursive understanding is metaphysically impossible in the absence of sensibility. Given this conception of the relationship between the two faculties, we will see that it is no surprise that intuition and concept can stand in the relations in which they must be able to stand given Kant's theory of cognition. The task, in spelling out this account, will be to hold firmly in view Kant's insistence that the two kinds of representation nevertheless differ in both origin and content.

The dissertation is split into three parts.

Part 1 is preliminary. My aim there is to set up a problem space for thinking about Kant's theory of concepts.

I start, in **Chapter 1**, by considering what a 'theory of concepts' would be within a Kantian context. Any theory presupposes a framing conception of the entity it is a theory of, and my first aim in the chapter is to uncover Kant's framing conception of concepts. On this framing conception, I argue, concepts are *representational mental states*, produced through certain distinctive acts of the intellect, which, in virtue of their intrinsic features as the kinds of modifications they are, stand in representational relations to further objects. This framing conception of concepts motivates three questions for a theory of concepts, concerning, first, the

acts through which concepts originate, second, the nature of concepts as mental states, and, thirdly, the kinds of entity that concepts represent in virtue of being the kinds of states they are. For the remainder of the chapter, I introduce textual materials that bear on all three of these questions. My primary focus is on two of Kant's most famous claims about concepts — namely, that they are 'universal' representations (the Universality Thesis) that 'mediately' relate to objects (the Mediacy Thesis). In presenting these doctrines, I argue that a proper understanding of them speaks against a common interpretation, on which Kant treats judgments as semantically prior to concepts. Having discussed the Universality and Mediacy Theses, which bear on questions about the content and objects of concepts, I turn to Kant's statements on the origin of concepts. My aim in this final part of the chapter is to show that Kant differentiates concepts as to *matter* and *form* and, further, to show that his broader account of the genesis of concepts encompasses an account of both the matter and the form of concepts.

In **Chapter 2**, my aim is to map the terrain of interpretive possibilities in filling out the schematic framework laid out in the first chapter. The secondary literature on Kant is, by and large, animated by a principle of charity, which makes commentators reluctant to attribute Kant positions that seem like obvious philosophical non-starters. For this reason, I intertwine my presentation of the interpretive options with a presentation of some of the philosophical objections to which Kant's various pronouncements have seemed to expose him. The topic of concept formation, in particular, is a context in which the interpretive horizon has been shaped by philosophical considerations. For a majority of commentators has held that Kant's discussion of the logical acts is not just flawed but obviously flawed — so obviously flawed, in fact, that sympathetic commentators have concluded that Kant ultimately never intended the logical acts story to be an account of concept formation at all. I lay out the philosophical objections that lie behind this interpretive tendency,

and I lay out the path ahead for a charitable reader who nevertheless wants to maintain that the logical acts story *is* intended as an account of concept formation. Moving to questions about the nature of concepts themselves, I show how the framing conception of concepts as mental states, which I argued in Chapter 1 that Kant accepts, is both philosophically contentious in itself and is in fact often argued not to reflect Kant's considered view. For a large contingent of commentators assume that Kantian concepts are, in fact, *rules*, not mental states. Given this tendency, for my own reading to substantiate its operative assumptions about the nature of concepts in a Kantian context, I will need to rebut the textual case for thinking of concepts as rules. Finally, I canvas three options for thinking about the entities that concepts represent: rules, properties, and 'inner natures'.

The findings of Part 1 leave us with different options for making inroads into Kant's theory of concepts. But because of my conviction that it is in Kant's theory of concept formation that we stand to learn most about his theory of cognition more broadly, I will focus throughout the rest of the dissertation on the question of origin.

Now, focusing on this question, given the matter-form distinction that I argue shapes Kant's account of concept formation, means distinguishing between the matter-giving acts and form-imparting acts that lie at the basis of concepts. No extant treatment of the topic takes this distinction seriously, but I will structure the rest of the dissertation around it. In **Part 2** of the dissertation, I make a study of the matter-giving acts that first bring forth the non-conceptual representations 'out of which' concepts are formed. In **Part 3**, I study the three logical acts of comparison, reflection, and abstraction, with a view to explaining how they create conceptual contents out of given matter.

Part 2 comprises three chapters. In **Chapter 3**, I study the matter-giving acts that pertain to empirical concepts. I show that Kant makes finer distinctions within the class of empirical concepts than has previously been recognized. Specifically, I show that he distinguishes empirical concepts into two fundamental classes: ‘given empirical’ concepts, on the one hand, and concepts of experience, on the other. I explain the content-level difference between these two kinds of concepts, and trace the difference back to a difference in their matter. Whereas the matter for given empirical concepts is given through an act that Kant calls ‘apprehension by means of sensation’, the matter for concepts of experience is given through an act he calls ‘empirical apprehension of an appearance’. Having explained what this distinction amounts to, I close the chapter by explaining how my reading of the distinction between the two kinds of empirical concept helps us make progress both in understanding the distinction between judgments of perception and experience and in diagnosing the debate between conceptualists and nonconceptualists.

In Chapters 4 and 5, I turn my attention to non-empirical concepts. **Chapter 4** focuses on the material origins of what Kant calls ‘pure sensible concepts’ — including the concepts of space and time and the concepts of mathematics. In the course of this chapter, I do several things. First, I begin to motivate my contention that a transcendental deduction takes notice of questions of origin, and I also show how taking seriously Kant’s claim that the Transcendental Aesthetic is a transcendental deduction motivates a revisionary reading of the Third and Fourth Metaphysical Expositions. These claims about the Aesthetic are in the service of an account of the material origins of spatial concepts. I argue that all such concepts originate in an act that Kant calls ‘pure apprehension’, and I argue that pure apprehension plays a similar role with respect to pure temporal concepts. Aside from motivating this claim, I explain the material difference between geometric concepts and the general concept of space, and I explain the relationship between pure

apprehension, on the one hand, and the two empirical modes of apprehension distinguished in the previous chapter.

In **Chapter 5**, I turn my attention to the ‘pure intellectual concepts’, with especial focus on the categories of understanding. In this chapter, I refine my interpretation of the nature of a transcendental deduction by explaining what I take to be the distinction between a transcendental deduction of a concept on the one hand and a ‘physiological derivation’ of it on the other. I argue that the transcendental deduction of a concept is concerned with uncovering the matter of a concept, whereas its physiological derivation consists in uncovering its matter-giving act. Through a study of Kant’s pronouncements about the physiological derivation of the categories, I begin to motivate a claim that will occupy me throughout the final chapter of the dissertation — namely, that the matter of the categories is given through the act of *reflection*, the very act that also creates the universal form of concepts. In closing this chapter, I develop a parallel proposal about the role of the act of *inferring* in giving matter for the Ideas of reason.

In **Part 3** of the dissertation, I turn my attention to the logical acts that create concepts out of given matter. This part of the dissertation splits into three chapters. In **Chapter 6**, my focus is on the operation that Kant calls comparison. I show that comparison represents a set of representations as being identical with respect to their ‘rule of apprehension’. Having put forward textual grounds for this proposal, I explicate the relevant notion of a rule of apprehension, showing that this notion has its place in Kant’s theory of schematism. A rule of apprehension, on this reading, is a procedure for producing sensible representations that could in principle ‘exhibit’ concepts. In the remainder of the chapter, I show that comparison is only required in those cases in which it is not possible to become conscious of a rule of apprehension directly, which limits the scope of comparison to the domain of empirical concepts.

In **Chapter 7**, I embark on my study of reflection and abstraction. I develop a close reading of the doctrine of reflection, explaining the sense in which reflection represents a manifold as being determined with respect to the logical functions of judgment. It is in this chapter that I confront the topic of apperception, laying out a reading of the various things that Kant means when he speaks of the ‘unity of apperception’, and the relation of this unity to the logical functions of judgment on the one hand and the categories on the other. I finish this chapter with a study of abstraction; here, my intention is to explain how abstraction takes the outputs of reflection and first creates determinate concepts.

In **Chapter 8**, I return to the doctrine of the categories. It is here that I make good on my claim, first mooted in Chapter 5, that reflection is the act that gives matter for categories. Drawing on the account of reflection developed in the previous Chapter, I argue that the reflection is the act through which the categories are first acquired, and, moreover, that it constitutes a kind of ‘prediscursive’ application of the categories that prefigures their subsequent application through acts of the power of judgment. Drawing on this account of the formation and application of the categories, I give an account of the relationship between the categories and sensible concepts.

Finally, in concluding the dissertation, I return to the specific set of interpretive questions that emerged in Chapter 2. I describe the implications of my account of concept formation for several key features of Kant’s doctrine of concepts, including i) the relationship between concepts and rules, ii) the nature of conceptual universality, iii) the scope of conceptual representation, and iv) the relationship between concepts and judgment. Finally, I close the dissertation by dwelling on the picture of the relationship between understanding and sensibility that I take to underlie Kant’s theory of concept formation. If I am right, then while Kant never falters in holding understanding apart from the sensible faculty of imagination, he brings them into far closer

proximity than a superficial reading would suggest. It is not simply the case that understanding is causally dependent on sensibility: sensibility, I argue, leaves its imprint on the essence of the faculty itself and the content of its *a priori* concepts.

Part I: Preliminaries

Chapter 1

Contours of a Kantian Theory of Concepts

Introduction

In this chapter, I want to introduce some of Kant's central commitments about concepts, but I also want to show that these commitments hang together as parts of a *theory of concepts*. To do that, I need to create a framework for thinking about what a theory of concepts would be, and that is the first task I take on, in Section 1. Rather than asking that question in the abstract, I try to ask it from Kant's perspective. Drawing on the metaphysics of causal powers that informs Kant's faculty psychology, I argue that Kant thinks of concepts as a kind of representational mental state and suggest that this starting conception sets the agenda for Kant's theory. Given this framing conception of what a concept is, we can ask three questions: i) how states of this kind come into being; ii) what their distinctive features are as representational states; and iii) what kinds of entities these states represent in virtue of being the states that they are. Kant's answers to these three questions constitute what I call his 'metaphysics of concepts'.

Within the framework of these questions, I then introduce textual materials that bear directly on all three of them. In begin, in Section 2, by setting forth a set of doctrines that bear directly on the second and third of these questions. Kant famously holds that concepts are both

‘mediate’ and ‘universal’ representations, in both of these respects contrasting with intuitions, which are immediate and singular. Throughout Section 2, I work toward an explanation of both the meaning of and relationship between (what I will call) the *Mediacy Thesis* and the *Universality Thesis*, together with their corresponding theses about intuition (which I call the *Immediacy Thesis* and the *Singularity Thesis*). The findings of Section 2 will give us an initial handle on the kinds of states Kant thinks concepts are, as well as the kinds of entities that they represent. These findings are preliminary in the sense that they are consistent with a wide range of interpretations, but there is one specific interpretation that I intend to rule out even at this early stage of investigation. This interpretation I call the *Semantic Priority of Judgment (SPJ)* interpretation, and it claims that concepts do not have contents independently of their role in judgment. SPJ interpretations are often thought to have a monopoly on the Mediacy Thesis; I argue that they do not, and that in fact the most plausible reading of both the Mediacy Thesis and its relation to the Universality Thesis requires that we abandon SPJ.

In Section 3, I pivot from questions of content and object to the question of genesis. I introduce some of the doctrines that are relevant to Kant’s account of concept formation, and I show how this account presupposes a hylomorphic analysis that distinguishes concepts into a *matter* and a *form*.

By the end of this chapter, we will have a preliminary understanding of the terrain Kant covers in his theory and the basic contours of his account, and we will also have reasons for steering clear of one particular style of interpretation. Still, the chapter is preliminary in two ways. First of all, the framework that I motivate in Section 1 will be subject to challenge, and it will need to be interrogated and strengthened at various points throughout the dissertation. For now, my aim is just to say enough to give the framework some initial plausibility as a working hypothesis.

Second, even though the subsequent findings of Sections 2 and 3 speak against one specific interpretation, the findings of the chapter leave open a wide range of interpretive options. The next chapter will lay out these interpretive options as well as the philosophical pressures that Kant must respond to as he develops his theory, and which we, likewise, must engage as we navigate between the different interpretive possibilities.

1. Situating Kant's Theory of Concepts within his Faculty Psychology

What is a theory of concepts a theory *of*?

Rather than asking that question in the abstract, I want to ask it from within the perspective of Kant's philosophy.

The best place to start in arriving at a series of possible answers to this question is with Kant's faculty psychology. Understanding this theoretical context will help us home in on the different possible subject-matters for a theory of concepts within a Kantian framework.¹⁰

Kant views the mind as a kind of substance, and thus he takes it to be subject to the same basic metaphysical framework as any substance. Substances subsist for themselves — they remain, as Kant says, 'even when we leave aside all accidents' (*MM* 29: 796) — but they also exist in particular ways. A given way in which a substance exists is called an 'accident', and insofar as a substance exists in a particular way, the accident is said to 'inhere' in it. The basic framework in which Kant explains how substances exist in particular ways — that is, how specific accidents inhere in them — is a metaphysics of causal powers. On this framework, substances are

¹⁰ The following paragraphs are profoundly indebted to Brink (2022), to which I owe both my specific interpretation of Kant's faculty psychology and the general strategy of situating Kant's philosophy of mind within his metaphysics of powers.

individuated by their constituent powers.¹¹ A power, meanwhile, is a capacity to act in a certain way, and an act is the ‘ground of actuality of the [substance’s] accidents’ (*MM* 29: 773). Insofar as a substance acts, it exercises a power and thereby *actualizes* — brings about, makes actual — an accident.

Since this framework applies to all substances, and since the mind is a kind of substance, the capacity of the mind to exist in particular ways — to actualize certain accidents — must therefore be attributable to its constituent powers or faculties. Kant insists on a deep divide, within the mind, between two faculties or mental powers — namely, sensibility and intellect — and he famously insists that both powers must be harmoniously exercised for cognition to take place. Insofar as the mind constitutes a faculty of cognition [*Erkenntnißvermögen*], therefore,¹² it must encompass within itself two radically distinct powers: sensibility, a power to intuit, and intellect, a faculty of thinking [*Denkungsvermögen*]. The intellect is then split into three sub-faculties: understanding, the power of judgment, and reason. These three faculties differ from one another in important ways, but each is a faculty of thinking — that is, a power whose exercise grounds the inherence of thoughts in a subject.

The divide between sensibility and intellect is radical because the former capacity is a *receptive* power, whereas the latter is a *spontaneous* power. A receptive power is a power to actualize accidents through the action of an external power,¹³ whereas a spontaneous power is a power to actualize accidents solely in accordance with an internal principle.¹⁴ Sensibility is receptive because sensible intuitions are accidents of the mind that express the action of an external

¹¹ Though, importantly, they are not *reducible* to those powers — see Watkins (2005: 261-62).

¹² And the mind *does* constitute a faculty of cognition, though cognition is not its only orientation. In addition to constituting a faculty of cognition, the mind is also a faculty of desire and a faculty for the feeling of pleasure and displeasure (*EE* 20:245).

¹³ See, for example, *MM* 29: 823.

¹⁴ See, for example, *ML₁* 28: 268; *ML₁* 28: 285; *ML₂* 28: 448.

power on the mind: '[t]he capacity (receptivity) to acquire representations through the way in which we are affected by objects is called sensibility' (A19/B33; cf. *MM* 29: 797). The intellect, meanwhile, is spontaneous, which, given Kant's conception of spontaneity, means that it is capable of producing accidents (representations) entirely through an inner principle, without the co-operation of an outer power. Kant's definition of the 'understanding' [*Verstand*] at the outset of the *Transcendental Logic*, which is plausibly read as a definition of the intellect as a whole,¹⁵ suggests exactly this:

If we call the **receptivity** of our mind to receive representations insofar as it is affected in some way **sensibility**, then on the contrary the faculty for bringing forth representations [from] itself, or the spontaneity of cognition, is the **understanding**.
A51/B75¹⁶

What we are seeing, then, is a division, within the cognitive faculty, between a spontaneous intellectual power, which brings forth representations solely from itself, and a lower, sensible power, which brings forth representations solely insofar as the mind is affected by an outer power.

As the passage above brings out, what differentiates mental powers, whether spontaneous or receptive, from other kinds of powers, is that the accidents brought forth through acts of mental powers are *representations* [*Vorstellungen*]. Now, Kant denies that the term 'representation' can

¹⁵ We saw above that Kant uses the term '*Verstand*' to name a sub-faculty of the intellect as a whole, but I do not think his definition here is restricted merely to that subfaculty. For Kant also accepts a broad usage on which the term encompasses the entire 'higher faculty of cognition', that is, understanding (in the narrower sense), power of judgment, and reason (A131/B169). The passage quoted occurs in the introduction to the *Transcendental Logic* as a whole, which encompasses a doctrine of all three sub-faculties of the intellect, before Kant has drawn any distinctions within the intellect, so it is very plausible that the term is functioning in its broad designation here.

¹⁶ I put the word 'from' in square brackets because this translation is not straightforwardly mandated by the German text (which reads, '*...so ist dagegen das Vermögen, Vorstellungen selbst hervorzubringen... der Verstand*'), and indeed the word is absent in the Guyer-Wood translation. It is very unclear, though, absent the word 'from', what this sentence means. And given that we have seen that spontaneous powers bring forth accidents solely in accordance with inner principles — that is, *from themselves* — I think we can be fairly confident that this translation captures Kant's meaning.

be defined; still, he makes plenty of informative claims about its meaning.¹⁷ In an early note, he characterizes representation as ‘that determination of the soul that refers to something other [diejenige Bestimmung der Seele, die sich auf andere Dinge beziehet]’ (R 1676, 16: 77; cf. *MM* 29: 970). Note: ‘other’, not ‘outer’ — representations can refer both to outer things and to the soul itself of which they are determinations. The representation refers to something other than itself (whether internal or external to the soul) in virtue of a relation of ‘agreement’ or ‘conformity’ between representation and object. This relation itself is based not on pictorial resemblance — of the kind, say, that exists between a painting of a house and a house — but rather on a kind of structural isomorphism between representation and object (R 1676, 16: 77). An accident of a mental substance, then, is a particular modification of that substance produced by an act of the substance, and because of the specific configuration of a given accident, that accident stands in a relationship of representation to some further object.¹⁸

Within this framework, one thing is absolutely clear: concepts bear a special relationship to the spontaneous intellect, not to receptive sensibility. More specifically, Kant indicates an

¹⁷ His reasoning for denying that it cannot be defined is somewhat odd: because any definition of the word ‘representation’ would itself be composed of representations, it follows that the word ‘representation’ cannot be defined (*MV* 29: 970). Whatever exactly the implicit conception of definition here, it is clearly compatible with the possibility of making substantive and informative claims about representation, which Kant himself does. Nevertheless, it is regrettable that Kant does not discuss the topic of representation in more detail. Here, I agree with Dickerson, who laments that ‘[t]here is nothing in the *Critique* to compare, for example, with the rich material to be found in the writings of Leibniz on notions like expression and isomorphism’ (Dickerson 2004: 4).

¹⁸ Kant thinks it is easy to see how this relation could obtain in the case of intuition, where the accident is itself the effect of an outer object. In that case, we can then say that the further object that the accident represents is the affecting object, thus basing the representational relation between mental state and object on a causal relationship between them. But Kant defines the mind in general, and not merely sensibility, as a representational faculty, which means that spontaneously produced accidents of the mind must also represent some further object. Here, it is far less clear what that object would be, given that, *ex hypothesi*, the state of mind is not produced through any influence of outer objects. Kant agonizes over this issue, famously posing the question in his 1772 letter to Marcus Herz (*Br* 10: 131), *What is the ground of the relation of that in us which we call ‘representation’ to the object?* In the case of spontaneously produced representations, that ground cannot be a causal relation in either direction since the representations in question neither cause nor are caused by the objects they putatively represent.

especially close tie between the understanding (in the narrow sense) and concepts, repeatedly defining the understanding as a faculty of concepts.¹⁹ Clearly, then, Kant's theory of concepts must be situated within his theory of the intellect and, more specifically, his theory of the understanding. But Kant's faculty psychology offers us three ways of situating the theory, and here we come to the Kantian range of possible answers to the question what a theory of concepts is a theory of:

1. The first option is that the term '*Begriff*' pertains to the level of representational *acts*. The understanding is exercised through acts of a certain kind; perhaps Kant's theory of concepts is part of his theory of the acts of understanding.
2. The second option is that the term '*Begriff*' pertains to the level of representational *states*. Acts of the understanding actualize accidents of a certain kind; perhaps concepts are the representational states or accidents characteristically produced by acts of understanding.
3. The final option is that the term '*Begriff*' pertains to the level of represented *objects*. Accidents produced by acts of the understanding are representations and thus stand in a relation of representation to some further object. Perhaps '*Begriff*' names the characteristic kind of object the mind represents *via* acts of the understanding.

¹⁹ See, for example, A126, A130/B168; *ÜE* 8: 218n; *ML*_I 28: 240; *MV* 29: 978; *MV* 29: 984.

Now, it might seem straightforward where to locate Kant's theory of concepts, for Kant defines concepts as a kind of representation (*Vorstellung*), and on the meaning of the term that I presented above, representations are a kind of 'determination' (read: accident) of the soul. It would seem, then, that Kant's terminology settles that he opts for *Option 2* above. The problem is that Kant's use of this term is extremely catholic, and there are several contexts in which it is far from clear that the term is functioning to pick out a representational state. Numerous commentators have maintained that central uses of the term 'representation' admit of an '*ing*' reading,²⁰ on which Kant is describing an *act* of representing rather than a representational state; moreover, there is at least one central context where the term apparently picks out a represented *object*, for Kant routinely describes *appearances* as representations, and appearances are plausibly thought of as the objects to which empirical intuitions are representationally related.

Still, I think we can argue by elimination that when Kant calls concepts 'representations', he is indeed using the term in the sense we presented initially, where it clearly picks out a kind of accident. Against the *object* reading, it is striking that when Kant divides the different species of the genus 'representation' in the famous *Stufenleiter* section of the Transcendental Dialectic, familiar terms such as *intuition*, *sensation*, and, indeed, *concept* do appear as naming species of the genus, but the term *appearance* does *not*. That suggests both that the sense in which appearances qualify as representations is a non-standard sense, and that this non-standard sense is not the sense in which concepts and intuitions qualify as representations.

The way in which Kant talks about concept formation, meanwhile, speaks against thinking of concepts as representational *acts*. We have seen that on Kant's metaphysics of causal powers, acts produce accidents. And Kant talks exactly as if concepts are produced by acts of the mind.

²⁰ See, for example, Van Cleve (1999: 7) and Tolley (2022).

The *Jäsche Logic*, for example, asks the question, ‘Which [acts of the understanding] are involved in the generation of a concept from out of given representations?’ (JL 9: 93), and it answers by specifying three ‘logical acts of the understanding, through which concepts are generated [*erzeugt*] as to their form’ (JL 9: 94). Since concepts are set up here as the product of mental acts, the natural place to situate them in the act-state-object framework is as states or accidents. Again, in the *Critique*, Kant tells us that ‘[c]oncepts are... grounded on the spontaneity of thinking’ (A68/B93, my emphasis). Recall, acts express powers and thereby *ground* the inherence of accidents in a subject. If concepts were themselves acts, they would *express* the spontaneity of thinking; as accidents, they would be *grounded by* (an exercise of) the spontaneity of thinking, which is precisely Kant says here.

More will need to be said on these issues, but I will take it henceforth that Kant thinks of concepts as modifications of the subject and hence follows *Option 2*. The subject-matter for a theory of concepts, on this suggestion, is a certain specific sub-domain of the accidents of mental substance. Specifically, concepts are the accidents characteristically produced through exercises of the understanding, a sub-faculty of the spontaneous intellect. At various points in this dissertation, we will come up against interpretations that deny that Kant endorses the representationalist account of concepts I am attributing to him here. For now, I hope to have said enough to justify us in taking as our working assumption that Kant endorsed the representationalist account of concepts and built his theory around that presupposition.

If we do situate concepts at the level of representations, three questions for a theory of concepts suggest themselves. First, what are the intellectual acts that produce concepts? Second, what are the characteristic features of concepts as the specific kind of mental accidents they are? Third, what are the distinctive objects to which concepts are representationally related in virtue of

being the kinds of accidents they are? These questions set the agenda for a specific kind of theory of concepts, that is, a *metaphysics* of concepts: an account that situates concepts within the broader metaphysics of causal powers that informs Kant's philosophy of mind.

2. Mediacy and Universality

Now that we have a sense of the questions that structure Kant's theory of concepts, I will lay out some of the doctrines that inform Kant's answers to them. In the next section, I will lay out doctrines relevant to Kant's account of the *origins* of concepts; in this section, my focus will be at the level of the second and third of the questions distinguished above, concerning the nature and representational objects of concepts.

My aim in this section is to work toward an outline understanding of two of the defining features of concepts as representational states. Throughout the *Critique* and elsewhere, Kant draws two main contrasts between concepts, as products of the higher spontaneous cognitive faculty, and sensible intuitions, as products of the lower receptive cognitive capacity: first, concepts are representations that 'mediately relate to objects' — I call this the 'Mediacy Thesis' — whereas intuitions are representations that 'immediately relate to objects' — I call this the 'Immediacy Thesis'; second, concepts are universal [*allgemein*] representations (the 'Universality Thesis'), whereas intuitions are singular [*einzel*n] representations (the 'Singularity Thesis'). My aim is to give an account of the meaning and import of these doctrines as well as the relationship between them. Since both the mediacy and universality of concepts are introduced contrastively, in relation to opposing features of intuitions, we will also need to say enough about intuitions to understand the relevant contrasts.

But before I launch into a study of Kant's two theses about concepts and their companion theses about intuitions, I want to introduce an important distinction, internal to Kant's theory of concepts, between 'content' and 'extension'. This distinction will help us understand both the Mediacy Thesis and the Universality Thesis: as I will argue, the Mediacy Thesis is a thesis about the relationship between concepts and their *extensions*; moreover, it is based on a negative claim about the nature of conceptual *contents*, and this claim itself is explained by the Universality Thesis.

2.1 Content and Extension

According to the *Jäsche Logic*, every concept has both a 'content' and an 'extension'. Drawing on Kant's own handwritten notes, Jäsche presents the distinction between content and extension as follows:

Every concept, *as partial concept*, is contained in the representation of things; as *ground of cognition, i.e., as mark*, these things are contained *under* it. In the former respect every concept has a *content*, in the other an *extension*.

JL 9: 95

This passage ties the 'content' of a concept to its status as a 'partial representation', and the 'extension' to the concept to its status as a 'ground of cognition'. A concept has 'content' insofar as it is a 'partial concept', and it has an extension insofar as it is a ground of cognition. It is worth unpacking both of these notions.

To begin with the notion of content: as a partial concept, a concept can be a 'contained in the representations of things', can be a *part of* further representations, and insofar as it can be so contained, it has 'content'. There are, specifically, two kinds of further representations in which concepts can be 'contained'. First of all, as we will see, a concept can be a part of a further, more

complex concept; for example, we could ‘synthetically determine’ the concept <body>²¹ with the concept <weight> to form the complex concept <heavy body>, which contains <body> as a partial concept. Second of all, a concept can be a part of a *judgment*, as when I form the judgment that all bodies are heavy, a judgment that contains the concept <body> as a part. In both of these cases, the concept <body> is making a distinctive contribution to the identity-conditions of the complex representation of which it is a part. More generally, there is a distinctive way in which a concept shapes any judgment or concept of which it is a part, and it has the power to play this shaping role through its content. The content of a concept is what determines its contribution to the identity-conditions of the judgments and further concepts of which it can be a part.²²

This content is intrinsic to the concept, which means that insofar as a mind is modified in accordance with a given concept, the content of that concept is already present, or ‘thought in’ that state of mind. However, the content of the concept can be present in mind without being salient in consciousness. If the content of the concept is present in mind without being salient in consciousness, then the content itself is ‘obscure’ [*dunkel*] and is hence thought in the concept only confusedly. If the content is salient in consciousness, then the content is clear [*klar*] and is hence thought in the concept distinctly [*deutlich*]. It is possible to make concepts distinct — that

²¹ Here and throughout the dissertation, expressions enclosed within angle brackets function as names for concepts.

²² It should be noted at once that this notion of *Inhalt* is distinct from another use that Kant makes of the term in connection with concepts, primarily in the first *Critique*. On the second usage, a concept that cannot be shown to ‘correspond’ to any object of sensible intuition lacks content, and thoughts that employ such concepts are ‘empty’ (see Edwards 2023 for further discussion as well as Roche 2010 and Chance 2018). There is a systematic reason for thinking that these notions come apart: concepts integral to the doctrine of transcendental idealism, such as <thing in itself> do not in any straightforward way correspond to intuition, but they still have representational content that can be exploited in judgments, such as the very judgments that comprise the doctrine of transcendental idealism. There are also more specific textual reasons to separate the two notions. In the Amphiboly chapter, Kant discusses ‘empty’ concepts ‘to which no intuition that can be given corresponds’ (A290/B347). These concepts clearly lack content in the specific sense that they cannot be related to objects of intuition; but at the same time, Kant insists that ‘one thinks [these concepts] to be sure, without contradiction’ (A291/B347). Clearly, then, the concepts still possess content in the sense that there is something one thinks ‘in’ them.

is, to raise their contents to consciousness — through ‘analysis’, the results of which are expressible as analytic judgments. Analysis, Kant tells us, ‘affords us a multitude of cognitions that, though they are nothing more than illuminations or clarifications of that which is already thought in our concepts (though still in a confused way)... do not extend the concepts that we have in either matter or content but only set them apart from each other’ (A6-7/B9). The content of a concept, then, is immanent to (‘thought in’) any state of mind in which that concept is present, but may require analysis to be brought to clear consciousness.

A full analysis of the concept would systematically present the content of the concept. Almost every concept is a complex representation whose content expresses the conjunction of several distinct conceptual contents. Kant does indeed think that there is one concept whose content is perfectly simple and which cannot therefore be brought to distinctness — namely, the concept of an ‘object in general’ — but all other concepts have complex contents. Moreover, such content is also structured, and this structure is object-like. In general, Kant divides the properties of an object into two classes: the properties that ‘express’ the nature of the object (*essentialia*) and the properties that ‘derive from’ its nature (*attributa*). In the same way, Kant distinguishes between the elements of the concept that constitute its ‘logical essence’ — the *essentialia* or *constitutiva* of the concept — and the elements of the concept that derive from its logical essence.²³ A full analysis of the concept would unite the theoretical virtues of completeness [*Ausführlichkeit*] and precision [*Präcision*].²⁴ As a complete exposition, it would bring to consciousness *every* element of the concept’s content; as a precise exposition, it would hive off the logical essence of the concept and bring to consciousness the derivation-relations between the *essentialia* and all remaining *attributa*.

²³ In a metaphysics lecture, Kant says that ‘[n]ature is in existence what essence is in concept’ (*ML*₁ 28: 221). For the distinction between *essentialia* and *attributa* applied at the level of conceptual content, see *LB* 24: 113; *LDW* 24: 728; *WL* 24: 838-39; *ÜE* 8: 229. For further discussion, see Edwards 2023.

²⁴ *LB* 24: 264-65; *WL* 24: 912-13; *WL* 24: 921-22; *R* 2925, 16: 578; A728/B756n.

Such a presentation would constitute an ‘analytic definition’ of the concept,²⁵ but Kant doubts whether such definitions are ever possible.²⁶ There are limits to the mind’s introspective access to its own accidents.

At this point, I want to pause to suggest that this notion of ‘content’ is equally applicable at the level of intuition. I have suggested that the content of a concept is what explains its ability to shape the contents of more complex representations that contain that concept as a part. Intuitions have that same content-shaping power. It is true that intuitions cannot literally be part of concepts or of judgments, but they *are* parts of *cognitions*. It is well-known that Kant thinks that intuition is *necessary* for cognition (see, e.g., A51-52/B75-76), but it could be necessary for cognition without strictly being *part* of cognition. (Empirical intuition, for example, is necessary for empirical concepts, but it is not strictly part of empirical concepts.) There is at least one passage, however, that clearly situates intuitions as *parts* of cognitions:

For a representation to be a cognition (though here I mean always a theoretical one), we need to have concept and intuition of an object *combined in the same representation*, so that the former is represented as containing the latter under itself.
wF 20: 273-74, my emphasis

If intuitions are combined with concepts in a single representation (a cognition), then intuitions will contribute something to the identity-conditions of the cognitions in which they feature. What they contribute, we can helpfully call their ‘content’ by analogy with the contents concepts have as partial representations.²⁷ And the parallel goes further: in just the same way as with conceptual

²⁵ UD 2:276-77; WL 24: 913.

²⁶ A727-30/B755-58.

²⁷ It is also worth noting that the use of the term ‘content’ in connection with intuition is not entirely foreign to Kant. As we saw in the introduction to the dissertation, in the Aesthetic, Kant criticizes the Leibnizean-Wolffian philosophy for construing the distinction between sensibility and intelligence as ‘merely logical, since it is obviously transcendental, and does not concern merely the form of distinctness or indistinctness, but its origin *and content*’ (A44/B61-62). See also B67.

contents, the content of a given intuition will be immanent to a state of mind in which that intuition is present, but not necessarily salient in consciousness. And again, it is possible to lift the content of intuition from obscurity to clear consciousness — not through analysis in this case, but rather through an act that Kant terms ‘the synthesis of apprehension’ (B160).²⁸

Moving now to the other term in the distinction: in addition to its content, the concept also has an ‘extension’, with the ‘things’ in its extension said to be ‘contained under’ the concept. The passage we started with tied the concept’s possession of an extension to its status as a ‘ground of cognition’. The things in a concept’s extension, then, will be the class of things whose cognition is ‘grounded’ by the concept — that is, those things that are cognized through complex representations that incorporate the concept’s content into their content. It is for this reason, the transcript tells us, that it is appropriate to use the language of ‘containment’ in describing the relationship between a concept and the things in its extension:

As one says of a *ground* in general that it contains the *consequence* under itself, so one can also say of the concept that as *ground of cognition* it contains all those things under itself from which it has been abstracted, e.g., the concept of metal contains under itself gold, silver, copper, etc.

JL 9: 96

Since a ground is said to ‘contain’ its consequences ‘under’ itself, and since the cognition of gold, silver, and copper is dependent on the concept of metal as the ground of their cognition, it is appropriate to say that these objects are contained under the concept since it is a ground of their cognition. Consider the following example:

So in the judgment, e.g., “**All bodies are divisible,**” the concept of the divisible is related to various other concepts; among these, however, it is here particularly related to the concept of body, and this in turn is related to certain appearances that

²⁸ This reading of the significance of synthesis of apprehension — as bringing to consciousness a representational content that is contained in the intuition but not thereby salient in consciousness — is indebted to Tolley (2013) and Tracz (2019). I will do much more to defend this operative conception of apprehension in Chapters 2, 3, and 4.

come before us. These objects are therefore mediately represented by the concept of divisibility.

A68-69/B93-94

Here, the concept of divisibility contributes content to the judgment that ‘all bodies are divisible’. This judgment, in turn, has the status of cognition with respect to a specific class of ‘appearances that come before us’. These appearances therefore count as being ‘mediately represented by the concept of divisibility’. The concept is a ground of their cognition, and hence they belong in its extension.

A little while ago, I suggested that the notion of ‘content’ can helpfully be extended to apply to intuitions, since the feature of concepts in virtue of which Kant assigns them contents (capacity to determine the identity-conditions of more complex representations) is one that intuitions share. We might therefore think, by parity of reasoning, that the notion of an extension can be applied to cover intuition, for, once again, the very feature in virtue of which Kant grants concepts an extension (capacity to ground cognition) is one that intuitions share. Intuitions, after all, can be *parts* of cognitions and so can, in this straightforward sense, be grounds of cognitions. Interestingly, though, Kant never uses the term extension (or ‘sphere’ [*Sphär*], a synonym) in connection with intuition, and never speaks of intuitions as containing objects under themselves.

The reason that Kant does not apply the notion of extension to intuitions, I think, stems from the fact that in the logical tradition in which Kant is writing, extensions must contain a *plurality* of objects,²⁹ and intuitions are plausibly thought of as representing (and hence grounding the cognition of) just one object. Recall, intuitions are accidents that result from acts of the receptive power of sensibility. Sensibility is receptive because it can only actualize an accident in

²⁹ This is a point that Lu-Adler (2014) explains in helpful detail.

the subject when the subject is acted upon by an object. Each intuition is therefore (partly) caused by the activity of a specific object exerting its power on the subject, and Kant is happy to conclude that the intuition represents the affecting object, the representation-relation here underwritten by the relation of conformity between an effect and its cause (*Br* 10: 131). It is not clear, though, that any other object beyond the affecting one is a candidate to qualify as being represented by the intuition, and given that Kant holds the Singularity Thesis — that intuitions are ‘singular’ representations — it is plausible to conclude that each intuition represents just one object.³⁰ If this is so, each intuition can only be the ground of cognition of a single object, and given that extensions must contain multiple objects, it follows that intuitions cannot possess extensions, their status as grounds of cognition notwithstanding.

At this point, we have a handle on the distinction between content and extension, both as it applies to concepts and as it carries over (or does not) to intuitions. Once more: the *content* of a representation is what it contributes to the more complex representations of which it can be part. Concepts, as potential parts of complex concepts and judgments, have contents; intuitions, as potential parts of cognitions, likewise have contents. The content of a concept is present in any state of mind in which the concept is present, likewise the content of the intuition, but these contents may be present in mind without being salient in consciousness. Analysis brings obscurely-thought conceptual contents to consciousness; apprehension brings obscurely-sensed intuitive contents to consciousness. The *extension* of a representation, by contrast, is the set of objects that

³⁰ As we will see, I do not think that this point about the number of objects to which intuitions are related exhausts the significance of the Singularity Thesis, but I do think that this claim is part of what is involved in the Singularity Thesis. It is worth noting that if this construal of the Singularity Thesis is correct, Kant’s notion of intuition is very far from our ordinary notion of perceptual experience. As I open my eyes and look around the room, my visual experience takes in countless different objects. Kant would need to say that my experience is composed out of countless different intuitions, one for each object the experience represents.

can be cognized through complex representations that contain that representation's content within their contents. Insofar as a representation extends over objects, it is therefore a 'ground of cognition' of those objects. Both concepts and intuitions, I have suggested, are grounds of cognition, for the straightforward reason that both kinds of representation can be parts of cognition, but only concepts can be granted extensions because only concepts can be applied to more than one object.

2.2 *The Mediacy Thesis*

We are now in a position to approach Kant's doctrine that concepts are mediate representations. Notice that in the passage we just discussed, when Kant describes the universal applicability of the concept of the divisible, he says that the class of bodies is 'mediately represented' by that concept. The Mediacy Thesis — often expressed as the doctrine that concepts *mediately* 'relate' to objects — is a mainstay of Kant's doctrine of concepts:

The former [intuition] is immediately related to the object and is singular; the latter is mediate, by means of a mark, which can be common to several things.

A320/B377

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).

A68/B93

Here, then, is the *data* we have so far: the Mediacy Thesis is a claim about the 'relation' of concepts to objects. The claim, which Kant makes often, is that concepts are 'mediately' related to objects, and the companion claim is that only intuitions are 'immediately' related to objects. Since the

relevant feature of the concept is explained contrastively, in relation to the relevant feature of intuitions, we must understand both features together if we are to understand either.

The published text that I think gives us the surest purchase on the Mediacy Thesis is in the *Leitfaden* section of the first Critique. The relevant passage, snippets of which have already shown up above, is worth quoting in full:

[1] 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). [2] So in the judgment, e.g., “**All bodies are divisible,**” the concept of the divisible is related to various other concepts; among these, however, it is here particularly related to the concept of body, and this in turn is related to certain appearances that come before us. [3] These objects are therefore mediately represented by the concept of divisibility.

A68-69/B93-94

This passage is helpful for two reasons. First, it specifies that the ‘relation to an object’ at issue in Kant’s claim that concepts mediately relate to objects is specifically a *representational* relation. For, having illustrated the ways in which the concept’s relation to an object is mediated, Kant concludes in sentence [3] that the concept mediately *represents* the objects under discussion. Presumably, therefore, the ‘relation to an object’ at issue in Kant’s companion claim that *intuitions* immediately relate to objects is also a representational relation. The second reason the passage is helpful is that it contains a model of mediacy and an outline of how that model applies in the case of concepts. In [1], we find the beginnings of a conception of mediacy. If a representation is not immediately related to an object, then it follows that it must be related to some other representation of the object. Sentences [2] and [3] then spell out what this further relation looks like in the case of concepts. The concept <divisible> is not immediately related to objects; but when it is employed as predicate in a judgment, it is related to the subject concept, which is in turn related to a class of appearances. And sentence [3] then concludes that in virtue of these two prior relations (first, the

relation of the predicate concept to the subject concept, and second, the relation of the subject concept to a class of appearances), the predicate concept counts as mediately representing the appearances. The implicit conception of mediacy here is as follows: a representation is mediately related to an object just in case it relates to an object in virtue of relating to other representations. It immediately relates to objects just in case it relates to objects independently of standing in any relations with further representations. Intuitions immediately relate to objects; concepts mediately relate to objects because they only relate to objects insofar as they are first brought into relations with further representations, with these relations themselves engendered through judgment.

The Mediacy Thesis serves to explain the close tie that Kant recognizes between concept and judgment. When Kant famously declares, in the same passage that we just quoted from, that ‘the understanding can make no other use [*Gebrauch*] of these concepts than that of judging by means of them’ (A68/B93), the point he is making is the same as the one he goes on to illustrate in explaining the Mediacy Thesis. Judgment is what establishes the relations between concepts and further representations in virtue of which concepts mediately relate objects, and so if the understanding intends to use concepts to relate to objects, it had better judge by means of them.³¹ This point is put particularly clearly in a metaphysics lecture: ‘The understanding is a faculty of concepts. Now in order to bring something under a concept for us, a judgment is necessary each time’ (*MV* 29: 985). The point, then, is that a concept only relates to an objects — to some *thing* — insofar as it is employed in judgment.

³¹ In interpreting the import of Kant’s claim about the relationship between concept and judgment in this way, I am in broad agreement with Heiss (2014a). Heiss distances this reading from more radical readings of a sort that I will discuss presently.

At this point, I want to bring up a line of interpretation that is very common but which should, I believe, be resisted. This interpretation holds that Kant accepts what I call the *Semantic Priority of Judgment* thesis (SPJ). Patrick Leland (2019) explains SPJ as follows:

[T]he primacy of judgment is a semantic claim. Judgments are prior to concepts in the semantic order of explanation, such that conceptual content originates in the propositional contents expressed in acts of judgment. This view departs radically from traditional, semantically atomistic accounts that treat concepts as explanatorily basic and judgments as derivative combinations of concepts. Kant rejects this by claiming that it is only through acts of judgment that one can grasp conceptual content.

Leland 2019: 281

Above, I argued that a concept has content insofar as it can be part of more complex representations. On a natural way of understanding this claim, the concept's possession of content is what *explains* its contribution to complex representations such as judgment. But the strong semantic thesis Leland describes (and advocates) reverses the explanatory relationship between conceptual contents and judgments. The 'propositional contents expressed in acts of judgment' come first, and conceptual contents are given only once we decompose the judgment into its parts. This content is common across various complex representations, but it does not exist prior to those representations: complex representations are not formed by combining discrete, already-formed conceptual contents; on the contrary, conceptual contents only come into being once the mind decomposes already-formed complex representations (i.e. judgments or the 'propositional contents expressed' therein). Concepts thus semantically depend upon judgments.

I bring up this line of interpretation now because a number of commentators have thought that there is a direct route from the Mediacy Thesis to SPJ.³² The Mediacy Thesis combines a

³² Two readers who reason in this way are David Landy (2015) and Robert Pippin (1982). Leland himself is an exception to this pattern: his argument for SPJ is nuanced and rich and goes well beyond the specifics of Kant's claims about concepts and judgment in the *Leitfaden* section.

negative and a positive claim: the negative claim is that concepts do not represent objects on their own, independently of their presence in judgment; the positive claim is that, as constituents of judgment, they *do* represent objects. If the negative claim is read as the claim that concepts have *no representational content at all* considered in themselves, and the positive claim is then accordingly read as the claim that whatever representational content they do have is bestowed upon them through judgment, then, indeed, the Mediacy Thesis entails — really, simply amounts to — SPJ. When Kant claims later in the same passage that concepts have ‘no other use’ except in judgment, the SPJ reader has a simple explanation. Concepts cannot be used except in judgment for the simple reason that they do not represent anything independently of judgment.³³

Now, I will argue against SPJ at several junctures throughout this dissertation. At this stage, I want to show that SPJ does not have a monopoly on the Mediacy Thesis. Neither the claim that concepts mediate to objects nor the claim that they can only be ‘used’ in judgment should be read as entailing SPJ.

First, as concerns the Mediacy Thesis itself, notice that Kant makes the specific claim that concepts are only mediate to *objects*. Now, Kant certainly has a sense of ‘object’ on which the term refers to any entity that can be the topic of thinking. This is the object as a ‘logical something’ (see Tolley (2012) for discussion), and if Kant’s denial that concepts immediately represent objects used ‘object’ in this sense, it would indeed be germane to the SPJ reader. But Kant also employs a much more restrictive sense on which an object is a subject of causal activity (either a thing in itself or an appearance), and I suggest that it is *this* restricted sense of the term that is relevant to the Mediacy Thesis. One indication that the Mediacy Thesis is a claim about the

³³ As Leland points out (2019: 282), this claim, that concepts can only be ‘used’ in judgment, is a pragmatic rather than semantic claim, and it is opposed to traditional accounts on which ‘conceiving’ is a basic concept-involving act of mind prior to judgment. This pragmatic claim does not entail but is plausibly entailed by the semantic claim embodied in SPJ.

relationship between concepts and objects in this more restricted sense comes in the *Stufenleiter* passage. There, Kant glosses the Mediacy Thesis as the claim that concepts relate to objects ‘by means of a mark, which may be common to several *things* [*Dinge*]’ (A320/B377). Houston Smit (2000) argues that Kant systematically uses the term ‘thing’ to refer to subjects of causal activity. If that is right, then it is open to us to read the Mediacy Thesis, as a claim about the relationship between concepts and things, as specifically a claim about the relationship between concepts and subjects of causal activity, not a broader claim about the relationship between concepts and objects in the logical sense. But if that is correct, then the Mediacy Thesis is entirely compatible with thinking that there are *some* entities that concepts represent immediately, i.e. independently of their presence in judgment; it is just that these entities cannot be situated at the ontological level of things. Compatibly with the Mediacy Thesis, therefore, it is entirely possible that concepts immediately represent, for example, *properties*, or *laws*, or *essences*, etc.

As concerns the claim that concepts have no ‘use’ except in judgment, while *prima facie* this might be taken as claiming that concepts are representationally null and void (literally: use-less) independently of their presence in judgment, this reading is by no means obligatory. In fact, the term ‘use’ [*Gebrauch*] as it appears here is a technical term that Kant defines in another context as follows:

The transcendental use [*Gebrauch*] of a concept in any sort of principle consists in its being related to things **in general** and **in themselves**; its empirical use, however, in its being related merely to **appearances**, i.e., objects of a possible **experience**.

A238-9/B298

Kant distinguishes the use of a concept into a transcendental use, through which it is related to things in themselves, and an empirical use, through which it is related to objects of possible experience. In both cases, the concept is ‘used’ insofar as it is related to objects of a particular kind, where ‘object’ is functioning in the same restrictive sense as I have just suggested is relevant

to the Mediacy Thesis. When Kant denies that a concept can be ‘used’ except through judgment, therefore, what he is saying is that concepts can only be related to appearances or things in themselves insofar as they feature in judgments. That is just another way of stating the Mediacy Thesis, and it in no way implies that concepts cannot be ‘related to’ other entities (for example, properties, or laws, or structures of some other kind) independently of their role in judgment.

We have just seen that we cannot simply shake SPJ out of Kant’s comment that concepts have no other ‘use’ than in judgment. And nor is there a short argument to the position from the Mediacy Thesis alone. In fact, I will argue in the next two sections that the best explanation of the Mediacy Thesis is one on which concepts *do* have contents prior to and independently of judgment.

2.3 The Universality Thesis

The Mediacy Thesis is a positive claim — that concepts *can* represent objects through judgment — conjoined with a negative claim — that they cannot represent objects independently of being taken up into judgment. So far, we have cautioned against one specific reading of these claims, but in this subsection and the next, I want to explore their basis. Why does Kant hold these two theses? In the next subsection, the focus will be on the positive claim, but we can begin in the present subsection with the negative claim. Why is it that conceptual contents are such that they cannot represent objects on their own, prior to being combined into more complex contents in judgment? Correspondingly, why is it that intuitive contents, just as such, already ‘get at’ objects? Underlying the Mediacy and Immediacy Theses is a content-level contrast between concepts and intuitions, and the aim of this section is to shed some light on what that contrast amounts to.

The second formulation of the Mediacy Thesis we find in published works points toward an explanation of the negative claim. There, Kant alludes to the notion of a ‘mark’ and links the mediacy of concepts with the fact that they relate to objects ‘by means of a mark’:

The former [intuition] is immediately related to the object and is singular; the latter is mediate, by means of a mark, which can be common [*gemein*] to several things.
A320/B377

Apparently, the fact that the concept relates to objects by means of ‘a mark, which can be common to several things’ explains the status of the concept as a mediate representation. Our attempt to understand the basis for the Mediacy Thesis thus points us to the doctrine of marks. What is a mark?

Earlier in this chapter (2.1), in our review of the content-extension distinction, we saw that a concept has content in virtue of its status as a partial representation [*Partialvorstellung*], and it has an extension in virtue of its status as a ground of cognition [*Erkenntnißgrund*]. These two notions — of *Partialvorstellung* and *Erkenntnißgrund* — come together in the doctrine of marks, for, as Kant writes in unpublished notes, a mark is ‘a partial representation [*Partialvorstellung*] as ground of cognition [*Erkenntnißgrund*] of the whole representation’ (R 2282, 16: 298); or again: ‘a partial concept [*Theilbegrif*] as ground of cognition [*Erkenntnißgrund*] of the whole representation’ (R 2283, 16: 299). We have seen that every concept, as bearer of both a content and extension, is precisely a partial concept that can function as a ground of cognition, and Kant therefore concludes that ‘all our concepts are marks and all thinking is representation through them’ (R 2287, 16: 300; cf. *JL* 9: 58).

Now, Kant is less forthright about the relationship between intuition and marks, but given this conception of what a mark is, it is plausible that intuitions, no less than concepts, qualify as marks. For I argued above that the notion of ‘content’ ought to be extended to cover intuitions as

well as concepts, since intuitions, no less than concepts, are capable of functioning as *Partialvorstellungen*, this time as parts of *cognitions* (and not of judgments or concepts). For just this reason, intuitions also function as grounds of cognition, which means that intuitions, no less than concepts, qualify as marks: ‘a partial representation [*Partialvorstellung*] as ground of cognition [*Erkenntnißgrund*] of the whole representation’ (R 2282, 16: 298). Moreover, there is also (admittedly somewhat sparse) positive textual evidence for conceiving of intuitions as marks.³⁴ But if that is so, then pointing out that concepts relate to objects by means of marks does not seem to be of any help in understanding the basis for the Mediacy Thesis after all, since it does not appear to get at a contrast between intuitions and concepts.

As Houston Smit (2000) has influentially argued, the point of contrast in this passage comes not in the phrase ‘by means of a mark’, but in the clause that immediately follows: ‘which can be common [*gemein*] to several things’.³⁵ Rather than reading this clause as non-restrictive, Smit argues that it functions as a restrictive clause to specify the specific *kind* of mark through which concepts relate to objects. Both intuitions and concepts relate to objects through marks, but only concepts relate to objects through marks of a kind that may be ‘common’ [*gemein*] to several objects. This suggests that the content-level difference between concepts and intuitions that underwrites the Mediacy Thesis is that concepts, unlike intuitions, represent something that can be common across — shared by — several distinct objects. Whatever exactly this common entity might be, it cannot itself *be* an object, for it makes no sense to speak of an object as being common across several objects. And if concepts do not represent objects on their own, we can see why concepts would not be capable of representing objects just in virtue of their contents.

³⁴ The one direct mention of intuitive marks comes at R 2286, 16: 299-300, but see also *LDW* 24: 725: ‘Partial representations as grounds of cognition can be partial concepts and partial intuitions’.

³⁵ Smit is here contradicting several earlier readings of the passage, including Howell (1973), Parsons (1964), Hintikka (1972), Thompson (1972), Wilson (1975), and many others.

A reader who tends toward this kind of reading of conceptual contents is Heidegger. In the following passage, Heidegger draws a helpful terminological distinction for demarcating the distinctive feature of conceptual contents:

But in a conceptual representing as *repraesentatio per notas communes* we do not simply represent a plurality of objects, but rather what is *common* to this plurality — common in spite of other differences in the objects. What is common to them — and must be capable of being common to them — must be such that in it individual objects agree with one another, in spite of their differences; it must be something with reference to which these objects are unified. This something wherein several objects become *one*, this one, is thus the determination of any of several objects... Admittedly, terms like *generality* and *general* are misleading; for they do not explain clearly that with them we must think of that *in which* several things become one, the *one* which *at the same time* is *common* to many. Hence it is more accurate to speak of the character of commonness [*Gemeinheit*] of the concept — this in spite of the possibility of an obvious misinterpretation of another sort. This ‘commonness’ is what *makes up* a concept in general as a specific representation or as a concept.

Heidegger 1927/1997: 154

Here, Heidegger names what is distinctive of conceptual contents ‘commonness’, *Gemeinheit*. This *Gemeinheit*, which Heidegger says ‘makes up’ the concept, is a site of agreement between objects: it is ‘that in which several things become one’. *Gemeinheit* is usefully contrasted with what Kant calls *Allgemeingültigkeit*: universal validity or applicability. A concept has universal applicability insofar as it mediately relates to a plurality of objects; accordingly, in hand-written notes, Kant ties a concept’s *Allgemeingültigkeit* to its status as a ground of cognition and thus to its possession of an extension (*R* 2281, 16: 557-58; *JL* 9: 95). But what Heidegger is claiming here is that the capacity of concepts to represent pluralities of objects is dependent on the fact that they represent a specific commonness at the level of their contents: ‘we do not simply represent a plurality of objects, but rather what is *common* to this plurality’. It is *because* the concept represents a *Gemeinheit* that it can then be applied to the plurality of objects that agree with one another, that become one, in this *Gemeinheit*. Thus, the universal applicability of concepts is traced back to a

distinctive feature of conceptual contents, namely that they represent *Gemeinheit*. To say this is to leave it completely unsettled what this *Gemeinheit* consists in. We could make out a sense in which *properties, essences, laws, or structures* are common to several objects, so just stating that a concept represents something that can be common to several things does not settle what that common element is. I will work toward a positive account of the nature of conceptual contents throughout this dissertation.

Now that we have a sense of the content-level feature of concepts that underlies the Mediacy Thesis, we can approach the second main point of contrast between intuitions and concepts: whereas concepts are ‘universal’ [*allgemein*] representations, intuitions are ‘singular’ [*einzel*] representations.³⁶ The contrast Kant is drawing here, I suggest, is precisely the content-level distinction that underlies the fact that concepts cannot relate to objects immediately and intuitions can. In making this claim, I am aligning myself with a tradition of interpretation, on the intuition side, that views the ‘immediacy criterion’ on intuitions as derivative of the ‘singularity criterion’, rather than as an independent constraint on intuition.³⁷ And I am making the corresponding claim on behalf of concepts: the Mediacy Thesis, I am suggesting, is explained by what we can call the Universality Thesis.

There are, I think, two components of the singularity-universality contrast. At one level, Kant is drawing what we can call an extensional contrast, between the *numbers of objects* intuitions and concepts represent. But at another level, he is drawing a complementary intensional contrast

³⁶ For articulations of this contrast, see A320/B377, *WL* 24: 805-806; *WL* 24: 905; *JL* 9: 91.

³⁷ Hintikka (1972) argues for a position of this sort; his position challenges Parsons (1964), who thinks that the immediacy criterion points to a phenomenological feature of intuitions not deducible from their status as singular representations. I side with Hintikka in thinking that the immediacy of intuition follows from its singularity, and I hold the corresponding claim about the relationship between the Mediacy Thesis and the Universality Thesis. It is striking that while interpreters have debated the relationship between the immediacy criterion and the singularity criterion for intuition, comparatively little has been written on the relationship between the mediacy criterion and the universality criterion on concepts.

between the *ways in which* intuitions and concepts represent, and it is at this second level that the content-level contrast we are looking for emerges. It will be useful to say something about both levels of the distinction.

At the extensional level, the contrast is between the number of objects intuitions and concepts represent. Intuitions are singular in the sense that they only ever represent *one object*. I alluded earlier to why Kant might think this is true: as the products of receptive acts, intuitions are always caused in part by the action of an external power. The object that exerts this power is a clear candidate to qualify as the representational object of the intuition (since Kant is happy to base the representational relation between state and object on a causal relationship between them), and it is unclear that anything else would qualify to be the object of the intuition. Concepts are universal, in contrast, because they can be deployed, in judgments, to represent a plurality of objects. Thus we can assign universal classes of objects to concepts as their extensions, whereas only one object can be assigned to each intuition as its object. The contrast here, then, is at the level of ‘applicability’: intuitions have singular applicability, whereas concepts have universal applicability (*Allgemeingültigkeit*) because they can be applied to several objects in judgment.

But at the intensional level, there is also a contrast between the *kinds of contents* through which intuitions and concepts representationally relate to their objects. Intuitions are singular, at this level, not simply because they only ever represent a single object, but because they possess the kind of content that is suited to represent individuals. Concepts, meanwhile, fail to be singular because they do not possess the kind of content that can be employed on its own to represent individuals.³⁸ Instead, concepts represent *Gemeinheit*: sites of commonness between individuals

³⁸ One attractive way of running the intensionalist proposal is put forth by Smit (2000). Smit argues that the difference between intuitive marks and conceptual marks tracks the difference between property-instances and properties. Intuitions represent clusters of property-instances; concepts represent properties. One cannot represent a singular red table by abstractly representing the properties of redness and being a table;

that are not themselves individuals. At this second level of analysis, even if a concept happened only to apply to a single object (which would render it a singular representation at the extensional level), it would not be singular in the intensional sense because it would still have a different kind of content to the singular content characteristic of intuitions. We see this point come out in Kant's discussion of the *ens realissimum* in the Transcendental Ideal. Kant says that 'only in this one case is an — in itself universal — concept of one thing thoroughly determined through itself, and cognized as the representation of an individual' (A577/B605). This concept is singular in the extensional sense because it is the 'representation of an individual', but it still contains content that is universal in the intensional sense, which is why Kant says that the concept is still 'in itself universal'.

As I said, I think that Kant combines the intensional and extensional levels of analysis when he is contrasting intuitions and concepts along the singularity-universality dimension. But the second level is where we find the (partial) explanation of the Mediacy Thesis. It is because concepts have the kind of content that relates to a *Gemeinheit* — something that is common across objects rather than simply being an object — that they cannot represent objects directly. Against SPJ, the reason the Mediacy Thesis is true is *not* that there is *nothing* that concepts immediately represent (i.e. represent just in virtue of their own contents, prior to being combined with further representations); the point is rather that the immediate representational *relata* of concepts are not themselves objects.

but one can get to a specific red table by representing spatiotemporally specific instantiations of those properties. As a specific exegetical point in favor of this general model, there is at least one suggestive passage in the Aesthetic in which Kant describes intuition as involving an act of property-attribution: 'as soon as we take away our subjective constitution', Kant says, 'the represented object *with the properties that sensible intuition attributes to it* is nowhere to be encountered' (A44/B62, my emphasis). Note that in saying that intuition in some sense 'attributes' properties to objects, I do not mean to suggest that this 'attribution' must take place in consciousness. I discuss the relationship between sensible intentionality and consciousness in more detail in Part 2.

2.4 Concept and Judgment

So far, we know that concepts, on their own, suffer a certain representational deficiency: their content, which represents a *Gemeinheit* in principle common to several objects, cannot of itself relate the mind to objects. This is the negative claim underlying the Mediacy Thesis. But we have yet to understand the positive claim: that this shortcoming is remedied through judgment.

We can begin with some preliminaries on judgment. To return to the faculty psychological framework within which we are working, I will take it that judging (*urteilen*) is an *act* of the subject, and judgment (*Urteil*) the kind of accident characteristically produced by this act. Thus, I take it that the ‘power of judgment’ (*Urteilstkraft*), as a representational power, is the power to produce judgments through acts of judging. Just as with intuitions and concepts, Kant uses a hylomorphic analysis to explain the generation of judgments. Judgments are complex representations that contain concepts as their logical matter (*WL* 24: 928-29; A266/B322); this matter is ordered, within the judgment, according to a certain form, and the form-imparting act is judging. Insofar as concepts are combined within a judgment, they are combined according to ‘functions of unity’ (and famously, Kant holds that general logic affords an exhaustive ‘table’ of these functions of unity, which he lays out at A70/B95). The function of unity pertains to the act of judging itself, but the resultant judgment will inherit its formal features from the functions of unity that governed its generation.³⁹ For example, if a judgment is generated according to the categorical function of unity, then it will inherit categorical form.

³⁹ I discuss the relationship between functions of unity and forms of judgment in more detail in Chapter 7.

The small amount we have said so far about judgment does not help us much in our attempt to understand the Mediacy Thesis. We are trying to understand why it is that, while concepts do not represent objects immediately, they *do* represent objects insofar as they are taken up into judgments. But judgments are just complexes of concepts organized according to certain logical functions. Why would uniting two representations that do not represent objects suddenly make it the case that those representations relate to objects? In the B-Deduction, Kant famously claims that if we ‘investigate more closely the relation of given cognitions in every judgment... then... [we] find that a judgment is nothing other than the way to bring given cognitions to the **objective** unity of apperception’ (B141). We will analyze this passage in much greater detail in Chapter 7, but the point he is making seems to be that judgments relate concepts in such a way that the concepts are thereby related to objects. But why should that be?

A pair of unpublished notes offers us a helpful point of entry here. Consider first the following:

An object... is only a something in general which we think to ourselves through certain predicates which constitute its concept. Every judgment, therefore, contains two predicates which we compare with one another. One of these, which constitutes the given cognition of the object, is called the logical subject; the other, which is compared with it, is called the predicate. When I say ‘a body is divisible’ this means that something *x*, which I cognize through the predicates that together constitute a concept of body, I also think through the predicate of divisibility.

R 4634 17: 616-17

This first passage discusses a judgment with categorical form, namely, the judgment ‘A body is divisible’. Given that it has categorical form, the judgment has a subject-predicate structure, with the concept <body> functioning as subject and the concept <divisible> functioning as predicate. The two concepts are ‘compared’ with one another, and the predicate concept is applied to the subject concept through the comparison. But strikingly, this passage suggests that the surface form

of the judgment is misleading. According to its surface form, the judgment contains just one predicate, but Kant asserts that ‘every judgment... contains *two* predicates, which we compare with one another’ (my italics). From this point of view, it is not just the ‘logical predicate’ of the judgment that constitutes a predicate but *also* the ‘logical subject’. The note suggests that the real subject of the judgment is *not* in fact the logical subject, but the ‘something x’ to which both concepts are related as predicates. Another note corroborates this suggestion:

An object is that in the representation of which other representations can be thought as synthetically connected.

Every judgment has a subject and predicate. The subject of the judgment, insofar as it contains different possible predicates, is the object... The subject of the judgment whose representation contains the ground of the synthetic unity of a manifold of predicates is the object.

R6350 18: 676

The subject of the judgment is that ‘whose representations contains the ground of the synthetic unity of a manifold of predicates’; this subject is not the logical subject-concept, but the *object* to which both concepts are related.

What these passages bring out is that the comparison between concepts that generates a judgment always takes place in relation to an object ‘in’ which the two concepts admit of comparison. That is to say, we compare concepts insofar as they are co-instantiated in all, some, or none of the objects to which the judgment is related. And this explains why all concepts, just insofar as they feature in judgment, regardless of their logical position, function predicatively. Both concepts must be applied to — predicated of — the object of the judgment just in order to be compared to one another. It is, I think, this broad sense of ‘predicate’ that Kant has in mind when he says that every concept, by its nature, is a predicate of a possible judgment.⁴⁰ And we can now

⁴⁰ That said, I do think there is also something special about the logical position of predicate. When the content of one concept, *B*, is contained within that of another, *A*, analysis of the content *A* will yield the analytic judgment *All As are Bs*. Thus, every concept is potentially the logical predicate of some judgment

see why Kant thinks that concepts are related to objects just insofar as they feature in judgments. Judgments are unities of concepts, but these unities can only be created insofar as the concepts are predicatively applied to an object (or set of objects), which constitutes the ground of their unity in the judgment.⁴¹

The explanation we have given of the Mediacy Thesis helps us make straightforward sense of Kant's distinction between the understanding, as the faculty of concepts, and the power of judgment [*Urteilkraft*], as the faculty for subsuming objects under concepts. Concepts are formed through acts of the understanding, and as the products of these acts, concepts have universal representational content: that is to say, they represent a distinctive kind of *Gemeinheit* that can be common across several objects. Just insofar as they exist through acts of the understanding, therefore, concepts do not represent any particular object or set of objects. However, they can be 'taken up' by the power of judgment, combined with further concepts through acts of judging, and in being taken up in this way they are predicated of objects. As constituents of judgments, concepts thus do represent objects, even though, as mere entities of understanding, they do not. That is why Kant needs to distinguish the intellect into understanding and power of judgment: a separate faculty is needed to explain how concepts can be applied to objects because the intellectual acts

just in virtue of having a content that can be contained within the content of a further concept, and *all* concepts have content of this kind. So concepts are also, by their nature, the potential *logical* predicates of judgments.

⁴¹ Now, the second passage calls the object the ground of the 'synthetic unity of a manifold of predicates' (my emphasis), and so it would be tempting to think that this conception of judgment is limited to the case of synthetic judgments — that is, those judgments in which the content of the logical predicate is not part of the content of the logical subject. But note that the example that Kant gives in the first note is in fact an analytic judgment. It is also worth noticing the way in which the *Jaesche Logic* distinguishes analytic and synthetic proposition: 'An example of an *analytic* proposition is, To everything x , to which the concept of body ($a + b$) belongs, belongs also *extension* (b). An example of a *synthetic* proposition is, To everything x , to which the concept of body ($a + b$) belongs, belongs also *attraction* (c)' (*JL* 9: 111). In *both* cases, the predicates within the judgment are compared in relation to a set of objects, x ; the difference is that the comparison extends our knowledge of the object(s) in the one case and merely elucidates existing knowledge in the other.

that produce concepts do not already relate them to objects. In the next section, we turn to the preliminaries of Kant's account of these concept-generative acts of the understanding.

3. Form, Matter, and the Origin of Concepts

In Section 1, I distinguished three questions for a Kantian metaphysics of concepts, given the situation of concepts at the level of mental states or accidents, rather than acts or objects. First, what are the spontaneous acts that bring forth concepts? Secondly, what are the intrinsic features of concepts as the accidents they are? Thirdly, what are the distinctive items to which concepts are representationally related in virtue of being the kinds of accidents they are? Our discussion so far as touched on the second and third of these questions. Concepts, we have seen, have a kind of content that is ill-suited to representing objects (though we have also seen that concepts can be used for the purpose of representing objects when they are combined with further representations in judgment). We have also seen that the kinds of items to which concepts *are* immediately related are items that can be common across pluralities of objects, though we have not yet narrowed down the range of what those items may be. Obvious candidates, though, include properties, essences, and laws: numerous distinct objects can share a property or an essence, or be subject to the same law. We will do more to specify the various possibilities in the next chapter; in the present section, I pivot to the first question, concerning the origins of concepts. Now that we know something about the kinds of accidents that concepts are, we can start to review what Kant has to say about the kinds of acts through which concepts are characteristically produced.

But before I begin discussing the origin of concepts directly, there is another important piece of Kant's theory of concepts that I think is indispensable for understanding what he has to say about the question of origin.

3.1 Form and Matter

We have seen so far that concepts and intuitions originate in different faculties, with the former grounded on the spontaneity of thinking, the latter on the receptivity of sensing. In spite of this difference in provenance, though, one important structural similarity between intuition and concept is that each is characterized by its possession of both a *matter* and a *form*. We are familiar with the presence of a form-matter distinction in Kant's doctrine of intuition, but less well-appreciated is that this distinction is also present, and doing the same kind of work, in Kant's account of concepts. To bring out the role that the form-matter distinction plays within Kant's theory of concepts, it will be beneficial to begin by drawing attention to the way the distinction operates in his account of intuition.

It is particularly helpful to draw on Kant's account of empirical intuition. In various places, Kant situates *sensation* as the matter of empirical intuition.⁴² Considered in itself, as mere matter, sensation is not intuition; it only constitutes an intuition when it is subject to a certain form, which is itself inherent in the sensible faculty. This form, of course, is space and time; it is when sensations are placed into spatiotemporal relations that empirical intuitions arise, as spatiotemporally structured sets of sensations. What we see, then, is that Kant's distinction between the form and matter of empirical intuitions gives him a model for explaining the origins, or formation, of empirical intuition: intuitions are representations with a certain kind of content; and representations with this kind of *content* arise when a 'raw' sensational *matter* is imbued with a certain *form*. It is worth dwelling on two important consequences of this point.

⁴² Admittedly, Kant never outright says that sensation is the matter of empirical intuition, but I take it to be strongly implied at A20/B34, A50/B75, and A86/B118.

First, the hylomorphic model gives us a framework for investigating the psychological genesis of intuitions. If we want to understand how intuitions arise in the mind, then we will need to inquire into, first, the acts that first produce the matter of intuitions (matter-giving acts), and, second, the acts that impart spatiotemporal form upon the given matter (form-imparting acts). To begin with the matter-giving act: sensation, Kant tells us, simply *is* ‘the effect of an object on the capacity for representation, insofar as we are affected by it’ (A19-20/B34). Sensation takes place, then, insofar as the mind is affected by an outer object, which means that part of the explanation for the matter of the empirical intuition needs to be located outside of the sensible faculty, in the power of some substance that affects the mind.⁴³ However, there must also be an internal dimension to the matter-giving act. Recall, on Kant’s metaphysics of causal powers, substances only modify their states insofar as they *themselves* act, and this requirement covers receptive as well as spontaneous faculties. An example from Kant’s metaphysics lectures brings out this point especially clearly:

E.g., a representation of a trumpet sound inheres in me through an external power, but not alone, for had I no power of representation <*vim repraesentativum*> then it could be sounded forever and I could not have a representation. From the union of one substance with another an effect comes about, namely, the representation of the trumpet sound

MM 29: 822

For the sounding of the trumpet to produce a sensation in me, it is not enough that the trumpet is sounding: I must also exercise my power of representation; the sensation itself is thus the product of a ‘union’ between two substances. From the side of the subject, then, the matter-giving act is the receptive act by which the subject modifies its state in accordance with an external principle.

The form-imparting act, meanwhile, is what arranges sensations in a spatiotemporal

⁴³ In the case of outer sense, the affecting substance is something external to the mind itself; in the case of inner sense, the affecting substance *is* the mind itself.

structure. An extremely sensitive and consequential question for our understanding of Kant's theory of cognition is where to locate this form-imparting act. Some readers argue that it should be located *outside* sensibility, in the synthesis of apprehension, an act that Kant attributes to imagination, whereas others argue that it should be located internally to sensibility, in an act that Kant calls 'synopsis' in the A-edition (A97) and ascribes to sense itself.⁴⁴ Another question we can ask in this vicinity is about the relationship between the matter-giving and form-imparting acts. Are the former performed (in some sense) 'prior' to the latter, such that there is a stage at which non-spatiotemporal sensations exist in a subject (in which case the form-imparting act is a kind of 'processing'); or are the two sets of acts (in some sense) performed 'together', such that there can never be non-spatiotemporal sensations in a subject with our forms of sensibility (in which case the form-imparting act is integral to our mode of reception rather than an act that processes already-received representations)?⁴⁵

In addition to setting the agenda for an account of the psychological genesis of intuitive contents, the hylomorphic model also sets the terms for an account of their metaphysical basis. Given the form-matter distinction, the distinctive features of intuitive contents must be traceable to features of either the form or the matter out of which such contents emerge. Since intuitive contents arise when a given matter is subjected to a given form, the explanation for why these contents end up having the features they do must presumably cite some features of either the form or the matter out of which they originate. We have seen that the defining feature of intuitive

⁴⁴ For readings on which the synthesis of apprehension is the form-imparting act, see (Waxman 2013, Horstmann 2018); for readings on which it is synopsis, see Matherne (2015), Tolley (2016), Tracz (2021). This question is sensitive because of its bearing on the question whether Kant was a conceptualist about empirical intuition. It is much easier to make out a case for thinking that the synthesis of apprehension is (in some sense) penetrable by the understanding than it is to make out a case for thinking this of synopsis, so readers who want the understanding to play a role in the generation of intuition are attracted to readings that locate the form-imparting act at the level of synthesis rather than synopsis.

⁴⁵ For discussion of this issue, see Falkenstein (1995).

contents (which, I argued, is the ground of their immediate relation to objects) is singularity. I suggested above that the singularity of intuitions has both an extensional and intensional dimension: it is both the case that intuitions represent just one object (extensional singularity) and that their representational content is of a kind that suits them to representing individuals (intensional singularity). Plausibly, the extensional dimension of singularity in the case of empirical intuitions traces back to their matter. The sensations that make up the matter of an intuition are all traceable to the action of a single substance, and so the causal relation between the intuition and that specific object (which grounds the representational relation between them) is evident in the matter of the intuition. Meanwhile, the singularity of intuitive content (at least on a proposal like Smit's, which explains singularity in terms of property-instances) is traceable to the form of intuitions. Intuitions are singular at the intensional level because they represent (sets of) spatiotemporally specific property-instances, and this specific spatiotemporal content is grounded on the form of intuition.

To summarize, then: Kant distinguishes between a form and a matter of intuition and uses this distinction to inform his account of both the psychological and metaphysical basis of intuitive contents. Intuitions arise when a given matter (sensation) is subjected to a certain form (space and time). If we are interested in understanding the subjective origins of intuitive contents, we need an account both of the matter-giving acts and of the form-imparting acts that preside over the formation of intuitions. Moreover, key features of intuitive contents, such as their singularity and immediacy, must be traceable to either the form or the matter out of which such contents emerge.

The hylomorphic nature of Kant's account of intuition is well-known, but what is less widely appreciated is that all of the core elements of this style of account are also present in Kant's account of concepts. In the *Jäsche Logic*, the doctrine of the concept begins with a distinction

between the matter and the form of concepts: ‘With every concept we are to distinguish *matter* and *form*. The matter of concepts is the *object*, their form *universality*’ (JL 9: 91). The distinction between form and matter, this passage tells us, applies just as universally to concepts as it does to intuitions.

This passage, however, locates that distinction in a manner that I do not think ultimately reflects Kant’s view. According to this passage, the form of concepts is universality [*Allgemeinheit*], their matter ‘the object’. However, when Kant goes on to describe what he calls the ‘formal origins’ of concepts, a different account suggests itself, on which the matter of a concept is the set of given representations ‘out of’ which a concept is generated. The text describes the inquiry into the origin of concepts as to form in the following way:

And thus arises here the question: *Which acts of the understanding constitute a concept?* or what is the same, *Which are involved in the generation of a concept from out of given representations?*

...[U]niversal logic does not have to investigate the *source* of concepts, not how concepts *arise as representations*, but merely *how given representations become concepts in thought*...

JL 9: 94

Concept formation is here modeled as a process by which given representations, intrinsically non-conceptual, ‘become’ concepts when they are subjected to certain ‘acts of the understanding’. This suggests a model on which the ‘matter’ out of which concepts are formed is not an object but rather the set of given nonconceptual representations ‘out of’ which concepts are formed.

If that is right, then Kant’s account of concept formation will develop within the same structure as his account of intuition formation: conceptual *contents* are produced when a given *matter* is subject to a certain *form*. Just as with intuition, Kant’s account of the psychological genealogy of concepts will distinguish between matter-giving and form-imparting acts. And just as with intuition, Kant will trace the distinctive features of conceptual contents back to their form

and matter. On this second point, Kant very clearly traces the universality of concepts — the feature that distinguishes them from intuitions — to their form, which suggests that the singularity-universality contrast is, in the first instance, reflective of a formal difference between intuitions and concepts.⁴⁶

It is thus extremely important that we distinguish sharply between the *matter* and *content* of a concept, and distinguish both from the objects in a concept's extension. Insofar as the matter of a concept plays a role in grounding certain features of its content, matter will *constraint* content, but the two must be kept separate.⁴⁷ It is also important that we carefully track Kant's use of the verb 'contain' [*enthalten*] and its cognates in connection with concepts. Kant uses this term at three levels. At one level, concepts 'contain' their contents 'in' themselves (this is the familiar sense in which the predicate of an analytic judgment is 'contained' in the subject). At another level, concepts 'contain' the objects in their extension 'under' themselves. But Kant also occasionally talks of concepts as 'containing' their *matter*. Consider, for example, Kant's definition of constructible concepts:

Now an *a priori* concept (a non-empirical concept) either already contains a pure intuition in itself, in which case it can be constructed; or else it contains nothing but the synthesis of possible intuitions

A719-20/B747-8

Constructible concepts, like the concepts of geometry, do not somehow 'contain' intuitions in their contents; the point is rather that pure intuitions are part of the matter out of which such concepts originate. This becomes clear in the *Stufenleiter* passage, when Kant draws the same contrast but

⁴⁶ Readers who explicitly argue for this point include Newton (2015) and Smit (2001), though I think that they are too hasty in concluding from this that there are no significant matter-level differences between intuitions and concepts. We will return to this issue in chapter 3.

⁴⁷ Many readers casually conflate matter and content (see, e.g., Anderson 2015: 337; Allison 2004: 79; Paton 1936: 193). One reader who does an excellent job distinguishing matter, content, and (extensional) object is Young (1992).

speaks in terms of origin rather than containment: ‘the pure concept, insofar as it has its *origin solely in the understanding (not in a pure image of sensibility)*, is called *notio*’ (A320/B377, my emphasis).

3.2 *The Origin of Concepts*

The form-matter contrast, I have suggested, sets the agenda for an account of the subjective genesis of concepts. If we wish to understand how conceptual contents arise in minds, then we need to inquire into two sets of acts: the matter-giving acts that first bring conceptual matters to consciousness, and the form-imparting acts that first impart the form of universality on a given pre-conceptual matter, thus generating conceptual contents for the first time.

Now, this distinction between matter-giving and form-imparting acts is, I believe, implicit in Kant’s account of the mental operation he calls ‘synthesis’. Consider:

By **synthesis** in the most general sense, however, I understand the action of putting different representations together with each other and comprehending their manifoldness in one cognition... Prior to all analysis of our representations these must first be given, and no concepts can arise analytically as far as **the content is concerned** [*keine Begriffe dem Inhalte nach analytisch entspringen*]... [T]he synthesis alone is that which properly collects the elements for cognitions and unifies them into a certain content [*zu einem gewissen Inhalte vereinigt*]; it is therefore the first thing to which we have to attend if we wish to judge about the first origin of our cognition.

A77-78/B103

This passage sets up a contrast between analysis and synthesis and makes plain that it is through *synthesis* that concepts arise ‘as far as the content is concerned’. The linkage between synthesis and content-generation is emphasized again in the passage — it is synthesis that unites the elements of cognition into a ‘certain content’ — and the passage concludes by noting the special relevance of synthesis to an inquiry into the ‘first origin of our cognition’. But what is also especially notable

is that, in characterizing *how* it is that synthesis generates conceptual contents, the passage consistently distinguishes *two* tasks. We can start with the first characterization: it is synthesis that both i) ‘puts different representations together’, and then also ii) ‘comprehends their manifoldness in one cognition’. Again, it is synthesis that both i) ‘collects the elements for cognition’, and then ii) ‘unifies them into a certain content’. With Kant’s hylomorphic model of concepts in mind, we can understand the first task for synthesis — the collecting or putting together of several representations that will subsequently be unified into a specific content — as the generation of the matter for a concept; and we can understand the second task — the unifying or comprehending of that matter in a single representation — as the act that imparts the form of universality onto a given matter and thereby produces a concept. The two acts that pertain to the origin of concepts are thus two parts of the broader act that Kant calls ‘synthesis’.⁴⁸

In the *Jäsche Logic* and elsewhere, Kant conducts an inquiry into the formal origins of concepts, situating this line of inquiry within the purview of general logic. By contrast, he tells us that an account of the *material* origins of concepts pertains to the science of metaphysics:

The origin of concepts in regard to their matter, according to which a concept is either *empirical* or *arbitrary* or *intellectual*, is considered in metaphysics.

JL 9: 93–4

⁴⁸ My reading of this passage cuts against a more common reading, to be found in Heidegger (1927/1997: 182), and Paton (1936, 250–51). Heidegger and Paton both argue that the passage implies an identification of the logical acts with ‘analysis’. That is because when Kant denies that concepts arise through analysis as to content, they take him to imply that concepts *do* arise analytically as to *form*; and since the logical acts originate the form of concepts, they take the passage to identify the logical acts with analysis. But this reading falsely assumes that the term ‘content’ contrasts with ‘form’. It does not. The proper contrast with form is *matter*, not *content*. In Chapter 8, in my discussion of pure categories, I will argue for a different and much more straightforward reading of this part of the passage. When Kant denies that analysis originates the content of a concept, the point he is making is that the analysis of a conceptual content does not produce that content but merely elucidates it.

The matter of a concept is the set of given representations that constitute the generation base for the concept. How exactly those representations originate in the mind is a question for metaphysics; and note that the metaphysical origin of the concept in respect of its matter will decide its status as intellectual or empirical, and also whether it qualifies as ‘arbitrary’. The form of a concept, however, is imparted on its matter through a set of ‘logical acts’ that together constitute the ‘logical origin’ of the concept as to form. Famously, the three acts in question are ‘comparison’, ‘reflection’, and ‘abstraction’, acts that Kant emphasizes govern the formation of all concepts, regardless of their matter (*JL* 9: 94). It is through these acts that a universal representation is generated from the given matter in its generation base.

If we want to understand Kant’s account of the origins of concepts, then, we will need to divide our inquiry into two stages: an inquiry into the ‘metaphysical origins’ of concepts — that is, an inquiry into the first stage of synthesis, the mental acts that gather together the matter for a concept; and an inquiry into the ‘logical origins’ of concepts — that is, an inquiry into the second stage of synthesis, the three logical acts said to impart the form of universality on given matter. This division between matter-giving and form-imparting acts has not been noted adequately in the literature, with the result that accounts of concept formation have focused one-sidedly on Kant’s discussion of the formal origins of concepts without any discussion of their material origins. In my treatment of this issue in the chapters to come, I will buck this trend by taking the distinction very seriously.

Conclusion

Let us gather together the findings of this chapter. I have argued that the framing account of what a concept is, which governs Kant’s metaphysics of concepts, is that concepts are accidents of mental substance. Specifically, they are the kinds of accidents produced by the spontaneous

power of understanding, which is one sub-power within the faculty of thinking [*Denkungsvermögen*], itself a sub-power within the faculty of cognition. What makes concepts distinctive as representations is that they do not, of themselves, represent entities at the object-level but instead represent a *Gemeinheit*: something that can be common among several objects. Because of this feature of conceptual contents, a mental substance that is modified in accordance with a particular concept is not thereby related to anything at the level of objects. However, concepts can play a role in relating minds to objects, but only insofar as their contents are taken up into judgments, which play a mediating role in establishing a representational connection between concepts and objects. The objects to which concepts can be representationally related through judgment constitute their extensions. Concepts come into being as the accidents they are when given, nonconceptual representations (matter) are imbued with the form of universality. A proper account of their origins will thus distinguish between i) the acts by which their matter is given, and ii) the acts by which that matter is imbued with the form of universality. ‘Synthesis’, the act that both collects the elements of a cognition and unifies them into a certain content, comprises both sets of acts.

As I argued for these claims, I also engaged with a specific line of interpretation, which attributes to Kant the thesis that judgments are semantically prior to concepts (SPJ). The working hypothesis throughout this dissertation will be that SPJ is false, and I motivated that hypothesis by arguing that the best reading of both the Mediacy Thesis and its interaction with the Universality Thesis is one that credits concepts with representational content independently of their presence in judgment. Still, my resistance to SPJ leaves us with a rich landscape of interpretive options, and in the next chapter we will review this landscape in some detail.

Chapter 2

Philosophical Pressures, Interpretive Possibilities

Introduction

In the previous chapter, I started by arguing for a framing conception of concepts within the Kantian framework: in this framework, concepts are understood as accidents of mental substance, which are produced as such by spontaneous mental acts, and which, in virtue of their production, modify the mind in such a way as to relate it to some further object. I then introduced some fundamental doctrines. First of all, every concept, as a modification of the mind, possesses a certain ‘content’, which determines the contribution it makes to further complex representations of which it can be part. This content is *not* such that it stands in a representational relation to objects on its own, but, through the act of judging, it can be combined into further complex representations that *do* represent objects, and in virtue of featuring in those object-directed representations it qualifies as representing objects in a derivative sense. This is the Mediacy Thesis, and it leaves us with a question about the primary representational objects of concepts: the objects to which concepts relate the mind just in virtue of their contents, prior to any combination in judgment. That

is where the Universality Thesis comes in: concepts are universal representations, which, I argued, means that they represent the kind of entity that can be common (*gemein*) to several objects. We saw that Kant also distinguishes between the matter and the form of a concept, and that his account of concept formation, of the intellectual acts that produce concepts, takes shape within this hylomorphic framework. The matter of a concept is a set of given, not yet conceptual, representations, ‘out of which’ a conceptual content is produced when the universal ‘form’ of the concept is imparted on to the given matter, through the three logical acts of comparison, reflection, and abstraction. I suggested further that, given this hylomorphic model, Kant’s explanation for how conceptual contents have the features they do must source those contents to either the matter or the form of the concept.

What we have, then, is some sense of how several of Kant’s signature doctrines about concepts hang together as part of a metaphysics of concepts. But the findings of the last chapter did little to articulate the interpretive field: we do not yet have a clear sense of the various different interpretive options available to us as we attempt to work out in more detail what Kant has to say about the genesis, content, and objects of concepts. In this chapter, I want to introduce some of the options at all three of these levels. But I also want to introduce some of the philosophical challenges that have been leveled at Kant’s theory of concepts, and especially at his theory of concept formation. We should keep these challenges in mind as we develop our interpretation for two reasons. As readers who care about the philosophical merits of Kant’s theory, it should be a matter of interest to us to what extent Kant can respond to these challenges; and as charitable readers, we should seek to develop the interpretation that, while being consistent with and hopefully preferred by the text, also gives Kant the most powerful resources to respond to them.

As we develop our sense of the interpretive options, we will also see that the framework I provisionally argued for in the previous chapter is by no means universally accepted. In fact, what is arguably the majority of commentators on Kant's theory of concepts contest this framework both in its fundamentals and its specifics. At the specific level, many have argued that the doctrine of the logical acts in fact does *not* constitute Kant's account of concept formation proper, with some commentators locating that account elsewhere and others denying that there is any such account to be found. At a more fundamental level, there is a broad tradition of readings that deny, implicitly or self-consciously, that concepts should be located as content-bearing mental states at all. My aim in this chapter is not to argue against these views, but rather to map out the path my interpretation will need to take in order both to remain within, and further justify, my proposed interpretive framework.

1. Origin

Let us begin by looking in more detail at Kant's account of the origin of concepts. This is the part of Kant's theory of concepts that has been most unanimously judged to be a failure, with sympathetic commentators generally concluding that the account is so obviously flawed that it could not really be Kant's considered view, appearances to the contrary notwithstanding. In this section, I distinguish several lines of objection to the account before laying out the different interpretive options open to us in light of these objections.

1.1 Philosophical Pressures

So far, I have said very little about Kant's actual account of concept formation beyond arguing that it should be situated within the context of his hylomorphic conception of concepts. To put us in a position to appreciate the objections that have been levelled at the account, it will help to present some of its key features.

In the previous chapter, I showed that Kant distinguishes between the matter and the form of a concept, and I argued that he uses this distinction to explain the genesis of concepts. Concepts come into being when a given, non-conceptual matter is imbued with universal form. We can thus distinguish, within Kant's answer to the question of origin, between a matter-giving stage and a form-imparting stage. The mental acts responsible for giving the matter for concepts will be matter-giving acts, and those responsible for imparting universal form on given matter will be the form-imparting acts. Kant does not explicitly catalog the matter-giving acts that first make concept formation possible, but he is quite explicit about the form-imparting acts. Early in the *Jäsche Logic*, in a section devoted to explaining 'the origin of concepts as to *mere form*' (*JL* 9: 93), the text poses, and goes on to answer, the following questions:

Which acts of the understanding constitute a concept? or what is the same, Which are involved in the generation of a concept out of given representations?

JL 9: 93

Before providing an account of these acts, the text goes on to specify the question at issue in a manner that is initially perplexing:

[U]niversal logic does not have to investigate the *source* of concepts, not how concepts *arise as representations*, but merely *how given representations become concepts in thought*

JL 9: 94

Prima facie, this is puzzling: in a section devoted to explaining the ‘origin’ of concepts, Jäsche declares that we will not be giving an account of their ‘source’ or of how they ‘arise’. On the basis of this apparent contradiction, Melissa Merritt (2015: 491–494) dismisses the entire passage as confused, arguing that it does not represent Kant’s account of how concepts are formed, and even going further to suggest that Kant simply does not *have* any such account.⁴⁹ But Merritt is wrong to think the passage contradicts itself, as becomes clear when we recall the distinction between material and formal origins. When the passage refers to the ‘source’ of concepts, from which they first ‘arise as representations’, what is at issue is the *material* origin of concepts: the set of given, nonconceptual representations that comprise the generation base for the concept. In investigating, not the material but the formal origins of concepts, the text is not asking where that matter comes from; it is rather asking how a given matter, regardless of its constituents and provenance, receives the form of universality. And as the text helpfully specifies, that question is precisely the question of ‘how given representations become concepts in thought’.

Now, it is worth pausing to appreciate the significance of the fact that Kant thinks that there *can be* a single account of concept formation that abstracts from the matter of concepts. As the text goes on to make clear, some extremely consequential distinctions between concepts are grounded on features of their matter:

[t]he origin of concepts in regard to their *matter*, according to which a concept is either *empirical* or *arbitrary* or *intellectual*, is considered in metaphysics.

JL 9: 94

We will see that Kant’s stock example of an ‘arbitrary concept’ is a mathematical concept; his stock example of an intellectual concept is a category of the understanding or ‘notion’; and his stock example of an empirical concept is a concept of experience (*Erfahrungsbegriff*). If the same

⁴⁹ ‘Kant might provide an account of concept generation in another context; but I do not think that there is any one place where he does this’ (Merritt 2015: 494).

account of concept formation applies to all concepts regardless of matter, it thus follows that the account must equally embrace categories, mathematical concepts, and concepts of experience. The text suggests just this much, declaring that the concepts to which the account applies ‘may contain something that is derived from experience, or something invented, or borrowed from the nature of the understanding’ (*JL* 9: 94).⁵⁰ More emphatically still, the text describes the three logical acts as ‘the essential and universal conditions for the generation of every concept whatsoever’ (*JL* 9: 94). The claim that every concept originates through specific acts of the mind is entailed by Kant’s denial that any concept is innately implanted (*ÜE* 8:221), but the claim that all concepts are formed through the *very same* acts of the mind is a further claim worth noting.

This point noted, we can preview the three logical acts of the understanding:

The logical *actus* of the understanding, through which concepts are generated as to their form, are:

1. *comparison* of representations among one another in relation to the unity of consciousness;
2. *reflection* as to how various representations can be conceived in one consciousness; and finally
3. *abstraction* of everything else in which the given representations differ.

JL 9: 94

The formation of a concept out of a given set of representations is thus modeled as a three-stage process: the mind ‘compares’ given representations ‘in relation to the unity of consciousness’, ‘reflects’ on how the representations can be conceived in a single consciousness, and then abstracts from those features of the representations that are not germane to conceiving them together in a single consciousness. The result is a concept.

At this point, we are ready to introduce the first line of objection to Kant’s account.

⁵⁰ Recall that in the previous chapter we distinguished three levels at which Kant uses the notion of containment in connection with concepts: a concept contains the objects in its extension ‘under’ itself, contains its content ‘in’ itself, and also in some sense contains its matter. The text is talking at the third level here, about the different matters from which the concepts are generated.

1.1.1 Exhaustiveness

I noted above that the three logical acts are said to preside over the formation of all concepts whatsoever, differences at the level of matter notwithstanding. If we pursue that suggestion seriously, Kant's position is that *a priori* concepts such as categories and mathematical concepts, no less than empirical concepts, must originate *via* the three logical acts. Many have balked at this. The general complaint is that the account seems tailor-made for *empirical* concepts but could not plausibly be applied at the level of *a priori* concepts.

One thinker who pushes this objection is Ernst Cassirer. In the first part of *Substance-Concept and Function-Concept* [*Substanzbegriff und Funktionsbegriff*], published in 1910, Cassirer contests a view of concept formation [*Begriffsbildung*] that he calls 'abstractionism', which, in outline at least, is a close match for the view we find in the *Jäsche Logic* and Kant's own handwritten notes. Cassirer thinks that abstractionism is not just wrong but radically wrong: radically wrong because it is the outgrowth of an outdated Aristotelian metaphysics that obscures the nature of 'function concepts', a form of thought different in kind from 'substance concepts'.⁵¹ The first chapter of *Substanzbegriff und Funktionsbegriff* is an extended polemic against abstractionism, and this is not the last time we will meet Cassirer in connection with this topic.⁵²

⁵¹ For a masterful exposition of why Cassirer centers the topic of concept formation in the argument of this text, and how the rejection of abstractionism plays into several of Cassirer's central doctrines, such as his advocacy of structuralism in mathematics, see Heiss (2014b).

⁵² It is worth noting, though, that, in spite of the close match between abstractionism and the letter of Kant's own view, Cassirer never mentions Kant in his discussion of abstractionism. This is deliberate. As Heiss explains (2014b: 251-52), Cassirer thinks that Kant himself *refutes* abstractionism and even reads the transcendental deduction as an argument against the doctrine. Thus, the objections Cassirer brings against abstractionism are not objections to which he thought Kant was insensitive. Still, they can fruitfully be levelled against the letter of the view that we find in Kant's writings on logic.

Cassirer ultimately denies that abstractionism can explain the formation of any concept, but he thinks that its deficiencies are particularly clear in the case of *mathematical* concepts.

Is the theory of the concept, as here developed, an adequate and faithful picture of the procedure of the concrete sciences?.. With regard to the Aristotelian theory [i.e. abstractionism], at least, this question must be answered negatively. The concepts, which are Aristotle's special object and interest, are the generic concepts of the descriptive and classifying natural sciences... Whenever he leaves the field of *biological* thought, his theory of the concept at once ceases to develop naturally and freely. From the beginning, the concepts of geometry, especially, resist reduction to the customary schema. The concept of the point, or of the line, or of the surface cannot be pointed out as an immediate *part* of physically present bodies and separated from them by simple "abstraction"... Mathematical concepts, which arise through genetic definition, through the intellectual establishment of a *constructive* connection, are different from empirical concepts, which aim merely to be copies of certain factual characteristics of the given reality of things... There appears here in opposition to bare "abstraction," an act of thought itself, a free production of certain relational systems.

Cassirer 1910/1923: 12

Cassirer here challenges the *exhaustiveness* of the abstractionist account. Whatever one might think of the account as it applies to the empirical concepts that figure in the descriptive sciences, it cannot hope to apply to the mathematical sciences because mathematical concepts arise through a process of 'genetic definition', or 'constructive connection', which cannot be accommodated on the abstractionist model.

A second exhaustiveness challenge we could add to this one concerns the categories. In spite of his insistence that the categories are 'originally acquired' rather than innate, we never see Kant explicitly telling the story of how the categories are acquired. One might suspect that this reticence stems from the philosophical inadequacy of his model of concept formation. Kant does not explain how the categories originate because his doctrine of logical acts, and the hylomorphic account of concepts to which it belongs, is not adequate to the task.

1.1.2 The Tree Example from *JL*

We can add two further challenges, both of which are made vivid by a notorious example that Jäsche presents immediately after announcing the three logical acts. Given its significance in the reception of Kant's theory of concept formation, it is worth quoting the relevant passage in full:

I see, e.g., a spruce, a willow, and a linden. By first comparing these objects with one another I note that they are different from one another in regard to the trunk, the branches, the leaves, etc.; but next I reflect on that which they have in common among themselves, trunk, branches, and leaves themselves, and I abstract from the quantity, the figure, etc., of these; thus I acquire the concept of a tree.

JL 9: 94

Jäsche intended to give us an anodyne example of the three logical acts in motion. In forming the concept <tree>, I start by confronting a plurality of trees (a spruce, a willow, a linden). In a first stage, comparison, I note that these objects differ from one another along various dimensions: their trunks, branches, and leaves differ in 'quantity and figure'. Still, having noted their differences I then note the ways in which they are similar: all of these objects *have* trunks, branches, and leaves, and that is worth holding onto. Having attended both to the similarities and differences between these objects, I then screen out or abstract from the differences, and find myself with the concept of a tree.

Now, Merritt has pointed out that there is very little evidence that this example is Kant's (Merritt 2015: 491). As she points out, everything that Jäsche mentions in this section prior to the example has a clear precedent in Kant's hand-written notes, but this example has no such precedent. It *does* have some precedent in the *Vienna* transcript (Jäsche's likely source), where

Kant is reported as discussing the tree example in connection with the logical acts, but as we will see in Chapter 6, what Kant is reported as saying there is importantly different from what Jäsche says here. And the example has had a very unfortunate effect on the reception of Kant's theory of concept formation, for it has been thought to expose the theory to two powerful objections.

1.1.3 Regress Worries

The first objection stems from the fact that the example looks as if it requires that the subject already possess some concepts just in order to engage in comparison, reflection, and abstraction. In the example, it looks as if the subject comes to her experience already equipped to compare the different items in respect of leaves, branches, and trunk. But if she already has a representation of leaves, branch, and trunk that enables her to compare objects in respect of these features, it sounds as if she already possesses concepts of those features. An alternative would be to say that these concepts are not presupposed by but somehow emerge in the process of comparison and reflection, but then, as Anderson presses the point,

the crucial question is how reflection arrives at general marks like <leafy> and <branched> on the basis of the originally compared visual representations. That matter is left wholly in the dark by Kant's strategy, raising the suspicion that the Kantian strategy for forming the concept <tree> actually presupposes *prior possession* of the concepts <trunk>, <leaf>, and <branch>.

Anderson 2015: 339-40

Now, if this suspicion is correct, it would not vitiate the example as an account of how we form the specific concept <tree>, but it would disqualify the example from being an illustration that applies to all concept formation just as such. If, to form any given concept, I already need to

possess some other concept (in order to compare and reflect upon the matter of the concept), then a regress threatens, and it is unclear how the process of concept formation can get off the ground. To block the regress, we could posit a concept or class of concepts whose genesis does *not* presuppose possession of some prior concept, but to do so would be to admit that there is a concept or class of concepts that does not arise through comparison, reflection, and abstraction. If that is the fix, we may still have an account that applies to some restricted class of concepts, but we would no longer have what the text advertises: an explanation of ‘the essential and universal conditions for generation of every concept whatsoever’ (*JL* 9: 94). Thus, we arrive at a similar challenge to the exhaustiveness of the account that we saw Cassirer reach in 1.1.1 *via* his consideration of mathematical concepts.

1.1.4 Circularity Objection

But the most damning objection, which also takes its cue from the example, presses that in fact there is *no* class of concepts to which the account could be adequate. The previous objection started from the claim that the subject must already possess *some* concepts in order to acquire the concept <tree>; this objection presses that the account is viciously circular: that the subject in fact needs to possess the *very* concept supposed to emerge from comparison, reflection, and abstraction just to get that process off the ground.

Recall, in the example the subject is working through a set of representations of trees, looking for some point of commonality between them so as to form a concept. The representations the subject is working through are the matter for the target concept. The example takes this situation as its starting point, but we can ask *why* the subject has assembled this matter in the first

place. Presumably, the subject only arrayed her experiences of several trees as matter for the logical acts at all because those experience seemed to share something similar, something that would lend itself to the formation of a concept. But, the objection goes, only a person who already possessed the concept of a tree would regard these experiences as similar. Here is Anderson and, before him, Cassirer pressing this objection:

The initial apprehension of these visual representations (plus unspecified other that would belong to the same series) *as similar* looks to be an *exercise* of the conceptual capacity to recognize trees, so it cannot serve as the initial step in an explanation of how we form the concept <tree> for the first time.

Anderson 2015: 342

What lends the theory of abstraction support is merely the circumstance that it does not presuppose the contents, out of which the concept is to develop, as *disconnected particularities*, but that it tacitly thinks them in the form of an ordered manifold from the first. The concept, however, is not deduced thereby, but presupposed; for when we ascribe to a manifold an order and connection of elements, we have already presupposed the concept, if not in its complete form, yet in its fundamental function.

Cassirer 1910/1923: 17

We would not be comparing representations of trees, the objection goes, if the representations did not already appear to us to share something in common, something conducive to the formation of a concept. But our very ability to recognize the representations as similar (in the respects that would ultimately lead to the ‘formation’ of the concept of a tree), already presupposes possession of the concept, ‘if not in its complete form, yet in its fundamental function’.

Henry Allison and Hannah Ginsborg approach the same conclusion from a different direction. They point out that any given set of representations could afford matter for numerous

possible concepts, and then query why, given the matter described in the example, it is specifically the concept <tree> that emerges through the logical acts:

[T]he process seems hopelessly circular. We supposedly arrive at the concept of a tree by reflecting on precisely those features of the perceived objects (trunk, branches, leaves, etc.) in virtue of which we recognize them to be trees, and by abstracting from those that are irrelevant. But how could one recognize and select these “tree-constituting” features unless one already had the concept of a tree, which was precisely what was supposed to have been explained? In short, it seems that on Kant’s account one must already have the concept of a tree before one is able to acquire it.

Allison 2001: 22

A second difficulty that arises in connection with the tree example is that even if we assume that we possess the concepts leaf, branch, and trunk, the example gives no indication of why our experience of the three trees should give rise to a concept involving just these features, as opposed to the many other features that those three trees have in common. For example, a spruce, a willow, and a linden typically have in common that they lack edible fruit, that they afford a degree of shelter from the rain, that they are composed of woody material, and that insects live in them. So why do we not attend to these features so as to arrive at a concept that would include the particular trees presented to us, but also exclude fruit trees and include wooden houses? It is hard to suppose any explanation for our privileging the tree-characterizing features other than that we are already in some sense representing the sample objects as trees, so that possession of the concept *tree* is already assumed from the start.

Ginsborg 2014: 152

Here, then, is a second level at which authors have pressed the circularity objection: both the initial selection of matter *and* the specific way in which we work on that matter to ‘form’ the concept presupposes possession of the very concept we are allegedly forming.

1.2 Interpretive Options

What, then, are the interpretive options? As we will see below, many sympathetic readers have attempted to ‘save Kant from himself’ by arguing that the logical acts are *not* in fact intended to explain the generation of concepts from nonconceptual matter. The path less trodden, which we will take in this dissertation, is to maintain that the account really is supposed to explain the origin of concepts and to show that Kant has the resources for a credible response to the objections laid out above.

1.2.1 Deny that the Logical Acts Produce Any Concepts

The first interpretive strategy shields Kant from many if not all of these objections simply by denying that the logical acts are supposed to give an account of concept formation at all.⁵³ Having pressed the circularity and regress objections to the logical acts account, Ginsborg draws the following conclusion:

The upshot of this seems to be that we cannot regard the appeal to comparison, reflection, and abstraction as constituting Kant’s answer to the question of how empirical concepts are possible, but only as explaining how concepts we already possess can be clarified or made explicit. That is, Kant’s account is not meant to explain how we come to possess the capacity to represent the objects in question as trees, but rather how we move from our implicit grasp of them as trees to an explicit understanding of the concept *tree*: that is, a grasp of the concept that allows us to specify criteria for a thing’s being a tree.

⁵³ Ginsborg (2015), Merritt (2015), and Pippin (1982) all adopt this strategy. Having denied that the logical acts story comprises Kant’s account of concept formation, Ginsborg then attempts to reconstruct a Kantian account of how concepts are actually formed from nonconceptual matter, drawing on resources from the third *Critique*. Merritt, meanwhile, is skeptical that Kant has any such account and criticizes Ginsborg’s positive proposal (Merritt 2015: 493). It is worth noting that Merritt reads Ginsborg’s positive account as an attempt to ‘save the spruce-willow-linden example (and its ilk) from circularity’ (2015: 493). I suspect that this reading slightly mis-states Ginsborg’s project; Ginsborg’s positive proposal is best thought of, not as an attempt to show that the logical acts story does give us a non-circular account of concept formation after all, but as an attempt to locate the materials for a non-circular account of concept formation outside of the logical acts story.

In the previous chapter, we saw that, on Kant's view, the content of a concept is always represented within any state of the mind in which the concept is present, but that this content may not itself be salient in consciousness. As we bring the content of the concept to increasing clarity, the content itself becomes more distinct, and Ginsborg is here suggesting that, rather than *creating* concepts, what the logical acts are really doing is contributing to the '*Deutlichmachung*', the making-distinct, of extant concepts.

Before it is made distinct, on views such as Ginsborg's, the concept already exists in mind as a sensitivity to similarity-relations between experiences, which manifests as a tendency to group together or 'reproduce' resembling experiences. It is at this level that the concept exists prior the logical acts. Ginsborg is thus attracted to a distinction that Béatrice Longuenesse (1998: 46-47) argues is present in Kant, between two senses of the term 'concept'. On the first sense, the concept is a 'prediscursive' rule for synthesizing sensory experience in a particular manner; on the second sense, the concept is a 'universal reflected' representation, which can function as a rule of inference.⁵⁵ The concept as prediscursive rule of synthesis is already present prior to the logical acts, according to Ginsborg — and Ginsborg then suggests that Kant's account of aesthetic

⁵⁴ Compare Pippin (whom Ginsborg cites): '[T]he process described here seems more like our making much clearer to ourselves a concept we already have than to be a genuine derivation. As such this reflective procedure would be helpful in "arriving at" as general a concept of tree as we can isolate, but would not account for the origin of the concept itself' (Pippin 1982: 113).

⁵⁵ In a similar vein, Stephanie Grüne (2009) argues that Kant distinguishes between 'obscure' concepts, on the one hand, and, on the other, concepts that are clear and distinct. Obscure concepts are mere capacities to synthesize intuitions in given ways; clear and distinct concepts then arise when we reflect on the grouping principles we are following in our application of obscure concepts. For a highly sophisticated development of this proposal in recent literature, see Leland (2019).

judgment in the third *Critique* affords the basis for explaining how the concept comes into being at this level.

1.2.2 Deny that the Logical Acts produce All Concepts

An alternative approach is to allow that, on Kant's view, at least some concepts really do come into being through the logical acts, while at the same time denying that the account is ultimately intended to cover all concepts. Cassirer, for example, argues that the categories are necessary conditions for recognizing any experiences as similar, and hence that they must already be in place in any subject capable of the logical acts. This observation could be the basis of an interpretation that limits the applicability of logical acts, say, to empirical concepts. An author who tends in this direction is Anderson (2015). On Anderson's account, all empirical concept formation presupposes prior possession, not just of the categories, but also of the concept <matter>, which, he argues (following Friedman), is not formed through the logical acts at all but rather through a construction procedure that Kant details in the *Metaphysical Foundations of Natural Science*. Interpretations such as this take on more work on Kant's behalf than those that deny that any concepts are formed through the logical acts, for they would still need to save the account from circularity with respect to the restricted class of concepts to which it is supposed to apply.

1.2.3 Maintain that the Logical Acts produce All Concepts

A final approach, and this is the one that I will follow, is to maintain that, just as advertised, Kant's view is that the logical acts do indeed govern the generation of all concepts.⁵⁶ Undertaken in a spirit of interpretive charity, this line of interpretation will at least have to show that Kant has worthwhile things to say in response to the three lines of criticism discussed in the previous section, even if his account does not ultimately succeed.

Let me say something upfront about how I will implement this strategy. First of all, I should concede that while I do insist that the logical acts play a role in the formation of all concepts, I deny that *all three* of the logical acts govern the formation of every concept. I am thus not able to take at face value Jäsche's claim that *each of* the acts is an 'essential and universal conditions for generation of every concept whatsoever' (*JL* 9: 94); still, I do maintain that at least one of the acts *is* present in the formation of every concept, and I also maintain that there is no fourth logical act beyond these three.

This nuance in my reading allows me to accommodate many of the points we saw Cassirer raising. There *is* a sense in which the story is tailor-made for empirical concepts, for I will argue that empirical concepts are the only class of concepts whose formation requires *all three* of the logical acts. And there is also a sense in which any straightforward application of the story to the case of mathematical concepts would be hopeless; it would be implausible to think of mathematical concept formation as requiring the mathematician to compare a series of triangles to one another in order to extract their common element. But Kant does not have to dispense with his theory of logical acts in order to accommodate the distinctiveness of geometric concepts, and this is not what we does. Instead, as I show in Chapter 6, he denies that *comparison* is required for the formation of geometric concepts, but maintains that reflection and abstraction are both necessary.

⁵⁶ I am joined here by Newton (2015). I discuss Newton's own proposal in Sections 3.2.2 and 3.2.3.

What about the regress and circularity objections raised in response to the tree example?

The observation I would like to make here is that authors who press these objections impute to Kant a very specific and permissive account of concept possession. On this account, if a subject has a capacity to become conscious of several representations as being similar in respect *R*, then that subject possesses the concept *R* (even if only ‘obscurely’). After all, the objections all move from the claim that the tree example presupposes differential sensitivity to trees (or, as *per* the regress objection, to branches and leaves *etc.*) to the claim that the subject already possesses the concept of a tree (or the concepts of branches, leaves, *etc.*), and this move only works if we assume that sensitivity to similarity-relations suffices for concept possession. Consider, for example, the way in which Merritt motivates the circularity objection:

[T]he spruce-willow-linden example presupposes that the three representations are appropriately comparable to one another, that they ‘belong together’ in the first place. If that is the case, then the task of reflection would be to bring out the rule that is already implicit in this recognition. But if *that* is the case, then we do not have an account of the generation of a concept; we at most have an account of the grasping or thinking a concept that is already in the subject’s possession. The passage is plainly circular if it is read as an account of the generation of a concept. Similar concerns would extend to Kant’s remarks about reflection in the First Introduction to the *Critique of Judgment*... Here, too, we find talk of a comparison of various representations with one another. But there can be no directive to compare two things without some standard or feature in virtue of which they are to be compared.

Merritt 2015: 492

This passage assumes a certain understanding of concept possession and imputes it to Kant without argument. Merritt assumes that to be capable of comparing two things in relation to some standard of comparison just is to possess a concept, and, on the basis of this assumption about concept possession, charges that the logical acts story is ‘plainly circular’ if advanced as an account of concept formation.

To be fair to her, Merritt has a charitable motive for this critique — she wants to discredit the logical acts story as an account of concept formation in order to argue that Kant never intended the story as such an account. But if we do want to maintain that the story is so intended, and if Merritt and others are right that the story would be implausible on the permissive account of concept possession, then interpretive charity will require us to look for a more demanding account of concept possession. And indeed I will argue on the basis of my discussion of the logical acts that the conditions Kant places on concept possession go well beyond mere sensitivity to similarity-relations.

2. Concepts as Mental States

In this section, my aim is less to consider alternative ways of filling out the framework I have proposed than to consider alternatives to that framework itself. Philosophically, the claim that concepts are a kind of mental state is by no means uncontroversial: numerous alternatives to the view have been developed, some of which I present below. Interpretively, many readers have denied — either explicitly or by implication — that Kant really did situate concepts at the level of mental states after all. In this section, I start by reviewing some of the most salient alternative proposals about what concepts are; then, I describe and criticize an extremely prevalent reading on which Kant identifies concepts with *rules*. If the concept as rule reading is correct, then we must revise the metaphysical framework I have proposed. I will present some exegetical reasons for doubting the reading, and I will lay out the work I will face in substantiating my representationalist alternative.

2.1 Philosophical Alternatives

Let us begin, then, by considering three proposals that would deny that concepts are mental states. All three of the proposals recognize important senses in which concepts can influence our mental lives; still, they would regard it as a category error to identify concepts with mental states.

2.1.1 Concepts as Principles

The first proposal, which comes, once again, from Cassirer, identifies concepts as *principles for ordering series*. Consider the following passage:

Without a process of arranging in series, without running through the different instances, the consciousness of their generic connection — and consequently of the abstract object — could never arise. This transition from member to member, however, manifestly presupposes a *principle* according to which it takes place, and by which the form of dependence between each member and the succeeding one, is determined. Thus from this point of view also it appears that all construction of concepts is concerned with some definite form of construction of series. We say that a sensuous manifold is conceptually apprehended and ordered, when its members do not stand next to one another without relation but proceed from a definite beginning, according to a fundamental generating relation, in necessary sequence. It is the *identity* of this generating relation, maintained through changes in the particular contents, which constitutes the specific form of the concept. On the other hand, whether from the retention of this identity of relation there finally evolves an abstract *object*, a universal representation [*allgemeines Vorstellungsbild*] in which familiar features are united, is merely a psychological side-issue and does not affect the logical characterization of the concept.

Cassirer 1910/1923: 15

In this passage, Cassirer claims that a concept *just is* an ordering principle that creates necessary relations between representations. There are, he holds, many different forms this necessity relation could take (he criticizes abstractionism for fixating on the similarity-relation, which he thinks is

but one of many possible ordering relations), and the ‘specific form’ of a given concept consists in the specific kind of ordering relation it embodies. He goes on to draw a distinction between that ordering relation *itself*, and ‘an abstract object, a universal representation [*allgemeines Vorstellungsbild*] in which familiar features are united’. The universal representation he describes here is a *mental representation of* the ordering principle, not the principle itself. We may order representations in accordance with a given relation *without* thereby forming a general presentation of it; and whether we do in fact form such a representation is, says Cassirer, ‘a psychological side-issue...[that] does not affect the logical characterization of the concept’. As he goes on to reiterate, the universal representation ‘may arise incidentally under special circumstances, but... does not enter as an effective element into the definition of the concept’ (1910/1923: 16). Cassirer thus insists on a sharp distinction between the concept itself — the ordering principle — and a mental representational state that happens to represent that principle, and as he makes clear, the existence of this latter entity is incidental to the existence of the former.

This kind of view would certainly reject the idea that the concept *itself* is a state of mind of a subject. Of course, there is some sense in which the concept can be ‘in’ mind. I can in fact order a series in accordance with the concept; moreover, I can, in certain cases, form a ‘direct presentation’ of the ordering principle that the concept embodies. Still, the concept is not literally a state of mind.

2.1.2 *Inferentialism*

A second view with a similar upshot is inferentialism. According to inferentialism, a concept simply is a set of rules that license and forbid certain ‘material inference’ patterns.⁵⁷ A material inference is an inference that is truth-preserving, but not in virtue of its form. Consider the following inference:

1. All men are mortal.
2. Caius is a man.
- 3 Therefore, Caius is mortal.

This inference is valid, but it is valid in virtue of the fact that it exemplifies the following inference *form*:

1. All *As* are *Bs*.
2. *C* is *A*.
3. Therefore, *C* is *B*.

The inference is thus formally valid. But now consider this inference:

1. Caius is a man.
2. Therefore, Caius is mortal.

⁵⁷ For the fullest development of inferentialism, see Brandom (1994). In several places, Brandom makes clear that he thinks of Kant’s doctrine of concepts as an historical forebear of his view — see, for example, his (2006) and (2013).

This inference is also valid — the premise could not be true and the conclusion false — but it is not valid because it exemplifies a valid inference form (*A*, therefore *B* is not generally truth-preserving). Instead, it is valid in virtue of its ‘matter’ — that is, the specific propositional contents of which it is made up. Here are some further materially valid inferences about Caius:

1. Caius is a man.
2. Therefore, Caius is rational.

1. Caius is a man.
2. Therefore, Caius is an animal.

The first thought that leads the way to inferentialism (but stops short of it) is that anybody who can be said to possess the concept <man> will be disposed to recognize the material validity of inferences such as these and to reason in this way themselves. This stops short of inferentialism because it is a claim about the conditions of *possessing* concepts, not about what concepts are. But we get to inferentialism if we go on to *base* this claim about the possession-conditions of concepts on a further claim about what concepts are — namely, that a concept *just is* a set of rules that licenses and forbids certain material inferences. If that is all a concept is, then it is no surprise that possession of a concept is a matter of being disposed to follow the relevant rules.

Of course, insofar as one ‘grasps’ the concept through one’s disposition to reason in accordance with the relevant rules, there is some sense in which the concept is ‘in’ one’s mind; it is guiding one’s thinking, after all. But still, the concept is a set of rules, not a mental state, and so situating the concept at the level of states would be a category error.

2.1.3 Concepts as Abilities

A kindred but different proposal views concepts as *abilities*. Once again, the argument for this kind of view goes *via* a claim about the possession-conditions of concepts. Possession of the concept <cat>, for example, might partially consist in an ability to recognize visually presented cats and discriminate them from other things. The concepts as abilities view then goes on to *identify* the concept with whatever set of abilities one must possess in order to grasp the concept. And once again, if a concept is an ability or set of abilities, then it is just a category error to identify it with a mental state.

2.2 Interpretive Options

We have seen, then, three kinds of account that depart from the view that concepts should be situated at the level of representational mental states. But what is striking is that many of the philosophers who have developed views such as these (and especially the progenitors of inferentialism), view Kant as an ally. For there is in fact a very widespread tendency to deny that Kant thought of concepts as mental states, after all.

2.2.1 The Concepts as Rules View

The most common version of this proposal, which I discuss in the present subsection, is to argue that Kant identifies concepts with *rules*.

This is really a very widespread view; in fact, it is almost received wisdom in contemporary

Kant scholarship. Consider:

[C]oncepts must not be conceived as representations with different degrees of clarity. They should rather be understood as rules for synthesizing representations of any kind.

Pollok 2015: 56

Kant... takes concepts to be rules, or to have serving as a rule as their essential function... and... understands concepts as being identical to, or essentially constituted by, the role they play in inference.

Landy 2015: 66

[C]oncepts turn out to be rules for the performance of mental activities, and according to Kant, these rules are built upon certain underlying simple “functions”.

Wolff 1963: 63

[Kant] thinks of concepts as rules that associate contents of representation in a necessary way

Keller 1998: 51

For Kant, concepts are (in some sense) rules

Allais 2015: 146

In general Kant describes concepts as rules or functions for “the ordering of different representations under a common one”

McLear 2020: 14

Concepts represent... [only] in the loose sense in which a rule represents how an action should be performed.

Dunlop 2012: 93

This is a representative but by no means exhaustive sample of writers who either assume or argue that Kant views concepts as rules.⁵⁸ Some of these authors make the point in passing; others spell out the proposal in some detail or at least hang important parts of their interpretation on the commitment. Landy is an author who argues specifically that Kant thinks of concepts as rules governing material inference patterns, developing the view in a monograph entitled *Kant's*

⁵⁸ Other writers who endorse the proposal are Ginsborg (2015), Grüne (2008; 2009), Longuenesse (1998), and Pippin (1982).

Inferentialism. A *prima facie* different way of spelling out the proposal is to link concepts to imaginative synthesis. Longuenesse (1998), for example, presents concepts as rules that guide the imagination as it synthesizes the manifold of intuition (and compare Pippin (1982: 104-108) and Wolff (1966)). These different versions of the proposal can be spelled out in different ways, but they can also be brought very close together: Landy's version of the concepts as inferential rule proposal ends up very close to the concepts as synthetic rule proposal, because he thinks that the process by which the manifold of intuition is synthesized is itself inferential and thus guided by concepts.

One background motivation for the concept as rule reading, I think, which applies to many (though certainly not all) of the readers quoted above,⁵⁹ is an attraction to conceptualism about intuition. Conceptualists, we saw at the outset of the dissertation, hold that some application of concepts is necessary just in order to have intuitions at all; and they typically think that Kant must hold this position if the project of the Transcendental Deduction is to succeed. They go on to develop the proposal against a background conception of the relationship between synthesis and intuition. Conceptualists typically assume that intuitions, in order to *be* intuitions, require an act of 'synthesis' that unites the manifold contained in the intuition into a single representation. Since synthesis is an activity that Kant attributes to the imagination, this background conception of intuition denies that intuitions are the products of receptive sensibility alone. The conceptualist strategy is then to find a way of implicating concepts in the process of synthesis itself, and the concept as rule proposal is extremely germane at just this point. If concepts are rules of synthesis, then we have a clear way of working out the proposal that intuitions depend on concepts: intuitions

⁵⁹ This would certainly not apply to Allais or McLear.

depend on synthesis, and the synthesis that generates intuitions is itself subject to (or ‘guided by’) the concept as rule of synthesis.

Now, this background conception of intuition and its relation to synthesis cuts against an alternative conception of synthesis that I will support throughout this dissertation. In the previous chapter, I suggested that the term *synthesis* has its primary home *not* in Kant’s account of intuition formation but rather in his account of concept formation: the term ‘synthesis’, I suggested, comprises both the matter-giving acts that ‘gather together’ the elements of a concept as well as the form-imparting acts that unify those elements ‘into a certain content’ (A77-78/B103). I also alluded to a reading (endorsed by Tolley (2013), Mattherne (2015), and Tracz (2021)) on which it is not synthesis but *synopsis*, an act of sense, that imparts the form of intuition on sensation. If we do not share the conceptualist’s background conception of intuition and its relation to synthesis, and if, further, we are not persuaded that the project of the Deduction requires that concepts play a role in generating intuitions, then developing a reading of concepts as rules of synthesis will lose at least some of its urgency.

Still, these readers have not plucked the idea from thin air. There *are* several canonical texts that make it clear that Kant sees a very close connection between concepts and rules. Aside from several unpublished texts that link the two notions closely, there are at least three passages in the *Critique* that are often cited by proponents of the concept-as-rule reading:

All cognition requires a concept, however imperfect or obscure it may be; but as far as its form is concerned, the latter is always something universal, and something that serves as a rule.

A106

We have above explained the **understanding** in various ways — through a spontaneity of cognition (in contrast to the receptivity of sensibility), through a faculty of thinking, or a faculty of concepts, or also of judgments — which

representations, if one looks at them properly, come down to the same thing. Now we can characterize it as the **faculty of rules**. This designation is more fruitful, and comes closer to its essence.

A126

[By means of the concept of cause] I... proceed merely in accordance with concepts, and cannot proceed through construction of concepts, since the concept is a rule of the synthesis of perceptions

A722/B750n

It is easy to see, then, why many readers — and not only those attracted to conceptualism — have been persuaded by the concept as rule reading.

It is worth taking a little time, though, to point out that none of these texts is quite as conclusive as its interpreters would like it to be. The first text, for example, does not equate concepts and rules at all; rather, it says that concepts can *serve as* rules, and it would be trivial or misleading to say that *rules* can serve as rules! Moreover, the text seems to separate out the universality of the concept, on the one hand, and its capacity to serve as a rule on the other. It is entirely consistent with situating concepts as mental representational states to hold that concepts are universal representations and *for this reason* can ‘serve’ as rules,⁶⁰ and this appears to be the most natural reading of the passage. In the second passage, it is true Kant seems to assert some kind of equivalency between characterizing the understanding as a faculty of rules and characterizing it as a faculty of concepts, and this has been cited as proof that Kant thinks of concepts as rules. But none of these readers think that concepts *are* judgments, yet the passage also equates the status of the understanding as a faculty of concepts with its status as a faculty of judgment.

⁶⁰ Pippin is one of the few proponents of the concepts as rule reading who acknowledges that the passage does not straightforwardly motivate the proposal (Pippin 1982: 108).

The third passage, admittedly, *does* explicitly equate a specific concept (the category of cause) with a rule of the synthesis of perceptions. This, I think, is the best evidence for the reading (though curiously it is seldom cited by proponents of the reading).⁶¹ But the context of the passage suggests, to me at least, that Kant is speaking loosely. The passage is part of a footnote in which Kant is elaborating on his claim that all that can ‘arise from’ a category considered in isolation is a ‘principle of the synthesis of possible empirical intuitions’, rather than a ‘determining synthetic proposition’ (A722/B750). A ‘principle of the synthesis of possible empirical intuitions’ is, plausibly, the same as a ‘rule of the synthesis of perceptions’, and the claim in the main body of text is that only such principles can ‘arise from’ categories. Talk of principles ‘arising from’ categories is reminiscent of talk of concepts ‘serving as’ rules, and does not imply that the concepts themselves *are* principles or rules. Given the claim Kant is illustrating in the passage, therefore, I take him to be speaking loosely when he outright equates the concept of cause with a rule.

None of this, of course, is to suggest that the concept as rule proposal is unworkable. Still, it is frustrating that the reading is accepted as obvious by so many otherwise careful commentators.

2.2.2. Maintain that Concepts are Content-Bearing Mental States

The alternative is to develop a reading that bears out the metaphysical situation of concepts that I motivated in the previous chapter, and this is the path I shall follow. I think that the concept as rule reading is the most powerful challenge to a view of this kind, so the main burden I will incur in substantiating my reading is to explain the connection between concepts and rules, doing

⁶¹ Particularly surprisingly, Landy does not cite the passage in his extended argument for the concept as rule proposal (2015).

justice to the relevant texts, in a manner that allows us to block any straightforward identification of concepts with rules.

The notion of a rule will loom large in my discussion of the formal origins of concepts. What we will see is that concepts presuppose rules: in every case, the mind can only form a concept if it has already become conscious of a certain kind of rule. Rules are thus metaphysically prior to concepts. It makes perfect sense, then, that Kant should say that the characterization of the understanding as a faculty of rules is the formulation that comes closest to its essence. For the most fundamental act of the understanding, without which neither concepts nor judgments would be possible, is the representation of rules. *Nevertheless*, the concept itself is a mental representation that comes into being, as a modification of the mind, due to the mind's consciousness of rules. It is not itself a rule; and nor, we will see, is it a representation of a rule.

3. The Object of Concepts

As we saw in the previous chapter, Kant characterizes representation in general as 'that determination of the soul that refers to something other [*diejenige Bestimmung der Seele, die sich auf andere Dinge beziehet*]' (R 1676, 16: 77). If we are steadfast in our identification of concepts with representations, we thus owe an account of the 'something other' to which concepts 'refer' as the kinds of modifications of the soul that they are. How should we characterize the entities to which the mind is representationally related through concepts?

3.1 The 'No Special Object' View

The No Special Object View denies that there is *any* special object to which we are representationally related through concepts beyond the objects — appearances or things in themselves — that we represent in judgment. This view emerges very naturally out of the view we discussed in the previous chapter, on which Kant accepts the semantic priority of judgments (SPJ). Insofar as the concept ‘has’ any kind of representational content, on this kind of view, this content must be assigned to the content on the basis of its role in judgment. As Leland puts it, the propositional contents expressed by judgments are ‘first in the order of semantic explanation’. Concepts are representationally null and void independently of judgment; they do not have contents at all — hence do not properly speaking exist — independently of judgment. This means that whatever entities conceptual ‘contents’ relate us to must be entities to which we are related through judgment; accordingly, there is no special object, beyond the objects to which we are related in judgment, that the concept puts us in touch with.⁶² Now, logically speaking, another path to the view could deny SPJ, maintaining that concepts *are* representationally significant independently of judgment but also maintaining that this pre-judgmental representational content simply represents object or sets of objects. It is hard to see, though, how such a proposal would be compatible with the Mediacy Thesis, and I am not aware of any commentators who have proposed it. Thus, in the Kantian context, an argument against SPJ doubles as an argument against the No Special Object view.

⁶² It is worth also mentioning that the SPJ reading sits very naturally with the concept as rule reading. If concepts, considered in themselves, really *are* not mental representations in any strict sense, it is unsurprising that they can only be ‘assigned’ representational contents, by courtesy as it were, and that they do not immediately represent anything just in virtue of their intrinsic features. After all, they are not, intrinsically, representations at all. It should therefore come as no surprise that two prominent concept as rule readers also advocate both SPJ and the No Special Object View (Landy 2015: 96–101; Pippin 1982: 104–106).

It will therefore be helpful to band together my reasons for rejecting SPJ and for departing from it as I develop my interpretation. First, I have argued that the view rests on a misreading of the Mediacy Thesis. Kant's claim is not that concepts are representationally null and void independently of judgment; his claim is, much more specifically, that whatever concepts represent independently of judgment cannot be located at the ontological level of things (subjects of causal activity). Secondly, and relatedly, SPJ cannot give a satisfactory reading of the Universality Thesis. That concepts are universal representations should be seen as part of the *explanation* of the Mediacy Thesis: the reason that concepts do not immediately represent objects is that the entity they *do* immediately represent is 'something universal' (*etwas allgemein*), something that can be *common* (*gemein*) to several objects and hence cannot itself be an object. SPJ, of course, cannot give this explanation of the interaction between the two theses, since it cannot allow that concepts have any immediate representational significance.

The findings of this chapter allow us to add a further objection to SPJ readings. The view that conceptual content originates in judgment, aside from the fact that it is not at all obviously motivated by the handful of passages in which Kant suggests that judgment is *in some sense* 'prior' to concepts, creates serious difficulties for any attempt to understand Kant's statements about the 'generation' [*Erzeugung*] of concepts.⁶³ When Kant presents the logical acts of comparison, reflection, and abstraction, he tells us straightforwardly that these are acts that govern the 'generation' of concepts from out of nonconceptual material. But if conceptual contents originate in judgment (and if concepts do not exist independently of possessing content), then we are forced

⁶³ I am not the first to press this objection; it is also an important part of Heiss's motivation for denying a 'strong semantic' reading of the claim that judgment is prior to concept in Kant: '[I]f Kant had believed that judgments are prior to concepts in the strong sense that the semantic content of a concept is simply a "node in a network of reasons," then Kant's theory would have ruled out abstractionism immediately: an inferentialist holism is simply inconsistent with the atomism of the abstractionist picture' (Heiss 2014a: 275–276).

into a revisionary reading of this doctrine. *Either* we must claim that the logical acts of comparison, abstraction, and reflection are somehow themselves already (covert) acts of judgment.⁶⁴ *Or* we must deny that the logical acts, after all, really are the place to look for Kant's account of the origin of concepts.⁶⁵ Neither strategy seems to me to be particularly promising, but the No Special Object view forces us to choose between them. This means that if I am able to substantiate a plausible reading on which the logical acts *are* genuinely originary of concepts (and on the assumption that those acts are not themselves acts of judging), the success of this account will indirectly speak against SPJ.

These considerations do not close the issue conclusively, but they do motivate me to make it my working assumption that the No Special Object view is false. The interpretation that I develop in this dissertation fundamentally departs from the No Special Object View: I will assume that there *is* something special that concepts immediately represent in virtue of their intrinsic features, prior to and independently of their role in judgment. This special object is what Heidegger helpfully refers to with the term '*Gemeinheit*'; it is something that can be common to a universal class of objects and hence cannot itself be an object. But there are several candidates for what that special object might be.

3.2 *The Varieties of Gemeinheit*

We can fruitfully distinguish three proposals about the common entity that concepts represent. We might think of the special objects of concepts as *rules*, *properties*, or *essences*.

⁶⁴ This reading is proposed by both Paton (1951: 250-51) and Rödl (2001).

⁶⁵ We discussed this strategy above, in Section 1.2.1.

3.2.1 Rules or Laws

Let us start with the proposal that concepts represent *rules* — or, on another variant of the proposal, *laws*. Rather than *identifying* concepts with rules, as we saw the concept as rule proposal does, this proposal would preserve the close tie between concepts and rules by holding that rules are the distinctive objects represented through the concept. Rules certainly have the right form to constitute a *Gemeinheit*: they are not themselves objects but can be common to several objects in the straightforward sense that numerous objects can be subject to the same rule.

The introduction to the Analytic of Principles in the first *Critique* sets up the faculty of understanding and its relation to the power of judgment in a manner that seems germane to this picture:

[i]f the understanding in general is explained as the faculty of rules, then the power of judgment is the faculty of **subsuming** under rules, i.e., of determining whether something stands under a given rule (*casus datae legis*) or not.

A132/B171

The way in which this passage describes the division of cognitive labor between the understanding and the power of judgment would make good sense if we thought of concepts as representing rules. We could then say that concepts, as products of the faculty of rules, represent rules, and that the power of judgment goes on to *use* concepts by determining whether or not specific objects stand under the rules represented by the concept. Grasping the rule would be a distinctive act of ‘conceiving’ on part of the understanding; applying the rule to objects, meanwhile, would be the office of the power of judgment.

As we read on, however, we find a distinction emerging between a *rule* and the ‘condition’ of a rule. This distinction shows up at exactly the point that Kant describes what is ‘given in’ pure concepts:

But the peculiar thing about transcendental philosophy is this: that in addition to the rule (*or rather the general condition for rules*), which is given in the pure concept of the understanding, it can at the same time indicate *a priori* the case to which the rules ought to be applied.

A135/B174, my emphasis

Kant initially says that the rule itself is ‘given in’ in the pure concept, but immediately corrects himself: it is not the rule but the ‘general condition for rules’ that is given through the pure concept.⁶⁶ It turns out the notion of a condition is a technical notion integral to Kant’s account of rules. The A-Deduction characterizes a rule as follows:

Now, however, the representation of a universal *condition* in accordance with which a certain manifold (of whatever kind) **can** be posited is called a **rule**, and, if it **must** be so posited, a **law**.

A113, my italics⁶⁷

There is thus a distinction here between a ‘universal condition’ and an act of ‘positing’ that is either licensed or required by the universal condition. When Kant says that what is given through the category is not the rule but, more specifically, the condition of the rule, he is claiming that what the concept represents is, specifically, the universal condition in accordance with which a manifold can be posited. This would give us a more nuanced way of describing the division of cognitive labor between understanding and the power of judgment. Understanding, in an initial act of

⁶⁶ This notion of the condition of a rule appears again in the passage: Kant warns that examples can be harmful to the ‘correctness and precision of the insight of the understanding [*Verstandesinsicht*]’ because they ‘only seldom adequately fulfil the condition of the rule’ (A134/B174).

⁶⁷ For other texts that closely tie the notion of a rule to the notion of a condition, see A27/B43–44; A330/B387; *JL* 9: 121. For the most detailed available discussion of Kant’s technical notion of a rule and its relation to the notion of a condition, see Longuenesse 1998: 93–106. The astute reader will have noticed that on this definition of a rule, a rule *is* a kind of representations. Thus, if proponents of the concept as rule interpretation had this specific, Kantian notion of ‘rule’ in mind, then it would not be the case that their views required us to revise our initial situation of concepts as representational mental states. However, this is not the way that such readers typically construe rules.

conception, ‘gives’ the universal condition; the power of judgment then ‘posits a manifold’ in accordance with that universal condition. And we could make sense of the claim that the concept is both something universal and something that can ‘serve as’ a rule. The concept, as a universal representation, represents a universal condition; but the concept can serve *the power of judgment* ‘as’ a rule because the power of judgment can then posit a manifold in accordance with that condition.

These considerations then point us away from rules toward the ‘universal conditions’ for rules.

3.2.2 *Properties*

One candidate account of the ‘something universal’ that can ‘serve as’ a rule is a *property*. Concepts, on this proposal, represents universal properties — the property of being a tree, for example — and it is for this reason that they can be employed to partition the world into classes of objects (for example, the class of trees as distinct from the class of non-trees).

One reader who runs a version of this proposal is Eric Watkins (2002). In a paper on the relationship between the categories and transcendental idealism, Watkins develops a strategy for developing a reading that acknowledges a sense in which the pure categories lack ‘content’ without claiming that they lack meaning altogether (Watkins 2002: 202–205). Watkins distinguishes between ‘meaningREF’ and ‘meaningPROP’: a concept has meaningREF insofar as it can be employed in judgment to refer to a specific object, whereas it has meaningPROP insofar as it represents a property. Kant’s occasional denial that the pure categories have ‘content’, according to Watkins, is the specific claim that they lack meaningREF, and this is compatible with holding

the view that Watkins thinks Kant in fact holds — namely, that categories represent properties quite independently of our ability to deploy them in judgments to refer to objects. If generalized, this proposal would lend itself to an account on which all concepts — simply as products of the understanding, prior to being taken up by the power of judgment — already represent properties, our ability to use them to represent specific objects notwithstanding.

Another reader who tends in this direction is Smit. In his influential paper on intuitive marks, Smit argues that a mark, in general, is ‘an identifying property through which we can cognize a thing’ (2000: 245). He then argues that the difference between intuitive marks and discursive marks is a difference between two ways in which a property can have ‘intentional being’ in an act of representing:

[A]n intuitive mark is a property as it makes up a thing’s (partial) cognition in intuition (that is, a property as it is represented, and thus has intentional being, in intuition), and a discursive mark, a property as it makes up a thing’s (partial) cognition in a concept (that is, a property as it is represented, and thus has intentional being, in a concept).

Smit 2000: 254

Smit goes on to cash out the difference between intuitive marks and discursive marks in terms of the difference between property-instances and properties (Smit 2000: 255). As it has ‘intentional being’ in an intuition, a property is represented as instantiated by some spatiotemporal particular; as it has ‘intentional being’ in a concept, the property is represented abstractly, in such a way that it could be common to several objects.

Recently, however, this style of account has been challenged by Alexandra Newton (2015), who argues that the account is too permissive to capture Kant’s commitments. Specifically, Newton argues that if we construe the objects of conceptual representation in this way, we will not

be able to respect Kant's claim that the logical acts govern the generation of concepts as such. Recall, in Section 1.2.1, we saw that a majority of commentators opt for an interpretation of the logical acts on which they are not responsible for the generation of concepts strictly speaking; instead, according to this dominant line of interpretation, they are responsible for clarifying or making explicit concepts that the subject already possesses in the form of recognitional capacities. Newton wants to resist this line of interpretation — and I follow her in wanting to do so — but she argues that it will be inevitable if we think of concepts as mere representations of properties.

To see why she thinks this, it helps to recall the circularity objection against Kant's account of concept formation. On one formulation, that objection starts by claiming that, just in selecting the matter for her concept, the subject must already be sensitive to similarity-relations between objects, and then concludes on this basis that the subject must already possess a concept that picks out the basis of the similarity-relation, albeit in obscure or undeveloped form. As I pointed out in Section 1.2.3, there is a suppressed premise underlying this inference — namely, that sensitivity to similarity-relations suffices for concept possession. Newton's strategy in response to the circularity objection is the same as mine: she wants to block the inference by denying that Kant would have endorsed this permissive account of concept possession. But, she presses, if all a concept represents is a property common to several objects, it is hard to see what basis Kant could have for denying the permissive conception. If a subject can already group together, say, trees, and distinguish them from things that are not trees, and if the concept of a tree is just the concept of a property (or set of properties) that several things may share, what basis do we have for denying that the subject already possesses the concept of a tree, even if only 'implicitly'?

The general lesson here is that our account of the representational content of a concept will affect our account of its possession-conditions. And according to Newton, Kant's account of the

contents of concepts places more stringent conditions on concept possession than the property account, such that mere sensitivity to similarity-relations does not suffice for concept possession.

For according to Newton, concepts represent *essences* or ‘inner natures’:

[T]he generality of concepts, as products of the understanding, should be distinguished from the classificatory generality of schemata, which are products of the imagination. A Kantian concept does not provide mere criteria for noting sameness and difference in things, but instead reflects the inner nature of things.

Newton 2015: 456

Newton’s strategy, then, is to draw a sharp distinction between the kind of content that pertains to ‘schemata’, as products of the imagination, and concepts, as products of the understanding.⁶⁸ While the properties account is suitable to characterizing the objects of schemata, it does not carry over to concepts. The mere fact that a subject can detect similarities between things does not entail that the subject is already (even if only ‘implicitly’) representing the essences of those things; thus, Newton’s account of the content of concepts allows her to reject the permissive account of concept possession that drives the circularity objection, opening the way for an account of concept formation that respects Kant’s claim that the logical acts really *generate* concepts and do not merely articulate existing concepts.

There is thus one final account of the *Gemeinheit* represented through concepts that we must consider.

3.2.3 *Essences*

To arrive at the suggestion that concepts represent essences, it will be helpful to review Newton’s account of the kind of ‘classificatory generality’ that she thinks falls short of the

⁶⁸ Newton cites Young (1988) as a precursor to this approach.

generality of a concept. This is a kind of generality Newton claims is already present in animal representation. She builds her case for this claim around an early discussion of animal representation in Kant's *False Subtlety of the Four Syllogistic Figures*:

The dog differentiates the roast from the loaf, and it does so because the way in which it is affected by the roast is different from the way in which it is affected by the loaf (for different things cause different sensations); and the sensations caused by the roast are a ground of desire in the dog which differs from the desire caused by the loaf, according to the natural connection which exists between its drives and its representations.

fS 2: 60

This passage sets out to explain how the dog possesses a specific discriminatory capacity: the capacity to 'differentiate the roast from the loaf'. The explanation then proceeds in two stages. First, it is noted that the roast and the loaf cause different sensations in the dog. The mere fact that the two kinds of object stimulate different sets of sensations, however, is not on its own enough to explain why the dog differentiates between the two. The second part of the explanation is that the two sets of sensations are different 'grounds of desire'. Due to a 'natural connection which exists between its drives and its representations', the sensations caused by the roast excite hunger and desire, whereas the sensations caused by the loaf excite aversion. The dog therefore differentiates the loaf and the roast on the basis of their differential effects on its faculty of desire. The fact that the dog can differentiate the world into classes in this way, according to Newton (2015: 463), explains why Kant says that animals are acquainted with [*kennen*] things, that is, 'represent things in comparison with other things, both as to sameness and as to difference' (*JL 9: 65*). Objects are the same, from the perspective of the dog, insofar as they affect its faculty of desire in the same way, different insofar as they affect its faculty in contrasting ways.

The dog's representations thus already incorporate what Newton calls 'classificatory generality'. But non-human animals lack understanding, the faculty of concepts, which means that something about the dog's awareness must disqualify it from counting as conceptual awareness. Concepts must therefore be more than mere devices for partitioning the world on the basis of apparent similarities between objects, because if they were not, the dog would possess concepts. What is missing from the dog's representation, according to Newton, is any aspiration to ground its partitioning on features that are 'internal to the objects themselves' (2015: 463) — something 'originally shared in common by the objects themselves', independently of their contingent relations to the dog's faculty of desire. What is missing from the dog's representation is any aspiration to represent the internal features of the object that explain why it shows up for the dog in the particular way that it does.

According to Newton, Kant identifies distinctively *conceptual* representation with what he calls the 'internal use of a mark' (Newton 2015: 471). In its internal use, a mark 'helps us see the manifold in the object' (*WL* 24: 836), and this usage 'consists in derivation' (*JL* 9: 58). The internal use of a mark consists with the external use, by which I 'compare the thing with other things' (*LB* 24: 107); as subject to such a use, marks are '*characteres*, distinguishing marks, characteristic in the proper sense' (*BL* 24: 107; cf. *WL* 24: 836). The dog is already capable of an external use of marks, according to Newton; what is new with the presence of conceptual capacities is the capacity to use marks internally, to 'see the manifold in the object'. Newton's example of an internal use of a mark is our cognition that a particular object is a tree partly in virtue of its possessing branches. Here, the mark <branched> is subject to an internal use because we represent it as a ground of the tree's being the kind of entity that is. Certain other features of the tree (for example, its having leaves) are derivable from its having branches, and so the mark <branched> allows us to derive

certain further properties of the tree, and thus to ‘see the manifold in the object’. To sum up Newton’s proposal, a mark is subject to an internal use insofar as it represents a ground of being: something that explains why a given entity is the kind of entity that it is.⁶⁹ And the mere capacity to differentiate between different things does not yet put us in a position to represent the grounds of being of the various things we differentiate.

For all of the interest of Newton’s proposal, I think that it sets the bar on concept possession too high. Newton’s reading parses the distinction between external and internal uses of a mark quite correctly; where she goes wrong, I believe, is in aligning *that* distinction with the distinction between the non-conceptual and the conceptual. Newton would have it that the *understanding* [*Verstand*], as the faculty of concepts, is the faculty that puts marks to an internal use. But Kant’s statements about the internal use of marks suggest instead a proprietary relationship between the higher faculty of *reason* [*Vernunft*] and the internal use. The internal use of the mark consists in *derivation*, which is the characteristic act of the faculty of *reason*, not understanding. Recall, too, Kant’s statement that the internal use of a mark allows us to ‘see’ the manifold ‘in’ an object. This description of the internal use of a mark calls to mind Kant’s discussion of the cognitive achievement he calls ‘insight’ [*Einsehen*; literally: seeing in]. But insight is consistently located

⁶⁹ Note that Newton does not want to restrict ‘inner natures’, or grounds of being, to entities that in fact exist: ‘I do not mean to speak here of the ‘inner nature’ of things in any metaphysically loaded sense. Unicorns and aliens may also have an inner nature — i.e., there is some feature that makes them be what they are, even though they are fictional’ (Newton 2015: 481). It is worth noting, though, that this feature of Newton’s usage places her use of the term ‘nature’ at a distance from Kant’s own, since Kant is very clear that only existing things have natures (see, for example, *MAN* 4: 467n). I am also unpersuaded that Newton’s use of the term ‘nature’ tracks Kant’s use of the term ‘logical essence’, as she sometimes implies (e.g. 2015: 458). As I alluded to in the previous chapter (Section 2.1), the evidence is that Kant uses the term ‘logical essence’ to name a privileged set of marks thought in the content of a concept (the *constitutiva* or *essentialia*); it is thus *concepts*, not the objects they represent, that have logical essences. These philological points are not serious evidence against Newton’s view, though, because she does not base her proposal on detailed exegesis of Kant’s usage of the terms ‘nature’ or ‘logical essence’.

above the act of understanding [*Verstehen*],⁷⁰ and Kant is often explicit in attributing insight to the faculty of reason.⁷¹ It seems wrong, then, to claim that concepts already represent inner natures just insofar as they exist through acts of understanding. Of course, all of this is compatible with holding that concepts *can* represent inner natures; still, I will not follow Newton in identifying inner nature as *the* distinctive *Gemeinheit* to which concepts are related just in virtue of being concepts. In departing from Newton's proposal, I will therefore need to find a different way of blocking the circularity objection to the logical acts story.

4. Plan

The findings of this chapter in hand, I am in a position to describe my course of action for the remainder of the dissertation. My aim in what follows will be to develop an interpretation of Kant's theory of concepts that both conforms to and bears out the faculty psychological framework I laid out in the previous chapter, on which concepts are representational mental states produced by the faculty of understanding. To stay within this framework, I will need to show that the logical acts are indeed originary rather than merely elucidatory of concepts; I will need to show that concepts are not themselves identical with rules or any other non-mental entity; and I will need to positively characterize the kinds of entities that concepts distinctively represent.

Of these three focal issues, for the rest of the dissertation my primary focus is on the question of origin, for it is here that I believe we have most to learn about Kant's strategy for explaining how intuitions and concepts can relate in the manner that they must for cognition to

⁷⁰ See *LB* 24: 134–135; *LB* 24: 236; *WL* 24: 845–846; *LDW* 24: 731; *R* 2394, 16: 342–344.

⁷¹ See *LB* 24: 135; *WL* 24: 456; *LDW* 24: 731; *R*2394 16: 343. Consider also the way in which Kant contrasts pure concepts of understanding with the Ideas of reason in the Dialectic: 'Concepts of reason serve for **comprehension** [*Begreifen*], just as concepts if the understanding serve for **understanding** [*Verstehen*] (of perceptions)' (A311/B367). Since Kant often presents *Begreifen* as a kind of insight (e.g. *LB* 24: 134), it is plausible that this passage is also reserving insight for the faculty of reason.

take place. As we focus on this question, though, we will be able to glean substantive lessons about the contents and objects of concepts as Kant understands them, and I will present some of these lessons in the conclusion of the dissertation.

What follows splits into two parts. In Part 2 of the dissertation, I turn to Kant's account of the material origins of concepts. With this account in place, I turn my attention, in Part 3, to their formal origins.

Part II: The Material Origins of Concepts

Introduction to Part II

In this part of the dissertation, we begin our investigation of Kant's account of the origins of concepts. As I have emphasized, interpreters have not tended to recognize the complexity this question takes on in a Kantian context, for treatments of Kant's theory of concept formation typically focus entirely on the logical acts of comparison, reflection, and abstraction without any investigation of the origin of concepts in regard to matter. Once we appreciate the hylomorphic nature of Kant's model of concepts, however, this restrictive focus becomes untenable. Kant, we have seen, distinguishes between the form and matter of a concept, holding that all concepts presuppose a given matter for their generation. The matter of a concept is the set of given representations on which the faculty of understanding imposes the 'universal' form characteristic of concepts, and the result of this in-formation of given matter is a concept — that is, a representation with the special kind of 'content' that can serve as 'ground of cognition' for a universal class of objects. If we are interested in how such content comes into existence, then, we face two questions, not one. Since the production of conceptual content presupposes a given matter, one question we can ask is how that matter comes to be given in the first place. And since concepts proper only emerge when a given matter — regardless of how it originated — receives the form of universality, we can also inquire into the nature of the acts that impart this form and thereby generate concepts proper. We must thus search in Kant's writing for *two* kinds of acts that pertain to the origin of concepts: matter-giving acts and form-imparting acts. In the following three chapters, we target the first kinds of act; only afterward, when we have a purchase on the material origins of concepts, will we investigate their formal origins.

My aim throughout this part of the dissertation will be to arrive at a comprehensive account of both the kinds of matter and the kinds of matter-giving acts that pertain to the various kinds of

concepts that Kant distinguishes within his theoretical philosophy. In creating the framework for this investigation, I will appeal to a much-neglected distinction that Kant consistently draws, between concepts that are ‘given’ and concepts that are ‘made’. This distinction, I show, pertains in the first instance to Kant’s account of conceptual matter, and specifically to his account of the kinds of acts that first give the matter for a concept. The distinction between empirical and pure concepts, on the one hand, and the given-made distinction on the other, create a two-dimensional framework for distinguishing concepts at the level of matter, and I use that framework to divide my treatment. In Chapter 3, I treat empirical concepts, and in the subsequent two chapters I move to pure concepts. My aim in both cases will be to present the content, matter, and matter-giving acts pertaining to each of the concepts I distinguish.

I want to advertise upfront two central upshots of the investigation. *First*, we will see that the mental act that Kant terms ‘apprehension’ is absolutely integral to his theory of concept formation — indeed, that the entire point of invoking an act called ‘apprehension’ is to explain how concepts come into being. Because apprehension is not itself an act of the understanding, and because treatments of concept formation have tended to focus exclusively on the intellectual acts of comparison, reflection, and abstraction, the relevance of apprehension to concept formation has been entirely overlooked. It is true that apprehension is not one of the form-imparting acts; however, I argue throughout this part of the dissertation that it is the matter-giving act *par excellence*. *Second*, our investigations will position us to see what distinguishes the categories of the understanding, as ‘selfthought *a priori* principles of cognition’ (B167), from all other concepts, and what explains the privileged relationship Kant frequently alludes to between the categories and the intellectual act of reflection. For we will see that the categories are the only concepts whose matter is *not* given through apprehension but instead arises through an act of the intellect —

namely, reflection. Even here, though, we will also see that apprehension is relevant to the material origins of the categories, albeit in a distinctive way — for here it shows up, not as a matter-generating act but rather as a part of the matter that is given through reflection.

But these general lessons are a long way off; for the rest of this introduction, I chart the path I will follow to arrive at them. I begin, in Section 1, with some important clarifications concerning what I will call the Question of Material Origin. In Section 2, I introduce the distinction between given and made concepts, showing i) that it pertains in the first instance to the matter of a concept, and ii) that the distinction marks the difference between those concepts whose matter is given through a voluntary act and those whose matter is not so given. Finally, in Section 3, I explain an important methodological principle that I will frequently employ in the chapters to follow.

1. Clarifying the Question of Material Origin

Let us begin, then, with some remarks that will, I hope, clarify both the scope and significance of the question of material origin.

First of all, it is important to keep in mind the sharp division between matter-giving and form-imparting acts, and to remember that in restricting their focus to the question of material origins, the chapters to follow do not aspire to give a full explanation of how any concept comes into existence. All we are describing here are the preliminary, matter-giving acts that first make it possible for the understanding to impart the universal form characteristic of concepts. None of the case studies of particular concepts to follow is intended as a complete explanation of how the relevant concept comes into being; each is meant only as an account of the ‘stage-setting’ that must take place before the logical acts can generate the relevant content.

Second, it is important to be clear about what exactly must be involved in the matter-giving stage of a concept's origin. The matter-giving act makes a set of representations present to the intellect in such a way that those representations could in principle receive the form of universality. Now, as we will see in our treatment of the logical acts, even the most elementary of the logical acts, comparison, presupposes that the representations it targets are already present in consciousness. Thus, for a set of representations to be present in the mind in such a way that they could be targets of the logical acts, they must already be conscious, just as logical matter. Given Kant's view that a representation can be 'in mind' but not in consciousness, the matter-giving acts are therefore not simply those that bring a set of representations into the mind, but, more specifically, the acts that bring a set of representations *to consciousness*. Let me give an example of this distinction that anticipates my treatment in Chapter 3. On the view that I will argue for in Chapter 3, empirical intuitions are produced in the mind through an act that Kant calls 'synopsis', which arranges sensations in spatiotemporal form. However, an *additional* act, over and above synopsis, is required to bring empirical intuitions to consciousness; this act Kant calls 'apprehension'. Since a representation must be present to consciousness in order to supply matter to a possible concept, only apprehension would strictly qualify as a matter-giving act, not synopsis.

Now, this process of bringing a representation to consciousness may itself *transform* the representation that is brought to conscious. For example, though it is apprehension that brings intuitions to consciousness, what the act of apprehension outputs is not itself an intuition but an *image*, a representation that differs in non-trivial ways from intuition. In several cases, then, we will find substantive differences between the representations *inputted* to the matter-giving acts and the representations *outputted* by them, and while the purpose of the matter-giving acts is to bring the input-representations to consciousness, it is the output-representations that are strictly speaking

present in consciousness and hence constitute the matter for the concept. Strictly speaking, then, it is only the output-representations that *constitute* the matter for a concept, but I will also say that any representation that can be inputted to a matter-giving act ‘provides’ matter for a concept, even while not strictly speaking constituting it. Derivatively, we could say that whatever act produces the input-representation also ‘provides’ matter for the concept, but I will not count such an act as a matter-giving act in the strict sense described in the previous paragraph (so, for example, synopsis would qualify as a matter-providing act but not a matter-giving act).

Finally, the study I undertake in this part of the dissertation serves an account of the ‘origins’ of concepts, and it is important to be clear on what it is that is supposed to be originating. On the framework I both presuppose and seek to motivate throughout this dissertation, Kant situates concepts at the level of *representation*: concepts are modifications that exist within *minds*. This proposal should be contrasted with models that situate concepts at the level of what is grasped *by* a mind. The account I am giving is an account of the mental processes that must take place for a concept to *exist in* a mind, not for the (intrinsically non-mental) concept to be *grasped by* a mind. What I take Kant to be explaining is the origin of concepts themselves, not simply subjects’ graspings of concepts.

2. Two Material Distinctions between Concepts

In the previous chapter, I briefly alluded to one consequential distinction between concepts that depends on their matter, for I pointed out there that Kant situates the distinction between pure and empirical concepts as a matter-level distinction:

The origin of concepts in regard to their *matter*, according to which a concept is either *empirical* or *arbitrary* or *intellectual*, is considered in metaphysics.

In this context, ‘arbitrary’ refers to the class of mathematical concepts, which Kant calls ‘pure sensible’ concepts; *intellectual* concepts are the categories and their ‘predicables’, as well as the Ideas of reason; and empirical concepts comprise both the concepts that feature in ordinary human experience as well as those that characterize the theoretical posits of natural science. And the text claims that the status of a concept *vis-à-vis* this threefold division depends on the nature of the matter out of which it originates.

The material element that decides whether a concept is pure or empirical is *sensation*. In the *Critique*, Kant proposes a general definition of purity that covers both intuitions and concepts:

Both [*viz.* intuitions and concepts] are either pure or empirical. **Empirical**, if sensation (which presupposes the actual presence of the object) is contained therein; but **pure** if no sensation is mixed into the representation.

A50/B74

Now, Kant here uses the language of containment, which might make one think that he is making a claim about the *contents* of intuitions and concepts (i.e., that a concept/intuition is only pure if its *content* does not contain sensation), but we saw in Chapter 1 (Section 3.1) that Kant’s usage of containment language is not restricted to the content-level, and it would be wrong to think it is functioning at that level here. First, it is especially clear in the case of concepts that *no* concept contains sensation in its content; second, in the sentence that immediately follows the passage above, Kant says that ‘one can call the latter [*viz.* sensation] the *matter* of sensible cognition’ (A50/B74-75, my italics). Whether a concept is pure or empirical, then, depends on whether the matter out of which it originates includes sensation.⁷² Once we count a concept as pure, there is

⁷² In view of the clarifications provided in the previous section, we can make this formulation more precise: a concept is empirical just in case its matter is *constituted* by sensation.

then a further question about whether it is a pure sensible or pure intellectual concept; we will pinpoint the material feature that decides that further question in Chapters 4 and 5.

But there is also a second, independent, distinction that the text also situates at the level of matter:

All concepts, *as to matter*, are either *given (conceptus dati)* or *made (conceptus factitii)*... The form of a concept, as that of a discursive representation, is always made.

JL 9:93; cf. LDW 24: 752-3

At the level of form, every concept is ‘made’; but as to matter, all concepts are either given or made. Here, then, we have an exhaustive distinction between concepts (it characterizes ‘all concepts’) that obtains at the level of matter (it characterizes ‘all concepts, as to matter’).⁷³ As several texts also make clear (see, eg., *WL 24: 915-916; LDW 24: 756-57; 16: 584*), it is a distinction that cross-cuts the empirical-pure distinction. As we will see, the sensation-containing matter of an empirical concept can be either given or made, as can the sensation-independent matter of a pure concept; thus, situating a concept with respect to the one distinction leaves open its status with respect to the other.

Kant’s willingness to admit a class of ‘given’ concepts should give us pause. We are most familiar with the notion of givenness from Kant’s distinction between sensibility and the intellect, where givenness is the key marker of the *nonconceptual*, intuitive representations produced by the receptive sensible capacity. Describing a concept as ‘given’ should sound jarring given this background because it can sound as if Kant is ascribing a kind of receptivity to the intellect, a passive capacity to have concepts ‘given’ to it much like the sensible capacity to receive intuitions.

⁷³ Note that in situating the distinction at the level of matter, Jäsche here is straightforwardly reproducing a claim from Kant’s handwritten notes (*R 2855, 16: 547*).

And indeed, a number of commentators' comments about given concepts encourage this sort of picture. Consider these two characterizations:

[a] given concept is one that we find ourselves employing, and of whose partial concepts we are therefore aware, even though we may not be conscious of these partial concepts and hence may not (yet) be able to identify them.

Young 1994: 337

As an initial formulation, a given concept is one we do not ourselves make up or construct

Messina 2015: 421

Both of these passages emphasize the passivity of our relation to given concepts; they are concepts that, as *per* the first passage, we simply 'find ourselves employing', concepts that, as *per* the second, we did not ourselves 'make up or construct'. These formulations create the impression that given concepts arrive in the mind fully-formed much as intuitions do, and they make it hard to see how Kant's doctrine of given concepts is possible to square with his insistence that the intellect is a strictly spontaneous rather than receptive power.

What is missing from Messina and Young's discussions is any emphasis on the fact that the given-made distinction is restricted to the level of *matter*. Indeed, no published treatment of the distinction involves any acknowledgment of this crucial detail,⁷⁴ yet it is key for seeing how the existence of given concepts is compatible with the spontaneity of the intellect and hence for warding off suspicion that the doctrine of given concepts is a mere relic of Kant's precritical period. Recall, it is only with respect to its matter that a concept may be given; at the level of form,

⁷⁴ The given-made distinction has been taken up by numerous commentators, primarily in the context of investigations into Kant's theory of geometry and space (see Dunlop (2012), Heiss (2014c), Callanan (2014), Messina (2015)). In addition, Young (1994) and Nunez (2014) appeal to the distinction in the context of discussing the categories. Not one of these commentators observes that the distinction is situated at the level of matter. The discussion of the following chapters departs from all of these discussions in taking this part of Kant's position very seriously.

the doctrine is that all concepts are made. Kant's claim is thus not that the concept *itself* is given to the mind but simply that its matter is. We certainly *do* 'ourselves make up or construct' given concepts, and we certainly *do not* just 'find ourselves employing' them: what we are passive in relation to is not the concept itself or our application of it, but rather its matter.

To return now to spelling out the distinction itself, we have seen so far that the status of a concept as given or made depends on some feature of its matter, where this feature, whatever it is, is different from the feature that marks the concept as empirical or pure. In the Vienna transcript, we are further told that the status of a concept as given or made depends on whether the 'faculty of choice' was involved in its production:

All our concepts are either *given* concepts or ones that are *made*. A concept is given insofar as it does not arise from my faculty of choice [*so fern er nicht aus meiner Willkür entspringt*].

WL 24: 914

This passage dovetails with the several passages in which Kant equates made concepts with 'arbitrary' [*willkürlich*] ones, as, for instance, in the following:

Conceptus facti, concepts that are made, are such as are created by us arbitrarily [*willkuerlich von uns erzeugt*], or fabricated, without previously having been given.

LB 24: 132⁷⁵

Together, these passages suggest that a concept is given in case it does *not* arise from my faculty of choice, and made if it does so arise. And given that we know that the distinction between given and made concepts obtains at the level of matter, we can specify that what is at stake here is the

⁷⁵ cf. WL 24: 918, LDW 24: 752-53; A727-30/B755-58.

origin of the concept in regard to *matter*. A concept is *made* if its matter is given through an exercise of the power of choice, given otherwise.⁷⁶

The pure-empirical distinction on the one hand, and the given-made distinction on the other, create a two-dimensional framework for distinguishing concepts at the level of matter. Logically, we can distinguish four classes of concepts:

1. Given Pure Concepts
2. Given Empirical Concepts
3. Made Pure Concepts
4. Made Empirical Concepts

On Kant's view, none of these classes is empty. The sensation-containing matter of an empirical concept can be given through an act that does, or one that does not, depend upon an exercise of the power of choice, and likewise for the sensation-free matter of a pure concept.

Throughout the next three chapters, I will investigate the material origins of the concepts that Kant situates within each of these four classes. I divide my treatment according to the empirical-pure distinction: Chapter 3 focuses on the empirical concepts that belong on either side of the given-made division, and Chapters 4 and 5 turn to the pure concepts within those classes.

3. The Matter-Content Linkage

⁷⁶ Kant will often say that made concepts 'rest on' or 'contain' an 'arbitrary [*willkürlich*] synthesis' (A221/B269; A729/B757), and this way of talking is easy to make sense of given what we have seen so far. 'Synthesis', I suggested in Chapter 1, is introduced as a general term that refers both i) to the acts that gather together the matter for a concept, and ii) to the acts that impart the form of universality on that matter: synthesis is the act that *both* collects together the elements for cognition *and* unifies them into a certain content. When a concept is made, the synthesis it 'contains' (read: originates out of) is arbitrary insofar as the first element of synthesis, the gathering together of conceptual matter, is itself a voluntary act, an expression of the power of choice (and note that here again, we see Kant using the language of containment to make a claim about the matter rather than the content).

Before we begin our study of specific concepts, I want to say something to explain and motivate a methodology I will frequently employ in the case studies to follow. In general, my strategy in studying the material origins of a concept will be to start with an account of that concept's *content* and then work back to an account of its matter and finally the relevant matter-giving acts. The reason that I think that this approach is viable in a Kantian context is not that the matter of a concept can simply be read off from its content, but that a concept's matter, while it underdetermines its content, significantly constrains its content. Thus, if we have an initial characterization of a concept's content, we will have a good sense of what its matter must be like even if we do not yet have a complete account.

For evidence that Kant recognized a matter-content linkage, consider his opening argument for thinking that the categories do not have an empirical origin, which only makes sense if he is assuming a principle of this kind. Consider, first, the following passage in the A-Introduction, in which Kant moves from a claim about the content of the categories to a claim about the nature of the matter from which they must have arisen:

[T]here still remain certain original concepts and the judgments generated from them, which must have arisen entirely *a priori*, independently of experience, because they make one able to say more about the objects that appear to the senses than mere experience would teach, or at least make one believe that one can say this, and make assertions that contain true universality and strict necessity, the likes of which merely empirical cognition can never afford.

A2

What is important to emphasize in this passage is the inference-pattern. Kant moves from a claim about the *contents* of certain concepts — as revealed in the kinds of 'assertions' they lend themselves to, namely, those that 'contain true universality and strict necessity' — to a claim about their matter, that is, the way in which they 'must have arisen'. The claim is that there is a certain kind of conceptual content that simply could not have originated from an experiential generation

base. In the B-edition, Kant scoffs at Hume's attempt to trace this kind of content (here, specifically, as it characterizes the concept of causation) back to an experiential starting-point:

[T]he very concept of a cause so obviously contains the concept of a necessity of connection with an effect and a strict universality of rule that it would be entirely lost if one sought, as Hume did, to derive it from a frequent association of that which happens and a habit (thus a merely subjective necessity) of connecting representations arising from that association.

B5

The concept of cause 'obviously contains the concept of a necessity of connection', but this content would be 'entirely lost' if one sought to trace that content to an experiential matter. Clearly, then, the difference between categories and empirical concepts is not merely a difference at the level of matter; there is also a special kind of content that characterizes categories, and, moreover, this special content is uniquely afforded by the distinctive *a priori* matter out of which categories are generated. What these passages show us, then, is that matter and content are not entirely divorced from one another. The mind is not free to generate just any kind of universal content from out of a given matter, and if the only matter we had to work with was afforded by experience, concepts with the contents of the categories could never arise.

At several junctures throughout the chapters to come, I will exploit this matter-content linkage, moving to a claim about the matter of a concept on the basis of a prior characterization of its content.

Chapter 3

Material Origins of Empirical Concepts

Introduction

I begin my study of the material origins of concepts with empirical concepts — that is, those concepts that originate out of a matter that contains sensation. Over the course of this chapter, I will show that Kant draws three material distinctions within the class of empirical concepts that have not been adequately appreciated in the secondary literature. First of all, I show that Kant distinguishes a special class of given empirical concepts, whose contents disqualify them from featuring in the cognitive state Kant calls ‘experience’ [*Erfahrung*]. I go on to show that the class of made empirical concepts includes two subclasses: the ‘concepts of experience’ [*Erfahrungsbegriffe*] that *do* feature in experience, and an additional class of empirical concepts that Kant says are ‘made *a priori*’.

Just pointing to these distinctions already enriches our understanding of the complexity of the domain of empirical concepts, but the real aim of the chapter is to provide an interpretation of what the distinctions amount to. More specifically, the main work of the chapter will be in characterizing the important differences between given empirical concepts and concepts of

experience. I will be concerned to pinpoint the content-level differences between these two concepts, and then to reconstruct an account of both the matter out of which such contents originate, as well as the matter-giving acts that originally bring that matter to consciousness. As we will see, an adequate understanding of the distinctions here has important implications for several areas of Kant scholarship, including both the distinction between judgments of perception and judgments of experience, and the conceptualism debate.

I proceed as follows. In Section 1, I make some comments upfront to substantiate both my general contention that the synthesis of apprehension is a matter-giving act and my specific proposal that it plays an important matter-giving role with respect to empirical concepts. These preliminaries in place, I turn to the class of given empirical concepts in Section 2. I argue that these concepts represent intrinsic features of sensations, in this respect resembling the ‘phenomenal concepts’ that have been invoked in the contemporary philosophy of mind;⁷⁷ and I propose, further, that their matter is given through an act that Kant calls ‘apprehension by means of sensation’. In Section 3, I move to the domain of empirical concepts that are made. I argue that the most

⁷⁷ See Balog (2007) and Sundström (2011) for helpful discussion of the relevant debates. As Katalin Balog helpfully explains, what is distinctive of phenomenal concepts is not simply that they represent mental states as opposed to non-mental phenomena. To bring out what is distinctive of phenomenal concepts, we can compare them with ‘psychological concepts’, another kind of concept that represents mental states: ‘Psychological concepts characterize mental states functionally in terms of causal relations with stimuli, other states, and behavior and are distinct from PCs [phenomenal concepts]. For example, the psychological concept *itch** may be (simplistically) characterized as the *state that is caused by tissue irritation and causes scratching*. In contrast, the PC *itch* picks out a certain sensation (itch) directly, without the mediation of a functional or behavioral mode of presentation. A psychological concept is a third-person concept in the sense that the mental state that it refers to does not play any direct role in the mental machinery associated with the concept nor does the concept contain any reference to the subject’ (Balog 2007, 297–298). A phenomenal concept, unlike a psychological one, picks out a phenomenal state from a first-personal perspective, that is, from the perspective of one who undergoes it, and is plausibly one that can only be possessed by a subject who has themselves undergone the relevant state (though cf. Dennett (2007)). The distinction between phenomenal and psychological concepts brings out what is new in my proposal. Nobody would be surprised to hear that Kant maintains that we can use concepts to represent our own mental states. But the claim that we can do so *via phenomenal concepts* and not merely through psychological concepts has not been put forward in the literature; and as we will see, it has important implications for several interpretive debates.

important subclass within this class is that of ‘concepts of experience’ [*Erfahrungsbegriffe*]: concepts which, in virtue of their distinctive contents, are suited to feature within the cognitive state Kant calls ‘experience’ [*Erfahrung*]. I explain the content-level feature that qualifies them to feature in experience, and I trace their material origin back to an act that Kant calls ‘experiment’. Finally, I move to the second class of made empirical concepts, and explain the distinctive use of the term ‘*a priori*’ operative in Kant’s claim that such concepts, though empirical, are ‘made *a priori*’. In concluding, I advertise the implications of my findings for both the conceptualism debate and the debate about the distinction between judgments of perception and judgments of experience.

1. The Role of Apprehension

One of the overriding contentions of this chapter and the next will be that the act Kant calls *apprehension* [*Apprehension; Auffassung*] is the matter-giving act *par excellence*. Indeed, I will contend that the primary theoretical home of the doctrine of apprehension is within the theory of concept formation. As a first contribution to my argument for this claim, in the present section I will introduce apprehension in more detail and adduce principled reasons for thinking that it must be part of Kant’s story about the material origins of empirical concepts.

The proposal that apprehension is central to Kant’s account of *concept* formation cuts against the dominant line of interpretation, according to which apprehension is, to the contrary, the key to Kant’s account of *intuition* formation.⁷⁸ I have already alluded to this reading of apprehension in previous chapters, and it will be worth saying something about how it is motivated.

⁷⁸ Advocates of this line of interpretation include Horstmann (2018); Griffith (2012); Gibbons (1994); Longuenesse (1998); Paton (1936); Rosefeldt (2021); Waxman (2013).

In the A-Deduction, the *locus classicus* for the doctrine of apprehension, Kant tells us that ‘unity of intuition’ can only arise through the synthesis of apprehension (A99). The key issue is what this ‘unity’ amounts to. On the dominant line, the ‘unity’ of an intuition is the arrangement of its elements in spatiotemporal form. If this is what Kant means, then apprehension comes out as the form-imparting act that generates intuitions out of the manifold provided by sensibility.

Given that apprehension is an act of the power of imagination, which is distinct from the receptive sensible faculty under study in the Transcendental Aesthetic, this traditional reading of apprehension entails that Kant’s doctrine of intuitions is not completed within the Transcendental Aesthetic. The receptive sensible faculty is not wholly responsible for intuitions: instead, there is a division of labor on which receptive sensibility gives the manifold for intuition (matter-giving act) and the faculty of imagination (a faculty that Kant often counts as spontaneous) unifies this manifold and thereby produces an intuition. As I mentioned in the previous chapter, this account of the etiology of intuitions is particularly attractive to conceptualist readers who want the understanding to play some role in the generation of intuitions. It is easier to see how the spontaneous action of the imagination could be penetrable by the understanding than it is to see how the understanding could influence the receptive operation of sensibility, and if the spontaneous action of imagination itself plays a role in generating intuitions, then we have a strategy for explaining how the understanding could play a role in governing the generation of intuition.

But this line of interpretation seriously misunderstands the role of apprehension. If we properly attend to the context in which Kant introduces the doctrine, what becomes clear is that the doctrine is *not* introduced to explain how intuitions are formed; rather, it is introduced to explain how already-formed intuitions could play a role in *cognition*.

Consider, first, the observation that motivates the doctrine of apprehension in the first place. Echoing his famous claims at the outset of the Transcendental Logic, Kant opens the A-Deduction by reiterating his position that ‘receptivity can make cognitions possible only if combined with spontaneity’ (A97). Kant’s question is *not* how receptivity can make *intuitions* possible; it is how receptivity can make *cognitions* possible. Alternatively put, the question is how intuitions, the representations Kant squarely ascribes to sensibility at the opening of the Aesthetic, could be *grounds of cognition*. Since all cognition requires a concept, an intuition can only make cognition possible — be a ground of cognition — insofar as it is an input to conceptual awareness, and Kant’s claim is that intuition can only *be* an input to conceptual awareness if it is subject to some spontaneous activity. The synthesis of apprehension is then introduced as one branch of this activity — specifically, as the first stage in a threefold synthesis that culminates in ‘recognition in the concept’ (ibid.). The question that apprehension is introduced to answer, it thus seems, is not how intuitions come into the mind at all, but how they could be grounds of cognition, which always requires a concept.

In this same passage, Kant distinguishes between the spontaneous synthesis required to move from intuition to cognition, and a further act, to which the synthesis ‘corresponds’ (A97), which he ascribes to ‘sense’ insofar as it ‘contains a manifold in its intuition’ (A97; A94) — namely, *synopsis*. Readers who want to preserve a form-imparting role for apprehension in the generation of intuition have often wanted to downplay synopsis as an act that merely ‘gives’ a disorganized and undifferentiated manifold (eg Kemp Smith (1918: 226–27; Paton 1936: 347), effectively relegating it to the status of a matter-giving act in the generation of intuition. But the etymology of this term — literally, seeing together — immediately suggests that the act has a unifying function. Moreover, as Tolley has emphasized (2014: 122–23), Kant goes on to attribute

to intuition an ‘absolute unity’ that exists prior to the synthesis of apprehension (A99). What this suggests, then, is that synopsis is what produces the ‘absolute unity’ of an intuition — that is, it is synopsis that arranges the manifold of intuition into a spatiotemporal structure. But if that is so, then there is no role for apprehension to play in the generation of intuition, because the role it was supposed to play by the dominant reading is already played by synopsis.⁷⁹

Several further pieces of evidence suggest that apprehension does not generate intuition. First, in Kant’s discussion in the A-Deduction, Kant tells us that apprehension is ‘directed straightaway toward the intuition [*gerade zu auf die Anschauung gerichtet ist*]’ (A99), which strongly suggests that intuitions are the *inputs* to apprehension, not its outputs. Likewise, in the Anticipations, Kant says that an empirical intuition is apprehended when it is ‘taken up into empirical consciousness’ (B202), which, again, implies that the intuition is already there to be taken up into consciousness prior to apprehension. And when Kant introduces the doctrine of apprehension in the B-Deduction, he defines it as follows:

[B]y the **synthesis of apprehension** I understand the composition of the manifold in an empirical intuition, through which perception [*Wahrnehmung*], i.e., empirical consciousness of it (as appearance), becomes possible.

B160

Whereas the previous passages identified intuition as the *input* to apprehension, here we have an identification of what is plausibly its *output* — namely, *perception* (*Wahrnehmung*). Perception is here cast as *empirical consciousness of* the intuition, which suggests that perception and intuition are distinct from one another, and Tolley has made a very plausible case for thinking that both Kant and his predecessors systematically distinguish these two notions (Tolley 2016a).

⁷⁹ This reading of the significance of synopsis is defended by Mattherne (2015), Tolley (2014), and Tracz (2021).

We thus have good reasons to distance ourselves from the standard reading. And further evidence for thinking that apprehension is integral to Kant's account of empirical concept formation comes in the third Critique, where Kant distinguishes 'three actions of the self-active faculty of cognition', which, he says, pertain to 'every empirical concept' :

1. The **apprehension** (*apprehensio*) of the manifold of intuition; 2. The **comprehension**, i.e., the synthetic unity of the consciousness of this manifold in the concept of an object (*apperceptio comprehensiva*); 3. The **presentation** (*exhibitio*) of the object corresponding to this concept in intuition.

EE 20:220

Apprehension of the manifold pertains to every empirical *concept*, not to every intuition. I conclude, then, as against the standard reading, that the role of apprehension is not to explain the ascent from sensation to intuition; it is, rather, to explain the ascent from intuition to concept. And we have seen that it plays its role in this latter ascent by producing 'perceptions', states of mind through which we are empirically conscious of the manifold contained in empirical intuitions.

More precisely, my general proposal will be that apprehension plays its role in the generation of concepts by supplying their *matter*. I will argue in the next chapter that it plays this role even with respect to pure concepts, but for present purposes, it is fairly straightforward to motivate this proposal as a claim about *empirical* concepts. We have seen that concepts are only empirical insofar as they contain sensations in their matter. But we have also seen that a representation only qualifies as part of the matter for a possible concept if it is present in consciousness. Thus, to bring forth the matter for an empirical concept, we need an act that brings sensations to consciousness. And since apprehension produces empirical consciousness of empirical intuitions — that is, consciousness of intuitions precisely in respect of that which renders

them empirical, i.e. their sensational matter — apprehension is perfectly suited to play the role of matter-giving act for the case of empirical concepts.

In our study of empirical concepts throughout this chapter, we will see this suggestion borne out, and as we go we will learn more about apprehension itself. But it is worth going in with a sense both of what apprehension is and what it is not, and an understanding of why it is suited to play the general role that I believe it is playing.

2. Given Empirical Concepts

Let us begin, then, with given empirical concepts. Recall, since they are *given* concepts, the act that generates their matter must not be subject to the power of choice; and since they are *empirical* concepts, the matter out of which they originate must include sensation. In view of the matter-content linkage I described in the introduction to this part of the dissertation, the project in working back to an account of both the matter and matter-generating acts for these concepts will be to start by motivating an account of their contents and then move to the levels of matter and material origin.

Let us begin by reviewing the evidence that Kant accepts a class of given empirical concepts:

The result of all that has been said, then, is that our concepts are either given or made. The given ones are either empirical concepts or concepts of the understanding.

WL 24: 918

All concepts are of two kinds, namely:
conceptus dati, and these are either
empirici – given *a posteriori*
rationati – given *a priori*

LDW 24: 756

All concepts, *as to matter*, are either given (*conceptus dati*) or made (*conceptus factitii*). The former are given either *a priori* or *a posteriori*.

JL 9: 93

Clearly, then, we have reason to think that Kant situates a kind of empirical concept as given rather than made.

As I investigate the content of these concepts, my guiding claim will be that given empirical concepts must be distinguished from a different, more familiar species of empirical concept, namely, the ‘concepts of experience’ [*Erfahrungsbegriffe*] that constitute the mental state Kant calls ‘experience’ [*Erfahrung*]. Kant defines experience as ‘cognition through connected perceptions’ (B161), or simply as ‘empirical cognition’ (B165-66). In the *Prolegomena*, he isolates a specific kind of empirical judgment that must occur ‘before experience can arise from perception’ (*Prolog* 4:300). Such a judgment is thus a ground of cognition — it must occur in order for empirical cognition, or experience, to take place — and Kant calls it a judgment of experience [*Erfahrungsurteil*]. A *concept* of experience [*Erfahrungsbegriff*], I suggest, is a specific kind of empirical concept whose content enables it to make up this specific kind of empirical judgment. And the claim that I want to press in my treatment of given empirical concepts is that *Erfahrungsbegriffe* do *not* exhaust the class of empirical concepts: Kant, I will argue, recognizes a distinct class of empirical concepts whose content is *not* suited to feature in judgments of experience, and he identifies this non-experiential class of empirical concepts with given empirical concepts.

Let me begin by offering some textual evidence for thinking that Kant recognizes a class of non-experiential empirical concepts. Consider, first, the following passage, in which Kant is discussing the conditions under which judgments of experience are possible:

If one analyzes all one's synthetic judgments insofar as they are objectively valid, one finds that... they would not be possible if, *over and above the concepts drawn from intuition*, a pure concept of the understanding had not been added under which these concepts had been subsumed and in this way first combined into an objectively valid judgment.

Prolog 4: 301

This passage distinguishes between two kinds of empirical concepts: those that are 'drawn from intuition', and those that arise from 'subsuming' the concepts drawn from intuition under pure concepts of the understanding. Only concepts of the second kind make judgments of experience possible. The concepts 'drawn from intuition', on the other hand, are not sufficient to make judgments of experience possible. This passage thus suggests that concepts of experience depend upon a prior kind of empirical concept — one that bears some especially close relation to intuition — that does not itself feature within experience. Two of Kant's handwritten notes, both of which Adickes dates to the critical period, lend further support to this two-tiered picture of empirical concepts:

Empirical concepts are therefore not drawn from experience; rather, they are first part of what make it possible. A concept of experience already presupposes empirical concepts

Empirische Begriffe sind darum nicht aus der Erfahrung gezogene, sondern sie zum theil erst möglich machende Begriffe. Ein Erfahrungsbegriff setzt schon empirische Begriffe voraus

R 2858: 16: 548

Empirical Concept: 1. Of Sensation. 2. Of Cognition; the latter are called concepts of experience, for experience already presupposes concepts of laws (of nature).

Empirischer Begriff: 1. Der Empfindung. 2. Der Erkenntnis; letzterer heißt Erfahrungsbegriff, denn Erfahrung setzt schon Begriffe der Gesetze voraus (der Natur).

R 2861, 16: 549

According to the first passage, concepts of experience 'already presuppose' a more basic kind of empirical concept that prefigures experience and makes it possible. The second passage then divides the domain of empirical concepts into concepts 'of sensation' and concepts 'of cognition',

identifying the latter as concepts of experience. What we are seeing, then, is the consistent suggestion that the domain of empirical concepts includes a class of ‘non-experiential’ concept that is distinct from and presupposed by the *Erfahrungsbegriffe* that make up the intellectual content of experience. The second of these passages also suggests that these non-experiential concepts have some special relationship to ‘sensation’. I will pursue both of these leads shortly, but first, I will need to give reasons for thinking that these special, non-experiential empirical concepts comprise the class of given empirical concepts.

The primary piece of evidence supporting this alignment comes in the *Dohna-Wundlacken* transcript. There, Kant is reported as claiming that ‘[e]very concept of experience [*Erfahrungsbegriff*] is made’ (*LDW* 24:753, my emphasis — a claim we can also find in his handwritten notes at *R* 2910, 16: 572). But since the given-made distinction is exclusive, and since Kant is committed to the existence of a class of given empirical concepts, it follows that given empirical concepts are not themselves concepts of experience (since, after all, every such concept is made). One might try to suggest that Kant is simply using ‘*Erfahrungsbegriff*’ as a synonym for ‘empirical concept’ in this passage, and that his claim that all *Erfahrungsbegriffe* are made is really a blanket assertion (contrary to other passages) that every empirical concept is made, but that reading is untenable since Kant goes on almost immediately afterwards to distinguish a class of given empirical concepts. It seems, then, that whatever given empirical concepts are, they are not the *Erfahrungsbegriffe* that make up experience, and the claim I will now pursue is that they are in fact the non-experiential concepts that *Erfahrungsbegriffe* presuppose.

Returning to the *Prolegomena*’s discussion, the text distinguishes judgments of experience from a lower kind of empirical judgment, which prefigures but falls short of the judgment of experience, called a ‘judgment of perception’ [*Wahrnehmungsurteil*] (*Prol* 4: 298). Though

judgments of perception prefigure judgments of experience — Kant says that ‘[a]ll our judgments are at first mere judgments of perception’ (ibid.) — they lack the objective validity characteristic of judgments of experience and hold ‘only for us, i.e., for our subject’ (ibid.). Now, it is striking that just as Kant splits the domain of empirical concepts — into concepts of experience, on the one hand, and the non-experiential concepts that such concepts presuppose, on the other — he also splits the domain of empirical judgment — into judgments of experience, on the one hand, and the non-experiential judgments that such judgments presuppose, on the other. The natural suggestion at this point is to connect these two distinctions by holding that whereas concepts of experience give content to judgments of experience, given empirical concepts — for parity, we could dub them ‘concepts of perception’ — give content to judgments of perception. More specifically, even if some of the concepts in a judgment of perception are identical to those in a judgment of experience, insofar as the difference between the two kinds of judgment is traceable to a difference in their constituent concepts, there must be some distinctive conceptual element in the judgment of perception that explains why it does not qualify as a judgment of experience. This conceptual element will be the given empirical concept, or concept of perception.

In his discussion, Kant splits judgments of perception into two kinds: those that can, and those that cannot, ‘become’ judgments of experience. Interestingly, the judgments that can become judgments of experience do not seem to differ from their corresponding judgments of experience at the level of their constituent concepts; rather, the status of the judgment depends either on the subject’s epistemic relation to it or on the logical relation between its constituent concepts. The judgment that ‘air is elastic’, for example, can count as a judgment of perception or a judgment of experience depending on whether the subject treats the connection of concepts as a universal one (*Prol* 4: 300), and the conditional judgment ‘If the sun shines on the stone, it becomes warm’

becomes a judgment of experience when it is reconfigured as the categorical judgment that ‘the sun warms the stone’ (*Pröl* 4: 301n). In neither of these cases is it the conceptual constituents of the original judgment that preclude it from the status of a judgment of experience. However, there is another kind of judgment of perception that Kant says could never become a judgment of experience. No transformation of the logical form of such a judgment or the subject’s epistemic relation to it would change the status of the judgment, because its status as judgment of perception reflects a feature of its *content*, which could not be transformed without obliterating the judgment itself. Judgments of this kind, Kant says, are such that they ‘refer merely to feeling — which everyone acknowledges to be merely subjective and which must therefore never be attributed to the object’ (*Pröl* 4: 299n). Now, it is a judgment’s content that determines what it does or does not ‘refer to’ or concern, and so there must be something internal to the content of the judgment in virtue of which it refers merely to feeling and hence cannot take on objective validity. This something, I propose, is the given empirical concept.

Kant gives three examples of such judgments: ‘the room is warm’; ‘wormwood is repugnant’; ‘sugar is sweet’ (*Pröl* 4: 299). Since quite clearly the concepts of a room, of wormwood, and of sugar, are not such as to debar a judgment from ever referring to an object, our candidate concepts of perception or given empirical concepts are <warm>, <repugnant>, <sweet>. These concepts, I propose, represent sensations in a subject (or the feelings produced by those sensations).⁸⁰

This proposal is, I think, correct as far as it goes, but it is consistent with two importantly different ways of spelling out the contents of these concepts, which we must choose between. The question is whether given empirical concepts represent i) the perceptible properties of things, or

⁸⁰ For feeling as the effect of sensation, see A29/B44.

ii) the sensible manifestation *of* those perceptible properties. To get a handle on this question, it is beneficial to briefly visit Kant's Anticipations of Perception. In the first edition, Kant expresses the 'principle' of the Anticipations as follows:

In all appearances the sensation, and the **real**, which corresponds to it in the object (*realitas phaenomenon*), has an **intensive magnitude**, i.e., a degree.

A165/B207

Notice that Kant here distinguishes between the sensation itself and the 'real' in the object of perception; he further claims that these two items stand in a relation of correspondence and assigns each an intensive magnitude. The same distinction is present in the B-edition:

[S]ensation in itself is not an objective representation... but yet it still has a magnitude..., thus it has an **intensive magnitude**, corresponding to which all objects of perception, insofar as they contain sensation, must be ascribed an **intensive magnitude**, i.e., a degree of influence on the sense.

B208

Kant here distinguishes between two different levels of 'reality': first of all, there is the 'real of the sensation, as merely subjective representation, by which one can only be conscious that the subject is affected' (B207). The real of sensation has a measurable degree of vividness and hence can be thought of as a magnitude. Then, distinct from this sensation-level reality, the objects that affect the senses so as to produce the relevant sensations are accorded their *own* reality, understood as their 'degree of influence of the sense', which systematically varies with (hence corresponds to) the degree of subjective reality possessed by the sensations the object excites.

This distinction allows us to parse the different options for thinking about the content of given empirical concepts. We have situated the content of these concepts at the level of sensation,

but that leaves us with a choice between holding i) that they represent the sensations produced in us by the thing, as individuated by their degrees of subjective reality, or ii) that they represent the properties in the thing that produce those sensations, as individuated by their degree of influence on the senses. Whereas on the second model, given empirical concepts would represent features of objects, on the first, they would be confined to representing purely subjective features, albeit ones that corresponded to features in the object. The choice here is between understanding a concept such as <warmth> as representing a mere subjective sensation, or as additionally representing the property in a thing in virtue of which it is apt to cause the relevant sensation.

Once we view the doctrine of given empirical concepts in the context of the doctrine of judgments of perception, it becomes clear that Kant must restrict the significance of these concepts to the subjective level. If <warmth> were already the concept of a property of a thing, we would have no explanation of why embedding that concept in a judgment would immediately disqualify the judgment from objective validity. In the context of his discussion of judgments of perception, Kant defines an objective judgment as one that expresses ‘not merely a relation of a perception to a subject, but a property of an object’ (*Pröl* 4:298). Since the object-level concept of warmth would precisely be the concept of a property of an object, it would hardly be the kind of concept that precluded a judgment from qualifying as objective in the sense relevant to the distinction between judgments of perception and experience. I conclude, then, that given empirical concepts are concepts of kinds of sensation, conceived of purely as modifications of the mind.

This characterization is correct as far as it goes, but it masks some important complexity within the content of given empirical concepts, which will be relevant to our account of their material genesis. In the Anticipations, Kant argues that every sensation possesses both *magnitude*

(A169/B211) and *quality* (A175/B217). Sensations can be assigned magnitudes for the following reason:

every sensation is capable of a diminution, so that it can decrease and thus gradually disappear. Hence between reality in appearance and negation there is a continuous nexus of many possible intermediate sensations, whose difference from one another is always smaller than the difference between the given one and zero, or complete negation.

A168/B209-10

Every sensation is thus a continuous magnitude because there is an infinite series of possible intensities of the sensation between a given intensity and zero. The specific magnitude of a sensation — its *quantity* — is what distinguishes that sensation from other sensations *of the same kind* — that is, the ‘possible intermediate sensations’ between a given intensity of sensation and total absence. But the specific *quality* of a sensation is what distinguishes it from other sensations *of different kinds*. A specific sensation of blue, for example, differs quantitatively from other sensations of blue, but it differs *qualitatively* from, for example, sensations of *red*, or sensations in different modalities like sensations of *warmth*. Even if two sensations of different kinds each have the same quantity, there remains a qualitative difference between them. Accordingly, the concept of a sensation is *both* a quantity-concept *and* a quality-concept. As a quantity concept, it is the concept of a modification of the mind that can continuously vary from a given intensity down to zero. As a quality concept, it is a concept of a modification of the mind that is different in kind from other such modifications.

For this reason, when we are inquiring into the matter of given empirical concepts, we need to distinguish the matter (and matter-giving acts) that prefigure their status as *quantity* concepts *and* the matter (and matter-giving acts) that prefigure their status as *quality* concepts. And we can also ask which part of the matter contains sensation and thus renders the concept empirical. Kant’s answer will be that only the matter underlying the status of the concept as a quality concept is

empirical; this matter includes sensation and is given to the mind through a specific kind of *apprehension*. The matter for the quantitative part of the content is given *a priori* through an act that Kant calls *anticipation*.

To see Kant's argument for this claim, we need to re-visit the doctrine of apprehension, which looms large in Kant's discussion in the Anticipations (and indeed, throughout the *Analytic of Principles*). In Section 1, I urged, against the standard view, that intuitions are the *inputs* to apprehension, not its outputs. In two important respects, this proposal still stands: first, in no case does Kant hold that intuitions are generated by apprehension, and so it is never the case that intuitions are the outputs of apprehension; second, intuitions are indeed a paradigmatic input to apprehension. However, we need to modify the picture of apprehension slightly, because it turns out that empirical intuitions are not the *only* possible inputs to apprehension. In fact, Kant's discussion of the first two principles of pure understanding in the *Analytic of Principles* is structured around a distinction, within empirical apprehension, between a kind of apprehension that brings *intuition* to consciousness, and a kind of apprehension that brings *sensation* to consciousness. The first kind of apprehension, which Kant discusses in the Axioms of Intuition, is a 'composition of that which is homogenous': it begins by selecting a 'part' of the manifold contained in the intuition, and goes on to combine that part with other parts to produce consciousness of the intuition as a whole. Because the intuition is brought to consciousness through this kind of compositional synthesis, Kant says that it is given as an aggregate or extensive magnitude — that is, a magnitude 'in which the representation of the parts makes possible the representation of the whole' (A162/B203). In the Anticipations, by contrast, Kant discusses 'apprehension by means of sensation', which differs from apprehension of intuition insofar as it 'takes place at an instant': it does not proceed from part to part but instantaneously produces

consciousness of the whole sensation, which means that the sensation is not given through its apprehension as an extensive magnitude (A167/B209). We will discuss this distinction in more detail shortly, but before we do so, we should note that its presence forces us to broaden our definition of apprehension. Instead of thinking of apprehension as the act that brings *empirical intuitions* to consciousness, we should think of it more broadly as the act that brings *representations of sensibility* to consciousness. As we will see in the next chapter, this broadening has the virtue not only of accommodating these two varieties of empirical apprehension but also opening space for a kind of pure apprehension.

Now, the claim that apprehension *can* target sensation might initially sound appealing to the advocate of the standard reading of apprehension, on which apprehension produces intuitions. They might suggest that the apprehension of sensations is what is needed to ‘unify’ sensations into empirical intuitions, and they might accordingly read Kant’s project in the Anticipations as giving an account of the genesis of intuitions. But there is no evidence that this is Kant’s project in the Anticipations (and the title of the section alone gives the lie to this reading: Kant is discussing anticipations of *perception* [*Wahrnehmung*], not intuition). My proposal instead is this: whereas (empirical) apprehension of an intuition produces consciousness of the object (appearance) that corresponds to an empirical intuition, apprehension of a sensation merely brings a sensation to consciousness; it does not generate an image of the appearance corresponding to the intuition in which the sensation is present.

Immediately, this proposal suggests that apprehension of sensation will play a role in giving the matter for given empirical concepts, but Kant argues, negatively, that it *does not* prefigure their status as quantity concepts. Kant, we have seen, claims that sensations have a magnitude insofar as they admit of a *gradual* diminution; but since apprehension of sensations is

instantaneous, whereas their diminution is extended across time (it is gradual), it follows that the feature of sensations in virtue of which they can be assigned quantities is not itself given through apprehension. Kant therefore concludes that the intensive magnitude of sensations is ‘not... encountered in apprehension’ (A168/B210): apprehension does not afford a generation base for the given empirical concept as a quantity concept. Instead, we have access to the quantity-grounding property of sensations *a priori*: ‘all sensations are thus, as such, given only *a posteriori*, but their property of having a degree can be cognized *a priori*’ (A176/B218); this general feature of sensations is thus given through an act Kant calls ‘anticipation’:

[I]f it were supposed that there is something which can be cognized *a priori* in every sensation, as sensation in general (without a particular one being given), then this would deserve to be called an anticipation.

A167/B209

Note, however, that what is given to the mind through anticipation is something that pertains to ‘sensation in general’. Anticipation thus provides the matter for a generic concept of sensation in general, but it does not provide the kind of matter that would allow us to differentiate that concept into specific sensational concepts because the qualitative differences between specific kinds of sensations are unavailable in anticipation:

The **quality** of sensation is always merely empirical and cannot be represented *a priori* at all (e.g. colors, taste, etc.).

A175/B217

It is the quality of sensations, I suggest, that is given through apprehension of sensations. The qualitative feature of a sensation of red that makes it a sensation of red and not, say, of blue, or of warmth, is what must be given through apprehension. In order to form the given empirical concept of redness, then, it is not enough simply to form the general concept of a sensation through *a priori* anticipation; one must also apprehend red sensations in one’s own subject. Kant suggests exactly

this in the *Vienna* transcript, where he is reported as saying that ‘[h]e who wished to have a representation of the color red first had to see the color red’ (*WL* 24: 904).

Recall, also, that as *given* concepts, the matter-giving act underlying given empirical concepts cannot be subject to the power of choice. Thus, the apprehension of sensation that affords the basis for a given empirical concept must be thought of as a natural operation of the imagination, one that it performs whether we want it to or not.

To sum up: given empirical concepts, I propose, are concepts of sensations conceived of as modifications of the mind. The matter for these concepts is given through anticipation — an *a priori* act that grounds the concept of a sensation in general — and empirical apprehension of sensation — an *a posteriori* act that brings sensations to consciousness in respect of their qualities, thus grounding the division of the general concept of sensation into concepts of specific sensation-kinds. These specifications of the general concept of a sensation are given empirical concepts.⁸¹

⁸¹ Let me acknowledge a textual challenge to this proposal. Kant gives very few concrete examples of given empirical concepts, and those he does sound, on their face, like object-level concepts: the concept of a horse (*LB* 24: 253), and the concept of “water as a fluid body” (*WL* 24: 914). How, then, are we to reconcile these examples with the sensation-oriented model I have proposed? The way forward here begins by noticing that Kant recognizes a distinction between a concept and a word that may be associated with it. (Consider: “I do not need to go outside *the concept that I combine with the word ‘body’* in order to find that extension is contained in it” (A7, my italics).) Moreover, Kant also maintains that the concept associated with a word could change without affecting the significance of the word — different people could connect different concepts with the word ‘gold’, for example, yet the word would designate the same object, these differences in conceptual accompaniment notwithstanding (A728/B756). In his discussion of the *Dichtungsvermögen* in his metaphysics lectures (*MM* 29: 881; *MM* 29: 887), we find an explanation for this, for there he is plausibly read as routing the signification-relation between words and the world *via* sensory representations rather than intellectual ones. What makes it the case that ‘Rome’ signifies the city of Rome is that speakers of a language are disposed to involuntarily form imagistic representations of Rome on hearing the word (*MM* 29:887). Now, this means that a word could be associated in a speaker’s mind with a sensation-level concept yet still designate something in the world, provided that that the word is also connected with a sensible representation that itself represents something in the world. Thus, we can disambiguate an expression such as ‘the concept of water’ into i) ‘the concept that represents water’, and ii) ‘the concept associated with the word “horse”’. On the second reading, it would be entirely possible for the concept in question to be a sensation-oriented concept of the sort that I have proposed. So my suggestion is that when Kant describes ‘the concept of water’ and ‘the concept of a horse’ as given empirical concepts, he is talking about the sensation-directed concepts speakers associate with these words, not the object-level concepts that represent the objects these words signify. Support for this suggestion comes from a passage in the

3. Made Empirical Concepts

We move now into the domain of the empirical concepts that Kant situates as *made*. As empirical, these concepts must contain sensation in their matter; as made, the act that brings forth their matter must be an expression of the power of choice. We will see that there are two species of made empirical concepts. First, there are the concepts of experience [*Erfahrungsbegriffe*] with which, I have argued, Kant contrasts the given empirical concepts we have discussed. Second, there is a kind of ‘invented’ empirical concept. Intriguingly, Kant says that concepts of this second kind are invented ‘*a priori*’, their status as empirical concepts notwithstanding, and we will be concerned to understand that claim.

3.1 Concepts of Experience

In our treatment of given empirical concepts, we started from the observation that Kant holds that concepts of experience (*Erfahrungsbegriffe*) are made. This is a claim we find in the Dohna-Wundlacken transcript (*LDW* 24: 753) and in Kant’s handwritten notes: ‘[c]oncepts of experience [*Erfahrungsbegriffe*] are also made, because they determine and connect the object through perceptions that I voluntarily gather [*durch Wahrnehmungen, die ich willkürlich auflese*]’ (*R* 2910, 16: 572). In the previous section, we built up to a characterization of the content and material genesis of given empirical concepts, whose sensation-directed content disqualifies them from featuring in experience. In this section, we will draw on the results of that section to

Canon, to which we will return, where Kant tells us that the ‘few marks’ that are associated with word ‘water’ do not constitute a “concept of a thing” (A728/B756).

build a corresponding account of the content and material genesis of the higher empirical concepts that do constitute experience. I will argue for two claims: first, at the level of content, concepts of experience point beyond the subjective realm to the realm of objects: whereas concepts of perception represent the subjective features of sensations, concepts of experience represent properties of the objects that correspond to those sensations. Secondly, the deliberate ‘gathering’ of perceptions that Kant alludes to, which first gives the matter for these concepts, is, specifically, a process of empirical inquiry.

The *Vienna* transcript contains a helpful description of the *a posteriori* making of an empirical concept, worth quoting in full:

I can also make a concept *a posteriori*, so that the object is given to me in experience. E.g., I have a piece of metal; that is always given *a posteriori*, not made. If I want to have a distinct concept of it, however, then I have to test the metal for all its properties, and in this way I find them through various experiences, which do not lie in the concept; the nature of metal is thus a concept made *a posteriori*.

To make a concept *a posteriori*, then, is to trace given experiences further, and thus to draw out an adequate concept. – This would be nothing more, then, than to extend the concept.

WL 24: 914

I want to dwell on three implications of this passage. First, the passage bears out a suggestion we found above — namely, that concepts of experience presuppose or depend upon the more primitive class of perceptual concepts we have identified with given empirical concepts. Second, it suggests that the concept of experience results when a given empirical concept is, in some sense, ‘extended’ through a process of empirical inquiry. Finally, it also suggests that the result of this extension is a concept whose content is different in kind from that of the original, given empirical concept.

To see the first point, it is important that we come to the passage knowing that Kant distinguishes between given and empirical concepts, for this background allows us to make sense

of the second sentence: ‘I have a piece of metal; that is always given *a posteriori*, not made’. Plausibly, what Kant is describing here as given *a posteriori* rather than made is not the metal itself, as the transcript misleadingly implies (what sense would it make to remind his listeners that the mind does not arbitrarily make a piece of metal?), but a *concept* of metal. This suggests, then, that the starting point for the *a posteriori* making of an empirical concept is some given empirical concept. While this concept would be one that we associate with the term ‘metal’, as a given concept, it would not itself represent metal at the object-level. Instead, it would be a representation of various subjective features of our experience of metal. If we think of the *a posteriori* making of a concept as starting with a given empirical concept, we can make sense of the concluding sentence of the passage, which holds that to make an empirical concept *a posteriori* is ‘nothing more, then, than to *extend* the concept’ (*WL* 24: 914, my emphasis). The making of a concept of experience, then, is modelled as the ‘extension’ of an originally given empirical concept. And since extension cannot take place without something to extend, it follows that concepts of experience presuppose given empirical concepts, just as we saw above.

The second important point concerns the way in which this extension takes place: the extension takes place in relation to experience, and specifically through a process of inquiry. I ‘test the metal for its properties’, which I find ‘through various experiences’. Again, the extension of the concept takes place when I ‘trace given experiences further’. Thus, the *a posteriori* making of an empirical concept is modelled as an *experientially-mediated, inquiry-driven* extension of a given empirical concept.

Finally, there is at least the suggestion of a kind-level difference between the *contents* of the originally given concept and the concept that is ultimately made, for the concept that is made

a posteriori is a concept of ‘the nature of metal’. It is presumably because the *a posteriori* made concept is a concept of the *nature* of the object that it claims to be an ‘adequate’ concept.

The passage goes on to confirm core elements of this model:

A posteriori, however, there are also *factitii conceptus*. If I want to define a concept through experience by clarifying, through experience, what is not contained in my concept, then this must also occur *per synthesin*. I want to produce a concept more extensive than I had; by this means I finally get a concept that consists of marks that I collected *per synthesin* from experience.

WL 24: 915

Once again, the model of ‘extending’ a concept is on display: my aim, in making an empirical concept *a posteriori*, is ‘to produce a concept more extensive than [the one that] I had’. And once again, this extension is experientially-mediated: the originally given concept is extended through ‘marks that I collected *per synthesin* from experience’.

In the first *Critique*, the extension model of *a posteriori* making shows up in several places. Consider the following passage from the *Canon*, which uses an example reminiscent of the example from the transcript:

If one is to judge synthetically about a concept, then one must go beyond this concept, and indeed go to the intuition in which it is given. For if one were to remain with that which is contained in the concept, then the judgment would be merely analytic, an explanation of what is actually contained in the thought... Thus I could analyze my empirical concept of gold without thereby gaining anything more than being able to enumerate what I actually think by means of this word, which would certainly produce a logical improvement in my cognition, but no augmentation or supplementation of it. But I can take the matter that goes by this name and initiate perceptions of it, which will provide me with various synthetic though empirical propositions.

A721-22/B749-50

We start with an empirical concept of gold.⁸² This, I suggest, is a given empirical concept. But if we are to ‘go beyond’ this given concept and thereby augment our cognition, we must ‘take the

⁸² Kant’s choice of example here is reminiscent of a passage in the *Blomberg Logic*, which identifies the concept of the ‘essence of gold’ as one that is arrived at ‘per synthesin’: ‘Through analysis I merely bring

matter that goes by this name and initiate perceptions of it'. This talk of initiating perceptions of the matter should call to mind the talk in the *Vienna transcript* of 'testing the metal for all its properties' (*WL* 24: 914). In 'going beyond' the given concept of gold to the intuition through which the concept is given, and in running our tests by deliberately 'initiating perceptions' of the matter that is given in this intuition, we are engaged in the experientially-mediated extension of a given empirical concept into a concept of experience.

Later in the passage, we find another hint of this extension model, which also lends support to the suggestion that this extension produces a concept whose content is different in kind from the original:

[W]hen, e.g., water and its properties are under discussion, one will not stop at what is intended by the word "water" but rather advance to experiments, and the word, with the few marks that are attached to it, is to constitute only a **designation** [Bezeichnung] and not a concept of the thing

A728/B756

I suggest that the 'few marks' that are attached to the term 'water' are given empirical concepts. Though these marks are attached to a term that itself designates water, they do not themselves constitute a 'concept of the thing' [*Begriff der Sache*]. Unsurprisingly, then, if we want to understand 'water and its properties', studying the marks that are attached to the word will not get us very far. Instead, we 'advance to experiments'. Advancing to experiments should put us in mind of the deliberate testing of metal for its properties in the *Vienna transcript*, or the deliberate 'initiation of perceptions' of gold from earlier in the passage. In each case, what I suggest Kant is describing is the experientially-mediated process by which we extend a given empirical concept

the marks of a cognition under more universal marks, into which I previously had insight *per analysin a priori*. But *per synthesin* I learn in addition new marks of a cognition *a posteriori*, eg., with the concept of the essence of gold' (*LB* 24: 132).

so as to produce a concept of experience, and this particular passage suggests that it is this transition that first produces a ‘concept of the thing’.

That there should be a content-level transition of this sort makes sense if we recall the way that Kant distinguishes between judgments of perception and judgments of experience. Judgments of perception (or at least the specific variety of such judgments that cannot become judgments of experience) ‘refer merely to feeling — which everyone acknowledges to be merely subjective and which must therefore never be attributed to the object’ (*Prol* 4: 299n); judgments of experience, by contrast, are *objective* insofar as they represent ‘not merely a relation of a perception to a subject, but a property of an object’ (*Prol* 4: 298). If the content of a judgment of experience is made up out of the contents of concepts of experience, then such concepts will presumably need to represent properties that could be instantiated by entities at the object-level (that is, by *things* [*Dinge*]).

To characterize this object-directed content in more detail, and to cash out the sense in which concepts of experience ‘extend’ given empirical concepts, it will help to recall Kant’s distinction between sensation, as a modification of the mind, and the objects that correspond to sensation, to which Kant ascribes a ‘degree of influence on the sense’ corresponding to the intensive magnitude of the sensation itself. My suggestion for understanding the division of cognitive labor between concepts of perception and concepts of experience is that whereas the former represent subjective features of sensation, the latter represent object-level features that correspond to sensations. In forming a concept of experience, we ‘extend’ the given empirical concept by co-opting its content into the content of a more complex concept, which represents an object-level property that corresponds to the subjective sensation picked out by the given empirical concept. The given empirical concept then constitutes the empirical ‘core’ of the concept of

experience. Because the given empirical concept has sensation in its matter, and because it is part of the concept of experience, it follows that the concept of experience has sensation in its matter.

The question, though, is how we position ourselves to make the representational transition from the sensation-level to the level of corresponding realities. What is the matter that underlies the status of a concept of experience as an object-level concept? This is not a question I can fully answer at this point, because this matter is not itself part of the empirical matter of the concept. The concept of an object that corresponds to and is distinct from our representations has a pure intellectual source, which we will begin to characterize in Chapter 5 and return to in Chapters 7 and 8; this element of the content of the experiential concept does not grow out of empirical matter. If the only conceptual matter came from sensation, therefore, concepts of experience would be impossible, for we would never form the idea of an object corresponding to and distinct from our sensations.

Nevertheless, even at the empirical level, the matter of these concepts is distinctive. All of the formulations we have looked at so far suggest that the matter for an experiential concept includes a *plurality* of empirical elements. Kant says that the matter for the concept is assembled through ‘various experiences’ (*WL* 24: 914), that we collect the matter for an experiential concept by initiating ‘perceptions’ [*Wahrnehmungen*] (A721-22/B749-50), that the eventual concept consists of ‘marks that I collected *per synthesin* from experience’ (*WL* 24: 915, my italics). What this suggests, then, is that the empirical matter for a concept of experience consists of a multiplicity of different apprehended-sensations, each of which is picked out by a distinct given empirical concept. Correspondingly, the *formation* of such a concept would proceed in two stages: first, through the formation of a complex sensation-level concept, whose content co-opts the contents of each of the given empirical concepts corresponding to the different sensations in the generation

base; second, through the formation of a concept of an object-level property that corresponds to the complex sensible profile picked out by the complex sensation-level concept. As an example, the object-level concept of a tomato is not simply the concept of the kind of object liable to produce red sensations; we think of a tomato as an object with a far richer and more complex sensory profile, and the content of the experiential concept will include a complex sensation-level concept that picks out this complex profile. We can thus recognize a second sense in which a given empirical concept is extended through the formation of an experiential concept: not only is its content extended in the sense that it is related to an object; its content is also extended in the sense that it is combined with further given empirical concepts to form a complex sensation-level concept.

We thus have a two-tiered model of the content of the concept of experience. First, there is the empirical core of the concept, which is a complex sensation-level concept that represents a complex sensory profile. Second, there is a pure component of the content, in virtue of which the sensory profile represented by the sensation-level concept is related to a corresponding object. This model is borne out in the following passage:

Not merely in judgments... but even in concepts is an origin of some of them revealed *a priori*. Gradually remove from your experiential concept [*Erfahrungsbegriff*] of a **body** everything that is empirical in it — the color, the hardness or softness, the weight, even the impenetrability — there still remains the **space** that was occupied by the body (which has now entirely disappeared), and you cannot leave that out. Likewise, if you remove from your empirical concept of every object, whether corporeal or incorporeal, all those properties of which experience teaches you, you could still not take from it that by means of which you think of it as a **substance** or as **dependent** on a substance (even though this concept contains more determination than that of an object in general). Thus, convinced by the necessity with which this concept presses itself on you, you must concede that it has its seat in your faculty of cognition *a priori*.

B5-B6

The content of the concept of body, as a concept of experience, can be factored into two levels. At the empirical level, the concept represents ‘all those properties of which experience teaches you’ — Kant lists color, hardness and softness, weight, impenetrability. These concepts, I propose, are the sensation-level concepts that combine to form a complex concept of a sensory profile. There is then a level of content that has an origin not in experience but in ‘your faculty of cognition *a priori*’. And this *a priori* content includes, in addition to spatial content, ‘that by means of which you think of it as a **substance** or as **dependent** on a substance’. There is a distinction, then, between the complex of empirically-grounded concepts making up the concept, and the additional *a priori* content ‘by means of which’ we relate the sensory profile represented by this sensation-level concept to something at the ontological level of substance and accident.

If this picture is correct, and the specifically empirical matter for an experiential concept consists of a plurality of apprehended-sensations (out of which we subsequently form the complex sensation-concept that forms the empirical core of the *Erfahrungsbegriff*), then the matter-giving act must be one that groups together these sensations. Now, since the concept is arbitrarily made as to matter, this act must be voluntary, and Kant hints in this direction when he says that the given empirical concept is extended through a process of experiment or testing. Although it is voluntary, though, I do not think that what Kant has in mind here is anything particularly cognitively sophisticated: at its most basic, the testing and experimentation he describes consist in noticing that two or more sensations of different kinds frequently co-occur in consciousness or follow one another. The starting point of an ‘experiment’, for example, might be the set of visual sensations produced by looking at a red tomato; the experimental intervention might be: eating the tomato; and the experimental finding, corroborated by repeat experiments, is that a given set of gustatory sensations typically co-occur with a given set of visual and olfactory sensations. These sensations

would then be grouped together as matter for the complex sensational concept that forms the empirical ‘core’ of the given empirical concept. The deliberate nature of this process explains the status of the concept as one that is arbitrarily made rather than given as to its matter.

Now, the results of these matter-generating ‘experiments’ are apt to be represented in the ‘judgments of perception’ [*Wahrnehmungsurteile*] that Kant discusses in the *Prolegomena* and elsewhere. A judgment of perception take place when I ‘compare... perceptions and connect them in a consciousness of my state (*Pröl 4: 300*); it is, Kant says, ‘merely a connection of perceptions within my mental state, without reference to the object’ (*ibid.*). In Chapter 1, I argued that, on Kant’s view, judgment compares concepts *by* relating them to an object. The object of the judgment is the medium of the comparison: in its most basic form, a judgment represents two concepts as being co-instantiated in all, some, or none of a given set of objects. Although there is, internal to the judgment, a distinction between logical subject and logical predicate, the real subject of the judgment is the object in relation to which the two concepts are compared, with respect to which both concepts function predicatively. The real subject of a judgment of perception, according to the passage above, is not an object of experience (that is, an object corresponding to and distinct from my consciousness), but a *state* [*Zustand*] of my mind. In the judgment of perception, concepts are compared and connected insofar as they are instantiated together within a given state of consciousness. And the kinds of concepts capable of being compared in this way — that is, the kinds of concepts capable of being predicatively applied to a state of consciousness — are the given empirical concepts that represent sensation-kinds as opposed to corresponding object-level realities. Accordingly, when we discover through ‘experiment’ that two sensation-kinds typically occur together within a single state, we can express this discovery by predicating two sensation-level concepts of a single state of mind within a judgment of perception. Judgments

of perception are thus byproducts of the matter-giving acts by which we assemble the empirical matter for a concept of experience, and this, I propose, is why Kant thinks of such judgments as an essential part of the cognitive assent from sensation to experience, something that must take place before the judgment of experience proper is possible.

3.2 Empirical Concepts Made A Priori

There is a final class of empirical concept, which comprises a second species of made empirical concept. Consider the following passage from the *Vienna* transcript:

All of mathematics defines *per synthesin*; it does not define given concepts, but concepts that are made. I want to think a figure, says the mathematician, that looks so and so, and is to be called such and such. We can also have a concept *a priori factitius*, the materials for which experience has given, while the concept itself has been made. E.g. Let one think of an unconquerable fortification, the like of which does not exist at all. The materials, such as moats, stone – lie in experience. The concept itself is *factitius*. This is how it happens with someone who invents a new instrument.

WL 24: 915

We can combine ‘materials’ that experience has given to form arbitrary empirical concepts. These ‘materials’, I think, are themselves concepts of experience. For example, we can combine various empirical concepts to form the concept of an unconquerable fortification. Since each concept of experience rests on a complex sensational concept, and since invented empirical concepts rest on a plurality of concepts of experience, it follows that the empirical ‘core’ of these invented concepts is a set of complex sensational concepts. This gives rise to an important distinction between invented empirical concepts and concepts of experience. For, unlike in the case of a concept of experience, there is no guarantee that the set of sensations underlying the empirical core of an invented empirical concept has ever occurred together in consciousness, or that they ever could so

occur. Thus, there is no guarantee that there is or could be an object corresponding to the complex empirical content of the concept:

Invented concepts of this sort cannot acquire the character of their possibility *a priori*, like the categories, as conditions on which all experience depends, but only *a posteriori*, as ones given through experience itself, and their possibility must either be cognized *a posteriori* and empirically or not cognized at all.

A222/B269-270

By the time one has formed a concept of experience, one has already secured the possibility of its object, because the act of experimentation that produces the empirical matter for the concept involves the recognition that the set of sensations that underlie the concept can indeed occur together within a single state of consciousness. In contrast, nothing in the formation of invented empirical concepts secures the possibility of an object corresponding to the set of sensations underlying the concept, because nothing in the formation of the concept guarantees that those sensations could co-occur in consciousness. Thus, the act of forming the concept is to be distinguished from the act that would ‘cognize its possibility *a posteriori*’.

Nevertheless, this kind of arbitrary combination of empirical concepts need not be confined to aimless daydreaming; it is also the act that prefigures the invention of new instruments. In the *Critique*, Kant in fact uses the concept of a recently invented instrument as his main example of a non-constructible arbitrary concept:

Since therefore neither empirical concepts nor concepts given *a priori* can be defined, there remain none but arbitrarily thought ones for which one can attempt this trick. In such a case I can always define my concept: for I must know what I wanted to think, since I deliberately [*vorsätzlich*] made it up, and it was not given to me either through the nature of the understanding or through experience; but I cannot say that I have thereby defined a true object. For if the concept depends upon empirical conditions, e.g., a chronometer [*Schiffsuhr*], then the object and its possibility are not given through this arbitrary concept; from the concept I do not even know whether it has an object, and my explanation [*Erklärung*] could better be called a declaration (of my project) than a definition of an object.

A729/B757

Kant here gives an example of an object that had only recently been invented. The concept is ‘deliberately’ made up, hence qualifies as made, but the act through which this configuration takes place, he says, is more aptly described as the ‘declaration’ of a project than the definition of an object.⁸³ We set ourselves the task of creating something new, and it is in the context of setting this task or declaring this project, that we gather together the matter for a new concept (in this case, the concepts of a ship and a clock). The reason that this gathering does not qualify as a definition, Kant holds, is that just setting ourselves the task does not guarantee that it can be completed, and so nothing in the synthesis that generates the matter for the concept puts us in a position to decide whether there could ever be an object to which the resultant concept applies.

Now, these concepts differ from the others that we have studied insofar as they are generated by combining *concepts*. This suggests that Kant’s account of the logical acts of comparison, reflection, and abstraction will not be relevant here. That account was designed to explain how concepts could be formed out of *nonconceptual* matter, how the form of universality could be imparted on intrinsically nonconceptual representations. While this limits Kant’s account of the logical acts, it does not do so in a very damaging way since these concepts are clearly derivative from the concepts that are supposed to be covered by the logical acts account. If the account can go through for the concepts it is designed to cover, it will still offer an explanation of how conceptual consciousness is possible in the first place.

Before leaving this class of arbitrary concepts, we need to introduce one important detail. We have seen that Kant uses the empirical-pure distinction to draw a contrast about the constituents of a concept’s matter. But in his discussion of arbitrary concepts, he employs the *a priori-a posteriori* distinction to draw a different contrast. Here, what is at stake is not the constituents of

⁸³ In hand-written notes, Kant experimented with the term ‘declaration’ as a general term for the act whereby concepts are made (see R 2920, 16: 576-77; R 2951, 16: 585).

a concept's matter, but the nature of the act through which the concept's matter is given. When Kant introduces the concept of an unconquerable fortification (which he bands together with the concepts of new instruments produced through declaration), he does so by saying that '[w]e can also have a concept *a priori factitius*, the materials for which experience has given' (*WL* 24: 915). The concept is made *a priori* and yet its matter is empirical. Thus, even though the concepts of a chronometer and, say, the experiential concept of water, are both arbitrary empirical concepts, they differ with respect to the acts through which their matter is given. Whereas the concept of experience is made *a posteriori* (*WL* 24: 914), the concepts we have been discussing in this section are 'made *a priori*', their empirical matter notwithstanding.

Kant's claim, then, is that the experimentation that generates the matter for a concept of experience is *a posteriori*, whereas the declaration that generates matter for the concept of an invention is *a priori*, notwithstanding the fact that both concepts rest on empirical matter. What exactly is the difference here? What is at issue here is whether the matter-generating act requires any direct exposure to sensation on the subject's part. In the case of experimentation, it does: I test the metal for its properties, for example, thereby voluntarily initiating the sensations that enter into the generation base for the new concept. In declaration, by contrast, I combine already-formed concepts, and while it is true that those concepts themselves, as empirical, depended on an empirical matter, I do not have to produce any sensation in myself in order to bring these concepts into the matter for a further concept. Thus, the matter-generating act is not *itself* mediated by sensation, even though the matter thereby assembled ultimately traces back to sensation.

Conclusion

In this chapter, I have argued that Kant distinguishes three materially-distinct kinds of concepts within the domain of empirical concepts: given empirical concepts, concepts of experience, and invented empirical concepts. Just drawing this distinction already goes beyond much existing literature, for while there is a consensus that Kant draws numerous consequential distinctions within the class of *pure* concepts, his theory of empirical concepts is typically treated as monolithic. That Kant draws this distinction is one thing; its basis is another. In closing, I want to advertise two benefits of the interpretation I have proposed.

First of all, the findings above allow us to advance the debate on Kant's account of the relationship between judgments of perception and judgments of experience. Readings of this distinction can be divided according to whether or not they recognize a fundamental semantic discontinuity between the two kinds of judgment. *Semantic continuity* readings hold that both kinds of judgments represent the objective world, locating the difference between them in some feature of the subject's psychology or the judgment's epistemic standing. For example, on Allison's reading (Allison 2015, 298–306), a judgment of perception is a 'provisional judgment' about some object-level state of affairs, which requires further investigation before it can qualify as a judgment of experience. On Longuenesse's reading, a judgment of perception represents an inductively observed correlation between two sets of object-level events, whereas a judgment of experience represents a causal connection between them (Longuenesse 1998, 167–197). On neither of these readings is there a meaningful ontological difference between the kinds of entities that the two judgments represent. Opposed to such readings are *semantic discontinuity* readings, which maintain, as I have done, that judgments of perception represent a different region of reality to judgments of experience — the inner world of a subject's mind rather than the intersubjectively accessible objects of experience. A recent proponent of this view is Janum Sethi, who argues

forcefully that judgments of perception “...should not be understood as insufficiently justified judgments about perceived objects, but rather, as judgments about *perceptions* that do not represent what the perceptions are *of* as an object independent of the perceptions” (Sethi 2020: 2). The reading that I have developed clearly falls into the camp of semantic discontinuity readings; however, it is importantly different from the version of the reading that Sethi proposes.

The difference comes down to the fact that, on my reading, what explains the semantic difference between the two kinds of judgments is a corresponding semantic difference at the level of their constituent concepts. For we have seen that on my reading, judgments of perception — at the very least, the class of such judgments that Kant says refer merely to feeling — recruit concepts that are different in kind from the concepts that feature in judgments of experience.⁸⁴ On Sethi’s model, this is not so. For Sethi, the way in which judgments of perception target a subject’s mental states is *not* through the deployment of concepts that represent intrinsic features of those states, but instead through the deployment of concepts that represent the contents of those states. So, for example, she proposes the following as an example of a judgment of perception: “My representation of the rooster crowing is followed by my representation of the smell of coffee” (Sethi 2020, 7). Here, the concepts used to specify the contents of the mental states — <rooster>,

⁸⁴ Note that I want to remain agnostic on whether my strategy can be applied to every instance of what Kant calls a ‘judgment of perception’, including those judgments of perception that ‘can’ become judgments of experience. The difficulty with these cases is that it is not obvious that the judgment of perception contains different conceptual constituents to its corresponding judgment of perception. This difficulty is particularly acute for the example ‘Air is elastic’, which Kant says can qualify as either a judgment of perception or a judgment of experience (*Pröl* 4: 299). To accommodate this example, my reading would need to claim that the sentence ‘Air is elastic’ is in fact ambiguous between two judgments, one which combines given concepts of sensory profiles, the other of which combines experiential concepts. Unsurprisingly, given that she wants there to be a fundamental semantic discontinuity between all judgments of perception and judgments of experience, Sethi also pursues this disambiguation strategy (Sethi 2020: 9). For present purposes, I will not attempt to show that my strategy can be extended to cover all cases. If it cannot, then my reading would require us to attribute Kant a disjunctive account of judgments of perception (on which they are either semantically discontinuous from judgments of experience *or* lack some relevant epistemic feature of the sort that readers such as Allison point to). It is not obvious to me why such an account should be rejected out of hand.

<crowing>, <coffee>, etc. — are all familiar object-level concepts; it is simply that these concepts are re-purposed to refer to mental states because they are employed to describe the contents of those states. In this respect, as she notes (Sethi 2020, 6), her account resembles the account of Prauss (1971). Prauss likewise holds that judgments of perception refer to a subject's inner states, but he claims that the way they do this is by enclosing ordinary object-level concepts within an 'It seems that...' operator (Prauss 1971: 234), in virtue of which, he claims, those concepts are 'used' but not 'applied' (Prauss 1971: 251–253). Thus, on both Prauss' and Sethi's versions of the semantic discontinuity reading, the explanation of the semantic discontinuity between the two kinds of judgment is that in a judgment of perception, ordinary object-level concepts are re-purposed somehow to represent features of mental states. But against both of these authors, I trace the discontinuity to a distinction between orders of empirical concept. Judgments of perception do not target the inner world by recycling ordinary object-level concepts; they do so, I have argued, because they involve an entirely distinct class of empirical concept — the concepts 'of sensation' that Kant remarks in his handwritten notes are presupposed by concepts of cognition or *Erfahrungsbegriffe*.

Secondly, I want to suggest that my way of distinguishing given empirical concepts from *Erfahrungsbegriffe* allows us to advance the debate about whether Kant was a conceptualist about intuition. While my own position departs from conceptualism, there seems to me to be an interpretive insight driving the position that nonconceptualists have difficulty acknowledging, which is this: it seems implausible to hold that the only operation of the intellect in the genesis of experience is in the application of concepts of experience to objects of intuition. It is hard to read the Transcendental Analytic and come away thinking that the *only* role of the intellect in experience is at its summation, so to speak; the idea that the intellect plays some necessary role in

the genesis of experience even prior to forming the judgments that constitute experience just sounds like Kant's view. He seems to carve out space for what we can call a 'pre-experiential' employment of the intellect, but nonconceptualists have had trouble acknowledging this thought. What is needed is an account of the pre-experiential role of the intellect on which that role *does not* consist in directly or indirectly producing intuitions, and no such account has been forthcoming. The distinction between given empirical concepts and concepts of experience gives the nonconceptualist a way forward here. I have argued that the intellect must become reflectively conscious of the intrinsic properties of sensations prior to and as a condition of forming the more complex empirical concepts that represent objects as to their natures. Here, then, we have a pre-experiential role for the intellect that in no way interferes with or otherwise 'imbues' the functioning of the faculty of imagination.

Chapter 4

Material Origins of Pure Sensible Concepts

Introduction

In this chapter, I turn my attention to the material origins of *pure* concepts. We will see that Kant draws a material contrast between two fundamental kinds of pure concepts: pure *sensible* concepts and pure *intellectual* concepts. The former occupy my attention in this chapter, the latter in the next. Kant claims that pure sensible concepts of the kind I study in this chapter are ‘grounded’ in the pure intuitions of space and time, and my task will be to understand this claim. The overall contention I will argue for in the service of this task combines a negative and a positive claim. The negative claim is that the operation Kant calls ‘pure apprehension’ in the A-Deduction has no role to play in his theory of pure intuition. The positive claim is that this operation is integral to Kant’s account of the material origins of pure sensible concepts. Specifically, my claim will be that the pure intuitions of space and time play their role in grounding pure sensible concepts insofar as these intuitions are inputted to pure apprehension. The outputs of this operation, pure *images*, constitute matter for pure sensible concepts.

To arrive at these conclusions, the chapter is split into three sections. In Section 1, I catalog the varieties of pure concepts, explaining the distinction between pure sensible and pure intellectual concepts, as well as several distinctions within the class of pure intellectual concepts, and I show how these distinctions cross-cut the given-made distinction. In the Section 2, I focus on pure spatial concepts. I motivate the proposal that these concepts are materially grounded on pure images, together with the complementary proposal that their matter-giving act is the operation Kant calls pure apprehension (figurative synthesis in the B-edition). Along the way, I argue for a novel reading of the project of the Transcendental Aesthetic and the arguments of the third and fourth Expositions, which takes seriously the fact that Kant refers to the Aesthetic as both an exposition and a transcendental deduction of the concepts of space and time. In Section 3, I say just enough about the concept of time to motivate the proposal that pure apprehension is also the matter-giving act that presides over the material origin of this concept, but a full treatment will have to await future work.

1. The Varieties of Pure Concept

In this section, I map the terrain of pure concepts. We will see that the class of pure concepts includes a wide variety of concepts with widely divergent *contents*. We will also see that there is an important *matter*-level divergence within the class of pure concepts. Though all pure concepts have in common that they do not have sensation in their matter, there is then a distinction, within the class of pure concepts, between pure *sensible* concepts, which contain pure sensible representations within their matter, and pure *intellectual* concepts, which do not. We will finally see that the given-made distinction cross-cuts the distinction between pure sensible and pure

intellectual concepts. Some pure sensible concepts are given *a priori*, others made, and likewise for the class of pure intellectual concepts.

We can begin by briefly reprising the empirical-pure distinction. In the introduction to this part of the dissertation, I argued that this distinction is a matter-level distinction. When Kant defines a pure representation in general as one that does not ‘contain’ sensation (or as one in which sensation is not ‘mixed in’), and an empirical representation as one that does (A50/B74-75), the relevant notion of containment is a matter-level notion. If it were a *content*-level notion, then every concept would be pure, since no concept contains sensation in its content. That is why Kant immediately identifies sensation as the ‘matter of sensible cognition’ a sentence after defining empirical representations as those that contain sensation. On the interpretation I proposed, a representation is empirical if sensation constitutes its matter, pure otherwise.

Kant uses the term ‘pure’ in this sense interchangeably with the term ‘*a priori*’,⁸⁵ and he recognizes a wide variety of concepts with widely divergent contents as pure. As we will see, the categories of the understanding, the Ideas of reason, the concepts of mathematics, and the concepts of space and time are all classified as pure concepts. But not only do these concepts differ at the level of content; Kant also marks several distinctions between them at the level of *matter*. What we will see is that the fundamental matter-level distinction Kant draws is one between pure *sensible* concepts and pure *intellectual* concepts. Within the latter class, there is then a further distinction between pure concepts *of understanding* [*Verstandesbegriffe*] and pure concepts *of reason* [*Vernunftbegriffe*].

⁸⁵ See, for example, A11/B24, where Kant equates being ‘absolutely pure’ with being ‘fully *a priori*’. Now, we have seen that in other settings, the notions of purity and *a priori* come apart. We saw, for example, that some empirical concepts are given through *a priori* acts. But when Kant describes a concept *itself* (rather than the act through which it is produced) as *a priori*, I take him to be claiming simply that it is pure in the sense defined above.

Kant catalogs the varieties of pure concept in the *Stufenleiter*:

A concept is either an **empirical** or a **pure concept**, and the pure concept, insofar as it has its origin solely in the understanding (not in a pure image of sensibility), is called *notio*. A concept made up of notions, which goes beyond the possibility of experience, is an **idea** or a concept of reason [*Vernunftbegriff*].

A320/B377

Having distinguished pure and empirical concept, Kant distinguishes three classes of pure concept. *First*, there are those concepts that have their ‘origin’ in a ‘pure image of sensibility’. These concepts are pure because their matter is a *pure* representation; nevertheless, this representation is also a representation of *sensibility*, and Kant will sometimes refer to these concepts as pure *sensible* concepts [*reine sinnliche Begriffe*] (for example at A140-41/B180). Aside from the concepts of mathematics, the concepts of space and time also belong at this level. *Second* are the concepts Kant here calls ‘notions’.⁸⁶ Clearly, the distinction between notions and pure sensible concepts obtains at the level of origin or matter: the former originate out of a ‘pure image of sensibility’, whereas the latter have their ‘origin solely in the understanding’. Since notions have their origin solely in the understanding, Kant often refers to them as ‘pure concepts of the understanding’ (*reine Verstandesbegriffe*), and he claims that the categories constitute the fundamental set of such concepts.⁸⁷ *Third*, there is a kind of pure concept that is ‘made up’ of notions, and this Kant calls an *Idea*. Whereas a category is a pure concept of *understanding* [*rein Verstandesbegriff*], an *Idea* is a pure concept of *reason* [*rein Vernunftbegriff*].

What unites notions and Ideas, and differentiates them from pure sensible concepts, is that their matters do not contain sensible representation. They can thus be banded together as ‘pure

⁸⁶ In the Vienna transcript, Kant uses the term ‘notion’ differently. There, the term applies to the entire class of pure concepts, which Kant further distinguishes into *notiones sensitives* and *notiones intellectuales* (*WL* 24: 907).

⁸⁷ At A81/B107, he memorably calls the categories the ‘ancestral concepts’ [*Stamm-begriffe*] of pure understanding

intellectual' concepts. But what is it that differentiates notions and Ideas from one another? What makes the former pure concepts *of understanding*, the latter pure concepts *of reason*? My answer to this question is not one that I will fully motivate until the next chapter, but I will state it now. Notions are pure concepts *of understanding*, I will argue, because their non-sensible matter is *given* through an act of the faculty of understanding. Correspondingly, Ideas are concepts *of reason* because their non-sensible matter is given through an act of the faculty of reason.

Kant further distinguishes notions into fundamental and derivative kinds. The fundamental notions are the categories of understanding, the derivative notions 'predicables'. Kant then distinguishes the predicables of the categories into two further classes. Consider:

The categories combined *either with the modis of sensibility or with each other* yield a great multitude of derivative *a priori* concepts

A82/B108; cf. *MM* 29: 884; *MM* 29: 988, my emphasis

The predicables formed by combining categories with *modis* of sensibility will be pure sensible concepts; the predicables formed by combining categories with each other will be pure intellectual concepts.⁸⁸

The domain of pure concepts thus includes, within the class of pure sensible concepts, the concepts of mathematics, the concepts of space and time, and the pure sensible predicables of the categories; and within the class of pure intellectual concepts, the categories themselves and their pure intellectual predicables (pure concepts of understanding) together with the Ideas of reason (pure concepts of reason). What is more, the sensible-intellectual distinction among pure concepts cross-cuts the given-made distinction. Within the class of pure sensible concepts, some of the concepts of mathematics are given, some are made; the concepts of space and time are given; and

⁸⁸ It is worth asking what distinguishes a pure intellectual predicable from an Idea. Kant says that Ideas are 'made up' of notions; but he also says that predicables are formed by 'combining categories with each other'. I will touch on this issue briefly in the next Chapter.

the pure sensible predicables of the categories are made. Within the class of pure intellectual concepts, the categories are given, their pure intellectual predicables are made; and the Ideas are plausibly thought of as given.⁸⁹

I cannot hope to adequately characterize the material origins of all of these concepts within the space of a single study. I have therefore had to restrict my focus within both the domains of pure sensible concepts and pure intellectual concepts.

Within the class of pure intellectual concepts, which I explore in the next chapter, I have chosen not to treat predicables at all and to restrict my treatment of Ideas to a basic outline of an account. Predicables are a derivative class of concepts, and for the purposes of understanding and evaluating Kant's account of concept formation, it is much more important that we understand his account of how fundamental, non-derivative concepts come into being. Moreover, as we saw in the previous chapter, there is a principled reason for denying that derivative concepts are formed through an application of the logical acts. The logical acts story is designed to explain how concepts come to be out of a nonconceptual matter; it is not designed to explain how complex concepts are formed out of more basic ones. I restrict my treatment of the Ideas, meanwhile, not because they are an uninteresting class of concepts — far from it — but because the considerations required to study them in full would take us beyond the realm of understanding into the higher faculty of reason, and doing justice to this higher faculty is beyond my scope in this dissertation. Nevertheless, I will make some brief comments in the next chapter about exactly *where* I think that the faculty of reason plays a role in the generation of ideas, and it is my hope that the findings of this dissertation will beneficially serve a more extended treatment of the Ideas in the future.

⁸⁹ As we will see, Kant *explicitly* situates all of these concepts with respect to the given-made distinction with the exception of the predicables and the Ideas. I will substantiate my suggestion that the Ideas are given in the next chapter.

My aim in this chapter is to make headway in understanding the material origins of pure sensible concepts, and within this domain, too, I have restricted my focus: my main focus throughout this chapter will be on pure *spatial* concepts. These include the given *a priori* concept of space; the given concepts of line and point; and the arbitrarily made concepts that feature in the science of geometry. This focus neglects a parallel stream of pure sensible concepts — namely, the pure *temporal* concepts, which likewise include the given *a priori* concept of time; the elementary temporal concept of a moment; and the concepts that figure in both the ‘axioms of time in general’ (B47) and the ‘general theory of motion’ (B49). I will say something very briefly at the close of this chapter to indicate where I think my account of the material origins of pure spatial concepts has implications for the origins of pure temporal concepts.

2. Pure Spatial Concepts

My aim in this section is to work up to a detailed characterization of the material origins of all spatial concepts. I will be concerned to understand Kant’s claim that the pure intuition of space ‘lies at the ground of [*zum Grunde liegen*]’ all spatial concepts (B39). In his discussion of grounding-relations in his lectures, Kant frequently distinguished between *mediate* and *immediate* grounds.⁹⁰ As Stang helpfully describes the distinction, ‘[a] mediate ground of some γ is a ground of a ground of γ . An immediate ground of γ is something that grounds γ but not in virtue of grounding some third thing, that is, an intermediary’ (Stang 2019: 82). My contention will be that pure intuition is a *mediate* ground of spatial concepts, for it grounds these concepts by grounding an intermediary representation, namely, a *pure image* [*rein Bild*] of space. This pure image is,

⁹⁰ See, for example, *MVM* 28: 409; *MM* 29: 817.

strictly speaking, the matter for pure spatial concepts, and the matter-giving act that brings forth this matter is *not* the act of intuiting itself (an act of sense) but rather a mode of the *synthesis of apprehension* (an act of imagination). This mode of apprehension, unlike the mode we studied in the previous chapter, is *pure* rather than empirical, and it supplies the common matter for all spatial concepts. Given this common matter, I will therefore need to explain why it is that some spatial concepts are given and others made.

2.1 The Varieties of Spatial Concept and Kant's Project in the Transcendental Aesthetic

Kant distinguishes two varieties of pure spatial concept: the general concept of space, on the one hand, and, on the other, the specific spatial concepts, such as <triangle>, that figure in the science of geometry.⁹¹ Both of these concepts, he thinks, are pure concepts, but the general concept of space is less determinate than the concepts of geometry. Kant 'exposits' (that is, analyzes) this general concept in the *Transcendental Aesthetic*, arguing that it represents space as an infinite, essentially singular magnitude,⁹² of which each particular space is a determination or 'limitation'. Meanwhile, geometric concepts represent specific kinds of determination of the one all-embracing space, for geometry is the science that studies the ways in which this space is determinable. Since geometric concepts represent specific forms of determination of the one space, every such concept must itself contain the general concept of space within its content. Kant thus calls this general

⁹¹ My discussion of the relationship between these sets of concepts in the next three paragraphs is very much indebted to Tolley (2016b).

⁹² One might worry, as Thompson (1972) does, about how this feature of the content of the concept is compatible with its status as a concept rather than intuition, since concepts are universal representations and intuitions are singular. Here, we can remind ourselves of what Kant says about the concept of the *ens realissimum* — this is a concept whose content is 'in itself universal' in spite of the fact that it represents something singular. There is a difference between i) a content that is essentially such that it represents something singular, and ii) a content that represents the property of essential singularity. The concept of space has content of the second kind, not the first.

concept the *Grundbegriff* of the science of geometry (A87/B120), and in the Aesthetic, he says that geometric cognitions ‘flow from’ the concept of space [*aus dem...Begriffe herfließen*] (B40). Still, it is important to keep in mind that geometric concepts are more determinate than the general concept of space, and while Kant does hold that geometric cognition is ‘grounded on’ and in some sense ‘flows from’ this concept, he *does not* mean that geometric axioms are derivable through analysis of the content of the general concept of space. Geometric cognition goes beyond the kind of cognition available through mere analysis of the general concept of space.

Kant thus contrasts two ways of utilizing the general concept of space in pure cognition. In philosophical cognition, we are limited to analysis of the given concept of space; in geometry, by contrast, we ‘construct’ more specific concepts of ways in which the space thought through the general concept admits of delimitation (A715-16/B743-44). But while these two sciences differ both in their methodology and in the contents of their constituent concepts (the concepts of geometry being more determinate than the general concept of space analyzed in metaphysics), Kant maintains that these disciplines agree at the level of their *matter* (A714/B742). What I take Kant to be claiming here is that the matter for the general concept of space is no different from the matter that underlies the more specific concepts formed in geometry. The added determination thought in geometric concepts is not facilitated by some special new matter that augments the original matter for the metaphysical concept (the *Grundbegriff*); instead, the content-level difference between these concepts must be grounded on some distinctive *way* in which this matter is given in geometry.

The distinctive matter-giving act that pertains to geometry will occupy us later; for now, we can ask what Kant identifies as the common matter for all spatial concepts. Kant’s answer to this question comes in the Transcendental Aesthetic, for there, he argues that ‘in respect to...[space]

an a priori intuition (which is not empirical) *lies at the ground of all concepts of it*' (B39). Note the plural here: an a priori intuition lies at the ground of *all concepts* of space — that is, both the given concept of space that Kant exposit in the Metaphysical Exposition, and the specific geometric concepts that 'flow from' (without being contained in) this general concept, which he treats in the Transcendental Exposition. Pure intuition is the common matter that unites all spatial concepts.

It is thus important to see that, while it is much else besides, the Transcendental Aesthetic is an extended argument to the claim that all concepts of space are pure sensible concepts. Of course, the proximal object of study in the Aesthetic is the receptive faculty that produces intuitions, but this entire study is in the service of an interrogation of the *concept* of space. Kant's study of sense allows him to motivate a specific claim about the matter of the concept of space — namely, that this matter is an *a priori* intuition.

The Aesthetic is *also*, Kant says later, a *transcendental deduction* of the concept of space; moreover, this transcendental deduction takes place precisely insofar as the concept is traced to its origin in an *a priori* intuitive matter:

We have above traced the concepts of space and time to their sources by means of a transcendental deduction, and explained and determined their a priori objective validity.

A87/B119-20

Thus, Kant's project of isolating the material origin of the concept of space serves the transcendental project of 'explaining and determining' the objective validity of the concept, such as to 'deduce' it. This transcendental project itself is not required by the science of geometry — which, Kant says, does not have to 'beg philosophy for any certification of the pure and lawful

pedigree of its fundamental concept [*Grundbegriff*] of space' (A87/B120) — but is made 'unavoidable' by the pure concepts of understanding:

With the **pure concepts of the understanding**, however, there first arises the unavoidable need to search for the transcendental deduction not only of them but also of space, for since they speak of objects not through predicates of intuition and sensibility but through those of pure a priori thinking, they relate to objects generally without any conditions of sensibility;...[therefore,] they not only arouse suspicion about the objective validity and limits of their use but also make the **concept of space** ambiguous by inclining us to use it beyond the conditions of sensible intuition, on which account a transcendental deduction of it was also needed above.

A88/B120-21

The pure concepts of understanding incline us to apply the concept of space to all objects in general, not merely objects of sensibility. In order to determine whether this further application is legitimate, we need a deduction of the concept — an account of its origin that explains and delimits its sphere of a priori validity. The deduction results in a limitation of the concept's sphere of proper application to the sphere of appearances, that is, the famous claim that space is transcendently ideal.

Kant's argument that <space> is a pure sensible concept is thus integral to the limiting project of the Aesthetic. This claim has two components, which Kant motivates separately.

2.2 <Space> as Pure Concept

Before arguing that <space> is, specifically, a pure *sensible* concept, Kant argues for the more basic claim that it is a *pure* concept:

1) Space is not an empirical concept that has been drawn from outer experiences. For in order for certain sensations to be related to something outside me (i.e., to something in another place in space from that in which I find myself), thus in order for me to represent them as outside and next to one another, thus not merely

different but as in different places, the representation of space must already be their ground.

B38

It is helpful to approach this passage knowing what we know about empirical concepts, for though Kant advertises the conclusion of the passage as the general claim that <space> is not an *empirical* concept, the passage itself really only argues for the more specific claim that it is not a *concept of experience* [*Erfahrungsbegriff*]. The reason that Kant is able to move from the specific claim to the general conclusion is that he goes into this passage taking it for granted that <space> is not a given empirical concept. Before the passage begins, he has asserted that space cannot ‘be intuited as something in us’ (A23/B37), and so the concept of space cannot be a given empirical concept that picks out a feature of our internal state. Still, empirical concepts can also represent features of objects that are distinct from my internal state — they do this precisely insofar as they are concepts of experience — and Kant still needs to rule out the possibility that the concept of space is an *Erfahrungsbegriff* before he can motivate the general claim that it is a pure concept.

That is what Kant does in this passage. Kant’s argument is that the concept cannot be an *Erfahrungsbegriff* for the simple reason that it is a *condition on the formation of* such a concept. As we saw in the previous chapter, *precisely* what an *Erfahrungsbegriff* does is to ‘relate certain sensations to something outside me’, that is, to an object that corresponds to and is distinct from those sensations. And according to this passage, the *Erfahrungsbegriff* represents the object that corresponds to the sensation as, specifically, *spatially* distinct from the subject. Thus, the act of relating given sensations to a distinct object, without which we could not ascend from concepts of perception to concepts of experience, itself requires possession of the concept of space. But if all *Erfahrungsbegriffe* presuppose the concept of space, it cannot itself be such a concept. Of course,

it is still part of the *content* of such concepts, but it is not on that account empirical. Recall the passage we considered in the previous chapter:

Not merely in judgments... but even in concepts is an origin of some of them revealed a priori. Gradually remove from your experiential concept [*Erfahrungsbegriff*] of a **body** everything that is empirical in it — the color, the hardness or softness, the weight, even the impenetrability — there still remains the **space** that was occupied by the body (which has now entirely disappeared), and you cannot leave that out.

B5-6

The concept of space shows up in any *Erfahrungsbegriff*, but it is not part of what is ‘empirical in it’. Rather than being part of the empirical core of the *Erfahrungsbegriff* (that is, the complex sensation-level concept that represents a given sensory profile), it is one of the concepts we must possess in order to represent an object that corresponds to and is distinct from our own internal states.

2.3 <Space> as Pure Sensible Concept

Having reviewed Kant’s reason for thinking that <space> is a pure concept, I want now to explore his more specific proposal that it is a pure *sensible* concept.

Kant’s argument for this claim rests squarely on the matter-content linkage we described in the introduction to this part of the dissertation. Recall, while Kant holds that matter underdetermines content, he also holds that matter constrains content. The mind is not free simply to form any conceptual content at all from any matter. Once we have a secure grasp on the content of a concept, then, we can narrow down the range of possible material bases for the concept. And Kant argues in the *Aesthetic* that specific features of the content of the concept of space could only have originated out of a pure *sensible* matter. In claiming that all concepts of space are grounded

on a pure intuition, Kant is making the strong claim that some element of the content of the concept simply could not *come into being* were it not for pure intuition. The question, thus, becomes: what are the intuition-dependent features of the content of the concept of space?

Kant argues that there are two such features, which he discusses separately in the third and fourth expositions respectively. We could faithfully represent the main premise and conclusion of each of those two expositions as follows:

Third Exposition (B39)

Main Premise:

‘[I]f one speaks of many spaces, one understands by that only parts of one and the same unique space. And these parts cannot as it were precede the single all-encompassing space as its components (from which its composition would be possible), but rather are only thought **in it**. It is essentially single [*wesentlich einig*]’

Conclusion:

‘From this it follows that in respect to it an *a priori* intuition (which is not empirical) grounds all concepts of it.’ (Conclusion)

Fourth Exposition (B39-40)

Main Premise:

‘Space is represented as an infinite **given** magnitude... [S]pace is so thought (for all parts of space, even to infinity, are simultaneous).’

Conclusion:

‘Therefore the original representation of space is an *a priori intuition, not a concept*.’

These passages isolate two features of the content of the concept of space and argue that each feature must be grounded on pure intuition. Let us unpack the relevant features in a little more detail.

First, essential singularity. The concept <space> represents an object that exists prior to its parts. It does not represent space as something that is composed or built up out of previously existing parts, as a house is built up out of bricks. Instead, the existential dependence-relation runs in the opposite direction: the concept <space> represents the parts of space as mere limitations of

the one all-embracing space, not as independently-existing components like bricks. Kant argues that this feature of the content of <space> could only be formed out of an intuitive matter.

Second, given infinity. There is much controversy about what Kant's use of the term 'given' amounts to in this passage, and I want to take a stand on this issue. Specifically, I want to reject an interpretive tendency that I think rests on a faulty understanding of Kant's project in the Aesthetic. According to this tendency, when Kant says that space 'is represented as' an infinite given magnitude, he means, specifically, that it is represented *in pure intuition* as an infinite given magnitude. Once readers assume that Kant is discussing the way in which space is represented in pure intuition, they typically suggest that in saying that the infinity of space is represented as 'given', he is making a *phenomenological* claim, to the effect that there is some quasi-perceptual sense in which the infinity of space is present to the mind in pure intuition. Such readers then agonize about how infinity could be phenomenologically present to us.⁹³

Rosalind Chaplin (2022) has recently argued against phenomenological readings of this kind, arguing that the phenomenological construal of givenness fails to pick up on any of the technical resonances that the term 'given' has within Kant's writings. I want to supplement Chaplin's critique of phenomenological readings with a specific exegetical claim about Kant's argument in the fourth Exposition. Simply put, when Kant opens the Exposition with the claim that space is 'represented as' an infinite given magnitude, *he is not making a claim about pure intuition at all*. Recall, the Transcendental Aesthetic is a *transcendental deduction of the concept of space*. Kant's project in the Aesthetic is to trace the concept of space to its 'birthplace' in order to evaluate its claims to *a priori* validity. The Fourth Exposition is part of that project. The *explanandum* with which Kant begins in the Exposition is a feature of the content of the *concept*

⁹³ Readers who subscribe to this interpretation include Parsons (REF), Carson (REF), Friedman (REF), and Rosefeldt (REF).

of space: its content is such that it represents space as an infinite given magnitude. The Exposition then argues for a specific explanation of this datum — namely, that the concept could only have this kind of content if the ‘original representation’ of space were an *a priori* intuition.

Once we see that Kant is making a claim about how space is represented *conceptually*, we remove the motivation for seeking a quasi-perceptual construal of the term ‘given’ (which, as Chaplin rightly presses, is foreign to Kant’s use of that term). What, then, does Kant mean in insisting that space is not represented simply as an infinite magnitude but, specifically, as an infinite *given* magnitude? What is the contrast here? It seems to me that the answer is straightforwardly present in the exposition itself. Kant says that space is ‘thought’ as an infinite given magnitude, ‘for all parts of space, even to infinity, are simultaneous’. The infinite set of spaces exists simultaneously, as parts that are contained *within* space. This way of containing infinity contrasts with a second way in which something may ‘contain’ infinity: Kant contrasts the way in which something contains infinity when the infinity is contained ‘within itself’ with the way it contains infinity when it contains infinity ‘under itself’. We saw in Chapter 1 that Kant reserves this second kind of containment language for the relationship between a ground and its consequences (*JL* 9: 96). A ground within an infinite series contains infinite consequences ‘under itself’, but those consequences are not given simultaneously and so are not contained *within* the ground. This, I think, is the contrast Kant is drawing between infinite given magnitudes and infinite magnitudes whose infinite magnitude is not given. A magnitude is infinite and given if it contains infinite parts *within* itself; it is infinite but not given if it contains infinite consequences *under* itself. And Kant’s claim is simply that the concept of space represents the infinite set of spaces not as consequences that are grounded on space but as parts that are contained within space.

The two features of the concept of space that Kant isolates in the third and fourth Expositions, then, are these: first, the concept of space represents space as a whole that exists prior to its parts (as essentially singular); second, the concept represents space as containing infinitely many parts within itself (thus as an infinite given magnitude). And Kant argues that both of these features of the content of the concept are grounded on pure intuition.

Rather than attempting to reconstruct Kant's arguments for thinking that *only* pure intuition could supply matter for these elements of the content of the general concept of space, what I want to do in the following sections is simply to take for granted that this is Kant's proposal and try to understand how that proposal could work given Kant's other commitments.

2.4 Pure Intuition as the Ground of Spatial Concepts

To make headway here, we will need to say something about pure intuition.

Now, on the assumption that pure intuitions are representations of the faculty of sense — the passive, receptive capacity under study in the Transcendental Aesthetic — the very doctrine of pure intuition is, *prima facie*, difficult to understand. As we saw in our discussion of Kant's faculty psychology in Chapter 1, if a mental power is *receptive*, it cannot bring about an accident of a mental substance purely from an inner principle; it can only ever act in concert with an outer power, which acts on the receptive faculty. But we have also seen that sensation simply is the effect of an object on the sensible capacity insofar as the object affects it. If sense can only act insofar as it is acted upon by an outer power, and if this action by an outer power by its nature produces sensation, then it seems that any representation that the faculty of sense makes actual must contain sensation. But since any intuition that 'contains sensation' is, *per* Kant's own definition, an empirical intuition, it is hard to understand how the doctrine of sense makes room for the existence of pure

intuition at all. The question, then, is how it is possible to reconcile Kant's doctrine of *pure intuition* with his doctrine of receptivity, for properly understood it seems as if the doctrine of receptivity entails that all intuitions are empirical.

The key to reconciling these features of Kant's position is to recognize that we can accommodate pure intuitions *without* requiring that they could exist in a mind independently of empirical intuition; likewise, we can accommodate an act of pure intuiting without requiring that this act could take place in a mind independently of empirical intuiting. Rather than thinking of pure intuition as a representation that exists separately from empirical intuitions, we should read the term 'pure intuition' as the name for a distinctive subset of the content of empirical intuitions. Likewise, rather than thinking of pure intuiting as a separate act that takes place independently of empirical intuiting, we should think of it as part of the broader act of intuiting, an act which always outputs empirical intuitions. Specifically, we should think of pure intuiting as the aspect of empirical intuiting that grounds the pure intuitive content of the empirical intuition.

In this respect, pure intuitions both resemble and differ from pure concepts. As we have already started to see, Kant holds that a distinctive subset of the content of empirical concepts (both concepts of perception and *Erfahrungsbegriffe*) is non-empirical. We could therefore use the term 'pure concept' to denote the distinctive non-empirical elements of the content of empirical concepts. We could likewise use the term 'pure thinking' to denote an aspect of the acts of empirical thinking through which we form and deploy empirical concepts. And Kant does use the term in this way, speaking in the A-Deduction for example of the 'pure thinking in every experience' (A96). So far, pure concepts and pure intuitions, as I propose to understand them, are on a par. But *unlike* pure intuitions, pure concepts *can* exist in a mind independently of the empirical concepts in which they feature, and an act of pure thinking can take place which is not

itself an aspect of empirical thinking. In the *Phenomena and Noumena* section, Kant restricts the cognitive reach of this kind of thinking, but his whole discussion there takes for granted that it is possible. In this second register, then, ‘pure concept’ is a name for a modification of the intellect that can exist entirely separately from empirical concepts, and ‘pure thinking’ is the name for an intellectual act that can take place in the absence of empirical thinking. And it is at this second level that I think Kant has to deny that there could be pure intuitions and acts of pure intuiting. Only a spontaneous power is capable of producing accidents in a subject from an inner principle alone; thus, only the understanding could continue to act in the absence of an empirical matter supplied by an affecting object.

Here, then, is the proposal: pure intuitions are subsets of the contents of empirical intuitions, not self-standing sensible modifications of the mind. But what exactly *are* the distinctive features of the contents of empirical intuitions that Kant refers to with the term ‘pure intuition’? As is well known, Kant links pure intuition and the *form of intuition*. In the Aesthetic, indeed, Kant declares that the ‘pure form of sensibility itself is also called **pure intuition**’ (A20/B34-35). Again, he says that the form of intuition can be cognized a priori and is *therefore* called pure intuition (A42/B60). Consider also the following:

[Intuition and concept] are either pure or empirical. **Empirical**, if sensation (which presupposes the actual presence of the object) is contained therein; but **pure** if no sensation is mixed into the representation. One can call the latter the matter of sensible cognition. Thus *pure intuition contains merely the form under which something is intuited*, and pure concept only the form of thinking of an object in general.

A50-51/B74-75, my emphasis

Given its status as pure, whatever content the pure intuition includes cannot derive from sensation. And Kant here claims that the only remaining source for the content of pure intuition is ‘the form under which something is intuited’. The content of pure intuition, I take Kant to be claiming, thus

derives from ('contains') only the form of intuiting.⁹⁴ The framework of Chapter 1 helps me clarify this proposal. There we saw that intuitions, as form-matter compounds, are produced when a matter is given to the mind and subject to form-imparting acts. When Kant claims that pure intuition contains only the form under which something is intuited, I take him to be claiming that the pure intuition present in every empirical intuition consists of those features of the intuition's content that derive solely from the form-imparting acts. These features are stable across all empirical intuitions, regardless of their matter.

An important part of Kant's project in the Aesthetic is to isolate these distinctive features of intuitive contents:

In the transcendental aesthetic we will therefore first **isolate** sensibility by separating off everything that the understanding thinks through its concepts, so that nothing but empirical intuition remains. Second, we will then detach from the latter everything that belongs to sensation, so that nothing remains except pure intuition and the mere form of appearances, which is the only thing that sensibility can make available *a priori* [*a priori liefern kann*].

A22/B36

Kant speaks here of 'detaching' sensation from empirical intuition so as to arrive at the pure content that sensibility 'makes available' a priori. Now, it is crucial to emphasize that this detachment does not happen *in sense*, the receptive faculty under study in the Aesthetic. If it were possible for sense alone to produce an intuition from which all empirical features were 'detached', then we would have pure intuition as a self-standing modification of sensibility, which is precisely the kind of representation I argued above is not possible given the receptive status of sense. The representational faculty that 'detaches' the empirical matter from an intuition to isolate the pure

⁹⁴ Once again, it is crucial to note that Kant's containment language here is located at the level of matter. Let us also note that Kant makes the same claim about the source of pure conceptual content — a point I return to in detail in chapters 5 and 8.

intuition (that is, the pure layer of content present in every empirical intuition) must thus be a higher cognitive faculty.

Recognizing that sense on its own never produces an intuition whose content is exhausted by pure intuitive content helps us make sense of an important passage in the *Amphiboly* that has often perplexed commentators and, I believe, led them astray. Consider:

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 (*ens imaginarium*).

A291/B348

Here, Kant says that the ‘mere form[s] of intuition, without substance’ are not ‘in themselves objects that are intuited’.⁹⁵ He then goes on to call these forms *entia imaginaria*, beings of imagination. This passage has confused commentators. On the plausible assumption that pure intuition precisely represents the forms of intuition ‘in themselves’, it is confusing to be told that these forms are not objects that are intuited, after all. Kant then speaks of these forms as beings of imagination. One way that commentators have made sense of this passage is to propose that Kant is claiming that the forms of intuition are not intuited *via* an act of sense but are instead represented only through imagination.⁹⁶ On this reading, pure intuitions thus come out as representations of imagination, not sense. This kind of reading is grist to the conceptualist mill.

But the considerations I have proposed so far give us a satisfying alternative to this reading. I have argued that the faculty of sense, as a receptive faculty, is incapable of producing an intuition whose content is exhausted by the pure intuitive content that traces back to the form of the sensible faculty. In addition to this pure content, every intuition must also contain content that traces back

⁹⁵ And compare A429/B457n: ‘Space is not a real object that can be outwardly intuited’.

⁹⁶ Readers who hold that pure intuitions are products of imagination include Haag (2007), Horstmann (2018) Longuenesse (1998; 2005), and Rosefeldt (2020). Longuenesse (2005, 73) bases her argument for this position in part on Kant’s claim that the forms of intuition are *entia imaginaria*.

to sensation. What that means is that while the form of intuition *is* ‘intuited’ within every intuition of sense, it is never intuited ‘*in itself*’, empty of all substance. Sense alone cannot produce a representation that would represent this form just as such, because to do so, we would have to remove all empirical content from intuition, and this removal cannot itself take place in sense. Instead, a higher faculty is required to isolate the pure intuitive subset of intuitive content, and, as the passage makes clear, this higher faculty is imagination. That is why the forms of intuition, considered in themselves without substance, are entities of imagination. Imagination is a requirement *not* for the formation of pure intuitive content, but for the *isolation* of that content from the empirical intuitive content with which it is always combined in sense. If we recall Kant’s stated project in the Aesthetic — of ‘detach[ing] from... [empirical intuition] everything that belongs to sensation, so that nothing remains except pure intuition’ (A22/B36) — it becomes clear that the faculty that makes a transcendental aesthetic possible is the imagination. And this faculty is not itself under analysis in the Aesthetic.

My contention will be that imaginative synthesis is not only a condition of transcendental aesthetic; it is also a condition for the formation of pure sensible concepts. For my contention will be that the pure intuitions of space and time can only give matter for pure sensible concepts insofar as they are first ‘taken up’ by the imagination. If that is right, then while the Aesthetic does motivate a claim about the ultimate material origin of the concept of space, what it *cannot* do is to explain how that matter is given to the mind in such a way as to facilitate the formation of the concept. We can thus make one final observation about Kant’s project in the Aesthetic. In the Analytic, in the same passage in which Kant refers back to the Aesthetic as a transcendental deduction of the concept of space, Kant distinguishes the transcendental deduction of a concept from the ‘physiological derivation’ of a concept. Whereas the former explains the possibility of an

objectively valid *a priori* application of the concept (and does so by tracing the origin of the concept to an objectively valid *a priori* representation), a physiological derivation locates the ‘occasioning causes’ of the ‘generation’ of the concept (A86/B118). Since Kant is not in a position in the Aesthetic to explain how the pure intuitive matter for the concept of space is given to the mind, what the Aesthetic is *not* is a physiological derivation of the concept of space. We must look to the Analytic for that account.

2.5 Pure Apprehension and Reproduction as Matter-Giving Acts

In the previous chapter, I argued that the synthesis of apprehension is what gives the matter for empirical concepts. Early in that chapter, I also advertised the more general contention that apprehension has an essential role to play in the material origins of *all* concepts, and that the doctrine of apprehension, far from being part of Kant’s account of *intuition* formation, is in fact a central yet unnoticed pillar of his theory of *concept* formation. In this section, I take another step toward that general conclusion by suggesting that what Kant calls ‘pure’ apprehension plays an essential matter-giving role in the genesis of the general concept of space.

Before we approach the texts that motivate this position, it will help to briefly rehearse my reasons for disagreeing with the dominant view that casts apprehension as part of Kant’s theory of intuition formation. Recall, apprehension is introduced early in the A-Deduction as part of a story that explains how receptivity can make *cognition possible*, not part of a story about how receptivity can make *intuition* possible (A97). Since cognition requires a concept, the question Kant is discussing at this stage in the A-Deduction, I suggest, is how intuitions could be inputs to conceptual awareness; apprehension is part of the answer, for it is the first stage in a threefold synthesis that culminates in ‘recognition in a concept’. We have seen also that Kant attributes the

intuition an ‘absolute unity’ (A99) prior to apprehension and claims that apprehension is ‘directed at’ [*gerichtet auf*] intuition (ibid.), which would make little sense if intuitions did not exist prior to apprehension. Rather than thinking of intuitions as *outputs* of apprehension, I therefore proposed that we should situate them as *inputs* to apprehension, with the output of apprehension some more cognitively advanced representation that helps the mind traverse the space between intuition and cognition.

This picture, however, is controversial, and it is especially so in regards to the pure intuition of space. In the A-Deduction, having introduced the synthesis of apprehension in general terms, Kant continues as follows:

Now this synthesis of apprehension must also be exercised *a priori*, i.e., in regard to representations that are not empirical. For without it, we could have *a priori* neither the representations of space nor of time, since these can be generated [*erzeugt werden können*] only through the synthesis of the manifold that sensibility in its original receptivity provides. We therefore have a **pure** synthesis of apprehension.

A99-100

Kant here distinguishes a ‘pure’ synthesis of apprehension that is ‘exercised *a priori*’. The sense in which this synthesis is *a priori* is spelled out in the first sentence: it is *a priori* because it is exercised ‘in regard to’ representations that are not empirical. I take this to be a claim about the inputs to pure apprehension: pure apprehension differs from empirical apprehension because the representations upon which it acts are themselves *a priori*. This *a priori* input to pure apprehension, the passage continues, is ‘the manifold that sensibility in its original receptivity provides’. The *outputs* of pure apprehension, which would be impossible except through pure apprehension, are ‘a priori representations of space and time’. This passage, considered in isolation, lends itself well to a reading along the lines of the dominant view of apprehension. According to this reading, the a priori ‘representations’ outputted by apprehension are the pure intuitions of space and time; the

a priori input, which sensibility in its ‘original receptivity’ provides, is a ‘pure manifold’ that is not itself an intuition (since, as *per* Kant’s statements in the previous paragraph, this manifold lacks the ‘unity’ that apprehension confers).

But while the text is *consistent* with this reading, it does not *mandate* the reading, and given the background considerations I started with, we should be motivated to look for alternatives. Notice that the passage neither *identifies* the output of pure apprehension with a pure intuition nor *denies* that the input to apprehension is a pure intuition. Let me take these points in reverse order. First: the way that Kant describes the input to pure apprehension is in fact reminiscent of the way that he describes pure intuition in the Aesthetic. The passage we are considering tells us that sensibility, in its ‘original receptivity’, ‘provides’ the input to pure apprehension. In kindred terms, in the Aesthetic Kant says that pure intuition is the only thing that sensibility ‘makes available *a priori*’ (A22/B36). It is thus plausible that the input to pure apprehension is pure intuition, that is, the elements of the content of an empirical intuition that sensibility ‘makes available *a priori*’. With respect to these elements, our sensibility is indeed an *original* receptivity, because these features *originate* in the form of our receptive capacity.

Moving now to the output of pure apprehension, note that Kant does *not* identify the a priori ‘representation’ [*Vorstellung*] of space and time with an a priori *intuition*, and we have already seen reason, in the case of empirical apprehension (that is, apprehension that acts on empirical inputs), to doubt that the outputs of apprehension are intuitions. We might, of course, hold that Kant has a disjunctive account of the outputs of apprehension (either perceptions, as in the case of empirical apprehension, or pure intuitions, as in the case of pure apprehension), but this passage does not straightforwardly motivate such a proposal. And in fact, later in the A-Deduction, Kant describes the outputs of apprehension in general as *images* [*Bilder*]; this characterization is

broad enough to unite the outputs of both empirical and pure apprehension, for images can be both empirical images (which I take to be the same as perceptions [*Wahrnehmungen*]) and pure images. Add to this the fact that in at least one place, Kant explicitly describes the representations of space and time as *pure images* (A142/B182), and we have plausible grounds for thinking that the a priori representations of space and time outputted by pure apprehension are *not* pure intuitions but instead *pure images*. My suggestion, then, is that pure apprehension is the act that brings the pure intuition of space to consciousness by creating a pure image of space, and it is only once this image has been produced that the mind is in a position to ‘generate’ the a priori ‘representation’ (that is, *concept*) of space.

Pure apprehension is not the only act that contributes matter for the concept of space. In the A-Deduction, Kant tells us that apprehension is ‘inseparably combined’ with the synthesis of *reproduction*, which Kant again splits into empirical and pure variants. Moreover, Kant makes it clear that the synthesis of reproduction plays a role in giving matter for the concept of space:

Now it is obvious that if I draw a line in thought, or think of the time from one noon to the next, or even want to represent a certain number to myself, I must necessarily first grasp one of these manifold representations after another in my thoughts. But if I were always to lose the preceding representations (the first parts of the line, the preceding parts of time, or the successively represented units) from my thoughts and not reproduce them when I proceed to the following ones, then no whole representation and none of the previously mentioned thoughts, *not even the purest and most fundamental representations of space and time*, could ever arise.

A101-02, my emphasis

The synthesis of reproduction is a necessary condition of ‘drawing a line in thought’; more fundamentally still, it is a condition of ‘the purest and most fundamental representations of space and time’. Of course, readers who are eager to give imagination a role in the generation of pure intuition will jump at this. But I take it that the ‘purest and most fundamental’ representations at issue here are the pure concepts of space and time, not the pure intuitions. For one thing, this entire

passage is about the conditions of *thinking* — drawing a line *in thought, thinking* the time from one noon to the next — not about the conditions of intuiting. For another, Kant has just described the concept of space as the ‘*fundamental* concept’ [*Grundbegriff*] of geometry, and a few pages later he will describe the concept as ‘the *purest* objective unity’ (A107). I take it, then, that the ‘*purest* and most *fundamental* representations of space and time’ under discussion here are the *concepts* of space and time. In the next section, I will say more about exactly *how* reproduction contributes to making this fundamental concept possible, but for now, I want to situate its role broadly as a matter-giving act, which cooperates with apprehension to generate the pure image of space.

What Kant refers to separately in the A-Deduction as the pure syntheses of apprehension and reproduction, he refers to jointly in the B-Deduction as the ‘synthesis *speciosa*’, or transcendental synthesis of the imagination (B151). Just as in the A-Deduction, I believe that the fundamental role that *synthesis speciosa* plays is to give matter for pure sensible concepts; moreover, I believe that it plays this role by generating the pure *image* of space. But just as we found in our discussion of the A-Deduction, this reading cuts against a more orthodox view, which holds that *synthesis speciosa* generates the pure *intuition* of space.⁹⁷ The exegetical issues we face in deciding between these readings are very similar to those we have already run into, and it will be worth saying something briefly to explain how my proposed reading makes sense of the relevant passages.

The fundamental passage that has sparked controversy about the role of *synthesis speciosa* is a notoriously obscure footnote in the B-Deduction. Consider:

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

⁹⁷ See, for example, Longuenesse (1998) and Heidegger (1927/1997). For helpful discussion of Longuenesse and Heidegger’s views, see Onof and Schulting (2015).

accordance with the form of sensibility in an **intuitive** representation, so that the **form of intuition** merely gives the manifold, but the **formal intuition** gives unity of the representation. In the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it precedes all concepts, though to be sure it presupposes a synthesis, which does not belong to the senses but through which all concepts of space and time first become possible.

B160-61n

The interpretive challenges we face in approaching this passage are strikingly similar to the challenges we faced above, in interpreting Kant's remarks about pure apprehension. This passage presents a kind of synthesis, and our task is to identify the *inputs* to and *outputs* of this synthesis.⁹⁸

Once again, Kant's language in characterizing these inputs and outputs is frustratingly vague; still, we can start by rounding up the things that he does explicitly say. The *input* to the synthesis is a 'manifold' that is 'given' by 'the form of intuition'. The *output*, meanwhile, is an 'intuitive representation', which Kant calls a 'formal intuition'; this formal intuition 'comprehends' the manifold given in accordance with the form of sensibility, thereby giving 'unity' to the representation. The formal intuition represents space as an object, which we are required to do in the science of geometry. The synthesis that produces the formal intuition both precedes the concepts of space and time and makes them possible.

Once again, we face the same choices. On the dominant model of apprehension, the input (the manifold that is given by the form of intuition) is some non-intuitive sensible representation, and the output (the 'formal intuition' produced when this manifold is given 'unity') is the pure intuition of space. But I have argued that the view of apprehension that this reading presupposes is seriously misguided. And the passage does not force it on us. First, as concerns the inputs: there is nothing stopping us from thinking that the 'manifold given by the form of sensibility' just is the

⁹⁸ For extensive discussion of the history of reception of this paragraph and an exhaustive discussion of the various interpretive options, see Onof and Schulting (2015). For an interpretation along the lines as the one I will advocate, see Tolley (2016).

pure intuitive content present in every intuition, the content that derives from (hence is ‘given by’) the form of sensibility. Kant, after all, tells us in the Aesthetic that sensibility makes the pure intuition of space available a priori. As for the outputs: Kant never once straightforwardly identifies the output as pure intuition; he calls it an ‘intuitive representation’, yes, and also a ‘formal intuition’, but that is not enough to clinch the case. And note what he says that we need this representation *for* at the beginning of the passage: we need it, specifically, for the science of geometry. That would be an oddly restrictive way of describing the utility of the pure intuition of space, which is a condition on all outer intuition and experience whatsoever, not merely a requirement for the relatively circumscribed intellectual endeavor of geometry. Notice, too, that Kant tells us that the synthesis that first generates this representation is one that precedes all concepts of space and time and first makes them possible. That is consonant with my proposal that pure apprehension gives matter for spatial concepts by bringing pure intuitive content to consciousness. I propose, then, that what Kant here calls the ‘formal intuition’ of space is the same as what he elsewhere calls the ‘pure image’ of space, and is to be sharply distinguished from the pure intuition of space. Notice, too, that our earlier discussion of the Amphiboly helps us make sense of what it means to say that this representation represents space ‘as object’. We saw that the faculty of sense can never intuit space ‘in itself’, as an ‘object of intuition’, because sense always represents space as filled by some specific substance. But imagination can form a pure image of space (or a ‘formal intuition’), which detaches the pure content from an intuition and thus represents the form of intuition in isolation, as an ‘object’.

So far, I have given background motivations for denying that pure apprehension is responsible for the generation of pure intuitions, and I have shown that the texts often adduced in support of the position are consistent with the alternative reading that I have proposed, on which

the output of pure apprehension is not a pure intuition but rather a pure image of space. In closing my case for this reading, I also want to address a more systematic motivation that has recently been put forward for the standard view. Recently, Tobias Rosefeldt (2022) has argued that if we do not give apprehension an intuition-generating role in the case of pure intuition, we will have no explanation for how pure intuition represents space and time. His argument for this claim starts from the fact that apprehension is the synthesis that governs the transition from unconscious representation to conscious representation. Therefore, if apprehension does not produce pure intuition, then it follows that pure intuition is not a conscious representation. But, Rosefeldt continues, if this were the case, then Kant would have no explanation for how pure intuition represents space and time. The reason for this is *not* that Kant equates sensible representation with conscious representation (in the Anthropology, Kant embraces the existence of an ‘immense field’ of ‘sensuous intuitions and sensations of which we are not conscious’ (*ApH* 7: 135)). The reason is rather that Kant’s specific explanation of how sensible representations unconsciously relate to objects cannot cover the intentional relation between pure intuition and space. On Rosefeldt’s reading, Kant assumes the following disjunctive account of sensible intentionality:

Sensible Intentionality 1: A sensible representation *S* represents an object *O* just in case either *O* causes *S* or *S* consciously presents *O*.

Now, space is the form of intuition, and forms of intuition, Rosefeldt plausibly suggests, are causally inert (Rosefeldt 2022: 16). Therefore, given this background conception of sensible intentionality, pure intuition can only represent space if it consciously presents space, and since only apprehended representations are conscious, it follows that the pure intuition of space *must* be a product of pure apprehension, on pain of not representing the object it is supposed to represent.

The problem with Rosefeldt’s argument is simply that he does nothing to justify his operative conception of sensible intentionality, and as Chaplin proposes (2022: 887-889), we can

easily make sense of the proposal that the pure intuition of space unconsciously represents space if we broaden the definition of sensible intentionality as follows:

Sensible Intentionality 2: A sensible representation *S* represents an object *O* just in case either *O* grounds *S* or *S* consciously presents *O*.

The form of intuition plausibly grounds pure intuition, albeit non-causally, and until Rosefeldt can show that Kant would deny that non-causal grounding relations suffice for intentional relations, we need not be persuaded by his argument.

I conclude, then, that the pure syntheses of apprehension and reproduction, which Kant refers to jointly in the B-Deduction as ‘figurative synthesis’, give matter for the concept of space by raising the pure content present in every intuition to consciousness. Now, in the A-Deduction, Kant presents a *third* synthesis, called the synthesis of recognition in a concept, and one might wonder whether this synthesis is an additional matter-giving act. I will argue later in the dissertation that the synthesis of recognition is in fact to be understood as a *form-imparting* act, not a matter-giving act. It should not surprise us that Kant’s doctrine of synthesis encompasses both the matter-giving acts that bring forth the matter for a concept and the form-imparting acts that create conceptual contents out of given matter, for we have seen that Kant’s definition of synthesis makes provision for both acts: synthesis is the act that both ‘gathers together’ the elements for cognition *and* ‘unites them into a certain content’. My suggestion is that the syntheses of apprehension and reproduction together constitute the gathering stage of synthesis, while the synthesis of recognition constitutes its unifying stage. We will study recognition in detail in our study of the formal origins of concepts.

2.6 *Material Origin of <Space>*

How exactly do the syntheses of apprehension and reproduction retrieve the pure intuitive content from sensible intuitions? That is the question I pursue in this section. A note on terminology going forward. Following Tracz, it is useful to distinguish apprehension in the narrow sense (on which ‘apprehension’ refers to the first of the three syntheses under discussion in the A-Deduction), and apprehension in a broader sense (on which the term refers both to apprehension in the narrow sense and the synthesis of reproduction with which Kant says that apprehension in the narrow sense is ‘inseparably combined’). Unless otherwise indicated, I will henceforth use the term ‘pure apprehension’ to refer to apprehension in the broad sense, insofar as it takes place *a priori*. On this usage, ‘pure apprehension’ is synonymous with ‘figurative synthesis’.

Given that pure intuition is the common material source of all pure spatial concepts, it is unsurprising that Kant sets aside a role for pure apprehension in the material origin of both the general concept of space and the more specific concepts of geometry. In several places, Kant maintains that the very synthesis that underlies the general concept of space *also* underlies our ability to intellectually represent specific shapes. This point comes out both in Kant’s discussion of the synthesis of reproduction in the A-edition and his discussion of figurative synthesis in the B-edition:

Now it is obvious that if I draw a line in thought... I must necessarily first grasp one of these manifold representations after another in my thoughts. But if I were always to lose the preceding representations (the first parts of the line...) from my thoughts and not reproduce them when I proceed to the following ones, then no whole representation and none of the previously mentioned thoughts, *not even the purest and most fundamental representations of space and time*, could ever arise.

A101-102, my emphasis

Likewise, in the B-edition, Kant claims that figurative synthesis, or what he calls ‘motion of the subject’ (B155), is a necessary condition of our drawing a line and is *also* a necessary condition of our representing space as three-dimensional:

We cannot think of a line without **drawing** it in thought, we cannot think of a circle without **describing** it, we cannot represent the three dimensions of space at all without **placing** three lines perpendicular to each other at the same point...

B154

The point to emphasize here is that the very same synthesis that underlies our ability to represent specific shapes in the science of geometry *also* underlies our ability to form the general concept of space.

But there is another parity: the same synthesis that underlies the concepts of geometry and the general concept of space is *also* at work in the empirical apprehension of appearances. Indeed, it is precisely for this reason that the propositions of geometry are objectively valid. Consider:

The synthesis of spaces and times, as the essential form of all intuition, is that which at the same time makes possible the apprehension of the appearance, thus every outer experience, consequently all cognition of its objects, and what mathematics in its pure use proves about the former is also necessarily valid for the latter.

A165-6/B206

Now that space is a formal *a priori* condition of outer experience, that this very same formative [*bildende*] synthesis by means of which we construct a figure in imagination is entirely identical with that which we exercise in the apprehension of an appearance in order to make a concept of experience [*Erfahrungsbegriff*] of it — it is this alone that connects with this concept [*viz.* the concept of a triangle] the representation of the possibility of such a thing.

A224/B271

These passages are perfectly explicit: the synthesis by which we construct a figure in imagination is ‘entirely identical’ to the synthetic procedure that we execute ‘in the apprehension of an appearance in order to make a concept of experience’. It is due to this coincidence that Kant says that figurative synthesis has a place, not just in geometry, but also within transcendental philosophy (B155n). For as the first passage above says quite clearly, this synthesis is a condition on the possibility of outer experience as such.

If we combine these findings with those of the previous chapter, we can articulate the distinction between pure and empirical apprehension more crisply. We can distinguish the following:

- *Pure apprehension* is the figurative synthesis by which we construct shapes in imagination. Pure apprehension brings the pure intuitive content of an intuition to consciousness to form a pure image. In doing so, it gives matter for pure sensible concepts.
- *Empirical apprehension 'by means of sensation'* brings sensations to consciousness. It brings the purely empirical content of the intuition to consciousness and thereby gives matter for a sensation-directed empirical concept.
- *Empirical apprehension of an appearance*, finally, is a complex act that combines pure apprehension with apprehension by means of sensation. It brings elements of both the empirical and pure content of the intuition to consciousness to form an empirical image (or perception). It thereby gives matter for a concept of experience.⁹⁹ Given that pure apprehension is a part of empirical apprehension, it follows that the empirical images that give matter for *Erfahrungsbegriffe* will always incorporate pure imagistic content as well as empirical content.

Kant, we have seen, contends that all spatial concepts are commonly grounded by the pure intuition of space. We have now seen, in addition, that this pure intuitive content is always brought to consciousness through the same act. Figurative synthesis or pure apprehension is the common

⁹⁹ Thus, when Kant tells us that the formative synthesis operative in geometry is 'entirely identical' with the synthesis that underlies our apprehension of appearances, I take him to be claiming that it is identical with *part of* this act.

act that generates matter for i) the pure spatial content present in any *Erfahrungsbegriff*; ii) the general concept of space ‘as object’; and iii) the specific concepts of geometry. Kant must therefore hold that the *product* of this act — pure imagistic spatial content — is the common material basis for all pure sensible spatial concepts. And this suggestion is borne out by the way we have seen Kant distinguish pure sensible concepts from notions in the *Stufenleiter*:

A concept is either an **empirical** or a **pure concept**, and the pure concept, insofar as it has its origin solely in the understanding (*not in a pure image of sensibility*), is called *notio*.

A320/B377

The difference between pure sensible concepts and notions is that the former, unlike the latter, originate in a *pure image* of sensibility. What I hope we are now in a position to see is that Kant is not using the term ‘image’ loosely here. Pure apprehension is the act that gives matter to pure spatial concepts (and, if this passage is to be taken at face value, to pure sensible concepts more generally), and the outputs of pure apprehension are pure *images*.

I will describe the specific way in which pure apprehension gives matter for the specific concepts of geometry in the next section, but before I do so, I want to make a general remark about Kant’s distinction between pure and empirical concepts. Kant’s account of the material origin of the concept of space, it seems to me, shows us something important about what is and is not entailed by calling a concept *a priori*.

The pure concept of space is an *a priori* concept in a specific sense: the matter out of which the concept is formed traces back to the form of our receptive capacity, which exists prior to and independently of experience. But the concept is *not* for that reason *a priori* in the sense that it can be formed ‘prior’ to experience. We have seen that the very synthesis that generates a figure also generates an image of space. Moreover, this very formative synthesis is part of the empirical apprehension by which we apprehend appearances. It is thus open to Kant to hold that the pure

imagistic content that underwrites the concept of space is first present in the mind as a subset of the content of the empirical image of a given appearance, as generated by empirical apprehension. This empirical image itself provides matter for a concept of experience, and Kant can thus correspondingly hold that the pure content of the concept of space is first present in the mind as a subset of the total content of an *Erfahrungsbegriff*. Compatibly with the empirical-pure distinction, Kant can therefore maintain — and, I think, *does* maintain — that the pure concept of space first comes into existence as *part of* a concept of experience, and is only subsequently abstracted from the *Erfahrungsbegriff* as a self-standing concept in its own right. Consider the way in which Kant describes the ‘very mixed fabric of human cognition’ (A85/B117) at the opening of the *Critique*:

[I]t could well be that even our experiential cognition is a composite of that which we receive through impressions and that which our own cognitive faculty (merely prompted by sensible impressions) provides out of itself, which addition we cannot distinguish from that fundamental material until long practice has made us attentive to it and skilled in separating it out.

B1-B2

It might thus be that the a priori concept of space is first present in the mind as part of an *Erfahrungsbegriff*, and only long practice can make us attentive to it and skilled at separating it out. This separating out of the concept is not the first formation of the concept; instead, it should be thought of as the making distinct [*Deutlichmachung*] of a pure concept that is already present in the mind.

Our ability to ‘attend’ to the pure spatial element of an *Erfahrungsbegriff* depends, I think, on a corresponding abstraction-like process at the level of imagination, by which the imagination detaches the pure spatial imagistic content from an empirical image. When this process takes place, the imagination thus forms a pure image as a self-standing imaginative representation (this, I think, is the ‘formal intuition’ Kant says is required for geometry, which represents pure space, empty of

substance). The important point to emphasize, though, is that the formation of this pure image is *not* a condition on the formation of the concept of space — a proposal that would implausibly require us to have imagined empty space prior to forming any concept of experience.

2.7 Material Origin of Geometrical Concepts

I have argued so far that all pure spatial concepts are commonly grounded on the pure intuition of space. This pure intuition, I further argued, is not an *immediate* ground of pure spatial concepts; it is, rather, a mediate ground, because it grounds pure spatial concepts in virtue of grounding pure spatial images (which are themselves immediate grounds of spatial concepts).

There is, however, an important material difference between the general concept of space and the specific spatial concepts of geometry: the former is given, the latter are made.¹⁰⁰ As we saw in the introduction to this part of the dissertation, to say that a concept is given is to make a specific claim about its material origin — namely, that the acts that bring forth matter for the concept are natural operations of the mind that are not influenced by the power of choice. To say that a concept is made, meanwhile, is to say that its matter-giving act is subject to the power of

¹⁰⁰ I present evidence for this claim about geometric concepts shortly. For the given status of <space>: first of all, in the *Dohna-Wundlacken* transcript, the concepts of space and time are banded with the categories as examples of concepts that are given *a priori* (*LDW* 24: 756), and even more impressive evidence comes in the *Transcendental Aesthetic* itself. As we have seen, the B-edition *Aesthetic* contains a ‘metaphysical exposition’ of the concepts of space. Now consider the way that Kant characterizes a metaphysical exposition: ‘I understand by **exposition** (*expositio*) the distinct (even if not complete) representation of that which belongs to a concept; but the exposition is **metaphysical** when it contains that which exhibits the concept **as given a priori**’ (B38, emphasis in original). Kant’s use of bold font here should suggest to us that he has the technical notion of givenness in mind here, as should his use of the term ‘exposition’, which in his hand-written notes Kant repeatedly connects specifically to given concepts and contrasts with ‘declaration’, which pertains to arbitrary concepts: ‘Definition is either a precise declaration or an adequate exposition; the former occurs in *conceptibus factitiis*, the latter *datis*’ (*R* 2920, 16: 576-77); ‘Through declaration a distinct concept is made. Through exposition a given concept is made distinct’ (*R* 2925, 16: 578; cf. *R* 2949, 16: 584-85). Clearly, then, Kant is employing his technical notion of a given concept in his characterization of the project of the *Aesthetic*.

choice. Since pure apprehension gives matter for *both* the general concept of space *and* the concepts of geometry, and since the former are given and the latter made, it follows that figurative synthesis must have a distinctive relation to the faculty of choice. On the one hand, figurative synthesis must be a process that can proceed ‘naturally’, without influence by the power of choice; this natural operation brings forth matter for the general concept of space. On the other, figurative synthesis must also be *penetrable by* the power of choice, and it must be governed by this power insofar as it is to bring forth matter for specific geometric concepts.

Before presenting evidence that this is Kant’s position, let me first present evidence for the status of geometric concepts as made. Here are several texts, spanning a 30-year period, that clearly express this commitment:

[A]ll mathematical concepts are synthetic and arise through arbitrary composition.
LB 24: 153

Only *conceptus arbitrarii (factitii)*, which are made *per synthesin arbitriariam*, can be defined synthetically; these include all mathematical concepts
WL 24: 918

Mathematical definitions can never be false, because mathematics makes its concepts itself
LDW 24: 756

[Mathematical definitions are] constructions of concepts that are originally made
A730/B758

Now, Kant in fact slightly over-states his position here, for while it is his contention that the majority of mathematical concepts are made, his considered position is that mathematics depends upon a small stock of indefinable ‘elementary’ concepts that are given:

Now we wish to mention that all mathematical *definitiones* are *definitiones* of arbitrary concepts. Mathematicians also have a few given concepts which, however, they cannot define, and the mathematician must not do this either, for

otherwise he philosophizes... and it is due to this ground that a mathematician cannot define a place, a direction, a straight line, etc., for these are all given concepts...

LB 24: 269¹⁰¹

There is thus a small stock of basic mathematical concepts that are given — the concept of a straight line, for example. But the specific geometrical concepts whose content goes beyond these elementary concepts — the concept, for example, of a shape that encloses a space with three straight lines — are made. And this means that the matter for such concepts must be given through a voluntary act.

With this background in mind, consider the following passage in the Critique:

Now in mathematics a postulate is the practical proposition that contains nothing except the synthesis through which we first give ourselves an object *and generate its concept*, e.g., to describe a circle with a given line from a given point on a plane; and a proposition of this sort cannot be proved, since *the procedure that it demands is precisely that through which we first generate the concept of such a figure*.

A233-34/B286-87, my emphasis

This passage tells us that the mathematician generates her concepts by issuing to herself a postulate, which is an unproven ‘practical proposition’ that commands a certain procedure — in this case, the description of a circle from a given point on a plane.¹⁰² Now, as we saw above, describing a circle is one of Kant’s paradigm instances of figurative synthesis, or ‘motion of the subject’ (B154-55). The postulate ‘through which’ the geometer generates a concept thus commands a specific act of figurative synthesis. What this shows is that figurative synthesis is penetrable by the power of choice but need not always be governed by the power of choice. The

¹⁰¹ See also *WL* 29: 840-41, where Kant says that the concept <point> is also an elementary given mathematical concept.

¹⁰² Notice, by the way, that the role of postulates in geometry gives us a good way of distinguishing between the elementary given geometric concepts and those that are made. The given, elementary concepts of mathematics are the concepts that *feature within* a postulate — line, plane, *etc.* The arbitrarily constructed mathematical concepts are those that are *produced through* the postulate — e.g. the concept of a circle.

formative synthesis by which we apprehend appearances, which gives matter for the general concept of space, is a natural operation of the mind that takes place whether we want it to or not. But the formative synthesis that underlies specific geometric concepts is the result of the mind issuing itself a postulate, which commands a certain act of figurative synthesis.

3. The Concept of Time

In this final section, I make some brief and cursory remarks about the origin of the concept of time; a full treatment of this concept is a project for future work.¹⁰³ What I would like to do is simply to say enough to help me substantiate the contention that figurative synthesis is the common matter-giving act for all pure sensible concepts.

We have already seen that Kant places figurative synthesis at the foundation of our capacity to form both the general concept of space and the specific spatial concepts that figure in geometry. But he is equally explicit in claiming that it is a condition of our representation of time. Having introduced figurative synthesis and claimed that it presides over the formation of spatial concepts, he continues as follows:

[W]e cannot even represent time without, in **drawing** a straight line (which is to be the external figurative representation of time), attending merely to the action of the synthesis of the manifold through which we successively determine the inner sense, and thereby attending to the succession of this determination in inner sense. Motion, as action of the subject (not as determination of an object), consequently the synthesis of the manifold in space, if we abstract from this manifold in space and attend solely to the action in accordance with which we determine the form of **inner sense**, first produces the concept of succession at all.

B154–55

¹⁰³ For a deep and extremely difficult discussion of this topic, see Dunlop (2009).

As in the case of space, we once again come up against questions about the outputs of figurative synthesis. In saying that ‘we cannot even represent time’ without figurative synthesis, is Kant making a claim about the condition of the pure intuition of time or the pure concept of time? At this point, I will not rehearse my reasons for insisting that pure apprehension is a condition of *concept* formation rather than intuition formation. I will simply take it for granted here that what Kant is describing is the condition under which the pure temporal content contained in every intuition can be brought before the mind as matter for a pure sensible concept.

Kant’s claim is that we bring this temporal content to consciousness through the very same figurative synthesis through which we generate pure images of spatial figures. Interestingly, Kant says that the same kind of imagistic content that gives content to pure spatial concepts — the image of a straight line — also serves as the ‘external figurative representation of time’. He also sets aside an important role for second-order *act* consciousness, directed at the figurative synthesis itself : we are first equipped to form the concept of succession when we ‘attend... merely to the action of the synthesis of the manifold through which we successively determine the inner sense’ (B154), which requires that we ‘abstract from this manifold in space and attend solely to the action in accordance with which we determine the form of inner sense’ (B155). These two claims seem to be in tension. On the one hand, Kant is claiming that a spatial image (of a straight line) can serve as an ‘external figurative representation’ of time itself. On the other hand, he says that we are only positioned to form the concept of succession when we ‘abstract from’ the spatial manifold on which figurative synthesis operates and attend solely to the act itself. Kant’s position, I think, is that pure spatial imagistic content *does* give matter for the concept of time, but only insofar as we are conscious of the successive synthesis through which this content is generated.

In one respect, we have here a material disanalogy between spatial and temporal concepts: while do images strictly speaking carry spatial content, they do not strictly speaking carry temporal content, even though the intrinsically spatial content of an image can be recruited to serve as an external figurative representation of time. But in another respect, the concept of time is no different from any other sensible concept. For what we will see in Chapter 6 is that *no* image can supply matter for a concept independently of our being conscious of the rule that governs its apprehension.

Conclusion

This chapter, together with the previous, is the center-piece of my argument that the fundamental role of the act that Kant calls ‘apprehension’ is to give matter for concepts. In the previous chapter, we saw that Kant distinguishes between apprehension ‘by means of sensation’ and the empirical apprehension of appearances, granting each mode of apprehension a matter-giving role with respect to a distinctive kind of empirical concept. In this chapter, I have argued that a third mode of apprehension, *pure apprehension*, or figurative synthesis, gives matter for all pure sensible concepts without exception. Since pure images are the outputs of pure apprehension, this contention makes good sense of Kant’s claim in the *Stufenleiter* section that all pure sensible concepts originate in a ‘pure image of sensibility’.

The path to defending this claim was to distance my reading from the standard reading that views apprehension as part of Kant’s theory of *intuition* formation. We discussed that general tendency in the previous chapter; in this one, we investigated it specifically as it applies to the relationship between pure apprehension and pure intuition. Against the standard view that pure apprehension *outputs* pure intuitions, I argued that pure intuitions are the *inputs* to pure apprehension, and its outputs are the pure spatial images out of which pure sensible concepts

originate. In defending this view, I showed that the standard view has no monopoly on the texts that are standardly taken to support it and that in fact the more plausible reading of those texts tends toward the reading I propose. Along the way, I also argued for a novel reading of Kant's project in the Aesthetic, as well as his arguments in the Third and Fourth Expositions, which takes seriously the fact that he refers to the Aesthetic as both an exposition and transcendental deduction of the concepts of space and time.

But for the very reasons that we have found apprehension to be the central matter-giving act for sensible concepts (both empirical and pure), we should *not* expect it to play a matter-giving role for the pure intellectual concepts. For the office of apprehension is to bring representations *of sense* to consciousness. Since pure intellectual concepts do not have sensible representations in their matter, it follows that however exactly their matter is given, it cannot be through apprehension. I turn in the next chapter to an exploration of the alternative material source that Kant posits for pure intellectual concepts.

Chapter 5

Material Origins of Pure Intellectual Concepts

Introduction

We arrive, then, at the pure intellectual concepts. If the material basis for these concepts is itself non-sensible, then it is not possible for that matter to be given to the mind through the act of apprehension, since apprehension is the act that brings sensible representations to consciousness. We are thus on the hunt for an alternative matter-giving act, one that is compatible with the status of these concepts as non-sensible concepts.

My central focus in this chapter will be on the categories, and my main aim is to bring out the feature that I believe lies at the basis of all of their peculiar and important features. The claim that I will begin to motivate in this chapter is that *reflection* — precisely the act that Kant says imparts the universal *form* characteristic of concepts — is also the act that first gives *matter* for the categories. Since reflection will be the topic of an entire chapter later in the dissertation (Chapter 7), the present chapter can only give us a somewhat shaky grip on this claim, but I hope to say enough to begin to motivate it. Having treated the categories, I will turn, very briefly, to the

Ideas of reason. I will say just enough to support my suggestion that the Ideas are given concepts, and to motivate the suggestion that their matter is given through the act of inferring. But as I mentioned in the previous chapter, my treatment of the Ideas will be nothing more than the faint outline of an account.

I proceed as follows. In Section 1, I treat the categories. Appealing to the matter-content linkage described in the introduction to this part of the dissertation, my first task (in Section 1.1) is to identify the distinctive content of the categories, in order to focus the question of how that content comes into being. In Section 1.2, I propose an interpretation of Kant's distinction between transcendental deduction and physiological derivation. Both modes of inquiry, I claim, concern themselves with the origin of a concept, but whereas transcendental deduction identifies the *matter* of a concept (and then further seeks to validate the concept itself by validating its matter), physiological derivation identifies the matter-giving act through which this matter is brought to consciousness. Then, in Section 1.3, I point to several texts that highlight a peculiarly close connection between categories and the act of *reflection*, and I argue that this connection consists in the fact that reflection is the act that gives matter for the categories. If this is correct, then Kant's account of the logical acts of comparison, reflection, and abstraction not only explains the origins of concepts as to form; it doubles as a physiological derivation of the categories. I close this section of the chapter (in Section 1.4) by suggesting that the mathematical and dynamical categories originate in distinct modes of reflection, and I explain the distinctness of these modes by adverting to the findings of Chapter 3. In Section 2, I turn briefly to the Ideas of reason, and say just enough to motivate the suggestion that their matter is given through the act of inferring, and, correspondingly, that they are given concepts.

1. Categories

Our account of the material origins of the categories must respect three constraints. First, our account must explain the status of the categories as pure concepts, and that requires that there be no sensation in the matter for the categories. Secondly, our account needs to respect the status of the categories as pure *intellectual* concepts. This requirement entails that there be no *sensible representation at all* in their matter, which in turn requires that this matter be given by some act that is not apprehension, since apprehension always takes sensible representations as its inputs. Thirdly, our account must respect the status of the categories as *given* concepts. This means that the matter-giving act must be a natural operation of the mind — one that is not arbitrarily brought about through an exercise of the power of choice.

I have already presented the evidence that motivates the first two constraints laid out above, but before we dive into our treatment of the categories, let me present evidence that the categories are *given* rather than arbitrarily made. Consider, first, the following passage from the *Critique*:

[S]trictly speaking, no concept given a priori can be defined, i.e., substance, cause, right, equity, etc.

A728-9/B756-7

Here, the relational categories of substance and cause are listed as examples of concepts given a priori. Consider also the following from the *Dohna-Wundlacken* transcript, which further lists the categories of quantity among the ranks of given a priori concepts:

All concepts are of two kinds, namely:
conceptus dati, and these are either
empirici – given *a posteriori*
rationati – given *a priori* - {E.g., concept of cause, quantity, substance, action, time, and space.

LDW 24: 756; cf. WL 24: 914

In Kant's handwritten notes, too, the concept of substance is cast as a concept that is 'given a priori but not arbitrarily' (*R* 2994, 16: 606-07). Admittedly, I cannot find a passage in which Kant makes the blanket assertion that all categories are given a priori, but I see no reason not to assume that Kant holds this general thesis, and I will assume that he does in what follows.

1.1 Content of the Categories

In the introduction to this part of the dissertation, I pointed to the matter-content linkage. Part of the point of claiming that concepts are form-matter compounds is to grant the matter of concepts a content-constraining role. If the matter of a concept placed no constraints at all on the kind of content that could be formed from that matter, it would make little sense to say, of any specific concept, that it was formed out of *that* matter rather than some other matter. Admittedly, matter underdetermines content, but the mind is not free to form just any concept on the basis of a given matter. Thus, if we have a secure grasp on the *content* of a given concept, we will have a good sense of what its matter must be like, even if the matter-content linkage is not so tight that we can derive the matter of a concept from its content.

Now, Kant says very little directly about the matter of the categories; however, he *does* have a lot to say about the distinctive kind of content that pertains to the categories, and so our first task will be to develop an account of the nature of categorial content. Before we develop this account, though, I want to issue a caveat. The characterization of categorial content I provide in this chapter will not be fully intelligible until we complete our study of the logical act of reflection in Chapter 7. What I say here will revolve around the notion of an 'agreement-relation' between apprehension and apperception, but I will not be in a position to fully clarify that notion until our

study of the act through which such relations are given to the mind, namely, reflection. My aim in this section is just to say enough to start to motivate the proposal that categorial content is ultimately sourced through the act of reflection; this is a proposal I will continue to develop throughout the rest of this chapter but will not make fully comprehensible until Chapters 7 and 8. With this caveat in mind, we can begin.

Perhaps the best place to start in capturing the content of the categories is with the ‘explanation [*Erklärung*] of the categories’ that Kant adds in the second edition *Critique*:

[The categories] are concepts of an object in general, by means of which its intuition is regarded as determined with regard to one of the logical functions for judgments.
B128

Let us unpack this passage. One thing is clear: the categories are ‘concepts of an object in general’. But that is not all: their content is also such that in applying them (‘by means of’ them), one represents (‘regards’) the *intuition* of an object as *determined* with respect to a *logical function of judgment*. We should distinguish, then, between what we can call the ultimate and the proximate representational contents of the categories. Ultimately, they are concepts *of objects*. But they achieve this ultimate representational significance *via* what they proximally represent — namely, determination-relations between intuitions and functions of judgment.

The supplementary characterization of the categories in the *Prolegomena* stresses the proximate significance of the categories at the expense of losing sight of their ultimate significance as concepts of objects, but is otherwise helpful in consolidating the formulation of the B-edition:

[The category is] that concept which represents the intuition as in itself determined with respect to one form of judgment rather than the others, i.e., a concept of that synthetic unity of intuition which can be represented only through a given logical function of judgments

Prolog 4: 304

Once again, the categories are cast as representing determination-relations between intuitions and forms of judgment: categories are those concepts that represent intuitions as determined with respect to specific forms of judgment.

These passages bring out some important points that are not always adequately appreciated in discussions of the categories. First of all, while the categories are fundamentally concepts of *objects*, not concepts of intuitions or unities of intuitions (as the second passage above misleadingly implies), they must always be understood as specifically concepts of objects of *intuition*.¹⁰⁴ As Kant later describes them, they are ‘merely thought-forms for the concept of an *object of intuition as such*’ (*wF* 20: 272, my emphasis). That their content is intuition-directed, however, does not entail the view, which Kant does *not* hold, that this content includes reference to specifically *spatiotemporal* intuition.¹⁰⁵ Still, while we must take care not to specify the intuition-directed element of categorial content in spatiotemporal terms, we must not disregard that aspect of their content, either. The second point is that the categories represent the forms of

¹⁰⁴ This element of categorial content goes missing in Brian Chance’s otherwise excellent treatment of the categories (Chance 2018). Chance correctly defends a view ‘according to which their content arises from the understanding alone’ (Chance 2018: 46), and he very helpfully brings out the historical context in which Kant defends this view. However, he takes it that such an account of the origin of categorial content is incompatible with an account such as Allison’s (2004), on which ‘reference to sensible intuition’ is an ‘essential component of the very concept of a category’ (Allison 2004: 156). In other words, Chance assumes that the categories could not have intuition-directed content compatibly with their purely intellectual origin. But as we will see in more detail in Part 3 of the dissertation, Chance is wrong to think that these features are in tension. Moreover, in Chance’s argument against the claim that categories have intuition-directed content, he fails to engage with any of the passages I have just presented, all of which tie the representational content of the categories to intuition.

¹⁰⁵ Not only does Kant deny that categorial content is restricted to spatiotemporal intuition, he denies that it is restricted even to specifically sensible intuition: ‘It should be noted, however, that these categories, or predicaments (as they are otherwise called), presuppose no particular kind of intuition which (like that which alone is possible to us men) is sensory as space and time are; they are merely thought-forms for the concept of an object of intuition as such, of whatever kind that may be, and even if it were a super-sensible intuition, of which we are unable to frame any specific concept... so that the category per se does not depend upon the forms of sensibility, space and time, but may also be based upon other forms quite unthinkable to us’ (*wF* 20: 272). I return to questions about the scope of the categories in the conclusion of the dissertation.

judgment, which means that, just as they have intuition-directed content, they also have *judgment*-directed content. But perhaps the most important point to emphasize concerns the *relationship* between the intuition-directed content of the categories and their judgment-directed content. These are not separate components of the categories' content; rather, the categories represent intuition on the one hand and the forms of judgment on the other only insofar as they stand in 'determination' relations to one another. No intrinsic property of the intuition itself is represented through the category; the intuition shows up in the category only insofar as it stands in a relation of determination to the form of judgment. Likewise, the form of judgment is represented only insofar as it determines a kind of intuition. To employ the categories is thereby to represent determination-relations between intuition and the forms of judgment.

Careful attention to Kant's transcendental deduction of the categories affords us a deeper characterization of these determination-relations. As we have seen in detail in previous chapters, Kant distinguishes between the intuition itself, as a representation of sense, and the *apprehension* of the intuition, which brings a given intuition to consciousness. Now, one way in which Kant frames the conclusion of the transcendental deduction of the categories is in terms of the notion of a necessary 'agreement' or 'conformity' between apprehension, on the one hand, and the 'unity of apperception', on the other. Here are two formulations taken from each edition:

In accordance with this principle [*viz.* the principle of the unity of apperception] all appearances whatever must come into the mind or be apprehended in such a way that they are in agreement with the unity of apperception [*sie zur Einheit der Apperzeption zusammeneinstimmen*]

A122

In such a way it is proven that the synthesis of apprehension, which is empirical, must necessarily be in conformity with [*notwendig gemäß sein müsse*] the synthesis of apperception, which is intellectual and contained in the category entirely a priori.

B162n

The deduction, then, has shown that all apprehended intuitions must stand in agreement-relations with the unity of apperception. Now, I would like to suggest that what the categories represent, as to their content, are precisely *kinds of agreement-relation between apprehension and apperception*. Determination-relations between intuitions and the forms of judgment *just are* agreement-relations between apprehension and the unity of apperception.

To see this, it is important to recognize the connection between the unity of apperception and the logical forms of judgment.¹⁰⁶ Kant says that it is the unity of apperception that ‘contains the ground of the unity of different concepts in judgments’ (B131), and again that ‘the possibility of the logical form of all cognition necessarily rests on the relationship to this apperception **as a faculty**’ (A117n). The unity of apperception is thus the ground of the logical forms of judgment; if an intuition is ‘determined with respect to the logical functions of judgment’, it therefore ‘agrees’ with or ‘conforms to’ the ground of those functions — namely, the unity of apperception. Now recall that the categories are concepts that represent objects precisely insofar as their ‘intuition is regarded as determined with regard to one of the logical functions for judging’. Linking this formulation of the content of the categories with Kant’s statement of the conclusion of the deduction, my suggestion is as follows: for apprehension and apperception to ‘agree’ just is for a given intuition to be apprehended in consciousness in such a way that it can be regarded as determined with respect to the logical functions of judging. If that is right, then, since the categories represent precisely such determination-relations between given intuitions and the functions of judgment, another way of characterizing their content would be to say that categories represent the fundamental ways in which apprehension and apperception can agree.

¹⁰⁶ I treat this connection in more detail in Chapter 7.

1.2 Transcendental Deduction Versus Physiological Derivation

Let us return to Kant's statement of the conclusion of the Deduction in the A-edition: 'all appearances whatever must come into the mind or be apprehended in such a way that they are in agreement with the unity of apperception [*sie zur Einheit der Apperzeption zusammeneinstimmen*]' (A122). Since appearances are the objects of empirical intuition, it follows that every object of empirical intuition is such that its apprehension agrees with the unity of apperception; alternatively put, every object of empirical intuition is such that its intuition can be regarded as determined with respect to the logical functions of judging. The Deduction, then, shows that the categories are valid with respect to appearances.

However, it is one thing to show that categorial content is objectively valid and another thing to explain how categorial content first originates in the mind, and we do not find a genetic story of this second kind in the Deduction. In this section, I want to explain why the Deduction does not tell such a story, and to do so, I will propose an interpretation of Kant's distinction between the transcendental deduction of a concept and the 'physiological derivation' of a concept.

The distinction between these two kinds of inquiry frames the transcendental deduction of the categories. In a section in which Kant lays down the 'principles of a transcendental deduction in general', he is at pains to distinguish a transcendental deduction from a physiological derivation and to convince the reader that the only way to establish the objective validity of the categories is through the former. In the opening of this section, Kant famously distinguishes two questions:

Jurists, when they speak of entitlements and claims, distinguish in a legal matter between the questions about what is lawful (*quid juris*) and that which concerns the fact (*quid facti*), and since they demand proof of first, they call the first, that which is to establish the entitlement of legal claim, the **deduction**.

A84/B116

In the context of concepts, Kant now aligns the question of right with the ‘transcendental deduction’ of a concept and the question of fact with the ‘empirical deduction’ of a concept:

I...call the explanation [*Erklärung*] of the way in which concepts can relate to objects *a priori* their **transcendental deduction**, and distinguish this from the **empirical** deduction, which shows how a concept is acquired through experience and reflection on it, and therefore concerns the lawfulness but the fact from which the possession has arisen.

A85/B118

In the context of concepts, then, the question of right is settled once we explain how a concept can relate to objects *a priori*; the question of fact is settled once we explain ‘how a concept is acquired through experience and reflection on it’. The former question concerns the ‘lawfulness’ of a concept’s use and is answered through transcendental deduction; the latter concerns the ‘fact from which the possession has arisen’ and is answered through empirical deduction. Later in the section, Kant calls an empirical deduction of a concept its ‘physiological derivation’ and once again emphasizes that such an account ‘concerns a *quaestio facti*, the explanation of the **possession** of a pure cognition’ (A87B119).

Now, Kant’s sharp distinction between these two kinds of account, together with his claim that a physiological derivation explains ‘how a concept is acquired through experience and reflection on it’, make it tempting to think that a transcendental deduction will say nothing at all about the origin of a concept. It is tempting to think that any discussion of a concept’s origin could only bear on a question of fact and so should have no place in a transcendental deduction of the concept. But that *cannot* be Kant’s position. In the previous chapter, we saw that Kant describes the Transcendental Aesthetic as a transcendental deduction of the concepts of space and time. But look at the way that Kant describes the result of the Aesthetic:

We have above traced the concepts of space and time to their sources *by means of* a transcendental deduction

A87/B119-20, my emphasis

It is precisely *through* a transcendental deduction of the concepts of space and time that we trace these concepts to their ‘sources’. Notice, too, Kant’s explanation of why an empirical deduction of the categories could not explain their objective validity:

[A] **deduction** of the pure *a priori* concepts can never be achieved in this way; it does not lie down this path at all, for in regard to their future use, which should be entirely independent of experience, an entirely different birth certificate than that of an ancestry from experiences must be produced.

A86/B119

An empirical deduction fails as a transcendental deduction *not* because it offers a ‘birth certificate’ for a concept but because it offers the *wrong kind of* birth certificate.

Clearly, then, a transcendental deduction is not mute on the question of a concept’s origin. On the other hand, it tells a different kind of origin story from an empirical deduction. What is the difference here? The answer to this question, I think, is implicit in the following passage:

[I]n the case of these concepts [*viz.* the categories], as in the case of all cognition, we can search in experience, if not for the principle of their possibility then for the occasional causes of their generation [*Erzeugung*]

A86/B118, my underlining

This passage distinguishes two questions we can ask about the origin of a concept. We can investigate the concept’s ‘principle of possibility’ — its ground. Or we can investigate the ‘occasioning causes of its generation’. A transcendental deduction, I suggest, traces a concept to its ‘principle of possibility’, whereas a physiological derivation details the occasional causes of the concept’s generation. We are telling an origin story in each case, but only a story of the former kind bears on a concept’s objective validity.

I recommend that we understand this distinction — between principle of possibility and occasional cause — as identical to the distinction between matter and matter-giving act. A concept’s matter is its ground or principle of possibility. Its matter-giving act is the occasional

cause of its generation, for it explains how the matter of the concept first comes forth in consciousness as a basis for the generation of the concept. The strategy of a transcendental deduction is to trace a concept back to its matter and then prove that this matter is itself an objectively valid representation. In the transcendental deduction of the concept of space, for example, Kant first argues (in the Metaphysical and Transcendental Expositions) that the pure intuition of space ‘grounds all concepts of it’ (B39), and then argues that this pure intuition is objectively valid with respect to the objects of empirical intuition (B43-44). In the transcendental deduction of the categories, Kant goes in having already traced the ‘origin’ [*Ursprung*] of the categories to the ‘universal logical functions of thinking’ (B159), but the transcendental deduction then argues, first, that *these functions* are themselves grounded on the transcendental unity of apperception (which is thus the ultimate ground of the categories), and second, that this unity is itself an objectively valid representation (B140).¹⁰⁷

It is therefore unsurprising that, for example, the Transcendental Aesthetic traces the concept of space to a pure intuition but says nothing about how this intuitive content is brought to consciousness through apprehension. Likewise, while the Transcendental Deduction does provide a birth certificate for the categories — it shows that they originate in the unity of apperception — it does not tell us how this representation is brought to consciousness. Isolating the matter of a concept is one thing; explaining how this matter is first brought to consciousness is another. Given our interest in questions of material origin, it follows that we need to look beyond the Transcendental Deduction for the physiological derivation of the categories.

It is worth dwelling on Kant’s description of physiological derivation:

¹⁰⁷ Notice, then, that the methodology of a transcendental deduction rests on a general thesis about the relationship between a concept’s matter and its validity — namely, that if a concept’s matter is valid with respect to a given domain of objects, the concept itself is valid with respect to that domain of objects.

Nevertheless, in the case of these concepts [*viz.* the categories], as in the case of all cognition, we can search in experience, if not for the principle of their possibility, then for the occasional causes of their generation [*Gelegenheitsursachen ihrer Erzeugung*], where the impressions of the senses provide the first occasion [*Anlaß*] for opening the entire power of cognition to them and for bringing about experience, which contains two very heterogeneous elements, namely a **matter** for cognition from the senses and a certain **form** for ordering it from the inner source of pure intuiting and thinking, which, on the occasion of the former, are first brought into use and bring forth concepts. Such a tracing of the first endeavors of our power of cognition to ascend from individual perceptions to general concepts is without doubt of great utility, and the famous Locke is to be thanked for having first opened a way for this... I will... call this attempted physiological derivation, which cannot properly be called a deduction at all because it concerns a *quaestio facti*, the explanation of the **possession** of a pure cognition.

A86-87/B118-19

A physiological derivation of the categories would explain our ‘possession’ [*Besitz*] of them by tracing their ‘generation’ back to ‘occasioning causes’ in experience. Kant is here echoing his claim from the earlier *Inaugural Dissertation* that the ‘concepts of metaphysics’ are acquired by ‘attending to... [the mind’s] actions on the occasion of an experience [*occasione experientiae*]’ (*MSI* 2:395).

It is extremely important to note here that while Kant denies the *justificatory relevance* of a physiological derivation of the categories, he never questions the *possibility* of such a derivation, which he says is ‘without doubt of great utility’. Coming to this passage without an adequate understanding of the distinction between empirical and pure concepts, one might wonder how the categories could admit of a derivation from experience consistently with being pure concepts. What we have to deny, given that the categories are pure concepts, is that experience contains the principle of possibility (matter) of the categories. The categories cannot contain sensation in their matter; thus, the role of experience in ‘occasioning’ the categories cannot be to provide any sensational matter out of which the categories are subsequently formed. But experience could ‘occasion’ the categories in a manner compatible with their purity if, included among the cognitive

acts through which experience unfolds, we could find the act that first gives matter for the categories — that is, the act that first makes us conscious of agreement-relations between apprehension and apperception. If experience contains, not the matter, but the matter-giving act for the categories, then they could ‘originate in’ or ‘begin with’ experience without their matter inheriting any sensation. And I want to suggest that a physiological derivation of the categories would precisely be an account that locates their matter-giving act amongst the acts that bring about experience.

Now, it is very striking that in the passage above, Kant says that the physiological derivation of the categories is to be sought within ‘a tracing of the first endeavors of our power of cognition to ascend from individual perceptions to general concepts’ (ibid.). What this suggests is that the act that gives the matter for the categories is somehow internal to *the very endeavor to form empirical concepts*. Included among the set of acts that bring empirical concepts into being is an act that first gives matter for the categories — an act, that is, that makes us conscious of agreement-relations between apperception and apprehension. A physiological derivation must study the origins of experience to unearth such an act.

1.3 Reflection and the Physiological Derivation of the Categories

We are looking, then, for an act that exhibits two features: i) it exists within the process of forming empirical concepts, and ii) it gives the matter for the categories. In this section, I argue that this act is called ‘reflection’.¹⁰⁸ More specifically, the kind of reflection that *gives the matter* for categories is the very ‘logical act’ of reflection that *generates the form* of empirical concepts.

¹⁰⁸ In wanting to trace the origin of the categories back to reflection, I am in profound agreement with Heidegger (1929/1997: 169–171).

What is distinctive of the categories and marks them out as possessing a unique ‘formal’ significance is that their matter originates through a form-giving act. If this is correct, then we will not fully understand the material origin of the categories until we have studied the formal origins of concepts in general, in the final part of the dissertation. My aim in what follows is just to motivate the proposal.

Before we start looking at particular texts, I want to provide upfront reasons for thinking that there is a special connection between the categories and reflection. Kant’s writings are littered with intriguing passages that suggest some special and peculiarly close connection between categories and reflection. Consider:

[The categories] contain nothing beyond the unity of reflection on appearances, insofar as these are supposed to belong necessarily to a possible empirical consciousness.

A310/B367

But how do... [the categories] come into the understanding?...[O]n the occasion of experience and the senses the understanding forms concepts which are not from the senses but rather drawn from the reflection on the senses.

ML₁ 28: 234

The concepts of the understanding are nothing other than actions of reflection.

MM 29: 762

Unser Verstand ist das Vermögen zu reflectiren, und reine Verstandesbegriffe (transcendentale) sind bloße abstracten reflexionsbegriffe.

R 409, 15: 165–66

Durch abstraction werden keine Begriffe, sondern durch reflexion: entweder, wenn der Begriff gegeben ist, nur die Form und heißt reflectirter, oder selbst der Begriff: reflectirender.

R 2865, 16: 552

Each of these passages is striking, and the final one is perhaps especially germane to the claim I want to defend. In this passage, Kant begins by noting that all concepts come into being through

reflection; he then draws a distinction between concepts that only owe their *form* to reflection ('reflected concepts'), and concepts which *themselves* come about through reflection ('reflecting concepts'). My proposal is that the categories (which Kant refers to in the penultimate passage as 'reflexionsbegriffe') are concepts of this special second kind. And what it means to say that the categories 'themselves' come about through reflection, I suggest, is that the very act that creates the universal form of every concept *also* gives the matter for the categories. While all concepts are *formally* dependent on reflection, the categories are also *materially* dependent on reflection.

That, then, is the proposal, and I think it receives strong support from the third *Critique*, which, I propose, contains the elements of a physiological derivation of the categories. Kant begins this *Critique* by drawing a distinction that he had not previously drawn in published works, between the reflecting and determining powers of judgment. To 'reflect', according to Kant—in the sense of that term pertinent to his characterization of the 'reflecting' power of judgment—is 'to compare and to hold together given representations either with others or with one's faculty of cognition, in relation to a concept thereby made possible' (*EE* 20: 211). This passage distinguishes two forms of reflection: a first, through which representations are compared with one another, and a second, through which representations are compared 'with one's faculty of cognition'. Immediately, two features of this second mode of reflection should jump out at us given what we know about the physiological derivation of the categories.

First, Kant has told us that the physiological derivation of the categories is to be sought in an act that is internal to the mind's effort to ascend from individual perceptions to general concepts, and this act clearly is internal to that effort: Kant, after all, tells us that this second mode of reflection acts on given representations in such a way that a concept is 'thereby made possible'. Secondly, it is an act that involves the comparison of given representations with our *faculty of*

cognition. Now, we have seen that the categories precisely represent agreement-relations between *given representations* and our *faculty of cognition*; after all, they represent given intuitions as determined with respect to the forms of judgment that constitute our cognitive faculty. Kant has told us to seek the physiological derivation of the categories in the endeavor of our mind to form concepts, and now he is isolating a mental act that i) clearly plays a key role within that endeavor, and ii) compares given representations with the faculty of cognition. Reflection thus seems like precisely the kind of activity that could make us conscious of an agreement between apprehension and apperception, thus generating matter for the categories.

Moreover, when Kant elaborates his account of reflection, the terminology of apperception and apprehension is clearly present, as is that of agreement. He starts by distinguishing ‘three actions of the self-active faculty of cognition’, which, he says, pertain to ‘every empirical concept’.

These are

1. The **apprehension** (*apprehensio*) of the manifold of intuition; 2. The **comprehension**, i.e., the synthetic unity of the consciousness of this manifold in the concept of an object (*apperceptio comprehensiva*); 3. The **presentation** (*exhibitio*) of the object corresponding to this concept in intuition.

EE 20: 220

Now, if the manifold of a given intuition is such that, in being apprehended, it is subject to what Kant here calls *apperceptio comprehensiva*, then this intuition will give matter to a possible concept, and that same intuition would accordingly present or exhibit the object of the concept once formed.¹⁰⁹ It is thus only if the apprehension of a given intuition agrees with apperception that this same intuition could present the object of a concept. Kant then goes on to tell us that precisely what *reflection* does, in comparing a given representation with our faculty of cognition,

¹⁰⁹ I will return to the notion of exhibition in Chapter 6.

is to detect *agreement-relations* between apprehension and exhibition. In reflection, we are aware that the apprehension of an intuition's manifold is such that the intuition could present a possible concept:

If, then, the form of a given object in empirical intuition is constituted that the **apprehension** of its manifold in the imagination agrees [*übereinkommt*] with the **presentation** of a concept of the understanding (though which concept be undetermined), then in the mere reflection understanding and imagination mutually agree for the advancement of their business, and the object will be perceived as purposive merely for the power of judgment, hence the purposiveness itself will be considered as merely subjective

EE 20: 220-21

Reflection discovers agreement-relations between apprehension and exhibition. As Kant also puts it, reflection 'perceives' ways in which the apprehension of an intuition could be 'subjectively purposive' for the power of judgment.

Now, I suggest that for an intuition to be subjectively purposive for the power of judgment just is for it to be possible to regard the intuition as determined with respect to the logical functions of judgment. My proposal is thus that the following three expressions are different names for the same kinds of relation:

1. "Determination-relations between a given intuition and the logical functions of judgment";
2. "Agreement-relations between the apprehension of an intuition and the unity of apperception";
3. "Subjectively purposive relations between a given representation and the faculty of cognition".

Each formulation describes the relation from a different vantage point, but the relation described is the same. Formulation 3 characterizes what it is that reflection brings to consciousness (allows us to 'perceive'), and formulation 1 characterizes what it is that the categories represent. And my proposal is, accordingly, that the relations the categories represent are first brought to

consciousness through the act of reflection. Reflection is what gives the matter for the categories.¹¹⁰

Let me note two strengths of this proposal. First of all, it allows us to make sense of a commonality that Kant finds between pure concepts of the understanding and pure intuition. Each kind of representation, Kant claims, ‘contains’ a mere form:

[Intuitions and concepts] are either pure or empirical. **Empirical**, if sensation (which presupposes the actual presence of the object) is contained therein; but **pure** if no sensation is mixed into the representation. One can call the latter the matter of sensible cognition. Thus pure intuition contains merely the form under which something is intuited, and pure concept only the form of thinking of an object in general. Only pure intuitions or concepts alone are possible *a priori*, empirical ones only *a posteriori*.

A50-51/B74-75

In the previous chapter, I proposed an interpretation of this passage as it concerns pure intuition. I suggested that Kant’s talk of containment throughout this passage is intended at the level of matter. Kant’s claim that pure intuition contains only the form under which something is intuited is a claim

¹¹⁰ Note that the reflection that I am proposing gives matter for the categories is, specifically, the very reflection through which the mind forms concepts. We have already seen evidence for thinking that this is what Kant has in mind: Kant’s distinction between reflected concepts and reflecting concepts is precisely a distinction between concepts that owe only their form to reflection and concepts that ‘themselves’ come to be through reflection. Clearly, then, Kant is happy to think that the same kind of reflection that creates the form of all concepts could play some broader originating role for a special class of concepts. And we have seen also that the reflection under discussion in the third *Critique* is one through which a concept is ‘thereby made possible’. Now, Kant uses the term ‘reflection’ to refer to a wide variety of mental acts beyond the act that forms of concepts. The ‘reflection’ that is pertinent to the physiological derivation of the categories must be distinguished, I think, from both the ‘transcendental reflection’ and ‘logical reflection’ that Kant discusses in the Amphiboly chapter of the first *Critique* since neither of these acts seems to be internal to the process of forming concepts. Transcendental reflection is a tool of transcendental critique. It compares representations to our faculties of cognition, but only in order to determine the application-conditions of the ‘concepts of reflection’, including matter and form, identity and difference, and others. Another reason why transcendental reflection cannot, or at least cannot obviously, give matter for the categories is that it is subject to voluntary control — indeed, Kant characterizes it as a ‘duty’ [*Pflicht*] (A263/B319) — but, since the categories are given concepts, their matter-generating act cannot be a voluntary one. Logical reflection, meanwhile, does not compare representations to our faculty of cognition; it compares them only with each other, abstracting away from the faculty that they belong to. Neither act seems to fit the bill. Instead, I want to suggest that the reflection at issue in the physiological derivation of the categories should be identified with the ‘logical act’ of reflection that first generates the universal form of concepts.

about the origin of pure intuitive content: pure intuitive content originates in the formal acts that create intuitions out of non-intuitive matter. We can now see that *precisely the same* is true of pure concepts. Pure concepts ‘contain... only the form of thinking of an object in general’ because the content of the pure concepts originates in the formal acts that create concepts out of non-conceptual matter.

A second strength of this proposal is that it clarifies the sense in which categories are not merely pure concepts but, specifically, pure concepts *of the understanding* [*reine Verstandesbegriffe*]. For reflection, unlike apprehension, is not an act of imagination but an act of understanding — indeed, it is *the* act of understanding. Recall the passage we quoted earlier (‘Unser Verstand ist das Vermögen zu reflectiren’ (R 409, 15: 165–66)), and consider this passage from the *Prolegomena*:

[All] our intuition happens only by means of the senses; the understanding intuits nothing, but only reflects.

Prolog 4: 288

Reflection is the characteristic act of understanding, which differentiates understanding from the senses. *Every* concept is thus a concept ‘of the understanding’ in the sense that its form is imparted through an act of understanding. But categories are *Verstandesbegriffe* in the further sense that their matter is given through an act of *Verstand*. Notice that this proposal is entirely consistent with acknowledging the intuition-directed component of categorial content. In calling the categories pure concepts of understanding, we do not need to claim that their *content* is somehow confined to the understanding — we do not need to claim, for example, that the categories simply represent the understanding and its laws.

1.4 Mathematical Versus Dynamical Categories

Kant draws a distinction, within the categories, between ‘mathematical’ and ‘dynamical’ categories (B110). The ‘synthesis’ through which we ‘apply’ mathematical categories, he tells us, pertains ‘merely to the **intuition**’, whereas the synthesis through which we apply dynamical categories pertains to ‘the **existence** of an appearance in general’ (A160/B199; cf. B220–221); accordingly, he calls the ‘principles’ for the application of the former set of concepts *mathematical principles*, and the principles for application of the latter *dynamical principles*. There is thus a content-level difference between the two sets of concepts, such that, in applying the former we thereby represent features of intuition, whereas in applying the latter we thereby represent features of objects corresponding to intuition. In this section, I suggest that the content-level difference between the two sets of categories traces back to an important material difference between them.

We have seen that Kant’s physiological derivation of the categories traces them to ‘the first endeavors of our power of cognition to ascend from individual perceptions to general concepts’ (A86-87/B118-19). The endeavor Kant has in mind, I have suggested, is the act of reflection. Reflection, I have suggested, represents relations of agreement between the apprehension of an intuition and the unity of apperception, and since these relations are precisely what the categories represent, reflection is what gives matter for the categories. Now, insofar as there can be different *kinds* of agreement-relation between apprehension and apperception, there can be different modes of reflection and, accordingly, different categories. There must be a ‘difference in reflection’ underlying the division between mathematical and dynamical categories, and in this section I want to characterize that difference. Drawing on Chapter 3, my proposal is, specifically, that the mode of reflection that gives matter for the mathematical categories is precisely the mode of reflection that forms *concepts of perception*; and the mode of reflection that gives matter for the dynamical categories is precisely the mode of reflection that forms *concepts of experience*. Kant thus locates

the material bases for the two sets of categories at different stages within the endeavor to ascend from individual perceptions to general concepts.

We saw in Chapter 3 that a concept of perception is a concept that applies at the level of sensation: to the subjective features of an empirical intuition. We likewise saw that a concept of experience applies at the level of objects: to that which corresponds to and is therefore distinct from the subjective features picked out by the concept of perception. The reflective formation of concepts of perception thus involves awareness of the ways in which ‘apprehension, by means of sensation’ can agree with the unity of apperception, whereas the reflective formation of concepts of experience involves awareness of the ways in which empirical apprehension of an object can agree with the unity of apperception. The mode of reflection that underlies the first kind of concept thus reveals ways in which the apprehension of a subjective representation can agree with the unity of apperception, whereas the mode of reflection that underlies the second kind of concepts reveals ways in which the apprehension of an object of sensible representation can agree with the unity of apperception.

These different modes of reflection, I contend, give matter for the mathematical and dynamical categories respectively. The mathematical categories, I propose, are formed through our consciousness of the ways in which a subjective representation can agree with the unity of apperception; thus, their matter is given through the mode of reflection that brings forth concepts of perception. That is why, in applying the mathematical categories once formed, we thereby represent features of intuition, *not* of the existence of objects distinct from the intuition. Likewise, my suggestion is that the dynamical categories are formed through our consciousness of the ways in which an object of sensible representation can agree with the unity of apperception, which is why their matter is given through the mode of reflection that brings forth concepts of experience.

Accordingly, in applying the dynamical categories once formed, we thereby represent features of the objects whose existence is distinct from our intuition. The two sets of categories thus originate at different stages in the ‘endeavor of mind’ to ascend from perception to concept. Mathematical concepts originate in the ‘endeavor of mind’ to ascend from individual perceptions to *concepts of perception*; the dynamical categories are formed in the endeavor of mind to ascend from concepts of perception to concepts of experience.

Support for this suggestion comes in the *Prolegomena*. Kant says there that in order to transition from judgments of perception to judgments of experience, we need to ‘subsume’ the concepts ‘drawn from intuition’ under pure concepts of understanding. This statement has, reasonably, been taken as evidence that judgments of perception do not already involve the categories. However, when we look at Kant’s examples of the kinds of concepts that need to be ‘added’ to judgments of perception to yield judgments of experience, his examples are only ever examples of relational categories (which are dynamical). This suggests a different picture of the relationship between judgments of perception and the categories. On this different account, the ‘concepts drawn from intuition’, which figure in judgments of perception, are *already* ‘subsumed under’ the mathematical categories; the ‘special concepts’ that must be ‘added’ to the judgment of perception are thus the dynamical categories in particular, not the categories *tout court*.¹¹¹ This account make perfect sense given that the transition from the one kind of judgment to the other is a transition from judgments that represent the subjective features of my ‘state’ [*Zustand*] to judgments with objective validity. Since the dynamical categories are required to represent an object that exists in relation to an intuition, it would make sense that they are required for a

¹¹¹ Sethi (2020) and Beizaei (2017) both argue that judgments of perception already involve mathematical categories; neither, however, argues that the empirical concepts that constitute judgments of perception are different in kind from the concepts that constitute judgments of experience.

judgment that represents an object corresponding to and distinct from my state. But since judgments of perception represent subjective features of my state, and since mathematical categories pertain merely to the intuition itself, it would also make sense that, just in forming the concepts required for a judgment of perception, we have already generated matter for the mathematical categories.

I conclude, then, that the mathematical categories have their material origins in the mind's effort to represent features of its own state, the dynamical categories in the mind's effort to represent an object corresponding to and distinct from its states.

2. Ideas of Reason

In the previous section, I argued that the categories have their origin in the act of reflection. We do not yet have a clear account of what reflection is — providing such an account will be the project of Chapter 7 — but we have at least seen reasons to think that Kant traces the material origin of the categories back to the act of reflection. Now, this finding makes good sense of Kant's claim that the categories are pure concepts *of understanding* [*reine Verstandesbegriffe*]. They are pure concepts *of understanding*, I have suggested, because the act that first gives their matter is itself an act of the faculty of understanding. In this section, I want to briefly describe a corresponding strategy for capturing the sense in which Ideas are pure concepts 'of reason' [*reine Vernunftbegriffe*].

In the Transcendental Dialectic, Kant draws an intriguing contrast between concepts of understanding [*Verstandesbegriffe*] and concepts of reason [*Vernunftbegriffe*]. Consider:

However it may be with the possibility of concepts from pure reason, they are not merely reflected concepts but inferred concepts. Concepts of the understanding are also thought a priori before experience and on behalf of it; but they contain nothing

beyond the unity of reflection on appearances, insofar as these appearances are supposed to belong necessarily to a possible empirical consciousness.

A310/B366–67

The act of inference, this passage tells us, plays some important role with respect to the ‘possibility of concepts from pure reason’, which it does not play with respect to concepts of understanding. But what is that role, exactly? In his entry on concepts for the Cambridge Kant Lexicon, Clinton Tolley suggests that this passage modifies Kant’s account of the logical acts that generate concepts as to form:

[C]oncepts have their “origin” (*Ursprung*) in three acts that the understanding performs on “given” representations: “comparison,” “reflection,” and “abstraction”... A similar sort of origin story should hold also for the most “originary and primitive” concepts, the pure concepts of the understanding (“categories”...), as well as for the pure concepts of reason (“ideas”...) — though in both cases it is less clear what the originally given representations would be, out of which such pure concepts would be “generated.” In the case of the pure concepts of reason, Kant says they are “not merely reflected but also inferred [*geschlossene*] concepts” (A310/B366–7...), which suggests that their generation involves a still further act than the three mentioned above.

Tolley (2021: 116–117)

Tolley thus takes this passage to suggest that the Ideas are subject to a fourth *formal* act, inference, in addition to comparison, reflection, and abstraction. The problem with this reading is that there is no corroborating evidence that Kant takes his account of the logical acts to be incomplete. And once we are clear on the matter-giving role that reflection plays with respect to the categories, a different reading of the contrast between reflected and inferred concepts suggests itself. Presumably, the point of contrasting Ideas, as *inferred* concepts, with concepts of understanding, as *reflected* concepts, is to suggest that the kind of role inference plays with respect to the Ideas is akin to the role that reflection plays with respect to the categories. My suggestion is, accordingly, that inference is not a fourth form-imparting act but is instead the *matter-giving* act that brings forth matter for the Ideas of reason, just as reflection brings forth matter for the categories. On this

proposal, Idea are concepts *of reason* in precisely the sense that categories are concepts *of understanding*: in both cases, the faculty referred to in the name of the concept is the faculty that brings forth the concept's matter.

Explaining what the matter of an Idea is and *why* that matter should be brought to consciousness through the act of inference is a task for another occasion.¹¹² But what I would like to suggest in closing is that this account of the material origins of the Ideas suggests that, like the categories, they are given concepts. Inferring is the characteristic, natural operation of the faculty of reason, just as reflecting is the natural operation of understanding. The faculty of reason engages in its characteristic acts of inference without depending on the power of choice, and if those acts generate matter for its Ideas, then they will qualify as given concepts.

Conclusion

It was the contention of the previous chapter that pure sensible concepts depend upon an act of apprehension, for apprehension, I argued, is the act that brings sensible representations to consciousness, such that they can constitute matter for possible concepts. But since pure intellectual concepts cannot originate in a pure image, their matter-giving act must be some act beyond apprehension. I have argued in this chapter that the relevant act in the case of pure concepts of the understanding is the characteristic activity of understanding — namely, reflection — and the characteristic act in the case of the pure concepts of reason is, correspondingly, the

¹¹² Here, though, would be where I would look for an explanation of the difference between Ideas of reason and pure intellectual predicables. As I mentioned in the previous chapter, both of these concepts seem to have similar kinds of matter, since both consist in or are made up from notions. But the suggestion would be that predicables do not depend upon an act of inference to bring their matter to consciousness.

characteristic act of reason — namely, inferring. The first of these suggestions is one that I will return to and deepen in the final chapter of this dissertation.

Conclusion to Part 2

In this part of the dissertation, I have countered the dominant narrative about the theoretical role of imagination in Kant's theoretical philosophy. This narrative, which is particularly germane to conceptualist readers, has it that Kant invokes the imagination in order to explain intuition formation. Whereas mere sensibility provides a manifold, the narrative goes, intuition only comes into existence through the synthesis of this manifold *via* imagination. Against this narrative, I have argued, negatively, that Kant takes his doctrine of intuition to be complete by the close of the *Aesthetic*, and hence that intuitions are the *inputs to* rather than *outputs of* the imagination's synthetic activities.

Now, I am not the first to press this negative point. What has not been forthcoming, however, is an alternative account of the theoretical role of imagination. The previous three chapters offer of such an account, for they suggest that the primary theoretical home of the doctrine of apprehension is Kant's account of *concept formation*. Apprehension has featured as the matter-giving act, or one of such acts, for every concept in this part of the dissertation, with the exception of the categories; and in the case of the categories, whose matter is given through reflection,

apprehension is itself part of the matter that is so given. Thus, *every* concept within Kant's doctrine of the understanding depends on apprehension in some way for its material genesis.

I want to close this part of the dissertation by adducing some general textual evidence for locating the theoretical role of apprehension in this way.

First, there is a terminological point. In the medieval tradition, the term 'apprehension' was specifically reserved for the act by which the intellect forms concepts. This tradition distinguished three intellectual acts: *apprehensio simplex*, whereby concepts are formed, judgment [*judicium*], whereby they are combined, and inference [*ratiocinium*], whereby judgments are combined. Kant signals his awareness of this tripartite division at various points throughout the logic lectures (see, for example, *WL* 24: 904; *LDW* 24: 701), and he should be thought of as carving out a nuanced position *within* this tradition. In keeping with the tradition, he carries forward the term 'apprehension' as a name for a fundamental act that pertains to the origin of concepts. But against the tradition, he denies that apprehension is sufficient for concept formation, and he attributes it to the faculty of imagination rather than the intellect. Nevertheless, I suggest, the term is playing the same broad theoretical role for Kant as it had done within the tradition.

We see this point borne out when we study the textual profile of the term within the first *Critique*. The term *Apprehension* occurs 65 times in that work. Of these occurrences, *not one* is to be found in the Transcendental Aesthetic (the part of the text that contains the science of sensibility), and only two are located in the Transcendental Dialectic (the part of the text that contains the science of reason). The *remaining 63* occurrences take place in the Transcendental *Analytic*, the part of the text that contains the science of the faculty of *concepts*, the *understanding*. Apprehension has pride of place in all of the core sections of the Transcendental Analytic. In the Analytic of Concepts — the part of the Analytic devoted to explaining the possibility of pure

concepts by seeking out their ‘first seeds and predispositions [*Keimen und Anlagen*]’ (A66/B91) — it is discussed and invoked at crucial stages of both editions of the transcendental deduction. And in the Analytic of Principles — the part of the Analytic devoted to explaining how the pure concepts could have ‘content [*Inhalt*]’ (A136/B175) — it features heavily in the Schematism chapter, and in the Axioms, the Anticipations, and all three of the Analogies, (as well as showing up once in the Postulates at A224/B271). Then, with the Analytic is complete, the term all but vanishes. Given the textual profile of the term, the claim that ‘apprehension’ has its primary home in Kant’s theory of concepts should not sound particularly audacious.

What has blocked us from appreciating the theoretical role of the doctrine of apprehension is a failure to take seriously Kant’s distinction between the formal and material origins of concepts. As long as we think that Kant’s doctrine of the formal acts contains all he has to say on the topic of concept formation, the role of apprehension in concept formation will remain invisible to us. For apprehension could not be one of the distinctive intellectual acts that imparts the universal form for concepts on pain of collapsing the distinction between intellect and imagination. But neither need it be in order to play a role in concept formation, for Kant’s hylomorphic model of concepts allows us to locate apprehension at the level of the material rather than formal origins of concepts. Apprehension is the fundamental imaginative act that first generates matter for concepts: it is what first makes the mind conscious of representations in such a way that it can subject them to the logical acts.

We turn now to the formal acts of the intellect that first convert apprehended matter into concepts.

Part III: Formal Origins of Concepts

Introduction to Part III

Let us return to Kant's definition of the act of 'synthesis'. When Kant first presents this act, he does so by way of a denial that the content [*Inhalt*] concepts could arise through analysis (A77/B103). Synthesis is then presented as follows:

By **synthesis** in the most general sense, however, I understand the action of putting different representations together with each other and comprehending their manifoldness in one cognition... [S]ynthesis alone is that which properly collects the elements for cognitions and unifies them into a certain content [*zu einem gewissen Inhalte vereinigt*]

A77–78/B103

In Chapter 1, we noted that twice in this passage, Kant distinguishes synthesis into two stages. Synthesis is *both* the act that 'puts representations together', or, again, 'collects the elements for cognitions' *and* the act that 'comprehends their manifoldness in one cognition', or, again, 'unifies them into a certain content'. The contrast between matter and form helps us understand these different stages. Synthesis both gives *matter* for concepts — it brings given representations to consciousness, such that they can 'receive' the form of universality — and it imparts form on given matter, thus creating conceptual content. In the previous chapters, we studied the matter-giving stage of synthesis. We saw that the syntheses of apprehension and reproduction bring forth matter for all sensible concepts. In this part of the dissertation, we move to the synthesis of 'recognition in a concept', which creates conceptual contents out of apprehended matter.

Kant, as is well known, distinguishes three acts within the form-imparting stage of synthesis: comparison, reflection, and abstraction. Because he never explicitly connects his remarks on these three acts with his remarks, in the first *Critique*, on synthesis, it has not often occurred to readers that the topic of concept formation features highly on Kant's agenda in the first *Critique*; many have thought that Kant's thoughts on concept formation, such as they are, are expressed in his scattered remarks on the logical acts. This, I think, is a mistake. As I hope to show

in the next three chapters, the topic of concept formation is front and center throughout the Transcendental Analytic of the first *Critique*.

But to arrive at that general interpretive thesis, we will need to undertake a detailed investigation of Kant's discussion of the three logical acts. And as we do so, there are several exegetical and philosophical questions we need to bear in mind; in the remainder of this introduction, I lay them out.

1. Logical Acts and the Power of Choice

One question we will need to keep in mind as we go concerns the relationship between the logical acts and the power of choice [*Willkür*]. To what extent and in what respects can an individual *choose* to execute the logical acts?

On the one hand, it seems implausible, both philosophically and exegetically, to hold that an individual could choose to form the categories — at least insofar as choosing to form them implies the possibility of choosing not to form them. On the other hand, there must be some respect in which concept formation is subject to the power of choice: recall, Kant maintains that all concepts are made with respect to form (*JL* 9: 93; *R* 2855, 16: 547), and I have argued (Part 2, Introduction) that a representation is 'made' [*gemacht*] precisely insofar as it originates in the power of choice. We thus need to find some role for the power of choice to play within concept formation.

Another consideration pertaining to the categories suggests, though, that the logical acts are not globally subject to the power of choice. For I have claimed both i) that the matter of the categories is brought to consciousness through reflection, and ii) that the categories are given concepts, which requires that their matter-giving act — *viz.* reflection — be an involuntary, natural

operation of the understanding. That suggests that the role of the power of choice in concept formation is more nuanced than we might initially think on hearing Kant's blanket declaration that the form of a concept is always made. And I will argue, in Chapter 7, that the role of the power of choice in concept formation is restricted to the level of *abstraction*, the third logical act. We will see in Chapter 8 that this restriction allows us to deny that the categories are subject to the power of choice. For abstraction is a condition for the formation of *determinate* concepts, and the categories themselves are not determinate in the relevant sense. We can thus maintain that the categories are formed prior to abstraction, which shields them from the power of choice.

2. Temporal and Logical Relations Between the Logical Acts

Jäsche's notorious tree example (which we discussed in Chapter 2), presents the logical acts as chronologically distinct elements in a temporal sequence. First, the mind compares representations, *then* it reflects, and then, finally, it abstracts a concept. Many commentators have balked at the suggestion that the logical are temporally distinct in this way. Allison, for example, commenting on the tree example, maintains that

the chronology that Kant describes is totally implausible... If this account is to make any sense, comparison, reflection, and abstraction must be seen as aspects of a single, unified activity, not as temporally successive operations.

Allison 2001: 22

Now, here Allison maintains that the acts are parts of a single, 'unified activity', which he takes to imply that they are not 'temporally successive operations'. But commentators have also proposed a more substantive sense in which these acts are 'unified' together within a single activity. Consider Longuenesse:

Actually, the chronological presentation of these operations is implausible. The “comparison” of trunks, leaves, etc., which takes stock of their differences, is not temporally prior to ‘reflection’ and ‘abstraction’. Rather, it presupposes efforts to *reflect* the similarities among the elements compared and *abstract from* (leave out) their dissimilarities. *Reflection* and *abstraction* are not operations that follow comparison and are dependent on it; rather, each depends on the others and all proceed simultaneously.

Longuenesse 1998: 116

In this passage, Longuenesse begins, as Allison had done, by denying that the acts are chronologically distinct. But as she substantiates this opening claim, she makes a further, more substantive claim not implied by the denial of temporal distinctions between the acts. For she further claims that each of the acts ‘presupposes’ or, again, ‘depends on’ the others. In effect, Longuenesse is denying that any of the acts is ‘logically prior’ to any of the others, in the sense that it would be intelligible without reference to the others.

Now, I think that there is a grain of truth in what Longuenesse says here, but I also think that she overstates the point. If the claim that each act ‘depends on’ or ‘presupposes’ the others is read as the claim that none of the acts can take place in the absence of the others, I think that it is false. On the analysis I develop in the next two chapters, it would be perfectly possible for the mind to compare without reflecting or abstracting. Likewise, it is possible for the mind to reflect without having previously compared, and it is also possible for the mind to reflect without then ‘taking up’ the results of reflection in abstraction. Moreover, abstraction itself is an act that can take place even in the absence of the prior two acts (though in this case it would not yield a concept). Thus, even if it is true that, when all three acts occur, they occur at the same time (and I will actually not take a stand on this question about the temporal relations between them), it does not follow that they could never occur in isolation from each other, and indeed I think that there is evidence that Kant would maintain that they can occur in isolation.

However, where I think Longuenesse is absolutely right is in her claim that the act of comparison ‘presupposes efforts to *reflect* the similarities among the elements compared and *abstract from* (leave out) their dissimilarities’ (ibid.). What I take that to mean is that each act is oriented toward the next, in the specific sense that the representational *outputs* of each act are by their nature suited to feature as *inputs* to the next, higher act. The three logical acts are teleologically oriented toward concept formation: they are parts of the effort of the mind to ‘ascend from individual perceptions to general concepts’. We would not fully understand the outputs of comparison if we did not understand those outputs as inputs to the act of reflection, and we would not fully understand the outputs of reflection if we did not understand them as inputs to the act of abstraction. These activities have their point insofar as they are oriented toward concept formation. Still, there can be successful and unsuccessful exercises of our concept forming capacity, and in an unsuccessful exercise, we may very well execute one or more of the acts without executing the others.

3. Philosophical Objections to the Logical Acts

In Chapter 2, we canvassed a range of philosophical objections that have been leveled against the claim that concepts are formed by comparison, reflection, and abstraction, out of a non-conceptual matter. Perhaps most fundamentally, the theory has been accused of circularity — of presupposing the existence of the very representations it is supposed to explain. As we draw out the details of Kant’s account, we will need to keep an eye on these objections.

Notice, though, that there are two ways of letting this philosophical worry guide us in our reading. We might have decided ahead of time that we know what a concept is for Kant. If we have made that decision, and we have a particularly permissive account of conceptuality — where

any ‘universal’ representation is *ipso facto* a conceptual representation — then we will be on the look out for signs that ‘universal’ representations enter into the picture before the culmination of the logical acts. If we see signs that the doctrine of the logical acts presupposes that universal representation is already present in the mind, we will have evidence that the theory is circular, and then our only path forward as charitable readers will be to re-construe the subject-matter of the theory in order to save it from circularity. We saw in Chapter 2 that the standard move here is to claim that, really, the logical acts are meant to explain how extant concepts are brought to distinctness, not how concepts are formed in the first place.

But this is not the only way of being guided by the circularity objection. We might instead go into the doctrine of the logical acts expecting to learn, through our study, exactly what a concept is for Kant. If that is our attitude, we will not pre-judge the question whether all universal representations are *ipso facto* conceptual representations. Thus, if we see evidence that the account presupposes universal representations at some early stage, we will take that as evidence that Kant distinguished between the universality distinctive of concepts and some other mode of universal representation. Our attempt to save Kant from the circularity objection will result not in a revisionist account of the subject-matter of the doctrine of logical acts, but in a revisionist account of the nature of concepts, which distinguishes the specific form of conceptual universality from universal representation in general. This will be my approach in what follows.

Chapter 6

Comparison and Sensible Schemata

Introduction

In this chapter, we begin our study of the logical acts of concept formation. Our focus throughout will be the act of *comparison*, an act that takes the mind beyond the nonconceptual matter of a concept but stops short of a fully-formed conceptual content. I will be concerned to develop an account of comparison that accurately predicts its placement, both with respect to the broad distinction between material and formal acts, and within the hierarchy of formal acts. And I am going to claim that the doctrines of *comparison* and *schematism* are mutually illuminating, so much so that by the end of the chapter we will have a broad account not just of the place of comparison in Kant's theory of concept formation but also of the place of schemata therein.

I proceed in five sections. In Section 1, I articulate several constraints that an account must satisfy if it is to describe an activity that can play the theoretical role that Kant reserves for comparison. Several accounts could satisfy those constraints, but I go on to argue for an account that I argue makes good sense of the texts in which Kant discusses comparison. The work of elaborating and justifying that account is distributed over Sections 2, 3, and 4. In Sections 2 and 3, I argue that comparison groups apprehended-representations according to their 'rule of apprehension', where this rule is first represented imaginatively *via* schemata, and I show why this

account of comparison is positioned to respect several of the constraints set forth in the first section. Then, in Section 4, I argue for a principled restriction on the scope of comparison according to which comparison is only necessary for the formation of empirical concepts. Finally, in Section 5, I step back to comment on an implication of my account of comparison, concerning the relationship between sensible concepts and their corresponding schemata. We will see that my account of comparison entails that sensible schemata are *prior* to sensible concepts, and I will explain why I think that this implication of my account is vindicated by Kant's metaphysics of the faculty of understanding.

1. Carving out a Theoretical Role for Comparison: Constraints on an Account

To begin, we need to create a framework for thinking about what it is that comparison is supposed to *do*. Any interpretation of the doctrine of comparison needs to respect the fundamental theoretical role it is supposed to play, and in this section my aim is to describe that role and derive from it a number of constraints on an acceptable account of comparison. I proceed in two stages. I begin by describing the theoretical role of apprehension and deriving four constraints our account will have to respect. I then introduce some initial textual *data* that will enable us to formulate a preliminary characterization of comparison; with this preliminary characterization in hand, we can specify the four abstract constraints into a more concrete set of desiderata, which the remainder of the chapter will attempt to satisfy.

1.1 The Theoretical Role of Comparison

Most fundamentally, any satisfactory interpretation needs to situate comparison within the appropriate system of acts. At a minimum, that requires that our account explain why comparison qualifies as a *formal* rather than *material* act, which, given our study of the material genesis of concepts, will mean differentiating comparison from apprehension. Any account that collapses the distinction between comparison and apprehension — or that otherwise implies that the office of comparison is limited to bringing nonconceptual representations to consciousness — must be rejected, for such an account would falsely situate comparison as a material rather than a formal act.

But not only must an account situate comparison on the correct side of the material–formal distinction, it must also correctly locate comparison within the hierarchy of formal acts. As I signaled in the introduction to this part of the dissertation, I take seriously Kant’s hierarchical presentation of the formal acts. Unlike readers such as Longuenesse, I take it that comparison *can* in fact occur in the absence of the other formal acts, and, moreover, that with respect to a certain class of concepts to be circumscribed in what follows, it *must* occur in order for the others to do so. However, as I also mentioned there, the one point that I do take on from formulations such as Longuenesse’s is the idea that each act is teleologically oriented toward the next higher act, such that we would not have a full understanding of what it is that the act accomplishes if we did not understand that its output is designed to be an input to the next higher act. Now, bearing out this overarching conception of the relationship between the logical acts in our discussion of comparison requires that we observe a number of further constraints. First of all, our account of comparison must leave space for a meaningfully distinct theoretical role for reflection, the next act in the hierarchical series of formal acts. But secondly, our account must make clear the sense in which comparison is *oriented toward* reflection, which requires that we characterize the *outputs* of

comparison in such a way as to make clear why those outputs are poised to provide *inputs* to reflection.

A final requirement on our account is that it come to a principled verdict on the *scope* of comparison. We have seen Jäsche, not without precedent in Kant's own written notes, claiming that all three of logical acts are universally necessary for the formation of all concepts, but rather than treating that claim as axiomatic, we will submit it to scrutiny.

Putting these constraints together, then, a satisfying account of the theoretical role of comparison must do the following:

1. Explain why comparison is not a material act;
2. Locate the difference between comparison and reflection;
3. Explain why the *outputs* of comparison are suitable *inputs* to reflection;
4. Give a principled account of the scope of comparison.

Now that we have these constraints in front of us, I want to introduce some initial *data* that will allow us to specify more concretely what we must do in order to satisfy them.

1.2 Comparison and Reflection: A Guiding Conception

In both this chapter and the next, I will be oriented by a very schematic guiding conception of the acts of comparison and reflection. This conception is rooted both in Jäsche's presentation of the relationship between the two acts as well as the note from which Jäsche's presentation appears to have been taken:

1. *comparison* of representations among one another in relation to the unity of consciousness;
2. *reflection* as to how various representations can be grasped [*begriffen sein können*] in one consciousness;

JL 9: 94-5

Logischer Ursprung der begriffe 1. Durch comparison: wie sie sich zu einander in einem Bewustseyn verhalten. (Vergleichung unter einander.) 2. durch reflexion (mit demselben Bewustseyn): wie verschiedene in einem Bewustseyn begriffen seyn können.

R 2876, 16: 556-557

Both of these formulations brings out two important differences between comparison and reflection. First, we see a difference in orientation between the two acts. Whereas comparison is oriented toward an *actuality* — the way in which representations are in fact related to one another within a consciousness — reflection is oriented toward a *possibility* — the way in which those representations *could be* ‘grasped’ [*begriffen sein können*]. Second, Kant’s talk of grasping or conceiving here suggests that reflection specifically considers the way in which a set of representations could be related to the faculty of conceiving — that is, the intellect. Whereas comparison considers the ways in which representations are in fact related to one another ‘in consciousness’, reflection considers the ways in which those same representations could be ‘grasped’ by the intellect.

With this initial handle on the distinction between comparison and reflection, it is worth attending to the distinction implicit within Kant’s definition of the operation he calls ‘reflection’ in the first Introduction to the third *Critique*:

To reflect (to consider), however, is to compare and to hold together given representations either with others or with one’s faculty of cognition, in relation to a concept thereby made possible.

EE 20: 211

This text distinguishes two kinds of ‘reflection’: one that ‘compares’ and ‘holds together’ representations merely with each other, and one that compares representations to the faculty of cognition and thereby makes a concept possible. Given the parallels between the two kinds of reflection as distinguished here, and comparison and reflection as distinguished in the texts considered above, it seems that Kant has shifted terminology but is making the same distinction as before — namely, between i) an act that notes the actual ways in which representations belong together within consciousness (comparison, or the first kind of reflection distinguished here), and ii) an act that notes the ways in which those representations may be *grasped* together, or their possible relationship to the faculty of cognition (reflection proper).

I will hold on to this way of understanding the distinction throughout this chapter and the next. Comparison, I will take it, represents actual relations that exist between a given set of representations; reflection represents the possible relations that those representations could bear to the faculty of cognition.

Now, this preliminary characterization of comparison allows us to specify what we must do in order to satisfy the first three constraints laid out above. In order to satisfy constraints 1–3 above, our account must do the following:

- 1*. Explain why consciousness of the way representations belong together in consciousness goes beyond apprehension;
- 2*. Explain the distinction between representing the way(s) representations belong together in consciousness and representing the way(s) they could be grasped together; and
- 3*. Explain why representing the ways representations belong together in consciousness enables us to represent the ways in which they could be grasped together.

As I attempt to cash out the guiding conception of comparison that I am working from, I will judge the success of the account in part by its ability to satisfy these three desiderata.

1.3 Geometric Concepts as Outside the Scope of Comparison

I will also address myself to questions about the scope of comparison. Now, among Kant's commentators, there is a universal consensus that the three logical acts of comparison, reflection, and abstraction are supposed to apply equally to *all* concepts. Longuenesse expresses the consensus clearly:

Thus the operation of comparison/reflection/abstraction is indeed the discursive act par excellence, through which the very form of conceptual universality is produced, *whichever kind of concept we consider.*

Longuenesse 1998: 121, my italics

And as I mentioned above, Jäsche's comment that the logical acts are 'the essential and universal conditions for generation of every concept whatsoever' (*JL* 9: 94) encourages just this sort of picture. But I also indicated above that I would not take this statement to represent Kant's final view on the matter. And the reason I take this approach is that there is in fact *direct* textual evidence, which to my knowledge has never been noticed by commentators, that Kant recognized at least one substantive limitation on the scope of comparison.

At several places throughout his *Nachlass*, Kant raises the question whether comparison is required for every concept.¹¹³ And he ultimately concludes that it is not: at least in the special case of *geometric concepts*, we can form concepts without any comparison (*R* 2884, 16: 558). Kant makes this claim in his hand-written notes and elaborates it in his metaphysics lectures:

¹¹³ See *R* 421, 15: 170; *R* 425, 15: 171; *R* 2878, 16: 556.

But concerning the claim that for us general concepts arise in comparison, it is rather the opposite that is correct. Thus we arrive at, e.g., the concept of a triangle not through comparison; rather, when we see one for the first time we are immediately aware that its magnitude does not restrict us at all from conferring the name triangle on all three-cornered figures which we see in the future.

MM 29:888

It seems clear, then, that at the very least in the case of geometric concepts, Kant denies that comparison is a condition of concept formation. Kant thus recognizes at least one fundamental scope-limitation on comparison; our interpretation must explain the basis of this limitation and see whether Kant is committed to any further limitations. Thus, in order to satisfy constraint 4 above, our account must do the following:

- 4*. Explain why geometric concepts at least are beyond the scope of comparison and determine whether it is subject to any additional scope-restrictions.

These, then, are the four constraints I will try to satisfy as I develop my account. Of course, merely satisfying these constraints is not enough for an account to be a good one: it must also be at least consistent with the relevant texts.

2. Comparison and Rules of Apprehension

To get us started toward developing an account that not only satisfies constraints 1*–4* but also makes sense of Kant's own statements about comparison, I want to start the work of unpacking the preliminary conception of comparison set forth above. Comparison, we have seen, represents the ways in which representations 'belong together' in consciousness. What does this

mean? What are the relations in virtue of which a set of representations ‘belongs together’ or fails to belong together in consciousness?

In Chapter 2, I mentioned the unfortunate fate of Jäsche’s notorious example of the formation of the concept of a tree in the *Jäsche Logic*. This example has muddied the waters in countless different ways; and one of the misunderstandings it has occasioned concerns the *relations* that comparison represents. For according to Jäsche, comparison targets *objects*, not representations, and notes ways in which those objects are *different*; for Jäsche tells us that the first stage in forming the concept of a tree consists in noting the various ways in which a set of trees’ branches, trunks, etc., differ from one another.¹¹⁴ But nothing in Kant’s own discussion of comparison bears this out. We do not find Kant claiming that the primary objects of comparison are *objects* rather than representations, and nor do we find him claiming that comparison represents relations of difference. Indeed, if that *were* Kant’s view of comparison, it is hard to see how he could also think of comparison as the act that represents the ways in which *representations belong together* in consciousness, that comparison ‘holds together’ representations ‘with each other’. As we saw, the overall description of comparison that Jäsche offers is relatively faithful to Kant’s own, but the proposed illustration is baffling, given the phenomenon it is supposed to illustrate, and is in no way required by Kant’s own remarks on comparison.¹¹⁵ Thus, I think we would do better to distance ourselves from Jäsche’s example and drop both the suggestion that comparison targets objects as well as the suggestion that it specifically targets relations of difference.

¹¹⁴ Several commentators build their account of comparison around this claim. Newton, for example, holds that ‘[l]ogical comparison first begins when I become conscious of differences among representations’ (Newton 2015: 472).

¹¹⁵ The use of the specific example of a tree itself has a precedent in the *Vienna* transcript (*VL* 24: 907–909), but the discussion there does not identify the objects of comparison as objects or the relevant relations as relations of difference.

The Vienna transcript points us in a more promising direction. There, we are told that comparison discovers relations, not of difference, but of ‘repetition’ among representations:

Concepts arise *per comparationem, reflexionem, et abstractionem*. In one consciousness I grasp many representations, in which I compare what is one a repetition [*Wiederholung*] of the other.

WL 24: 910

On a natural gloss of ‘repetition’, this formulation suggests that comparison discovers relations of *identity* or at least *similarity* between representations.¹¹⁶ Putting this finding together with our guiding conception of comparison, then, representations ‘belong together in consciousness’ in the manner that is relevant to comparison insofar as they are *identical* or at least *similar* in some respect.

But in what respect? Here, several of Kant’s handwritten notes on reflection promise us assistance. Consider:

Wir vergleichen nur das allgemeine der regel unserer Auffassung.

R 2880; 16:557

Diese Gemeingültigkeit setzt freylich eine Vergleichung voraus, aber nicht der Wahrnehmungen, sondern unserer Auffassung, so fern sie schon die Darstellung eines noch unbestimmten Begrifs enthält und an sich allgemein ist.

R 2883, 16: 558

¹¹⁶ It is worth us noticing that right away, this feature of Kant’s position commits him to thinking that either prior to or as a direct result of comparison, the mind is able to represent identity-relations between representations. If we think that sensitivity to similarity-relations suffices for concept possession, then it follows that Kant would be committed to thinking either that comparison presupposes concept possession (as *per* the circularity objection) or that it suffices for concept possession, in which case the other two logical acts would be unnecessary. So if we approach the text with the permissive view of concept possession, then Kant’s account is obviously implausible (‘plainly circular’, as Merritt puts it) as an account of concept formation. But given that it is advertised as such an account, I think the proper response is not to deny that it really is an account of concept formation, but to drop the assumption that Kant holds the permissive view of concept possession that made the account seem implausible in the first place. At least, that is how I will proceed: as I mentioned in the introduction to this part of the dissertation, my methodology will be to study the logical acts in order to learn something about what Kant thinks concepts are, rather than letting a prior conception of what concepts are guide my interpretation of the doctrine of logical acts.

Both of these passages suggest that there is some kind of universality [*Allgemeinheit*] inherent in apprehension [*Auffassung*] itself, and they claim that it is this universal feature of the act of apprehension itself — rather than any intrinsic feature of the *products* of apprehension, namely, perceptions [*Wahrnehmungen*] — that is the target of comparison. According to the first passage, we compare only ‘the universal in the rule of our apprehension’; according to the second passage, the general applicability [*Gemeingültigkeit*] characteristic of concepts presupposes a prior comparison, not of perceptions, but rather of apprehension itself insofar as it is ‘already in itself universal’ [*an sich allgemein ist*]. The first passage suggests that this intrinsically universal element already present in apprehension is a rule [*regel*].

Now, when Kant denies that we compare ‘perceptions’ here (that is, products of the act of apprehension), I take his point really to be that we do not compare perceptions *directly* but only with reference to their rules of apprehension. Ultimately, comparison represents similarity-relations between representations; it represents these relations, however, by means of representing rules of apprehension. Specifically, my proposal is that comparison represents several representations as identical to one another *in respect of* their ‘rule of apprehension’. Representations ‘belong together in consciousness’, in the sense relevant to the doctrine of comparison, insofar as they are subject to the same ‘rule of apprehension’.

If this proposal is correct, then our understanding of the doctrine of comparison hangs on our understanding of the notion of a ‘rule of apprehension’, and I will turn to this notion in the following section. Before I do so, however, I want us to briefly return to our question about the scope of comparison. If the doctrine of comparison is indeed tied to the notion of a ‘rule of apprehension’, then we should expect the scope of comparison to be limited to *sensible concepts*

— that is, concepts whose matter is given through apprehension (and is thus subject to a ‘rule of apprehension’). Since the matter of intellectual concepts, we saw in Chapter 5, is not itself given through an act of apprehension, this matter will not itself be subject to a rule of apprehension. Thus, we should not expect comparison to play a role in converting the matter for such concepts into full-fledged conceptual content. We therefore come upon an additional restriction on the scope of comparison: while we know that comparison does not apply universally within the domain of sensible concepts (geometric concepts, we have seen, fall outside the scope of comparison), we also have a principled reason for restricting comparison to the sensible domain.

With this consequence of the account we are developing noted, let us turn to the notion of a ‘rule of apprehension’.

3. Comparison and Schemata

The overarching claim I want to argue for in this section is that Kant’s doctrine of *comparison* is intimately tied to his doctrine of *schematism* — that the two doctrines are mutually illuminating. We cannot understand the notion of a ‘rule of apprehension’ in the sense relevant to the doctrine of comparison, I will argue, without appeal to the doctrine of schematism. But more than arguing for this general claim, I want to advance a specific interpretation of the relationship between the two doctrines. Thinking through this precise relationship, I will argue, points us toward a textually-motivated account of comparison that sheds light on how it could perform the theoretical role delineated in Section 1. With the fundamentals of this account in front of us, the rest of the chapter will be spent clarifying the account and tracing out its implications.

3.1 Schemata and Rules of Apprehension

Now, in connecting the two doctrines of schematism and comparison, I am in distinguished company. For Béatrice Longuenesse, who also draws on the passages presented above in her reading of comparison, likewise reaches for the doctrine of schematism to understand what Kant means when he speaks of a ‘rule of apprehension’ (Longuenesse 1998: 116). Although Longuenesse founds her reading on this claim, however, she makes it in passing and does little to substantiate it. In this section, I want to explain in more detail than Longuenesse does the principled reasons for drawing these two notions together. Now, as we will see, the reading I will go on to develop differs in important ways from Longuenesse’s. Whereas Longuenesse’s account effectively collapses the distinction between schematism and comparison, the claim I am going to argue for is this: schematism and comparison are acts that produce two distinct representational *vehicles* for one and the same representational *content*. That content is given by the *rule of apprehension*: this same rule is represented imaginatively by the schema (imaginatively-generated product of schematism) and intellectually through comparison (an act of the intellect for whose representational products Kant does not have a general term).

To arrive at this general picture, we can begin by building the case for thinking that the contents of schemata would be aptly described as ‘rules of apprehension’. We can start by reviewing some fundamental features of Kant’s account of schemata. First of all, Kant tells us that schemata are a kind of *representation*¹¹⁷ and that they are produced by the faculty of imagination: ‘[t]he schema is in itself always only a product of the imagination’ (A140/B179; cf. A142/B181). To bank this initial, guiding conception of schemata: schemata are representations of a certain kind, and they are produced by the imagination.

¹¹⁷ See, for example, A138/B177, where the schema is introduced as a ‘mediating representation’ [*vermittelnde Vorstellung*].

As we saw in our review of Kant's general faculty psychology in Chapter 1, when Kant talks about a 'representation', he is generally referring to a certain kind of *modification* or *accident* of a *mind* — specifically, a modification that 'designates' or 'refers to' [*beziehet auf*] something 'other' (*R* 1676, 16:77). In giving an account of a certain kind of representation, we can thus inquire both into i) the act that grounds the inherence of the representation as a modification of the mind and ii) the specific kind of entity that the modification designates. If Kant is using the term 'representation' in this technical sense when he refers to schemata as 'representations', it behooves him to tell us something both about the act that gives rise to schemata and the content of schemata — that is, the objects schemata designate. And Kant's procedure in the Schematism chapter suggests that he is thinking of schemata in precisely these terms, for he makes remarks that bear on both of these issues. With respect to the *origin* of schemata, we have seen him commit on numerous occasions to the claim that schemata are products of the imagination. And Kant also makes several claims about the *contents* of schemata. These claims suggest that the contents of schemata are, precisely, 'rules of apprehension'.

Two characterizations in particular suggest that schemata designate what could aptly be termed 'rules of apprehension'”

This *representation of* a general procedure of the imagination for providing a concept with its image is what I call the schema for this concept.

A140/B179-80

The schema of the triangle... *signifies* [*bedeutet*] a rule of the synthesis of the imagination in regard to pure shapes in space.

A141/B180

The operative terminology in these passages makes it clear that Kant is characterizing the *contents* of schemata — that is, specifying the kinds of entities schemata are 'representations of'; the kinds of entities that they *signify*. And both of his characterizations point us back to the notion of a 'rule

of apprehension’. Let us split this notion into its components — *rule, apprehension* — and address each in turn. First, both formulations point to the notion of a rule. The second outright claims that the schema for triangles signifies a rule. The first claims that schemata represent ‘general procedures’ — and on one natural gloss of ‘general procedure’, a procedure is general precisely insofar as it is subject to a rule. Second, both formulations point to the notion of apprehension. As we saw in detail throughout the previous part of the dissertation, ‘apprehension’ is Kant’s term for i) an act of the synthesis of the imagination, through which ii) the imagination brings sensible representations to consciousness, typically as *images*. *Apprehension*, then, is the synthesis of the imagination through which the mind forms images. And the first passage tells us that schemata represent rule-governed procedures for ‘providing images’, while the second tells us that schemata represent rules ‘of the synthesis of the imagination’. It does not take much interpretive license, then, to suggest that schemata represent *rules* that govern *apprehension*.

In the Schematism chapter, Kant not only characterizes the *origins* and *contents* of schemata; he also assigns them an important *functional role*. For schemata do not merely represent rules governing image-production; they themselves play a role in bringing images into being:

[T]he **image** is a product of the empirical faculty of productive imagination, the **schema** of sensible concepts (such as figures in space) is a product and as it were a monogram of pure *a priori* imagination, *through which and in accordance with which the images first become possible*

A141-4/B181, italics of final clause mine

Schemata represent rules that govern the apprehension of images — images, in this sense, become possible ‘in accordance with’ (what is represented in) schemata. But it is also *through* schemata that images become possible. What I take Kant to be claiming here is that schemata are not merely

inert representations of rules of apprehension; rather, they represent those rules in such a way as to constrain the activity of the imagination in its production of images.¹¹⁸

As I mentioned at the outset, in turning to the doctrine of schemata to cash out the notion of a ‘rule of apprehension’ relevant to the doctrine of comparison, I am in agreement with Longuenesse.

However, it is important to emphasize a difference between my reading of schemata and Longuenesse’s. Longuenesse collapses the distinction between a schema and a rule of apprehension: ‘[n]ow, the “rule of apprehension” *is* the schema’ (Longuenesse 1998: 116, my italics). Against this equation, I have argued that schema and rule of apprehension are related as representational state and representational content; Kant’s formulations, I have argued, suggest that schemata *designate* or *signify* rules of apprehension, not that they are identical to such rules. Now, in later work, Longuenesse is dismissive of this kind of attempt to distance schema and rule of apprehension: ‘I do not think there is much sense in distinguishing between ‘rule’ and (clear or obscure) ‘awareness of the rule’ in the case of either schemata or concepts’ (Longuenesse 2005: 28). This refusal to distinguish between the rule of apprehension and our *awareness* of it leads Longuenesse to an account of the relationship between the doctrines of comparison and schematism that is importantly different from mine. Longuenesse thinks schemata *are* rules of apprehension (here we disagree). She also thinks that comparison makes us conscious of rules of apprehension (here we agree). But since she thinks that there is no difference between a rule of

¹¹⁸ An account of what it is about the representational format of schemata that allows them to influence the activity of imagination is beyond the scope of this study. One plausible and interesting recent account is provided in Mattherne (2015: 762–768). Mattherne points to the language of ‘sketching’ (*zeichnen*) that runs through the Schematism chapter, as well as the term ‘monogram’ in the passage above and Kant’s description of schemata as a kind of ‘sillhouette’ (A570/B598) to suggest that the schematism functions like a template or stencil to guide the activity of apprehension. A challenge for this reading is to explain why schemata do not collapse into images. I will not pursue the topic further here.

apprehension and the consciousness it, she holds that comparison, in producing consciousness of rules of apprehension, itself produces schemata. Somewhat paradoxically, then, schemata emerge on Longuenesse's account as both the inputs *and* the outputs of comparison.¹¹⁹ Assuming that Kant uses the term 'schematism' as a name for the process by which the imagination forms schemata, Longuenesse's position thus effectively collapses the distinction between comparison and schematism.

Against this tendency in Longuenesse's account, I think it is important that we maintain a strict separation between schematism and comparison, and we can do so if we distinguish schemata and rules of apprehension along the lines I have suggested. If we distinguish between the schema, as an imaginatively-generated representational state, and the rule of apprehension, as the object of that state, we open up the possibility that this same object could be represented through a different representational faculty. Since comparison is an act of the intellect, and since we know that comparison targets rules of apprehension, we can thus distinguish between *schematism*, on the one hand, and *comparison*, on the other, as follows: schematism is an act of the imagination that produces imaginative representations of rules of apprehension (schemata); comparison, meanwhile, is an act of the understanding that produces *intellectual* representations of those same rules.

This way of understanding the distinction between comparison and schematism does two things: first, it enriches our understanding of the material acts that we studied in the previous part of the dissertation; second, it gives us a way of locating comparison on the formal side of the

¹¹⁹ '[T]o compare schemata, by means of the three joint acts of comparison, reflection, and abstraction, is first of all to *generate* these schemata. Thus the schemata result from the very acts of universalizing comparison of which they are the object' (Longuenesse 1998: 116–117). Notice that we cannot dispel the air of paradox by saying that a given set of schemata are inputted to comparison and a further, distinct set is outputted. To compare schemata, Longuenesse says, is 'first of all to generate *these* schemata' (my italics).

material-formal distinction. To the first point: since schemata condition image-formation, it turns out that it is not merely apprehension but, more specifically, *schema-guided* apprehension that produces matter for concepts by bringing given intuitive content to an image. To the second point: unlike schematism, comparison is not an act that we must perform in order to generate images at all. Instead, it is an act through which we become intellectually conscious of the rules of apprehension that governed the formation of already-apprehended images. We thus get the result that comparison is an operation that acts on apprehended-representations, not an act through which representations are first apprehended; our account therefore satisfies constraint 1*.¹²⁰

3.2 Schematism, Subsumption, and the Outputs of Comparison

What about the other constraints? On the account I am proposing, comparison groups a set of apprehended representations together by representing their common rule of apprehension. The inputs to comparison are apprehended representations; its outputs are sets of apprehended representations, grouped according to their common rule of apprehension. Now, fully explaining why this grouping stops short of the act of reflection (as *per* constraint 2*) will only be possible once we have an account of reflection on the table in the next chapter. However, what we can do now is return to constraint 3*, which requires us to explain why the outputs of comparison are suited to be inputted to reflection.

If our account is to respect 3*, it will need to explain why the outputs of comparison are such that they could in principle be ‘grasped together’. That, of course, will require us to explain what it would be to grasp a set of representations together. Now, Kant does not cash out the notion

¹²⁰ Notice that it is much less clear how Longuenesse’s account could respect 1*. Since her account equates schematism and comparison, and if it is true that schematism, as a condition of image-formation, qualifies as a material act, her account predicts that comparison should also count as a material act.

of ‘grasping together’, but I think that the following is a natural and plausible gloss. To say that a set of representations can be ‘grasped together’, I suggest, is just to say that every member of the set could be ‘subsumed under’ a single *concept*. Since the faculty that subsumes representations under concepts is the *power of judgment*, a set of representations can thus be grasped together insofar as each could be subject to the same kind of exercise of the power of judgment. We will see in the next chapter that Kant’s remarks about the nature of reflection bear this picture out, for he characterizes the objects of reflection as being ‘subjectively purposive’ for the power of judgment. I submit, then, that a set of representations can be ‘grasped together’ when they are subjectively purposive for the power of judgment, which is to say that every member of the set could be subsumed under a single concept.

If that is what it means to grasp a set of representations together, then our appeal to schemata puts us in a position to satisfy constraint 3* by explaining exactly why Kant would think that the outputs of comparison are suitable inputs to reflection. For Kant invokes schemata precisely in order to explain the possibility of subsumption. Kant opens the Schematism chapter by telling us that what it means to say that an object is ‘contained under’ a concept is that the object is subsumed under the concept. But, he continues, subsumption of an object under a concept itself requires a relation of ‘homogeneity’ between i) what the concept itself ‘contains’, and ii) ‘that which is represented in the object’ (A137/B176). I take it that the second item in this homogeneity relation (‘that which is represented in the object’) is a set of given, nonconceptual representations, which themselves represent the object in question.¹²¹ Kant’s claim, then, is that a concept only subsumes an object insofar as it is ‘homogenous’ with some nonconceptual representation of that object. Derivatively, we can say that these nonconceptual representations themselves, insofar as

¹²¹ Cf. Stang (2021: 33) for a similar reading of this passage.

they are homogenous with the concept, are subject to subsumption under the concept.¹²² Schemata are then invoked as mediating representations that serve to explain how conceptual and nonconceptual representations can stand in the homogeneity relation required for subsumption. Because subsumption would be impossible in the absence of schemata, Kant describes schemata as conditions on the power of judgment:

Now to the use of a concept there also belongs a function of the power of judgment, whereby an object is subsumed under it... If this condition of the power of judgment (schema) is missing, then all subsumption disappears

A247/B304

It is therefore only insofar as a representation is subject to a schema that it can be subsumed under a concept; correlatively, it is only insofar as a *set* of representations is subject to a *common* schema that the members of the set could be subsumed under a single concept and thereby ‘grasped together’.

A different way of approaching this same point adverts to the notion of ‘exhibition’ [*Darstellung*], which is a technical notion that appears in Kant’s definition of comparison.¹²³ The notion of ‘homogeneity’ that we have seen running through Kant’s discussion of subsumption reappears in his account of ‘exhibition’ (*Darstellung*), though here he speaks in terms of correspondence rather than homogeneity. Exhibition is an act of the ‘self-active faculty of

¹²² There are numerous passages in which Kant speaks of sensible representations, rather than objects, as *relata* of the subsumption-relation (e.g. A356), so extending the relation to cover representations as well as objects is licensed by Kant’s own usage of the term. Indeed, in the paragraph after the one we have just been describing, Kant makes it clear that the subsumption-relation can hold between intuitions and concepts: having claimed that pure concepts ‘can never be encountered in any intuition’, he asks, ‘[n]ow how is the subsumption of the latter [*viz.* intuition] under the former [*viz.* the category]... possible...?’ (A137/B176).

¹²³ Recall: ‘Diese Gemeingültigkeit setzt freylich eine Vergleichung voraus, aber nicht der Wahrnehmungen, sondern unserer Auffassung, so fern sie schon die *Darstellung eines noch unbestimten Begriffs enthält* und an sich allgemein ist’ (R 2883, 16: 558, my italics).

cognition'; it involves the '**presentation** [*Darstellung*] of the object *corresponding to* [a] concept in intuition' (*EE* 20:221). An object can be said to 'correspond to' a concept insofar as it is represented by an intuition that itself corresponds to (is homogenous with) the concept; hence, Kant also defines exhibition [*Darstellung; exhibitio*] as the act of 'placing a corresponding *intuition* beside the concept' (*KU* 5: 192, my emphasis). Thus, just as we could speak of both objects and intuitions as being *subsumed* under a concept, we can also speak of both objects and intuitions as 'exhibiting' a concept, and we can speak of the concept itself as 'exhibited in' the intuitions and objects that correspond to it. My proposal is that subsumption and exhibition are the same act, differently described: to subsume an intuitive representation (hence, ultimately, an object) *under* a concept just is to exhibit the concept *in* a 'corresponding intuition' (hence, ultimately, a corresponding object). As evidence for this equation, note that while Kant defines the power of judgment, as a whole, as 'the faculty of the subsumption of the particular under the general' (*EE* 20:201; cf. A132/B171), he likewise tells us repeatedly that exhibition is the 'proper business' of the power of judgment (*EE* 20:221; *KU* 5:192). We can thus cash out the notion of 'grasping together' *via* the notion of exhibition: a set of apprehended representations can be grasped together insofar as they are capable of exhibiting a single concept. Since schemata are conditions of subsumption, they are likewise conditions of exhibition: only representations subject to a common schema could exhibit a single concept and thereby admit of being 'grasped together'.

Circling back to constraint 3*, then, our account gives a principled explanation of why the outputs of comparison are suitable inputs to reflection. Reflection represents the ways in which a set of representations can be grasped together. Representations can be grasped together only insofar as they can be subsumed under (and thereby exhibit) a single concept, and they can be subsumed under (and thereby exhibit) a single concept only insofar as they are subject to a common

rule of apprehension. Comparison represents a set of representations as subject to a common rule of apprehension. It therefore gives reflection a set of representations that could indeed be grasped together by the intellect.

We have already found circumstantial evidence for linking comparison and schematism (in Kant's appeal to the notion of a 'rule of apprehension'), but this finding gives us systematic textual evidence for linking the doctrines of schematism and comparison in the way that I have proposed. Situating comparison in the way that I have proposed not only allows us to explain Kant's situation of comparison as a formal rather than material act, it also gives us exactly the right prediction about the precise location of comparison within the hierarchy of formal acts because it explains why the outputs of comparison are poised to be inputted to reflection.

4. The Scope of Comparison

The previous section contains the core of my positive account of comparison, but we have not yet explained Kant's basis for limiting the scope of comparison. In Section 2, I argued on systematic grounds that comparison has no role to play in the formation of non-sensible concepts, the matter of which does not depend on apprehension, but even within the domain of sensible concepts, we have seen Kant deny that comparison has a role to play in the formation of geometric concepts. In this section, I explore Kant's basis for this limitation and investigate whether he would recognize any further limitations within the domain of sensible concepts, arriving at the conclusion that comparison is in fact only required for the formation of *empirical* concepts. To reach this finding, I show that Kant distinguishes between two ways in which we can be aware of a rule of apprehension: either i) directly, through act-consciousness of the synthesis of apprehension itself, or ii) indirectly, through consciousness of those representations that are the 'effect' of the rule. I

then argue that this distinction is the basis for Kant's restriction of the scope of comparison. Comparison is only required, I argue, when our mode of access to the rule of apprehension is indirect; it is not necessary when our awareness of the rule of apprehension is afforded by direct act-consciousness. With this understanding of the basis of the scope-restriction, I then investigate the variety of sensible concepts in addition to those of geometry. On the resulting picture, comparison is limited, within the class of sensible concepts, to empirical concepts.

Kant's denial that the concept of a triangle depends upon comparison is initially hard to square with other comments about the formation of geometric concepts. In the A-Deduction, in a discussion to which we will return, Kant says that 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 [*jederzeit dargestellt werden*]' (A105). What Kant is describing here is an already-universal rule of apprehension of just the kind that I have argued comparison represents. And his claim is that in order to 'think the triangle as an object' — that is, I take it, to form the concept of a triangle — we must be conscious of just such a rule. Why, then, does Kant claim in both the passage quoted above and in his handwritten notes (16: 558) that we form the concept even without any comparison? The answer to this question clearly cannot be that formation of the concept does not require that we become conscious of the rule of apprehension. Instead, I want to argue, what is driving Kant's claim here is a distinction two ways in which we can become conscious of a rule of apprehension.

In the A-Deduction, Kant distinguishes between i) the syntheses of apprehension and reproduction, and ii) the *consciousness of the unity* of those syntheses, and claims that this latter consciousness is a condition on the possibility of conceptual awareness. Kant then draws a

distinction between two ways in which we can become conscious of the rules that ground the unity of synthesis:

This consciousness may often only be weak, so that we connect it with the generation [*Erzeugung*] of the representation only in the effect, but not in the act [*Actus*] itself, i.e., immediately; but regardless of these differences, one consciousness must always be found, even if it lacks conspicuous clarity, and without that concepts, and with them cognition of objects, would be entirely impossible.

A104-05

Here, the consciousness Kant is describing is our consciousness of the ‘unity’ of the synthesis that ‘generates’ our conscious representations, and he distinguishes two ways in which we may be conscious of this unity as presiding over the generation of our representations: *immediately*, ‘in the act itself’, and mediately, ‘only in the effect’. Kant, I suggest, is distinguishing between two ways in which we can become aware of a rule of apprehension. *Either* we are immediately conscious of the unfolding of the synthesis of apprehension itself — a form of awareness Kitcher (1990) derisively calls ‘synthesis watching’ — and our awareness of the rule is given through this act-awareness; *or* we are conscious only of the representations produced as an effect of synthesis, but our awareness of these representations indirectly yields awareness of the rule governing the synthesis by which they were produced.

The first, un-mediated form of awareness is, it seems, comparatively rare:

Synthesis in general is, as we shall subsequently see, the mere effect of the imagination, of a blind though indispensable function of the soul, without which we would have no cognition at all, but of which *we are seldom even conscious*. Yet to bring this synthesis **to concepts** is a function that pertains to the understanding, and by means of which it first provides cognition in the proper sense.

A78/B103, my italics

I take it that when Kant holds that we are ‘seldom even conscious’ of synthesis, the consciousness he is describing here is the immediate form of act-awareness alluded to above. Now, the task of ‘bringing synthesis to concepts’ is precisely the task that Kant is analyzing in his doctrine of the

logical acts. If direct consciousness of synthesis itself were a condition of bringing synthesis to concepts, then, we would have very few concepts indeed, since Kant holds that we are ‘seldom even conscious’ of synthesis. In the standard case, then, the first step in ‘bringing synthesis to concepts’ will involve the kind of mediate awareness of the rule of apprehension described above, where our awareness of the rule is mediated by our awareness of the effect of synthesis, not the act itself.

Nevertheless, though rare, direct consciousness of synthesis *is* a kind of awareness that features in the origins of certain concepts. Specifically, Kant clearly thinks that it takes place in the figurative synthesis that gives matter for pure sensible concepts:

We cannot think of a line without **drawing** it in thought, we cannot think of a circle without **describing** it, we cannot represent the three dimensions of space at all without **placing** three lines perpendicular to each other at the same point, and we cannot even represent time without, in **drawing** a straight line (which is to be the external figurative representation of time), *attending merely to the action of synthesis of the manifold [Handlung der Synthesis]* through which we successively determine the inner sense, and thereby attending to the succession of this determination in inner sense.

B154

What this passage makes absolutely clear is that it is possible to ‘attend merely to the synthesis of the manifold’ through which we draw shapes in space and thereby generate matter for geometric concepts. Thus, figurative synthesis is subject to the kind of act-awareness — which discloses ‘unity’ of synthesis ‘in the act itself’ — that Kant had pointed to in the A-Deduction.

Let us put together what we know so far, then. First, geometric images are formed through figurative synthesis. Second, geometric concepts require consciousness of the rule of apprehension governing figurative synthesis. Third, geometric concepts do not depend on comparison. I suggest that we appeal to the first two of these *data* points to explain the third. It is *because* the geometric rule of apprehension can be discovered through consciousness of the act of synthesis that

comparison is not necessary for the formation of geometric concepts. Why? Because, I suggest, comparison only takes place when we must work through a series of apprehended representations to find their common rule of apprehension. This proposal gets us to the sense in which it *is* true that comparison is tied up with multiplicity and difference. Jäsche was quite wrong to suggest that the point of comparison is to note differences between things — comparison, as we have seen, is geared toward the discovery of common rules of apprehension that unite several representations in consciousness. But what is true is that comparison is only required when the mind must confront a plurality of representations and search for their common rule of apprehension; in cases where this kind of searching need not take place, as when the rule is given through direct act-consciousness, we can bypass comparison.

This reading fits with Kant’s characterization of the understanding as a faculty of rules in the A-Deduction: the understanding, he says there, ‘is always busy poring through the appearances with the aim of finding some sort of rule in them’, and, as employed in this business, it is a ‘faculty for making rules through the comparison of the appearances’ (A126).¹²⁴ Further support comes in Kant’s notes, where he links *comparatio* directly to ‘*apprehensio variorum*’ (R 2876, 16:556), which suggests again that comparison must confront various apprehended representations.

If this proposal is correct, then we need to understand the difference between those acts of synthesis of which we *can* become directly conscious and those of which we cannot. This distinction will allow us to draw a principled line between sensible concepts whose formation does not depend on comparison (*viz.* concepts whose matter is given through an act of synthesis of

¹²⁴ I should concede that I need to hear Kant here as really saying that the understanding is the faculty for making *representations of* rules through the comparison of appearances since I hold that comparison discovers rather than creates rules of apprehension. I think that the fact that Kant had spoken in a discover-register a sentence beforehand (the understanding seeks to ‘find rules’ in the appearances it pores through) supports this reading.

which we *can* become directly conscious), and concepts whose formation does depend on comparison (*viz.* concepts whose matter is given through an act of synthesis of which we *cannot* become directly conscious).

So far, we have seen that figurative synthesis, at least insofar as it gives matter for pure sensible concepts, *is* subject to direct awareness; we can conclude, accordingly, that not just geometric concepts but pure sensible concepts more broadly do not depend on comparison, for in all such cases it is possible to produce consciousness of the rule of synthesis through immediate act awareness rather than comparison. But that leaves us with two further modes of apprehension (as we distinguished them in Chapter 4): empirical apprehension ‘by means of sensation’ — the act that gives matter for concepts of perception; and empirical apprehension of appearances — the act that gives matter for concepts of experience. Since, we have seen, Kant maintains that we are seldom ever conscious of synthesis, we should expect that at least one of these modes of apprehension takes place outside of the purview of consciousness.

Immediately, there are good reasons to rule out the possibility that we can be directly conscious of ‘apprehension by means of sensation’. On phenomenological grounds, it seems implausible that, in addition to being conscious of sensations, we are conscious of the process by which sensations are brought to consciousness. But a textual reason to doubt that Kant thinks that we can be directly aware of this kind of apprehension stems from the fact that it is *instantaneous* (A167/B209). Our consciousness of pure apprehension involves our ‘attending merely to the action of synthesis of the manifold through which we *successively determine the inner sense*’ (B154). If, generalizing, our direct consciousness of synthesis is always awareness of an act that unfolds over time, then the fact that apprehension by means of sensation takes place at an instant would place it outside the purview of conscious awareness.

Since empirical apprehension of an appearance is an amalgam of figurative synthesis and empirical apprehension by means of sensation, it combines a form of synthesis of which we can become conscious with a form of which we cannot. The question, then, is whether this synthesis itself can be brought to consciousness. Of course, it is Kant's view that when we are conscious of pure apprehension, we are conscious of a process that is always already taking place in our apprehension of appearances — it is for this reason that he thinks that the axioms of geometry are valid of appearances (A165–6/B206) — but the question is whether he thinks that we can become directly conscious of figurative synthesis insofar as it is combined with synthesis by means of sensation. And I think the answer here is negative. The understanding, recall, is 'always busy poring through the appearances with the aim of finding some sort of rule in them' (A126). If it could become directly conscious of the empirical synthesis that first brings appearances to consciousness, it would not have to pore through the appearances themselves to glean 'some sort of rule in them' — it could simply read off the rule from consciousness of the act of empirical synthesis itself.

We have arrived, then, at a principled limitation on the scope of comparison. And what we have found is that all and only empirical concepts depend upon comparison. First of all, comparison cannot play a role in the formation of pure intellectual concepts, for since the matter for these concepts is not given through apprehension, it is not subject to a *rule* of apprehension. Secondly, those concepts whose matter is given through pure apprehension do not depend upon comparison. We *do* need to become conscious of the relevant rule of apprehension to form these concepts, but this consciousness is provided for in direct consciousness of the act of figurative synthesis that first brings forth the concept's matter. It is only those sensible concepts whose matter is given through a synthetic operation of which we cannot become conscious that depend on

comparison. And this class of sensible concepts, we have seen, includes both the class of given empirical concepts and *Erfahrungsbegriffe*.

5. Schemata and the Understanding

In this final section, I want to dwell on a controversial entailment of my reading of comparison — namely, that sensible schemata are prior to sensible concepts.¹²⁵ For I have argued that all such concepts require, for their formation, that we become intellectually conscious of the rules of apprehension represented in schemata. Whether such consciousness transpires through comparison or direct act-awareness, in both cases it requires that its objects — rules of apprehension — already be present in the mind as contents of schemata. Since we cannot form sensible concepts unless we are first conscious of schematically-represented rules of apprehension, it follows that schemata must exist in the mind prior to and as a condition of sensible concepts.¹²⁶

This account of the priority-relation between sensible schemata and sensible concepts puts me at odds with readers who argue that sensible concepts and sensible schemata are simply

¹²⁵ By ‘sensible schemata’, I mean the schemata that Kant specifically mentions in connection with sensible concepts, such as the schema for triangles and the schema ‘signified’ by the concept of a dog. I am using this term to draw a contrast with the ‘transcendental schemata’ he describes in connection with the categories, which I discuss in Chapter 8.

¹²⁶ It is worth being clear that I have left myself no room for maneuver on this point. If I subscribed to the dominant view of the logical acts discussed in Chapter 2, on which Kant’s account is not meant to explain how concepts come into being but only to explain how they are made ‘explicit’ or ‘distinct’, I could marry my account of comparison with a different account of the relationship between sensible schemata and sensible concepts (either one that reverses the priority relation between them or claims that they are equally fundamental). For I could say that ‘obscure’ sensible concepts are first in the order of existence, that these sensible concepts then ground (or are perhaps identical to) sensible schemata, and I could further claim that those same concepts are made distinct when we become conscious of their corresponding schemata through schemata. But this type of move is only available to a reader who denies that the logical acts ground the existence of concepts, and as I made clear in chapter 2, that is not the path I am taking. I am taking seriously the idea that the logical acts produce concepts themselves, not merely some clarified variant of extant concepts, and so if schemata must exist for the logical acts to take place at all, then my account commits me to the claim that schemata (at least in the sensible case) are prior to (at least sensible) concepts

identical (Guyer 2006: 97; Chipman 1972: 42) as well as those readers who maintain that sensible concepts in fact ground sensible schemata (most forthrightly, Mattherne 2015, 762–774). Rather than pitting these views against each other on narrow textual grounds,¹²⁷ in this section I want to present a more systematic argument in favor of my position. What I want to argue is that my account of the relationship between schemata and concepts dovetails with a plausible reconstruction of Kant’s metaphysics of the faculty of understanding.

At the outset of the Analytic of Concepts, Kant tells us that

I understand by an analytic of concepts not their analysis, or the usual procedure of philosophical investigations, that of analyzing the content of concepts that present themselves and bringing them to distinctness, but rather the much less frequently attempted **analysis** [*Zergliederung*] **of the faculty of understanding** itself, in order to research the possibility of *a priori* concepts

A65-6/B90

Kant will analyze — take apart — the faculty of understanding in order to explain how *a priori* concepts are possible, where the concepts Kant is referring to are the pure concepts of understanding, the categories. What would it mean to take apart a faculty?

¹²⁷ To briefly review the passages to which the different views can lay claim: the reader who claims that sensible concepts and their schemata are identical is on strongest ground in the case of empirical concepts. Kant, we have seen, presents schemata as representations that signify rules of imagination. It is striking, then, that he tells us that the concept of a dog ‘signifies a rule in accordance with which my imagination can specify the shape of a four-footed animal in general’ (A141/B180). This might understandably be read as claiming that the concept just is a schema. Meanwhile, the reader who claims that sensible concepts are prior to their schemata has a very easy time making sense of Kant’s general characterization of a sensible schema, which, he says, is a ‘representations of a general procedure of the imagination for providing a concept with its image’ — a formulation that could understandably be taken as implying that concepts must exist before their schemata. Finally, a reading such as my own finds circumstantial evidence in Kant’s claim that schemata lie at the ground [*zum Grunde liegen*] of our pure sensible concepts (A140/B180). It can also appeal to Kant’s doctrine in the third Critique of ‘schematism without a concept’, which is widely read as implying that imagination can schematize in the absence of empirical concepts (see Filieri 2021 for excellent discussion). And there is finally a hand-written note to Kant’s copy of the first *Critique* in which Kant characterizes ‘perception’ as ‘consciousness of an appearance (prior to all concepts [*vor allem Begriffen*])’ (VN 23: 28); assuming that schemata are conditions on perceptions, this would strongly imply that schemata exist prior to concepts.

In the lead up to the A-Deduction, Kant claims that there are ‘three original sources (capacities or faculties of the soul), which contain the conditions of the possibility of all experience’ (A94). Kant identifies these original faculties, which ‘cannot themselves be derived from any other faculty of the mind’ (ibid.), as ‘sense, imagination, and apperception’ (ibid.). He then tells us that the faculty of sense has already been discussed but ‘we will now attempt to understand the nature of the other two ones’ (A95/B126). Shortly afterwards, Kant refers again to the ‘three subjective sources of cognition’, and claims that these sources ‘make possible even the understanding’ (A97). What we see, then, is a distinction between fundamental and derivative faculties of the mind. The three original sources — sense, imagination, and apperception — are fundamental faculties because they ‘cannot themselves be derived from any other faculty of the mind’. The understanding, however, is a derivative faculty because the three original sources ‘make possible even the understanding’ — thus, it *can* be derived from other faculties of mind. And it is for this reason, I suggest, that it can be analyzed or taken apart: it can be traced back to the fundamental faculties that make it possible and thereby resolved into its elements. And Kant’s overriding claim, remember, is that performing this analysis will help us understand the possibility of *a priori* concepts (we will return to this claim in Chapter 8).

Now, it is with this theoretical background in mind that we should approach Kant’s description of the understanding in the A-Deduction:

The unity of apperception in relation to the synthesis of the imagination is the understanding, and this very same unity, in relation to the transcendental synthesis of the imagination, is the pure understanding.

A119

The understanding is a derivative faculty in the sense that it depends for its possibility on three more fundamental faculties, named as the faculties of sense, imagination, and apperception. This

formulation now claims that understanding depends, not just on three further faculties, but on a specific relationship between two of them, imagination and apperception. In the next chapter, I will make some positive claims about the nature of the faculty of apperception. For present purposes, though, rather than characterizing the faculty, I simply want to investigate Kant's account of the manner in which the faculties of apperception and imagination must be related if they are to make understanding possible.

Brian Tracz (2021) has recently argued for a model on which the relevant relationship between the faculties of apperception and imagination is *casual*. On Tracz's model, the faculty of apperception 'penetrates' the imagination by altering the way in which the imagination operates. Tracz appeals to this penetration model to explain Kant's distinction between the 'reproductive imagination' and the 'productive imagination'. The reproductive imagination is the imagination as it functions independently of the faculty of apperception; it is subject to laws of association, and it is shared between humans and animals. The *productive* imagination, by contrast, is a faculty for 'transcendental synthesis' that itself comes into being as a result of the faculty of apperception affecting the faculty of imagination: '[w]e might think of the productive imagination... as a derived faculty of the mind that results when apperception penetrates the faculty of imagination' (Tracz 2021, 204).¹²⁸ Thus, unlike reproductive imagination, productive imagination is an

¹²⁸ The following passage, amongst several others, speaks in favor of Tracz's way of distinguishing reproductive and productive imagination: 'Now insofar as the imagination is spontaneity, I also call it the **productive** imagination, and thereby distinguish it from the **reproductive** imagination, whose synthesis is subject to empirical laws, namely those of association' (B152). Here Kant tells us that he refers to the imagination as productive insofar as it is 'spontaneity' (and, for this reason, is not subject to the laws of association). The understanding 'is spontaneity' in the sense that it can do something that the reproductive imagination cannot, namely, 'determine the form of sense *a priori* in accordance with the unity of apperception' (B151-52). Tracz's claim is that the reason that it can do *this* is that it is penetrated by the faculty of apperception.

apperception-dependent faculty and therefore cannot exist in non-human animals, for such beings lack a faculty of apperception.

But how exactly does apperception affect imagination? Several texts suggest that the faculty of apperception influences the imagination in the specific sense that it transforms its *aim* or *function*. The following is particularly striking:

[A]pperception must be added to the pure power of imagination in order to make its function intellectual

A124

The result of ‘adding’ apperception to imagination is that the ‘function’ of the latter is rendered ‘intellectual’. Putting all of this together, then, we can say that the faculty of understanding is only possible insofar as apperception affects the imagination in such a way as to transform its function, that is, to ‘make its function intellectual’. This transformation constitutes the human imagination as a ‘productive’ imagination capable of ‘transcendental synthesis’. Productive imagination, then, is the faculty that arises when apperception and imagination interact in the manner that they must if they are to make understanding possible.

In the following passage, Kant characterizes the distinctive function or aim of the imagination insofar as it is productive:

The imagination is therefore also a faculty of a synthesis *a priori*, on account of which we give it the name of productive imagination, and, insofar as its aim in regard to all the manifold of appearance is nothing further than the necessary unity in their synthesis, this can be called the transcendental function of the imagination.

A123

The imagination is productive insofar as its ‘aim in regard to all the manifold of appearance is nothing further than the necessary unity in their synthesis’. This is the aim, or function, that imagination assumes when apperception is ‘added to it’.

Now, the point of bringing out this nuance in Kant's account of imagination — and here again I am in agreement with Tracz — is that Kant clearly identifies *schemata* as distinctive products of the *productive* imagination. This is obviously true of transcendental schemata, which he identifies as 'transcendental products' of the imagination (A142/B18) (for recall that it is only as productive that imagination is a faculty for 'transcendental synthesis'). But he likewise tells us that the sensible schema is a 'product and as it were a monogram of pure *a priori* imagination' (A142/B181) — and while it is true that Kant distinguishes between empirical and pure exercises of productive imagination, it is also plausible that he denies that reproductive imagination admits of a pure use.¹²⁹ Moreover, when Kant traces sensible schemata to the imagination, he invokes precisely the aim or function that, according to the A-Deduction, the imagination inherits when apperception is 'added' to it.:

The schema is in itself always only a product of the imagination; but since the synthesis of the latter has as its aim no individual intuition but rather only the unity in the determination of sensibility, the schema is to be distinguished from an image.
A140/B179

The schema is a product of the imagination insofar as the latter aims at 'unity in the determination of sensibility', and we have seen that this is the aim or function that pertains to the imagination precisely insofar as it qualifies as productive (see again A123). Kant's claim, I take it, is that the imagination can only fulfil this aim insofar as it generates and acts in accordance with schemata.

This way of explaining the origin of schemata has several implications. First of all, it shows us that denying that schemata are grounded on *concepts* — the representations that come into existence through acts of the faculty of understanding — does not require us to deny that schemata are grounded on *apperception*. Thus, a reading such as my own can continue to acknowledge a

¹²⁹ '[O]nly the **productive synthesis of the imagination** can take place *a priori*; for the **reproductive synthesis** rests on conditions of experience' (A118).

substantive sense in which schemata should be counted as spontaneous representations and even as a kind of ‘intellectual’ representation — that is, as a kind of representation that is produced through the imagination insofar as its ‘function is intellectual’. Accordingly, we have a model for explaining what Kant means when he says that schemata are ‘partly sensible, partly intellectual’, which does not require us to collapse the distinction between schemata and concepts or to claim that concepts are prior to schemata. And moreover, this way of explaining the origins of schemata in fact gives us positive reason to *deny* that concepts are prior to schemata. *Schemata*, we have seen, are representations that arise when the two fundamental faculties of apperception and imagination interact in the manner that they must if they are to make understanding possible. *Concepts*, on the other hand, are representations that come into existence insofar as the understanding is actual. Since productive imagination (as the faculty that comes into being when apperception affects imagination) is a condition on the possibility of understanding and not *vice versa*, we should not expect the representational outputs of the understanding to be prior to the representational outputs of the productive imagination.

Conclusion

This concludes my treatment of comparison. I have argued that comparison is an act that groups apprehended representations according to their common rule of apprehension. This rule is first represented, imaginatively, *via* schemata; it is then represented intellectually through comparison. This intellectual representation of the rule of apprehension plays no role in the actual apprehension of the representations, which explains why comparison does not count as a material act. The account also explains why, as a formal act, comparison stops short of but is oriented toward reflection, the act that represents the ways in which given representations could be ‘thought together’. Since representations subject to common rules of apprehension are apt to be ‘thought

together' — that is, subsumed under a single concept — the outputs of comparison are suitable inputs to the act of reflection. But the account also insists that comparison proper only takes place when the rule of apprehension is not given through immediate act-consciousness of the kind that takes place in pure figurative synthesis. That is why pure sensible concepts, whose matter is given through figurative synthesis, do not depend on comparison, as Kant claims.

We noted in the final section of the chapter that my account of the relationship between comparison and schematism, together with my commitment to viewing the logical acts as genuinely originary rather than merely clarificatory of concepts, entails that sensible concepts are grounded on schemata and not *vice versa*. I closed the chapter by arguing that this account of the relationship between schemata and concepts is exactly what it should be given Kant's conception of the understanding as a derivative faculty that depends for its existence on a specific relationship between the faculties of apperception and imagination. Schemata, I showed, are not merely imaginative representations but, more specifically, outputs of the productive imagination, a faculty that must exist prior to the understanding given that it comes into being when apperception and imagination interact in the manner that is necessary to make understanding so much as possible.

Now, it is important to emphasize that the interaction between apperception and imagination that gives rise to *productive imagination* does not thereby give rise to *understanding*. Schemata do not simply bring concepts into existence, for we have found that Kant claims that we must become *conscious* of schemata before we can form concepts. And that is not all, for if it were, then comparison would be a sufficient condition of concept formation, which it plainly is not. Not only must the mind group apprehended-representations according to their common rule of apprehension; it must also represent the possibility of grasping these representations together, in a separate act that Kant calls reflection.

While schemata are products of the relationship between apperception and imagination that makes understanding *possible*, in the next chapter, we will see that reflection is the act through which apperception and imagination relate to one another in such a way as to make understanding *actual*. Thus, it is through the doctrine of reflection that Kant completes his derivation of the faculty of understanding from the faculties of apperception and imagination. And as we follow this derivation, we will see why Kant held that his analysis of the faculty of understanding would elucidate the possibility of the categories.

Chapter 7

Reflection and Abstraction

Introduction

Our discussion of comparison complete, in this chapter we arrive at the higher acts in the progression of logical acts: reflection and abstraction. We begin with a treatment of reflection. In several places, Kant casts reflection as *the* characteristic act of the understanding as a faculty (e.g. *Prolegomena* 4:288; *Metaphysics* 28:240-41), and we will attempt to understand why he accords reflection such importance. My treatment of reflection stretches across two sections. In Section 1, my aim is to convert our guiding conception of reflection into a more substantive working definition. To do so, I draw together materials from published and unpublished works that all converge on a formulation that brings the doctrine of reflection into close proximity with Kant's notion of the 'unity of apperception'. On this formulation, reflection represents a specific respect in which the outputs of comparison can be 'brought to' the 'unity of apperception'. The aim of Section 2 will be to unpack that working definition. To do so, we must confront the doctrine of apperception directly. There will be much that Section 2 does not explain, but what it will try to do is to situate several key features of the doctrine in relation to each other. I will develop an account of the relationship between the discursive faculty of understanding and the faculty of apperception more broadly

(2.1), of the difference between ‘transcendental’ and ‘objective’ unity of apperception (2.2), of the relationship between the logical functions of judgment and the objective unity of apperception (2.3), in order to cash out the notion of reflection in 2.4. The work of Section 2 will allow me to convert my first working definition of reflection into a second: reflection represents ways in the outputs of comparison are ‘determined with respect to logical functions of judgment’. This working definition allows me to characterize the outputs of reflection: reflection produces representations of mappings from manifolds and rules of apprehension to logical functions of judgment.

The question to answer in Section 3 is why Kant denies that these outputs of reflection qualify as ‘determinate concepts’. Answering this question will require us to situate the theoretical role of abstraction, the culminating logical act. I begin, in Section 3.1., by assembling various textual *data* concerning the act of abstraction, before turning, in Section 3.2, to an explanation of how abstraction first brings forth determinate concepts. I explain the distinction between a ‘feature’ (*Beschaffenheit*) and a ‘mark’ (*Merkmale*) and use this distinction to explain why abstraction — as the act that converts features into marks — both depends and builds upon reflection.

1. Reflection

Our first task, then, is to arrive at a satisfactory understanding of the nature of reflection. To make progress here, let us return to the distinction between comparison and reflection that guided our discussion in the previous chapter: whereas comparison represents the ways in which representations *in fact belong together* in consciousness, reflection represents the ways in which such representations *could be grasped together* by the intellect. Again, to compare (or to ‘reflect’

in the first sense that Kant distinguishes in *EE*) is to hold representations together with *one another*, whereas to reflect proper is to hold them together with one's faculty of cognition in relation to a concept thereby made possible. We want to unlock the meaning of this contrast.

We can begin by reminding ourselves of what we now know about comparison. As against the common claim that comparison represents relations of difference between representations, in the previous chapter we argued that, in fact, comparison represents relations of *identity* between representations. Specifically, it represents a set of representations as being identical insofar as they are subject to a common 'rule of apprehension', where we understand the 'rule of apprehension' in question as the distinctive kind of rule represented in schemata. What is distinctive of rules of this kind is that representations apprehended in accordance with them are thereby subject to subsumption under a single concept. If a set of representations is apt to be subsumed under a common concept, then those representations are capable of being 'grasped together' by the intellect. We thus have an explanation of why comparison could put the mind in a position to recognize the way in which a set of representations could be grasped together by the intellect, which is precisely the recognition that takes place in reflection.

Now, to represent a set of representations as being identical in respect of a rule of apprehension is not yet to represent any specific respect in which they can be grasped together. There is a distinction between i) becoming conscious of a rule of apprehension, and ii) becoming conscious of that rule *in relation to* the faculty of understanding, and this distinction tracks the distinction between mere comparison and reflection. Consider:

But... in the mere reflection on a perception it is not a matter of a determinate concept, but in general only of reflecting on *the rule concerning a perception* in behalf of the understanding, as a faculty of concepts

EE 20:220, my emphasis

Comparison makes us conscious of rules of apprehension ('the rule concerning a perception'); but reflection 'reflects on' this rule 'in behalf of the understanding, as a faculty of concepts'. The passage continues in a manner that gives us some purchase on what it would be to consider the 'rule concerning a perception in behalf of the understanding':

If, then, the form of a given object in empirical intuition is so constituted that the **apprehension** of its manifold in the imagination agrees with the **presentation** [*Darstellung*] of a concept of the understanding (though which concept be undetermined), then in the mere reflection understanding and imagination mutually agree for the advancement of their business, and the object will be perceived as purposive merely for the power of judgment

EE 20:220-221

In reflection, an object is 'perceived as purposive merely for the power of judgment'. We perceive such purposiveness when the '**apprehension** of its manifold agrees with the **presentation** [*Darstellung*] of a concept of the understanding'. Now, we saw in the previous chapter that schemata represent rules that ground the *Darstellung* of concepts of understanding, and this passage tells us that in reflection, we are conscious that the apprehension of an intuition 'agrees with' the exhibition of a concept. What we are conscious of, then, both in comparison and reflection, is a rule of apprehension that 'agrees with' the exhibition of a possible concept. But in *comparison*, we are conscious of the rule merely insofar as it is common to several representations, without yet attending to the manner in which this rule also agrees with the exhibition of a possible concept; in *reflection*, by contrast, we are conscious of the rule precisely *insofar as it agrees with* the exhibition of a possible concept. That is what it is to reflect on 'the rule concerning a perception in behalf of the understanding'.

We started with the question what it means to say that reflection represents ways in which representations could be grasped together by the faculty of concepts. We saw that representations

can be grasped together insofar as they are subject to a common rule of apprehension, and we have now motivated the claim that representing a set of representations as such that they can be grasped together means representing the respect in which their rule of apprehension ‘agrees with’ the exhibition of a concept. Thus, we can transform our initial question into a new one: what is it to represent a rule of apprehension as agreeing with the exhibition of a possible concept?

A further transformation beckons when we recognize an intermediary act, between apprehension [*Auffassung*] and exhibition [*Darstellung*], which Kant calls ‘*apperceptio comprehensiva*’ and attributes specifically to the understanding:

To every empirical concept, namely, there belong three actions of the self-active faculty of cognition: 1: the **apprehension** [*Auffassung*] (*apprehensio*) of the manifold of intuition; 2. the **comprehension** [*Zusammenfassung*], i.e. the synthetic unity of consciousness of this manifold in the concept of an object (*apperceptio comprehensiva*); 3. the **presentation** [*Darstellung*] (*exhibitio*) of the object corresponding to this concept in intuition. For the first action imagination is required, for the second understanding, for the third the power of judgment

EE 20: 220

As I read this passage, Kant’s numbering of these three operations suggests a step-wise progression, on which each act is a condition of the higher one in the series. Thus, a manifold cannot be ‘comprehended’ unless it is first apprehended; and that same manifold cannot exhibit an object corresponding to a concept unless it is comprehended. If that is right, then a rule of apprehension can only ‘agree with’ the exhibition of a concept insofar as the rule brings a manifold to consciousness in such a way that this manifold can be ‘comprehended’ [*zusammengefaßt*]. A manifold is comprehended insofar as it is brought to a ‘synthetic unity of consciousness’; and Kant’s use of the Latin *apperceptio* suggests that the synthetic unity of consciousness he has in mind is the unity of apperception he had discussed in the first *Critique*. We thus arrive at another transformation of our question. To reflect on a given manifold is to recognize respects in which that manifold is given through a rule of apprehension that agrees with the exhibition of a possible

concept; a rule of apprehension only agrees with the exhibition of a possible concept if it brings representations to consciousness in such a way that they can be brought to the unity of apperception; thus, to reflect on a given manifold is to recognize specific respects in which it can be brought to the unity of apperception. Our question, then, is what is involved in representing a manifold in such a way.

Now, Kant's discussion in the passages we have been drawing from so far is confined to the way in which reflection operates in the formation of empirical concepts, but the model extends to cover non-empirical concepts. In the A-Deduction, in the section on the synthesis of recognition in a concept, Kant discusses the conditions under which I 'think a triangle as object'. I take Kant here to be discussing the conditions under which a triangle goes from being merely an object of intuition to an object of possible thought; which is to say, he is discussing the conditions under which it is possible to form a concept of a triangle.¹³⁰ In his discussion, he claims that this representational transition is driven by our consciousness of a distinctive kind of rule:

[W]e say that we cognize the object if we have effected synthetic unity in the manifold of intuition. But this is impossible if the intuition could not have been produced in accordance with a rule that makes the reproduction of the manifold necessary a priori and a concept in which this manifold is united [*vereinigt*] possible. Thus we think of a triangle as an object by being conscious of the composition [*Zusammensetzung*] of three straight lines in accordance with a rule according to which such an intuition can always be exhibited [*dargestellt*]. Now this **unity of rule** determines every manifold, and limits it to conditions that make the unity of apperception [*Einheit der Apperzeption*] possible

A105

¹³⁰ In this reading of the example, I differ from Longuenesse, who treats the example as explaining how we go from a concept of a triangle as an object of pure intuition to a concept of a triangle as possible object of empirical intuition (1998: 48). Longuenesse does not provide any argument for this reading, and I think that, given the detectable presence of the doctrine of the logical acts in Kant's discussion, he is best read as explaining how the concept of a triangle is formed in the first place.

At the beginning of this passage, Kant says that the mind can only ‘effect synthetic unity in the manifold of intuition’ in cases where it is possible to ‘produce’ (that is, I take it, apprehend) the intuition according a distinctive kind of rule. Such a rule must have two features: i) it ‘makes the reproduction of the manifold necessary a priori’, and ii) it makes possible ‘a concept in which this manifold is united’. The passage continues by claiming that we ‘think of a triangle as an object’ — that is, I take it, form the concept of a triangle — by becoming conscious of precisely such a rule. The rule in this case is a rule for the composition [*Zusammensetzung*] of three straight lines, and it has just the two features Kant had distinguished above: i) it is a rule through which ‘such an intuition can always be exhibited’, consequently one that ‘determines every manifold’, and ii) it is a rule that ‘limits’ the manifolds it determines to ‘conditions that make unity of apperception possible’.

I contend that the doctrine of reflection is visible here. The first property of the rule of composition — the fact that an intuition can ‘always be exhibited’ through it, that it determines every manifold — is the universality of the rule of apprehension, which, we saw in the previous chapter, is a feature we are directly aware of in our consciousness of the synthesis through which we represent a triangle. The second property of the rule — the fact that it limits the manifold to conditions that make the unity of apperception possible — is, I suggest, precisely the ‘agreement’ with the faculty of understanding that reflection discerns. For a rule of apprehension to agree with the conditions under which a concept of understanding can be exhibited just is for it to ‘limit the manifold to conditions that make the unity of apperception possible’. We do not yet know what it means for a rule to ‘limit’ the manifold in this way, but my suggestion is that, in the non-empirical case just as in the empirical case, reflection consists in the consciousness that the rule of apprehension agrees with the unity of apperception.

We can thus bank the following initial formulation, which will guide us in what follows:

General Definition of Reflection 1: To reflect is to represent a specific respect in which a given manifold, in virtue of its rule of apprehension, can be brought to the unity of apperception.

This formulation, though hard won, is far from perspicuous, for we do not yet have any grasp on what it is to ‘bring representations’ to the unity of apperception. Unpacking this notion, in close detail, will be the project of the next section.

2. Reflection and the Unity of Apperception

If the findings of the previous section are correct, then the doctrine of reflection brings us face to face with the doctrine of apperception. In a dissertation devoted to Kant’s theory of concepts, it was only a matter of time before this notorious doctrine would confront us. That time has come. In this section, I will investigate the doctrine of apperception in order to develop an understanding of what it is to bring a given representation to the unity of apperception.

Now, in attempting to situate the term ‘apperception’, we run into the fact that Kant uses it in three different metaphysical registers. In the previous chapter, in our brief study of Kant’s *Zergliederung* of the faculty of understanding, we saw that Kant situates apperception at the metaphysical level of faculty: apperception, we saw, is one of the three non-derivative faculties that grounds the possibility of human understanding (A94; cf. A114; A117n). But Kant also uses the term to refer both to an *act* (B137; A547/B575), and as the name for a distinctive kind of consciousness or *representation* (A107; B132).

This tripartite usage is not surprising given Kant's faculty psychology. As a representational *faculty*, the faculty of apperception is precisely the faculty to *act* in such a way as to produce (ground the inherence of) a specific kind of modification — namely, *representation*. We could start at any of these three levels and make inroads into the others, but it will be worth keeping them separate as we proceed. In what follows, I begin (Section 2.1) at the level of faculty: my aim is to situate the discursive understanding, as a faculty of thinking, within the broader division of the faculty of apperception. I then move (Section 2.2) to Kant's account of the 'unity of apperception', which is a notion he uses to characterize the distinctive representational products of the faculty of apperception, and I explain the distinction as I understand it between transcendental and objective unity of apperception. In Section 2.3, I turn to the *acts* of the human understanding, in order to explain what Kant means when he claims that judgment is the act that brings given representations to the 'objective unity of apperception'. With all of this in hand, I finally return (Section 2.4) to the working definition of reflection that we articulated in the previous section. I show that what it is to bring a manifold to the unity of apperception is to represent that manifold as 'determined with respect to a logical function of judgment', and on this basis I claim that the outputs of reflection are representations of mappings from outputs of comparison to functions of judgment.

2.1 The Place of Discursive Understanding in the Division of the Faculty of Apperception

Let us begin, then, with the *faculty* for apperception. The faculty of apperception is, as we will see, the faculty for a certain kind of consciousness. Since Kant denies that all representations are conscious (see, eg, *ApH* 7: 135), he situates the faculty of apperception within a division of the broader faculty of representation:

First, the division of the faculty of representation into the mere apprehension of representations, *apprehensio bruta* without consciousness (that is only for the brutes) and the sphere of apperception, i.e., of concepts; the latter constitutes the sphere of understanding in general

Br 11:345

The faculty of representation can be divided into the faculty of representation ‘without consciousness’ and the ‘sphere of apperception’ — the faculty of representation with consciousness. In this passage, the distinction between (what I will call) *apperceptive* representational faculties and non-apperceptive representational faculties aligns with the distinction between rational and animal souls, an alignment that re-appears in several places (e.g. *MM* 29:888).

Now, Kant also presents the difference between animal and rational faculties as one between faculties of mere ‘acquaintance’ (*kennen*) and faculties of *cognition* (*erkennen*) (*JL* 9: 64-65; *WL* 24: 845; *LDW* 24: 731). The line dividing apperceptive from non-apperceptive faculties is thus the same line that divides cognitive from non-cognitive faculties. Any cognitive faculty must therefore constitute a specific ‘implementation’ of the faculty of apperception. Given that the understanding is a branch of the ‘self-active faculty of cognition’, it is therefore no surprise that we have seen Kant present the ‘faculty of apperception’ as one of the ‘original sources (capacities or faculties of the soul)’ (A94) that ‘make possible even the understanding and, through the latter, all experience as an empirical product of understanding’ (A97-98). Now, our pathway to understanding the doctrine of *reflection* will be to understand the specific way in which the faculty of apperception is implemented in the human understanding. In what follows, I will speak of a ‘division’ of the faculty of apperception in the same way that we saw Kant speak of the ‘division’ of the faculty of representation above. Just as apperceptive and non-apperceptive souls constitute two ways in which the faculty of representation can be implemented within a kind of mind, I will

investigate the different ways in which the faculty of apperception itself can be implemented in order to situate human understanding within the division of the faculty of apperception.¹³¹

In order to make progress here, we will need a very bare orienting conception of the faculty of apperception itself, considered in abstraction from any of its particular implementations. Here is the general characterization I propose: the faculty of apperception is the faculty for *unifying manifolds of representations*. This characterization — which I will not attempt to argue for now but which will be borne out in what follows — gives us a way of understanding the principle guiding the division of the faculty. The *unity of apperception* — the distinctive unity that the faculty of apperception imparts through its activity of unifying manifolds — is always the same. However, the *manifolds* to which the faculty imparts this distinctive unity can themselves vary. This variation in the kinds of manifold on which the faculty can act is the basis for the division of the faculty. Every cognitive faculty is thus a faculty for imparting unity of apperception to a manifold of a particular kind.

This general account allows us to distinguish between the faculties of *reason* and *understanding* in a way that respects the status of both as cognitive faculties. *Reason* is the faculty for imparting unity of apperception on a manifold of *concepts*:

[Reason] never applies directly to experience or to any object, but instead applies to the understanding, in order to give unity *a priori* through concepts to the understanding's manifold cognitions.

A302/B359

¹³¹ Note that a *division* of a faculty is not the same as an *analysis* of a faculty. Analysis of a faculty, as in Kant's *Zergliederung* of the faculty of understanding, resolves the faculty into the more fundamental faculties on which it depends. Analysis is thus only possible for derivative faculties. Fundamental faculties cannot themselves be analyzed; but they can be co-instantiated with other faculties within further derivative faculties, and the division of a faculty maps out the series of derivative faculties in which the fundamental faculty can feature. The distinction between analysis and division with respect to *faculties* thus matches the distinction between analysis and division with respect to *concepts*. Analysis reveals the 'constitutiva' of a concept (the more basic concepts that are coordinated with one another to form the logical essence of the analyzed concept), whereas division charts out the lower concepts in which the divided concept can feature as a partial concept.

Understanding, by contrast, is the faculty for imparting unity of apperception on a manifold of *intuition*. The first fundamental division of the faculty of apperception, then, is into the distinction between reason and understanding. Within the domain of understanding, there is then a further subdivision of the faculty into *discursive understanding* and *intuitive understanding*. Discursive understanding is the way in which the faculty of apperception is implemented in the human mind, and intuitive understanding is the way in which the faculty of apperception is implemented in the divine mind.

Since both discursive and intuitive understanding are branches of *understanding*, each must be a faculty for imparting unity of apperception on intuited manifolds. The distinction between the two branches of understanding pertains to the *origins* of these manifolds. When the faculty of apperception is realized as intuitive understanding, the manifold on which it operates is itself given *through an act of the faculty of apperception*. But when it is realized as discursive understanding, the manifold is given through acts of a non-apperceptive, sensible faculty:

An understanding, in which through self-consciousness all of the manifold would at the same time be given, would intuit; ours can only think and must seek the intuition in the senses.

B135; cf. B139

Since the first kind of understanding gives the manifold of intuition through its own acts, Kant characterizes those acts themselves as a kind of intuiting. But the second kind of understanding cannot impart unity of apperception until it is connected in some relevant way to an additional, non-apperceptive sensible faculty for intuiting manifolds.¹³² Its acts thus cannot themselves be

¹³² The non-apperceptive nature of our sensibility follows in general terms from its status as a non-intellectual faculty. More specific textual support occurs in the metaphysics lectures, where Kant is reported as saying that even were we to ‘remove’ a ‘specific feature of the understanding and of reason, namely consciousness’, sensibility would ‘still remain’ (*MV* 28: 449).

described as acts of intuiting; instead, Kant calls them acts of *thinking* [*Denken*]. Later in the B-Deduction, Kant defines the operation of thinking as follows:

[Thinking is] the action of bringing the synthesis of the manifold *that is given to it in intuition from elsewhere* to the unity of apperception

B145, my emphasis

This definition brings out why thinking is restricted to a non-intuitive intellect: it is the characteristic act of an apperceptive faculty that imparts unity of apperception on manifolds that are given in intuition ‘from elsewhere’. And it is also worth noting that this definition of thinking echoes Kant’s threefold *Zergliederung* of the faculty of understanding in the A-Deduction. There, recall, Kant identified the faculties of *sense*, *imagination*, and *apperception* as the three subjective sources of the faculty of understanding. All three faculties re-appear here, for Kant claims that the characteristic act of human understanding, *thinking*, takes place when the mind brings i) the (*imaginative*) ‘synthesis’ of ii) the (*sensibly given*) manifold, to iii) the unity of apperception. A certain interaction between all of these three fundamental faculties is needed in order to produce acts of thinking and thus realize the faculty of apperception as a faculty of discursive understanding.

In our discussion of schemata in the previous chapter, I argued, following Tracz, that part of the interaction here is causal. The faculty of apperception must influence the faculty of imagination by conferring on it a specific intellectual function, in the pursuit of which the faculty of imagination is constituted as a productive imagination that produces schemata. But this interaction does not suffice for thinking: schema-driven synthesis is not thought.¹³³ Thus, we do not yet have an account of what it is to ‘bring the synthesis of the manifold that is given... in

¹³³ *Pace* Heidegger. I discuss Heidegger’s interpretation in the next chapter and the conclusion to the dissertation.

intuition from elsewhere to the unity of apperception'. To make progress here, we need to say more to characterize the unity of apperception itself.

2.2 *Transcendental Versus Synthetic Unity of Apperception*

Though they differ in their characteristic acts, what is common to the human and the divine understanding — what preserves the univocity of the term *Verstand* as it applies to both — is the 'unity' that both faculties bring about. This is the unity imparted by any exercise of the faculty of apperception just as such. The divine mind brings about this unity in a self-generated intuitive manifold; the human mind brings about this unity in a sensibly given intuitive manifold; but the unity itself is the same, which is why each faculty is an implementation of the same faculty of apperception. To have a general term that brings out the fact that both the human and the divine mind bring about the same kind of unity, even though the one acts *via* thinking and the other *via* intuiting, I will use the term 'intellection' to refer to any act of an understanding, be it an intuitive understanding or one that merely thinks.

We are now in a position to broach questions about the 'unity' of apperception, but to do so, we must begin by carefully distinguishing between i) the unity that any exercise of the faculty of apperception produces, considered in the most abstract terms as a unity or structure that is imparted by all acts of intellection; and ii) the unity that a specific manifold exhibits insofar as it is structured according to this most general form of intellectual unity. The distinction I have in mind here is akin to the distinction between a form considered in abstraction versus a form as realized in a given matter. This is a distinction that Kant tracks with two clusters of terms. He refers to the first unity as the *transcendental* or *original* unity of apperception. He refers to the second unity, as it is brought about by the discursive human understanding, as the *synthetic* or

objective unity of apperception. That is to say: *objective synthetic* unity of apperception is the unity that pertains to the manifold of sensibly given intuition insofar as it is brought to the *transcendental* or *original* unity of apperception. Thinking, as the act that brings a given manifold to the transcendental unity of apperception (a unity that exists prior to and independently of thinking) thus *creates* the objective or synthetic unity of apperception (a unity that does not exist independently of acts of thinking).

We find evidence that Kant uses the terms in the registers I have described at the outset of the B-Deduction. There, Kant describes ‘combination’ [*Verbindung*] as the characteristic ‘action of the understanding’. Combination, Kant says, represents the ‘synthetic unity of the manifold’ (B130); the representation of this unity itself, however, does not arise from the combination (B131). What arises from combination is a representation of the ‘synthetic unity of the manifold’; but what does *not* arise from combination is our fundamental representation of that unity *itself*, considered without reference to any specific manifold it unifies. This most fundamental representation is a condition rather than an upshot of our capacity for combination: Kant goes on to say that the representation of this unity ‘contains the ground... of the possibility of the understanding, even in its logical use’ (B131). And Kant goes on to call this unity the ‘original unity of apperception’. Kant is thus marking the distinction between the unity of apperception the understanding *creates* — that is, the *synthetic unity* of apperception, the unity of a combination — and the unity of apperception that the understanding presupposes in order to create synthetic unity of apperception — that is, the *original* unity of apperception. Thinking is the action of bringing the synthesis of the manifold that is given to it in intuition from elsewhere to the unity of apperception; the unity *to which* the understanding brings this synthesis is the original unity of apperception; the unity it thereby creates is the synthetic unity of apperception.

Now, Kant says that the categories of understanding ‘presuppose combination’. Since the original unity of apperception ‘first makes the concept of combination [*Begriff der Verbindung*] possible’, it follows that the categories cannot be applied to the original unity of apperception itself. The categories, we will see in the next chapter, bear a special relationship to the *synthetic unity of apperception*, the unity that thinking creates insofar as it brings a sensible manifold to the original unity of apperception,¹³⁴ but since they presuppose combination, they cannot themselves be used to represent the unity that combination itself presupposes. It is for this reason that Kant cautions us away from construing the original unity of apperception in terms of the category of unity.

Nevertheless, though the categories are of no service in positively characterizing the original unity of apperception, Kant does not say nothing. Instead, he describes it as a ‘qualitative’ unity (*ibid.*). In Kant’s earlier discussion of qualitative unity, to which he refers us, he describes this unity as the ‘unity of the comprehension [*Einheit der Zusammenfassung*] of the manifold... as, say, the unity of the theme in a play, a speech, or a fable’ (B114). This unity results from a ‘principle... for the connection [*Verknüpfung*]¹³⁵ of heterogeneous elements of cognition into one consciousness’ (B115). Any exercise of understanding, even in its ‘logical use’, is grounded on this unity, because for something to be an act of intellection just is for it ‘connect’ or ‘comprehend’ heterogeneous elements of cognition in one consciousness.

¹³⁴ In the Critique, Kant tells us that the categories ‘indicate the synthetic unity that alone makes possible an empirical cognition of objects’ (A321/B377-78), and in a late essay, Kant claims that ‘[t]here will thus be as many *a priori* concepts resident in the understanding... as there are types of synthetic unity of apperception of the manifold given in intuition’ (wF 20: 271). I return to these passages in the next chapter.

¹³⁵ I take it that the distinction between *Verknüpfung* and *Verbindung* tracks the distinction between original and synthetic unity of apperception. *Verbindung* is the representation of the way in which sensibly given elements must be *verknüpft* in one consciousness.

To describe the original unity of apperception, then, we would need to describe the unity that any set of heterogeneous elements must bear to one another in order to be ‘connected’ [*verknüpft*] in one consciousness. We could call the concepts that articulate this fundamental unity ‘concepts of connection’ [*Begriffe der Verknüpfung*], to be contrasted with ‘concepts of combination’ [*Begriffe der Verbindung*], which are restricted to characterizing the synthetic unity of apperception. The categories, as concepts of the latter class, thus cannot help us here.

There is, however, one set of concepts that I think *can* tell us something informative about the nature of qualitative unity, a set of concepts that could qualify as *Begriffe der Verknüpfung*, and these, strikingly, are the set of concepts that Kant calls the ‘concepts of reflection’ [*Reflexionsbegriffe*]. These special concepts, Kant tells us, describe the ‘relation... in which the concepts in a state of mind [*Gemüthszustände*] can belong to each other [*zu einander gehören können*]’ (A261/B317). Now, the reference here to the relation of *concepts* in a state of mind might seem to restrict these concepts to the case of the human understanding, but it turns out they apply, more widely, to the relations that must hold between *any* set of representations ‘in a state of mind’ insofar as they ‘belong to each other’. For these concepts can be applied even after ‘complete abstraction from the cognitive power to which the given representations belong’ (A262-3/B318), and if they were restricted to relations between concepts, they would not admit of this kind of employment. Here, then, is a set of concepts that characterize the relations in which any set of representations must belong just insofar as they are to belong together within a state of mind, and since qualitative unity is precisely the unity that representations must bear insofar as they are connected within a single state of mind, I propose that the concepts of reflection describe the structure of the transcendental unity of apperception.

There are four concept-pairs: identity and difference; agreement and opposition; inner and outer; and matter and form. My suggestion, then, is that any manifold that is brought to the transcendental unity of apperception must be organized according to (at least some of) these four sets of relations, for these relations characterize the structure of intelligibility conferred by any act of intellection just as such.

To sum up: the original or transcendental unity of apperception (hereafter ‘TUA’) is the unity that any act of intellection imparts on an intuitive manifold, described in abstraction, whereas the synthetic or objective unity of apperception (hereafter ‘OUA’) is that unity as manifested in a manifold of sensible intuition. The categories of understanding, while not limited to *human* understanding, are limited to *discursive* understanding, for they characterize OUA: the transcendental unity of apperception *as manifested in* a sensible (though not necessarily spatiotemporal) manifold. The concepts of reflection, however, characterize TUA just as such — the relations in which any set of representations must stand in order to ‘belong together in a state of mind’.

2.3 The Form of Judgment and the Objective Unity of Apperception

We have distinguished so far between i) the universal structure that is imparted through an act of intellection — the transcendental or qualitative unity of apperception (TUA); and ii) the unity a sensible manifold exhibits insofar as this structure is imparted on it — the synthetic or objective unity of apperception (OUA). We now come to the specific act of intellection that represents the presence of TUA in a sensible manifold so as to produce OUA.

We have seen that Kant’s generic term for this act is *thinking* [*Denken*]: ‘Thinking is the action of bringing the synthesis of the manifold that is given to it in intuition from elsewhere to

the unity of apperception’ (B145). Since Kant uses the terms ‘judging’ and ‘thinking’ interchangeably,¹³⁶ it is no surprise that we find him attributing the very same functional role to judgment:

I find that a judgment is nothing other than the way to bring given cognitions to the **objective** unity of apperception.

B141

This claim on its own simply re-formulates Kant’s general definition of thinking in terms of the notion of judgment. But Kant goes on to make a more specific claim about the precise way in which judgment brings given cognitions to the objective unity of apperception:

That act of the understanding... through which the manifold of given representations (whether they be intuitions or concepts) is brought under an apperception in general, is the logical function of judgments.

B143

Putting these passages together: judgment brings representations *under* an ‘apperception in general’ (TUA), and thereby brings those same representations *to* the objective unity of apperception (OUA). But what is especially important about the second passage is Kant’s claim that it is, specifically, the ‘logical function of judgments’ through which judgment plays this role. This claim — that judgment brings representations under TUA *through its logical functions* — is very important, both for our understanding of the doctrine of reflection and, connectedly, for our understanding of the categories. We need to unpack it.

In the first section of the famous *Leitfaden* section of the first *Critique*, Kant defines a ‘function’ in general as ‘the unity of the action of ordering different representations under a communal one [*einer gemeinschaftlichen*]’ (A68/B93), and he goes on to claim that ‘[a]ll

¹³⁶ ‘The unification of representations in a consciousness is judgment. Therefore, thinking is the same as judging’ (*Prolog* 4: 304).

judgments... are functions of unity among our representations' (A69/B94). Now, the translation I have just given of Kant's definition of functions, in terms of the notion of a *communal* representation, is due to Alexandra Newton (2015: 472). It is the literal rendering of the adjective *gemeinschaftlich* and so we should prefer it, on narrow grounds of faithful translation, to Guyer and Wood's 'common', which is a literal rendering of *gemein*, not *gemeinschaftlich*. But it is also to be preferred on substantive grounds because it points us toward the doctrine of apperception. A 'communal' representation is a representation that provides a principle of community in accordance with which representations can belong together within a state of mind. And original apperception is communal in precisely this sense: it represents the ways in which any set of representations must be connected [*verknüpft*] insofar as they are to belong together in a state of mind. The act of 'ordering different representations under a communal one' is thus the act of 'bringing the manifold of given representations under an apperception in general'. Kant claims in the Deduction that judgment brings given representations 'under an original apperception' by means of its logical functions, and now we see this claim presaged in the definition of logical functions. A logical function is the unity of the act of bringing different representations under the original transcendental unity of apperception (thereby bringing them *to* the objective unity of apperception). And Kant's claim is that there are *different* ways of bringing given representations under the original unity of apperception: different principles of community that the original unity of apperception can furnish. Accordingly there are numerous distinct logical functions of judgment.

To see why Kant calls these functions 'logical' functions, we need to recall Kant's conception of general logic as a purely formal science. Kant distinguishes between the matter and form of judgment and thinks of the logical functions of judging as grounds of the form of judgment.

The matter of a judgment is a set of concepts; judgment combines the concepts that make up its matter in such a way as to bring a given manifold under TUA (thus bringing it to OUA). Since there are different ways in which judgments can bring a given manifold under TUA, there are thus different functions of unity that specific acts of judgment enact. Now, if two acts of judging bring the same manifold under TUA in different ways, we should expect this difference to show up in the relevant judgments, but since *ex hypothesi* the judgments bring the *same* manifold to TUA in different ways, this difference cannot show up at the level of their matter. Instead, the act-level difference in function shows up in the *forms* of the judgment — the specific relationships between their material constituents. Two judgments could be identical at the level of matter but different at the level of form, in which case the form of each judgment is the imprint of two distinct functions for bringing one and the same manifold under TUA. Alternatively, two judgments could have different matters but identical forms, in which case each judgment is the imprint of one and the same function for bringing two distinct manifolds under TUA. Because we can hold a judgment's form fixed and vary its matter (and *vice versa*), the logical functions of a judgment are still visible even when we abstract from the judgment's matter; Kant therefore calls them 'logical functions', in line with his broader conception of general logic as a science that abstracts from the matter of intellectual representations.

Now, if the *concepts of reflection* characterize the abstract structure of TUA itself, and the *functions of judgment* characterize the way in which the human understanding represents the presence of this structure, then we should expect there to be some co-ordination between the concepts of reflection on the one hand and the functions of judgment on the other. In a passage to which Longuenesse has drawn our attention, we see Kant at least begin to coordinate these two sets of concepts:

Prior to all objective judgments we compare the concepts, with respect to **identity** (of many representations under one concept) for the sake of **universal** judgments, or their **difference**, for the generation of **particular** ones, with regard to **agreement**, for **affirmative** judgments, or **opposition**, for negative ones, etc.

A262/B317-18

According to this passage, there is a comparison that takes place prior to and *for the sake of* acts of judgments that enact specific functions of unity. For example, we compare the items in the manifold with respect to identity, and we do so ‘for the sake of’ universal judgment. If the pre-judgmental comparison represents items as identical, we represent the manifold through universal judgment: the pre-judgmental comparison culminates in a judgment with universal form; the universal form of the judgment represents the presence of identity within the manifold, discovered through the ‘prior’ comparison to which Kant alludes. Again, we compare representations with respect to difference ‘for the sake of’ particular judgments. When the pre-judgmental comparison represents items as different, we represent the manifold through particular judgment: the pre-judgmental comparison culminates in a particular judgment; the particular form of the judgment represents the presence of difference within the manifold. When the pre-judgmental comparison discovers agreement, it culminates in affirmative judgment. The affirmative form of the judgment represents the presence of agreement in the manifold. And so on.

What we have, then, is a picture on which, in representing the manifold through a specific form of judgment, we thereby represent the presence, within the manifold, of a specific element of TUA. And what is especially important to note is that the judgment represents the obtaining of this structure *through its form*. What that means is that there is an element of the representational content of a judgment that cannot be accounted for by appeal to the contents of the concepts that make up the judgment’s matter. The specific functions of unity that generate a judgment ground the form of the judgment, and this form *itself* is representationally significant: it represents the

presence, within the manifold, of a specific element of TUA. If we took the notion of ‘form’ to contrast with the notion of ‘content’, the idea of a representationally significant form would be a contradiction in terms. But once we place the notion of form into its proper relationship with the notion of *matter*, we can make sense of the idea that the form of judgment could itself carry representational content of a special kind.

We can accordingly speak of the form of judgment as *determining* a sensible manifold; correspondingly, we can speak of a sensible manifold as being ‘determined’ with respect to a given logical function or form of judgment. As we will see in the next chapter, this notion of a determination-relation between forms of judgment and sensible manifolds repeatedly shows up in Kant’s account of the categories. At its heart lies a specific conception of the representational content of judgment. A given judgment determines a manifold *both* through the concepts that make up its matter *and* through the logical form that derives from its underlying function. And it is specifically through the logical function of the judgment that it brings a given manifold under an apperception in general. To represent a sensible manifold as exhibiting a specific element of TUA just is to ‘determine’ it through a logical function of judgment.

Now, we could quite reasonably ask why TUA should be discoverable in the sensible manifold at all — that is, why the sensible manifold should *be* determinable through the logical functions of judgment. Consider Kant’s remarks in the following contested passage from the section on the principles of a transcendental deduction:

[T]hat objects of sensible intuition must accord with the formal conditions of sensibility that lie in the mind *a priori* is clear from the fact that otherwise they would not be objects for us; but that they must also accord with the conditions that the understanding requires for the synthetic unity of thinking is a conclusion that is not so easily seen. For appearances could after all be so constituted that the understanding would not find them in accord with the conditions of its unity

A90/B122-23

For objects of intuition to ‘accord with the conditions that the understanding requires for the synthetic unity of its thinking’ is for the manifold of intuition to exhibit TUA and hence make thinking possible. If TUA is discoverable within the manifold, the objects of intuition accord with the conditions of the synthetic unity of thinking, for the understanding can then bring the manifold to the objective or synthetic unity of apperception. But apparently appearances *could* be so constituted that they would not exhibit TUA, in which case the understanding would not find them in accord with the conditions of its unity. The question whether Kant does indeed take this to be a real possibility is the primary contested issue in this passage.¹³⁷ I fall squarely in the camp of readers who take Kant at his word here: appearances *could* be constituted in such a way as to preclude the possibility of thought, and Kant thus owes us an explanation (and *takes himself* to owe us an explanation) of why they are not in fact so constituted.

To understand the difference between i) appearances that are constituted in such a way as to accord with the conditions of the understanding’s unity, and ii) appearances that are not so constituted, we can return to the distinction between productive and reproductive imagination that we discussed in the previous chapter. *Both* reproductive and productive imagination are faculties for apprehending intuitions. To apprehend an intuition and thus form an image is, I take it, what it would be to ‘constitute an appearance’. Appearance is the undetermined object of intuition; apprehension forms an image that determines (‘constitutes’) that object. But it is only when the faculty of apprehension is penetrated by the faculty of apperception that the appearances it constitutes are such that they make possible the understanding. If apperception did not penetrate imagination — if our faculty of imagination were merely reproductive — then the images formed through imagination would not exhibit TUA and hence would not accord with the conditions of

¹³⁷ See Indregard (2021) for a very thorough and helpful discussion of the literature on this passage and the issues at stake.

the understanding's unity. Thus appearances *could* indeed be so constituted that they would not accord with the conditions of the understanding's unity, but given that images are formed through the productive imagination in accordance with schemata, they do accord with those conditions.

2.4 Reflection and the Logical Functions

We are now, at last, in a position to return to our working definition of reflection:

General Definition of Reflection 1: To reflect is to represent a specific respect in which a given manifold, in virtue of its rule of apprehension, can be brought to the unity of apperception.

When we stated this definition, we had not yet earned an understanding of what it would be to 'bring' a given manifold to 'the unity of apperception'. Now we have. To bring a given manifold to the unity of apperception is to represent that manifold as exhibiting the general structure of TUA. In doing this, we represent the manifold as providing the basis for the enactment of a specific logical function of judgment, hence as determined with respect to that function. For it is through the logical functions of judgment that we bring given manifolds to OUA. We can thus further transform our definition of reflection:

General Definition of Reflection 2: To reflect is to represent a specific respect in which a given manifold, in virtue of its rule of apprehension, is determined with respect to a specific logical function.

Recall, reflection presupposes that we are conscious of a manifold in respect of its rule of apprehension (this rule is either given to the mind through comparison, or directly, in our immediate awareness of figurative synthesis). Reflection then ‘compares’ this manifold with the understanding. What that means is that it discovers ways in which the relevant manifold, as structured by the relevant rule of apprehension, manifests TUA and thus affords a basis for a specific employment of the logical functions. It flags a manifold as purposive for the power of judgment insofar as it is determined with respect to a given logical function.

Suppose, for example, that reflection discovers that a manifold is purposive for the universal function of judgment; then, the results of reflection could be expressed as follows:

Result of Reflection: **This** manifold, as structured by **this** rule of apprehension, is determined with respect to the universal function of judgment.

The demonstrative elements in this formulation represent the fact that the matter for a concept is given *to*, not *through* reflection. Reflection takes the matter that is first given through apprehension and then grouped together in comparison, and it flags that matter as standing in a proprietary relation to a specific logical function. The outputs of reflection are mappings from manifolds and rules of apprehension to functions of judgment. What is new with reflection is not our consciousness of the manifold or its rule of apprehension; what is new is our consciousness of that manifold, as structured by that rule, as a pathway to thinking.

Kant says that his account of the formal origins of concepts will consider merely the ‘difference of reflection’ between them (*R* 2851, 16: 547). The notion of a mapping from manifolds to forms of judgment, I think, gives us a purchase on what he means here. For this picture suggests

a form-level grouping of concepts in terms of the specific functions of judgment to which they relate the manifold in their matter. For each distinctive logical function of judgment X, there will be a set of concepts that map given manifolds to that function. The set of X-mapping concepts will differ from one another at the level of their matter — that is, at the level of *which* manifold they map to X — but at the level of form, they will agree insofar as they all map their relevant matter to the same judgmental function, namely, X. Concepts that do not exhibit any ‘difference of reflection’ will come out as formally identical, whatever matter-level differences might exist between them.

Let us recall that Kant describes a kind of comparison that takes place ‘prior to’ and ‘for the sake of’ objective judgment (A262/B317-18). This is the comparison that first discovers contours of TUA within the manifold — identity or difference, agreement or opposition, etc — and thus positions us to bring the manifold to OUA through a specific logical function of judgment (universality for identity; particularity for difference; affirmative judgment for agreement, etc.). This pre-judgmental comparison, I now want to suggest, is *precisely* the act of reflection in the sense of the doctrine of the logical acts. Reflection, we have seen, represents agreement-relations between the synthesis of apprehension and the unity of apperception: it represents the suitability of a given manifold, as organized by a specific rule of apprehension, to be brought to the unity of apperception. When we initially arrived at these claims, we did not have a particularly deep understanding of what they meant, but now we do. To discover a way in which the manifold is purposive for the faculty of cognition is just to discover a respect in which it affords the basis for enacting a specific logical function of judgment, which is nothing other than to detect a respect in which it exhibits TUA.

Kant often presents reflection as the form-imparting act *par excellence*. In his notes, he says that the logical form of a concept ‘consists in’ (*besteht auf*) reflection, that reflection creates the *conceptus communis* as the specific form required by the power of judgment.¹³⁸ The reading we have developed positions us to understand these claims.

In order to recognize the connection between reflection and the universal form characteristic of concepts, we need to recall Kant’s doctrine of *marks* [*Merkmale*]. As we saw in Chapter 1, Kant defines a mark as ‘a partial representation [*Partialvorstellung*] as ground of cognition [*Erkenntnißgrund*] of the whole representation’ (R 2282, 16: 298), or, again, ‘a partial concept [*Theilbegrif*] as ground of cognition [*Erkenntnißgrund*] of the whole representation’ (R 2286, 16: 299). Kant also maintains that ‘all our concepts are marks and all thinking is representation through them’ (R 2287, 16: 300; cf. *JL* 9: 58). As a mark, then, every concept is both a ‘partial representation’ and a ‘ground of cognition’. Now, Kant ties the universality of a concept specifically to its status as a ground of cognition:

Die allgemeinheit beruht nicht darauf, daß der Begriff ein theilbegrif, sondern ein Erkenntnisgrund ist

R 2881, 16: 557-58

In turn, the status of a concept as a ground of cognition is tied directly to the act of reflection:

Logische *actus* im begriffe: erstlich die Vorstellung einer *nota* als *communis comparatio*, zweytens. Diese als Erkenntnisgrund eines Dinges: *reflexio*, drittens die abstraction von dem, was es von andern Dingen Verschiedenes hat.

R 2854, 16: 547, my underlining¹³⁹

¹³⁸ ‘Aber die Form desselben ist logisch und besteht in der reflexion wodurch ein *conceptus communis* wird, als derjenigen Form, die zur Urtheilskraft erfordert wird’ (R 2851, 16: 547).

¹³⁹ This passage dovetails with a passage in the Dohna-Wundlacken transcript, where the second act in the ‘making of a concept’ (here un-named) is said to produce a ground of cognition: ‘The latter [*viz.* the making of a concept – MVE] occurs (1.) through the fact that something is considered as a partial representation [*als Theilsvorstellung betrachtet wird*], which can be common to several, e.g., the red color. (2) When I consider the partial representation as a *nota*, as ground of cognition [*Erkenntnißgrund*] of a thing, e.g., when I cognize blood, a rose, etc., through *red*’ (*LDW* 24: 753).

Putting these points together: Kant's position is that reflection grounds the universality of concepts because it is reflection that first creates universal grounds of cognition.¹⁴⁰

We saw in Section 2.1 that any faculty of cognition must constitute a specific implementation of the faculty of apperception. I take it that a 'ground of cognition' is, more specifically, a ground of an *exercise of* a faculty of cognition — alternatively put, a ground of a specific implementation of the faculty of apperception. The faculty of apperception is implemented as human understanding when the mind brings the manifold of a sensible intuition to the objective unity of apperception, through an act of thinking. Reflection is the comparison that takes place 'prior to' and 'for the sake of' objective judgment. It is what first makes us conscious of the agreement between the manifold and the unity of apperception, and thereby puts us in a position to bring the manifold to the unity of apperception through an act of thought. It is therefore what lies at the ground of the discursive exercise of the faculty of apperception. Alternatively put: reflection creates grounds of cognition.

To briefly conclude our treatment of reflection: whereas *comparison* outputs awareness of a manifold of apprehended representations and a rule of apprehension common to the manifold, *reflection* outputs awareness of a mapping from the outputs of comparison to a logical function of judgment. Given that judgment is the manner in which discursive intellects bring given representations to the objective unity of apperception, in representing these mapping-relations, reflection represents ways in which a set of representations, in virtue of their rule of apprehension, agree with (are subjectively purposive for) the unity of apperception. And that is what it means to

¹⁴⁰ In situating the role of reflection in this way, I am in agreement with Houston Smit, who writes that 'reflection is an act that makes a mark discursive, one predicable of more than one object' (Smit 2000: 257).

say that reflection represents the possibility of ‘grasping together’ a set of representations. In representing this possibility, reflection creates grounds of cognition.

3. Abstraction

Kant’s account of concept formation is not yet complete. I argued above that the output of reflection is a representation of a mapping from a specific manifold, as subject to a specific rule of apprehension, to a specific logical function of judgment. Reflection thus creates a new representational form: manifold-function mappings. However, the representational output of reflection, while formally novel, is *not* itself a ‘determinate concept’: in reflection, Kant tells us, ‘no determinate concept of the object at all is required nor is one thereby generated’ (*EE* 20:220-221). Our aim in this final section is to explain the additional role that abstraction plays in generating determinate concepts out of the new forms generated by reflection. In the Section 3.1, I gather together some *data* points to guide our inquiry, and in Section 3.2, I put them together to argue that abstraction is the act by which the mind moves from manifold-level representation to mark-level representation, thus culminating the transition from reflected representation to determinate concept.

3.1 Data Points

First, then, several *data* points on the act of abstraction.

The first point to make is that, like reflection and unlike comparison, abstraction is a ubiquitous logical act. We never see any indication that a concept could be formed without some process of abstraction. It is true that Kant consistently differentiates abstraction from the other two

acts, with abstraction cast as in some sense ‘negative’ while the others are ‘positive’ (*WL* 24: 909; *JL* 9: 95), and, relatedly, with abstraction cast as an act that merely ‘perfects’ a concept, in contrast to reflection and abstraction, which really ‘produce’ the concept (*ibid.*). These differentiations are important, but if they are taken to imply that abstraction is in any sense an optional act, they mislead. Abstraction is never absent from any list of logical acts, and in the Vienna transcript, Kant is reported as declaring that ‘[i]f I could not abstract I would not have any concepts, because something other than what is common to the individual representations would always be occurring to me (*WL* 24:909).¹⁴¹ Thus, there is no making sense of Kant’s theory of concept formation without an understanding of the doctrine of abstraction.

To better understand the role of abstraction in general terms, it is worth remembering Kant’s declaration that in reflection ‘no determinate concept of the object at all is required nor is one thereby generated’ (*EE* 20:220-221). Thus, what reflection supplies to abstraction is not yet a ‘determinate concept’. Abstraction is then cast as an act that ‘perfects’ a concept (*WL* 24: 909) by, according to the Jäsche Logic, ‘enclos[ing] it in its determinate limits’ (*JL* 9: 95). Abstraction, then, is the act that outputs *concepts*; and it does this by taking the ‘indeterminate’ product supplied to it by reflection and ‘enclosing it in its determinate limits’. Here, then, we have a second *data* point: abstraction produces concepts by taking the output of reflection and making it more ‘determinate’.

In the Introduction to this part of the dissertation, we saw Longuenesse insist that each of the logical acts depends on the other and that none can proceed without the other. Regardless of whatever grain of truth there might be here as concerns the relationship between comparison and

¹⁴¹ I should note that in the next chapter I will argue that the ubiquity of abstraction is in fact circumscribed to the class of *determinate* concepts. But the distinction between a determinate and an indeterminate concept does not need to occupy us at present.

reflection, I think it is positively misleading for the case of abstraction. We see why when we take seriously the fact that abstraction is consistently presented as a kind of *attention*:

Consciousness is the principle of the possibility of the understanding, but not of sensibility. Consciousness with the power of choice is attentiveness – the repetition of that is abstraction.

MM 29:878

As a mode of *attention* (consciousness with the power of choice), abstraction is an activity that we can choose to perform or prescind from through an exercise of the power of choice. Comparison and reflection, by contrast, are consistently presented as ‘natural’ operations of the understanding that do not depend upon the mediation of some further faculty. In the B-Introduction, for example, comparison and, plausibly, reflection, show up as soon as understanding is ‘set into motion’:

[H]ow else should the cognitive faculty be awakened if not through objects that stimulate our senses and in part themselves produce representations, in part bring the activity of our understanding into motion to compare these, to connect or separate them, and thus to work up the raw material of sensible impressions into a cognition of objects that is called experience?

B1

Likewise, in the A-Deduction, we are told that the understanding ‘is *always* busy poring through appearances with the aim of finding some sort of rule in them’ (A126, my emphasis). We have a picture, then, on which comparison and reflection are always in some sense taking place (or striving to take place) just insofar as a faculty of understanding is in exercise. But whether or not abstraction additionally takes place depends upon the subject’s ability to voluntarily direct the operations of the understanding. And some people are better at this than others: ‘For many a man it is hard to abstract, even if he can readily compare and reflect’ (WL 24: 909). For this man, it seems that, contrary to Longuenesse’s suggestion, his problem is precisely that he can all too easily compare and reflect *without* already abstracting.

We can glean another *data* point, then: abstraction is a voluntary dedication of attention. Putting this finding together with what we saw above: it is a voluntary dedication of attention through which a ‘determinate’ concept is produced on the basis of the output of reflection. This finding allows to return to an important feature of Kant’s distinction between the form and matter of concepts. We saw in Part 2 that the division between given and made concepts is one that applies at the level of matter: while some concepts are indeed given as to their matter, the form of a concept, Kant insists, is always *made*. We saw further that a representation is ‘made’ (*gemacht*), or, as Kant also puts it, ‘arbitrary’ (*willkürlich*), insofar as it depends on the power of choice. Thus, for the form of a concept to be made is for it to depend on the power of choice. What we now see is that Kant’s account of concept formation precisely locates the stage at which the power of choice makes its contribution. It does not permeate the entire process of concept formation; it is only at the highest stage, when the proto-conceptual output of reflection is converted into a determinate concept, that the power of choice manifests itself.

I alluded earlier to the fact that abstraction is often presented as a ‘negative’ act,¹⁴² and it will be helpful to indicate upfront the basic gist of that claim. Kant is often at pains to insist that in its proper philosophical use, it is incorrect to say that we ‘abstract something’; rather, we always ‘abstract *from* something’ (e.g., *WL* 24: 754). Kant illustrates this point in his discussion of the act of abstraction involved in the formation of the concept of a tree:

No, I do not abstract the leaves and the trunk; rather, I retain them, and I separate them from everything else.

WL 24: 909

¹⁴² See, for example, *WL* 24: 909, *LDW* 24: 753, *JL* 9: 95.

In abstraction, we confront a manifold of representations, and abstraction takes place when we selectively focus on one element or set of elements within the manifold in such a way as to de-emphasize or ‘screen out’ all other elements. Abstraction always involves this negative posture — the turning *away from* certain elements of the manifold — as the necessary concomitant of its positive posture — the turning *toward* certain thematized elements of the manifold (in the example above, leaves and trunk). The simultaneously positive and negative nature of abstraction comes out nicely in the following passage, where abstraction is tied to ‘clarity’ [*Klarheit*]:

Abstraction is the actualization of attention, whereby only a single representation is made clear and all the remaining are obscured.

WL 29: 878

Abstraction, then, is negative insofar as it ‘obscures’ part of the manifold; it is positive because in so doing it makes another element ‘clear’. Here is another *data* point, then: abstraction is selective attention that makes one element (or set of elements) of a manifold clear and the remaining elements obscure.

To integrate our findings: abstraction is a voluntary act that takes the output of reflection as its input. In abstraction, we deliberately direct our consciousness toward one element of the manifold and simultaneously de-emphasize all other elements. This voluntary act remedies the lack of determinacy in the output of reflection, and thereby produces a concept. Our task now is to understand in more detail how to integrate this initial sketch of abstraction with the account we have been developing of the logical acts.

3.2 From Manifolds to Marks

Let us begin by reminding ourselves of how far the mind has come by the time it is in a position to abstract. We started with apprehended representations. Comparison then partitioned the apprehended matter for concepts into discrete manifolds, grouped together by the common rule of apprehension to which those manifolds are subject. As yet, our consciousness is directed purely at the ways in which our representations are in fact present within consciousness, but with the onset of reflection, there is a shift in orientation, toward the possibility of intellectually grasping or conceiving our apprehended representations. In reflection, we saw, we are conscious of a manifold, not simply insofar as it is grouped together by a specific rule of apprehension, but more specifically insofar as this grouping renders the manifold purposive for the faculty of cognition. A set of representations is purposive for the faculty of cognition when its apprehension ‘agrees with’ the unity of apperception, and we saw that, for human discursive understanding, this agreement obtains when the manifold admits of determination with respect to a specific logical function of judgment. Thus, we were able to express the results of reflection as follows, where F indicates a function of judgment:

Result of Reflection: **This** manifold, as structured by **this** rule of apprehension, is determined with respect to F .

Reflection, we thus saw, maps manifolds to functions of judgment. Yet it does not produce a ‘determinate concept’. Abstraction, we have just seen, encloses a concept in determinate limits and thereby completes the process of concept formation. How are we to understand this final stage? We have seen that abstraction involves selectively attending to certain elements of the manifold

that reflection provides it. We now have to ask, to which elements does abstraction attend, and why does this attending create a determinate concept?

The key to making progress here is to realize that every manifold instantiates multiple rules of apprehension. Take, for example, my consciousness of the house in front of me. One set of features within the manifold in my consciousness — say, its windows, roof, its being made of a sturdy material — betokens its membership among the manifolds that instantiate the rule of apprehension for houses. Another set of features — its faded red brick, say — betokens its membership among the manifolds that instantiate the more specific rule of apprehension for Victorian town houses. Still another set of features — its spatial location, say — betokens its membership among the manifolds that instantiate the more general rule of apprehension for spatially located objects as such. Now, let us say that the comparison and reflection that first brought this manifold into the purview of an act of concept formation specifically brought to consciousness the rule of apprehension for *houses*, as opposed either to the more or less specific rules that the manifold also happens to instantiate. In abstraction, I suggest, we selectively attend to *all and only those features of the manifold in virtue of which it instantiates the relevant rule of apprehension*, simultaneously screening out those features that are not relevant to its instantiating the rule.

This proposal allows us to see how abstraction ‘determines’ or ‘restricts’ the awareness produced in reflection. In reflection, we are conscious of the manifold as a whole; in abstraction, we narrow our focus to specific elements within the manifold (namely, those that instantiate the relevant rule of apprehension). The increased determinacy of our awareness is the result of a shift from manifold-level awareness to feature-level awareness. Thus, the transition from reflection to

the restrictive form of awareness that emerges from abstraction can be represented as follows (where F stands for a logical function):

Result of Reflection: **This** manifold, as structured by **this** rule of apprehension, is determined with respect to F .

Result of Abstraction: **This** set of features is determined with respect to F .

Where reflection mapped *manifolds* to functions of judgment, abstraction maps *features* to functions of judgment.

The idea of a mapping from features to functions of judgment helps us to see why Kant should think that abstraction produces concepts proper. In a fascinating passage in the B-Deduction, Kant draws an intriguing distinction between a ‘feature’ and a ‘mark’:

The analytical unity of consciousness pertains to all common concepts as such, e.g., if I think of **red** in general, I thereby represent to myself a feature [*Beschaffenheit*] that (as a mark) can be encountered in anything, or that can be combined with other representations

B133n

As the first part of this passage makes clear, Kant is here describing a form of consciousness that pertains to ‘all common concepts as such’. Conceptual consciousness obtains, according to the passage, when we think something ‘in general’, in such a way that we represent a *feature* [*Beschaffenheit*] as a *mark* [*Merkmale*]. This distinction between a mere feature and a feature *thought as a mark* is crucial to understanding why abstraction produces concepts proper. We can understand the distinction when we recall Kant’s definition of a mark as ‘a partial representation [*Partialvorstellung*] as ground of cognition [*Erkenntnißgrund*] of the whole representation’ (*R*

2282, 16: 298). The distinction between a feature and a mark is the difference between i) a ‘mere’ partial representation, and ii) a partial representation *as a ground of cognition*. Representing a feature *as a mark*, which Kant tells us takes place in all conceptual consciousness as such, means being conscious of a partial representation as a ground of cognition. Now, we saw above that abstraction produces awareness of features: we start with indeterminate awareness of the whole manifold and then zero in on a partial representation, a specific feature within the manifold. But we are not simply aware of features; if that was all that took place in abstraction, it would not issue in concepts, because there is a difference between merely being aware of a part of a representation and being aware of that part as ground of cognition of the whole. It is because we are conscious of the feature as purposive for the faculty of cognition — that is, as determined with respect to a given function of judgment — that abstraction does not merely represent features but represents them *as marks*. And since all concepts, by their nature, represent features as marks, we can see why abstraction should be thought of as the final stage in the creation of concepts.

This distinction between mere features and marks also helps us to see why reflection can never be sidestepped in the process of concept formation. Unless it was guided by reflection, abstraction could only ever turn our awareness to features, never to marks. The preparatory work done by reflection, which flags a manifold as purposive for the faculty of cognition, creates the context in which abstraction takes place: from the start, abstraction is the act that selects the specific features of the manifold in virtue of which it is determined with respect to a function of judgment. If, however, these more basic apprehension-apperception agreement-relations had not already been uncovered through reflection, then abstraction would merely ‘light up’ certain parts of the manifold without ever creating concepts. Because, again, a concept does not merely represent a feature; it represents that feature as the ground of an exercise of the faculty of cognition.

Conclusion

In concluding this chapter, I want to do two things. First, I want to briefly sketch what a full account of the logical origins of the sensible concepts we discussed in Part 2 would look like. Second, I want to explain an apparent limitation of the model that I have described in this chapter — namely, that it cannot explain the origin of intellectual concepts such as the categories.

Suppose we start with a series of apprehended sensations. Comparison would then group a set of these sensations together as having a common rule of apprehension. Reflection would then represent the members of this set as such that they can be brought to the objective unity of apperception *via* a specific logical function. Abstraction would then represent the specific feature of each member of the group in virtue of which it instantiates the relevant rules of apprehension. The result is a concept of perception. The work of fleshing out this account will involve i) specifying the relevant rule of apprehension, and ii) specifying the logical function(s) with respect to which the manifold of apprehended sensations admits of determination.

The formation of a concept of experience, would begin with a set of empirical images (apprehended empirical intuitions) and, through comparison, represent a subset of these images as subject to a common rule of apprehension. Reflection would then represent this manifold as being determinable with respect to a specific logical function or set of functions, and abstraction would then isolate the specific feature(s) of each image in virtue of which it admits of logical determination by the relevant function. The result is a concept of experience. Once again, the interpretive work for fleshing out this reading would be to isolate the relevant rule of apprehension and function(s).

The formation of pure sensible concepts would proceed slightly differently. We begin from direct awareness of the rule of apprehension, as disclosed in immediate consciousness of figurative synthesis. We then represent the pure image generated through the rule as being determinable with respect to a logical function or set of such functions, and we abstractively isolate only those features of the pure image in virtue of which it instantiates the rule of apprehension. Now, the pure concept of space itself, we saw in Chapter 4, rests on the same material foundation as the pure sensible concepts of geometry. Thus, an account of the origins of this concept would need to explain how the schema-guided apprehension that produce pure images can simultaneously position the mind to form geometrical concepts *and* the concept of space. This a question I will take up in future work.¹⁴³

Now, the reader might wonder why I have not provided any sketch of how this account would work in the case of the categories. The answer to that question is that it is not at all obvious *how* this account is supposed to explain the origin of the categories. I argued in Chapter 5 that part of what Kant means when he situates the categories as pure intellectual concepts is that they do not contain images in their matter. It follows, then, that the matter of the categories cannot be given

¹⁴³ Let me anticipate my account. The solution, I believe, turns on drawing a distinction between two ways of being conscious of one and the same rule of apprehension. When Kant spells out the sense in which space is essentially singular, he says that the manifold in space, ‘thus also the general concept of spaces in general, rests merely on limitations’ (B39). The ‘limitation’ Kant describes here is brought about by the gradually-unfolding process of description or ‘drawing’ of lines to represent an enclosed region of space. In the image thus produced, the figure is represented as an extended magnitude, which is composed out of the combination of homogenous spatial units; but it is simultaneously represented as a limitation of a surrounding space. The synthesis of apprehension is thus *both* a ‘compositional’ synthesis that represents a specific figure as an aggregate of previously existing parts *and* a decomposing synthesis that limits the one all-embracing space. Correspondingly, the rule of apprehension is both a rule for composing spatial figures and a rule for decomposing space. (For the notion of ‘decompositional synthesis’, see A524/B552; A505/B533; see Marschall (2019) and Rosefeldt (2022) for helpful discussion.) If we are conscious of the rule governing the apprehension solely insofar as it is a decompositional rule, we are in a position to represent the space that the synthesis decomposes as a singular whole that exists prior to the decomposition. But this very same rule of apprehension, if we represent it as a rule for composing magnitudes, puts us in the position to form the concept of a specific geometric figure.

through an act of apprehension. But notice that the entire account that I have developed in this chapter and the previous one has depended at every turn on the notion of a rule of apprehension. Concept formation, on the model I have been proposing, takes place when the mind becomes conscious of the rule of apprehension that presides over the imaginative synthesis that gives the matter for a concept. But if the matter for the categories is not given through an act of the power of imagination, then their matter-giving act is not subject to a 'rule of apprehension'. It appears, then, that categories must fall out of the scope of the model we have developed in this chapter. It thus falls to us to confront the topic of category-formation directly and to investigate the resources that Kant offers us for a positive account.

Chapter 8

Categories as Concepts of Reflection

Introduction

We have seen Jäsche claiming that the logical acts pertain to the origin of every concept whatsoever. And yet it seems that the model we developed in the previous chapter is limited to the domain of sensible concepts: concepts whose matter is a sensible manifold given through schema-guided apprehension. For the act of *reflection* represents a specific feature of the *rule of apprehension* governing the apprehension of a sensible manifold, and the act of abstraction then isolates a specific feature of that manifold. It would thus seem that reflection and abstraction can only play a content-generative role with respect to sensible concepts. Intellectual concepts, whose matter is not given through schema-guided apprehension, and which do not simply represent features of sensible manifolds, seem to fall outside the scope of the account. Should we then conclude that the categories do not originate in the logical acts? That is the question I take up in this chapter.

The answer is not entirely straightforward. On the one hand, I think that it would be an error to think that there is any straightforward application of the logical acts story from the case of sensible concepts to the case of categories. On the other hand, in Chapter 5 we reviewed the

impressive volume of texts that trace the origins of the categories back to the act of *reflection*. My aim in this chapter will be to explain the distinctive way in which the categories are formed through the act of reflection, and then to use this account both to bring out what is distinctive about the categories and to explain the relationship between categories and sensible concepts.

The account I develop turns on the distinction between ‘determinate’ and ‘indeterminate’ concepts. On the one hand, Kant appears to maintain that the categories come into being through reflection. On the other hand, he denies that reflection produces ‘determinate’ concepts. These texts are compatible, I show, because Kant distinguishes between determinate and indeterminate concepts and situates categories in the latter class. Determinate concepts are determinate in the sense that they manifest categorial thought-forms, and since abstraction produces determinate concepts, my account of the categories thus casts abstraction as the act that determines the categories. Having connected the doctrine of the categories to the doctrine of the logical acts in this way, the chapter then situates the role of transcendental schemata in the origins of the categories, and finally explains the sense in which the categories possess conceptual content even as indeterminate thought-forms.

I proceed in four sections. In Section 1, I argue that reflection is both the fundamental application of the categories *and* the act that first creates categories. Since reflection does not create determinate concepts, I go on, in Section 2, to explain the distinction between determinate and indeterminate concepts and argue that the categories are indeterminate concepts. In Section 3, I round out my picture of the origin of the categories by investigating the role of transcendental schemata in category-production. And I close by explaining the sense in which the pure categories continue to possess a kind of ‘transcendental significance’ in spite of their status as indeterminate thought-forms.

1. Reflection as the Origin and First Application of the Categories

The texts in which Kant ties categories to reflection can be understood as making claims about both the *application* and *origins* of the categories. When Kant claims, for example, that the ‘concepts of the understanding are nothing other than actions of reflection’ (*MM* 29: 762), I take him to be making a claim about the conditions under which the categories are applied: to apply a category just is to engage in an ‘action of reflection’. But when Kant asks how the categories ‘come into the understanding’ and claims that they are ‘drawn from the reflection on the senses’ (*ML*₁ 28: 234), he is clearly making a claim about their *origins*. In this section, I want to use the findings of the previous chapter to work toward an understanding of both of these claims.

In the previous chapter, we saw that Kant situates the categories as ‘concepts of combination’ [*Begriffe der Verbindung*]. Combination, we saw, represents the way in which a given manifold exhibits transcendental unity of apperception, and thereby brings that manifold to the objective or synthetic unity of apperception. In situating the categories as concepts of combination — concepts in which ‘combination is already thought’ — I suggested that Kant is situating the categories as concepts that characterize the synthetic unity of apperception; alternatively put, the categories represent the ways in which transcendental unity of apperception is realized in a sensible manifold. And the conclusion that the categories bear a special relationship to the synthetic unity of apperception, aside from following in general terms from our reflection on what it means to situate the categories as concepts of combination, is also encouraged by several passages. In the Critique, Kant tells us that the categories ‘indicate the synthetic unity that alone makes possible an empirical cognition of objects’ (A321/B377-78). More strikingly still, in a late essay, Kant claims that

[t]here will thus be as many a priori concepts resident in the understanding... as there are types of synthetic unity of apperception of the manifold given in intuition.
wF 20:271

As concepts of combination, the categories ‘indicate’ the kinds of unity in virtue of which a given sensible manifold can be brought to the synthetic unity of apperception. Each category represents a fundamental form of this unity, which is why there will be as many categories as there are ‘types of synthetic unity of apperception of the manifold given in intuition’.

In the passage above, Kant claims that the number of categories matches the number of ‘types of synthetic unity of apperception’. In the metaphysical deduction, more famously, he argues for their ‘complete coincidence with the universal logical functions of thinking’ (B158). These two coincidence claims are sides of the same coin. In the previous chapter, we saw Kant holding that judgment is the way in which a discursive understanding brings given representations to the objective unity of apperception. Each universal logical function constitutes a way in which the intellect orders representations under the transcendental unity of apperception and thereby brings about objective unity of apperception. In bringing the manifold to the objective unity of apperception, the logical function thus ‘determines’ the manifold. Each ‘type’ of synthetic unity of apperception is thus the product of a specific ‘way’ of determining the manifold through a logical function. The types of synthetic unity of apperception thus coincide with the logical functions of thinking. Each category, as a representation of a fundamental form of the synthetic unity of apperception, must therefore correspond to a specific logical function: the categories must represent the fundamental ways in which a sensible manifold admits of determination through logical functions. Consider the following note to the *Preface* of the *Metaphysical Foundations of Natural Science*, which relies on the notion of an object’s being determined with respect to a logical function:

The table of categories contains all pure concepts of the understanding, just as it contains all formal actions of the understanding in judging, from which the concepts of the understanding are derived, and from which they differ only in that, through the concepts of the understanding, an object is thought as *determined* with respect to one or another function of judgment'

MAN 4:475n

Each category, in representing a form of synthetic unity of apperception, represents a respect in which an object is determined with respect to a corresponding functions of judgment.

Given, then, that categories represent the ways in which a sensible manifold could be determined with respect to a logical function, it follows that to *apply* a category is to regard a manifold as determined with respect to a logical function. Consider Kant's *Erklärung* of the categories at the outset of the B-Deduction:

They are concepts of an object in general, *by means of which its intuition is regarded as **determined** with regard to one of the **logical functions** for judgments.*
B128; cf. *Prol* 4: 302

It is 'by means of' the categories — that is, I take it, through our application of them — that we regard the intuition of an object as 'determined with regard to one of the logical functions for judgments'.

In the lead up to the Deduction, Kant calls the categories '*subjective conditions* of thinking' (A89/B122, my emphasis). I suggest that what Kant means here is that the 'regarding' of the manifold through which we apply the categories is not itself an act of judging but rather a condition of judging, a way in which the mind 'prepares' for judgment. In order to determine the sensible manifold through a logical function of judgment, we must regard the manifold as such that it can be determined through the relevant function, and that is just what it is to apply a category. Thus, application of the category must take place prior to and as a condition of judgment. It takes place,

not through judgment, but precisely at the point that we regard a manifold as the basis for an act of judgment.¹⁴⁴

But we have already uncovered an act that i) takes place prior to and for the sake of judgment, and ii) represents the respects in which a given manifold admits of determination through a logical function. For recall the definition of reflection that we worked toward throughout the previous chapter:

General Definition of Reflection 2: To reflect is to represent a specific respect in which a given manifold, in virtue of its rule of apprehension, is determined with respect to a specific logical function.

Reflection, the very act that generates the universal form of concepts, is thus the act by which we first apply the categories. If this is correct, then every concept that we form through the logical acts is itself the product of a prediscursive employment of the categories. That the categories are applied in reflection rather than judgment is, I take it, part of what Kant means to signal in the various texts that call the categories concepts of reflection.

But these texts also make *genetic* claims that we have not yet accounted for. The claim is not simply that the categories are applied in reflection but that, to use the language of one of the passages, they ‘come into the mind’ through reflection (*ML*₁ 28: 234). And this much would seem to follow from the status of the categories as concepts of combination. For Kant says that the categories presuppose combination, that combination is ‘already thought’ in them, which suggests

¹⁴⁴ To use a term that often circulates in the secondary literature, I am thus claiming that the categories are subject to a ‘prediscursive’ application — that is, an application that does not itself constitute an act of discursive thinking. Both Longuenesse and Heidegger hold that the categories are applied in this manner, but I disagree fundamentally about the nature of this application. I will return to this issue in the next section.

that they do not exist in the mind prior to the act(s) by which we combine the manifold. How, then, should we understand the genetic role of reflection with respect to the categories?

In Chapter 5, I suggested that we understand the genetic role of reflection in terms of the form-matter distinction. Reflection, I suggested, is the act that first gives matter for the categories because it is the act through which we first become conscious of agreement-relations between intuition and the functions of judgment. This picture is correct as far as it goes, but it might suggest a model on which the reflectively-generated matter for the categories is *then* subject to further reflection and abstraction in a second, form-generating stage. But I do not think that this is in fact Kant's picture. Rather, I think that in the one case of the categories, the distinction between matter-giving and form-imparting acts in fact breaks down. We cannot distinguish, in the case of the categories, between an initial matter-giving act and a subsequent form-imparting act. The categories simply come into being, both as to form and as to matter, through a single act of reflection.

To see why this is, let us remind ourselves of what it is that reflection creates. Reflection, we saw, generates representations of mappings from manifolds to functions of judgment. These mappings are the reflectively-generated thought-forms that underlie the 'difference in reflection' between concepts. Every determinate concept formed through abstraction is then a determination of one of these thought-forms. My controversial claim is that *the categories just are these thought-forms*. Thus, in creating the forms of concepts, reflection does not stop short of creating the categories.

Explaining in more detail what a thought-form is and how such a form could nevertheless qualify as a concept will be important in what follows. But first, the evidence that Kant treats the categories in these formal terms. Consider:

Thus pure intuition contains merely the form under which something is intuited, and pure concept only the form of thinking of an object in general.

A50-51/B75

[The pure categories] are merely the pure form of the use of the understanding in regard to objects in general and of thinking

A248/B305

[The categories] are merely thought-forms for the concept of an object of intuition as such

wF 20:272

The last of these passages is particularly striking. The categories are merely thought-forms for the concept of an object of intuition as such. Such thought-forms are precisely what reflection creates. It is thus plausible that reflection is the site not merely of the original *application* of the categories but also of their original *acquisition*.

2. The Categories as Indeterminate Thought-Forms

To take stock of where we are: I have claimed that the categories are concepts of reflection in two specific senses. First of all, unlike other concepts, which are applied in acts of subsumption by the power of judgment, the categories are applied through the act of reflection, a prediscursive act that takes place prior to and as a condition of judging. Secondly, unlike other concepts, which depend on reflection only for their *form*, the categories *themselves* come into being through reflection. The reason that a formal act could generate the categories is that reflection creates ‘thought-forms for the concept of an object of intuition as such’, which ground the formal differences between concepts; and according to Kant, the categories *simply are* these thought-forms.

Now, there is a lot in this account that needs to be developed. Assuming that the categories really are themselves concepts, as Kant's formulations overwhelmingly assume, we need to know how and in what sense the *form of a concept* could itself *be* a concept. And given that Kant insists that abstraction is a condition for the formation of determinate concepts, we also need to know how to square the claim that reflection originates the categories with the doctrine of abstraction. I will confront these issues in this section and the next, but before I do, I want to note two virtues of the suggestion that the categories originate in reflection.

First of all, the proposal gives us a way of explaining a claim that Kant makes about the relationship between the categories and sensible concepts in general. In Kant's response to Eberhard, he maintains that all concepts are acquired rather than innate, but he also draws a distinction between *original* and *derivative* acquisition. The categories — what he there calls 'universal transcendental concepts of the understanding' (*ÜE* 8: 223) — are originally acquired (*ibid.*); sensible concepts — what he there calls 'determinate concepts of things that are in accordance with' the spatiotemporal form of sensibility (*ÜE* 8: 222) — are subject to *acquisitio derivativa* (*ÜE* 8: 223), which means that the acquisition of this latter class of concepts presupposes prior possession of the categories. The categories, then, are genetically prior to sensible concepts, and if they arise in reflection, we have an explanation of why that would be. Reflection, I argued in the last chapter, is necessary but not sufficient for the formation of sensible concepts (since these concepts rely on abstraction as well). If reflection is, by contrast, both necessary *and sufficient* for the formation of the categories, we would have an explanation of why any acquisition of a sensible concept, given that this acquisition must have involved reflection, presupposes a category.

Secondly, the claim that the categories originate in reflection also puts them out of reach of the faculty of choice. In the introduction to this part of the dissertation, we reminded ourselves

that Kant's claim that the form of a concept is made requires him to carve out a role for the faculty of choice in the formal acts that produce the forms of concepts. And in the previous chapter, I argued that Kant restricts the role of the power of choice to the operation of abstraction, which is a voluntary act of attention. If the categories depended on abstraction, then, we could make sense of the possibility of a human subject either unable to unwilling to devote their attention in the specific manner required to form the categories. But if the categories are formed through reflection, a natural operation of the understanding that is not mediated by an act of the faculty of choice, then such a subject could not after all exist.

We have some motivation, then, to develop the account. Now, one obstacle that immediately arises for the account is that it is not obvious how to square it with the doctrine of abstraction. In the previous chapter, we saw Kant claim that in reflection 'no determinate concept of the object at all is required nor is one thereby generated' (*EE* 20: 221). Abstraction is then recruited as the act that 'perfects' a concept (*WL* 24: 909) and 'encloses it in determinate limits' (*JL* 9: 95). If the categories originate in reflection, abstraction has no content-generative role to play with respect to the categories; but how is this compatible with Kant's claim that abstraction is a requirement on the formation of determinate concepts? The answer to this question, I suggest, is simply to maintain that not all concepts are 'determinate'. And the categories, precisely insofar as they are thought-forms, are indeterminate. That is the claim that I will develop in this section, and to do so, I will unpack the distinction between determinate and indeterminate concepts.

I believe that the distinction between a mere thought-form and a determinate concept is best illustrated in an important section of the A-edition *Phenomena and Noumena* section, which is worth unpacking in some detail. The passage I have in mind begins with a set of claims about the highest concept of an object in general:

This [concept] signifies, however, a something = X, of which we know nothing at all nor can know anything in general (in accordance with the current constitution of our understanding), but is rather something that can serve only as a correlate of the unity of apperception for the unity of the manifold in sensible intuition, by means of which the understanding unifies that in the concept of an object. This transcendental object cannot even be separated from the sensible *data*, for then nothing would remain through which it would be thought. It is therefore no object of cognition in itself, but only the representation of appearances under the concept of an object in general, which is determinable through the manifold of those appearances.

A250-511

The concept of an object in general signifies something that ‘can serve only as a correlate of the unity of apperception for the unity of the manifold in sensible intuition’. As we saw in Chapter 7, the synthetic unity of apperception is *precisely* such a correlate: it is the unity of apperception as manifested in a sensible manifold. The concept of an object indicates this unity as such. As Kant puts this point in the A-Deduction, ‘this concept cannot contain any determinate intuition at all, and therefore concerns nothing but *that unity which must be encountered in a manifold of cognition insofar as it stands in relation to an object*’ (A109, my italics). But this unity, the passage tells us, is not *itself* an ‘object of cognition’; it is, rather, the condition under which anything must stand in order to *be* an object of cognition. Therefore, the concept of the transcendental object, in itself, does not indicate an object of cognition. In order to use the concept for cognition, we must ‘determine’ the concept through the manifold of appearances; and we determine the concept in this way when we represent appearances ‘under the concept of an object in general’. If we ‘separate’ the concept from sensible *data*, then the representation we are left with is an indeterminate concept that is no longer suitable to feature in act of cognition.

What this suggests is that a ‘determinate’ concept is one that is capable, without further supplementation, of supplying the conceptual element of an act of cognition; and Kant’s claim here is that the pure concept of a transcendental object, which represents the synthetic unity of

apperception as such, is not in itself (i.e. as 'separated' from sensible *data*) a determinate concept. The concept *can* feature in an act of cognition, but only insofar as it is determined through sensible *data*. In the next paragraph, Kant relates his discussion to the categories:

Just for this reason, then, the categories do not represent any special object given to the understanding alone, but rather serve only to determine the transcendental object (the concept of something in general) through that which is given in sensibility, in order thereby to cognize appearances empirically under concepts of objects

A251

In order to generate determinate concepts, we must determine the (concept of the) transcendental object through that which is given in sensibility, and the categories 'serve to' determine the transcendental object. However, they are not *themselves* determinations of the concept, which is why, just like the concept of the transcendental object, the pure categories do not represent any 'special object', that is, any distinctive object of cognition. Just like the concept of the transcendental object, the categories themselves must be combined with sensible *data* if they are to contribute to cognition of an object:

[n]ow through a pure category, in which abstraction is made from any condition of sensible intuition as the only one that is possible for us, no object is determined, rather only the thought of an object in general is expressed in accordance with different *modi*... The merely transcendental use of the categories is thus in fact no use at all, and has no determinate or even, as far as its form is concerned, determinable object.

A247

The concept of the transcendental object represents the synthetic unity of apperception as such, and categories represent the specific forms of this unity. In order to determine the concept of the transcendental object, we must represent a specific way in which a sensibly given manifold realizes the synthetic unity of apperception. This, in turn, requires that we represent the sensible manifold in accordance with a given category, but the category itself, while it *serves to* determine the concept

of the transcendental object, is not *itself* a determination of the transcendental object, which is why the pure category on its own does not determine any object.

Since the concept of the transcendental object must be determined in relation to sensible *data*, every determinate concept will therefore be a *sensible* concept. And since the concept of the transcendental object can only be determined *through a category*, it follows that every determinate sensible concept must itself constitute a determination of a category. Kant makes precisely this point regarding concepts of experience in the first *Critique*, where he says that a ‘concept of experience [*Erfahrungsbegriff*]... is nothing but a concept of the understanding *in concreto*’ (A567/B595). The *Jäsche Logic* gives us an example of what Kant means here: the concept of ‘chalk’ is presented as an example of a concept through which we use the concept of substance *in concreto* (*JL* 9: 100). We can use that same concept abstractly if we abstract from sensible conditions of its employment, and as subject to such a use, it is a pure category (A247/B304). But it is only as part of the content of a concept of experience that the concept can be used to determine an object. There is thus a mutual cognitive dependence between categories and determinate concepts. Every determinate concept contains categorial content; and this content itself can only be used for cognition insofar as it is embedded within the content of a determinate sensible concept.

Now, we know that it is through abstraction that determinate concepts are formed; thus, it is the act of abstraction that determines the categories. Reflection creates the categories as indeterminate thought-forms: mappings from manifolds to logical functions of judgment. Abstraction then maps a *specific element of a sensible manifold* to a logical function. This mapping is what it is to sensibly determine the concept of the transcendental object in accordance with a category. We thus see that Kant’s claim that the categories arise in reflection is compatible with his denial that reflection creates determinate concepts.

To sum up the picture that has emerged so far: reflection generates categories as thought-forms. These thought forms are mappings from sensible manifolds to logical functions of judgment. Now, as they exist in reflection, the categories are not themselves determinate concepts, which means that they do not admit of any cognitive use merely as reflectively-generated thought-forms. It is the act of abstraction that generates cognitively useful determinations of the categories — categories *in concreto* — but while abstraction plays a content-generative role with respect to determinate concepts, it plays no role in generating the content of the categories.

The distinction between categories as indeterminate thought-forms and the categories as constituents of determinate concepts corresponds to a distinction between two modes of category-application. Reflection, which takes place prior to and for the sake of judgment, is the act by which the mind represents a manifold as determined with respect to a logical function of judgment — which, I argued in the previous section, is just what it is to apply a category. Thus, already in reflection, prior to the formation of determinate concepts, there is an application of the category. But when determinate concepts are formed and subsequently deployed through acts of subsumption by the power of judgment, the same categorial content originally formed and employed in the act of reflection is re-deployed, this time through an act of judgment.

My account thus has Kant distinguishing between a prediscursive and discursive employment of the categories. But I want to distinguish the way in which I draw this distinction from a more common way of understanding the distinction, which Longuenesse has made influential. Longuenesse claims that the categories are both ‘rules of apprehension’ and ‘reflected representations’. In their former capacity, categories are applied prediscursively. Here is Longuenesse retrospectively characterizing her position:

This characterization of the categories means two things. (1) To have a category is to have a rule for ordering sensible manifolds (and for us human beings, this means

manifolds of spatiotemporal elements) in such a way that they can be reflected under (empirical) concepts of objects according to logical functions. For instance, to have the category of cause is to have a rule: look for something real that is such that whenever it exists (is “posited”) something else follows. (2) To have a category is to have a concept under which we can think of an object as “in itself determined” with respect to a logical function of judgment.

Under the first description, categories guide synthesis. Under the second description, objects are subsumed under them. These are the “two ends” of the cognitive process I mention in my book: first synthesis (the categories are rules for synthesis); then subsumption (as any other concept, the categories are “universal and reflected representations” under which objects are subsumed).

Longuenesse 2005: 24

The categories thus admit of a prediscursive use, whereby they function as ‘rules for synthesis’; employing the categories at this primary level enables us to represent sensible manifolds in such a way that they can, as a result, be subsumed under concepts — including, ultimately, under the categories. Now, since we saw that Longuenesse equates schemata with rules of synthesis, she is effectively equating the category, in its prediscursive employment, with a transcendental schema. Longuenesse’s position is thus reminiscent of Heidegger’s. Heidegger distinguishes between two kinds of ‘thinking’: judging, on the one hand, and a more elementary kind of ‘self-orienting’ which takes place in schematism. ‘This original thinking’, Heidegger claims, ‘is pure imagining’ (1929/1997: 106). Heidegger thus claims that ‘pure schematism, which is grounded in the transcendental power of imagination, constitutes precisely the original Being of the understanding’ (1929/1997: 106). As with Longuenesse, then, we see Heidegger aligning the distinction between discursive and prediscursive uses of the understanding with the distinction between judgment and schematism.

I think that these ways of describing the prediscursive use of the understanding are seriously problematic. Longuenesse’s account collapses the distinction between categories and transcendental schemata, and Heidegger’s ascribes the act of schema-guided synthesis to the faculty of understanding. Both of these interpretations do violence to the text (Heidegger’s self-

consciously so). But the proposal that we apply the categories in reflection allows us to isolate a prediscursive role for the categories that neither collapses the distinction between schemata and categories nor requires us to attribute imaginative synthesis to the understanding, for synthesizing in accordance with schemata is not the same as reflecting (even though, as I will argue later on, it is a condition on the possibility of reflection).

3. Transcendental Schemata and the Formation of Categories

In order to respect the status of the categories as pure intellectual concepts, I have argued that they originate both as to form and as to matter through the act of reflection, an act of the intellect. However, it does not follow from this, and it is not my view, that sensibility has no role to play in the formation of the categories. In this section, I want to complete my account of the origin of the categories by explaining where I think transcendental schemata fit into the picture. In Chapter 6, I motivated a general account of the relationship between sensible concepts and their corresponding schemata, on which sensible schemata ground the existence of their corresponding concepts, rather than *vice versa*. In this section, I want to argue that precisely the same priority-relation exists between categories and transcendental schemata, and to integrate this account of the relationship between categories and transcendental schemata with my claims about the role of reflection in the formation of the categories. Now, given that categories are not sensible concepts, the genetic role of transcendental schemata with respect to the categories cannot be the same as that played by sensible schemata in the formation of sensible concepts. Transcendental schemata, as products of productive imagination, cannot directly condition the matter-giving act for the categories on pain of situating that act at the level of imagination rather than intellect, thus losing

sight of the intellectual status of the categories. The challenge will thus be to identify some recognizably genetic role that stops short of giving matter for the categories.

Before we discuss what exactly that role would be, I want to offer some systematic grounds for expecting that transcendental schemata would have some such role to play in the formation of the categories, rather than thinking that their role is limited to explaining the application of independently-formed categories. While the claim that transcendental schemata have a place in category-formation is not without precedent,¹⁴⁵ it is a marginal position, and given Kant's own positioning of the Schematism chapter, the ascendancy of views that restrict the role of transcendental schemata to category-application is not difficult to understand. For nothing in the way that Kant sets up the problematic of the Schematism chapter suggests that his concern there is to explain the formation of the categories or any other concept. Instead, he situates the problem as one concerning the 'application' [*Anwendung*] of categories to objects of sensible intuition, and on the most straightforward way of making sense of this statement of the problem, the chapter takes for granted the existence of the categories. Thus, if we are to substantiate the contention that schemata have a role to play in the formation of the categories, we will need to provide some systematic grounds for thinking that schemata could play such a role, the framing of the Schematism chapter notwithstanding.

¹⁴⁵ Perhaps its most famous proponent is Heidegger: 'In the Transcendental Schematism the categories are formed first of all as categories. If these are the true primal concepts, however, then the Transcendental Schematism is the original and authentic concept formation as such' (Heidegger 1929/1997: 77-78). More recently, de Boer (2016) has argued that the proximal products of transcendental schemata are 'pure concepts of objects', from which categories can then be abstracted. The account I will go on to give of the genetic role of schemata differs from both of these proposals. Heidegger's account, as we have already seen, collapses the distinction between transcendental schemata and categories, and correspondingly collapses the distinction between schema-formation and concept formation. De Boer's account, meanwhile, collapses the distinction between categories and forms of judgment and thus fails to explain the transcendental significance of the categories — a topic I discuss in the next section.

The first defensive point to make here is that Kant's presentation of the Schematism chapter does not straightforwardly preclude a genetic role for transcendental schemata. Absent further argument, the fact that a representation plays a role in explaining the application of a concept does not rule out that it also plays a role in explaining the formation of the concept. And there are several systematic reasons to think that transcendental schemata do have such a role to play with respect to the categories.

To begin, it will be helpful to remind ourselves of the systematic reasons I gave for thinking of sensible schemata as prior to sensible concepts, for it is not clear why the same considerations should not carry over to the present case. In Chapter 6, I pointed out that Kant sets up the Transcendental Analytic as the project of 'analyzing the faculty of understanding', with a view to understanding how *a priori* concepts are possible. The possibility of an analysis of the faculty of understanding is dependent on the fact that the understanding is a derivative faculty, grounded on three more fundamental faculties, which constitute the subjective sources of the faculty of understanding. These faculties are sense, imagination, and apperception, and Kant's position is that the faculty of understanding only comes into being when those faculties interact in a certain way. We have been tracking this understanding-constitutive interaction for the past several chapters; in Chapter 6, I argued that the most fundamental interaction between them, on which all subsequent interaction depends, is a causal interaction by which the faculty of apperception influences the faculty of imagination. The result of this influence is that the faculty of apperception acquires a new, intellectual function — the function of synthesizing intuitions in order to produce synthetic unity in the determination of sensibility — and, in virtue of this function, qualifies as a 'productive' faculty with a transcendental function. The representations characteristic of this

newly-formed imaginative faculty, we showed, are schemata, for Kant implicitly traces both empirical and transcendental schemata to the productive imagination.

Now, since the faculty of understanding is dependent on the faculty of productive imagination — since, as I argued in chapter 7 (Section 2.3), the constitution of appearances is only in accord with the conditions of the understanding’s synthetic unity because the appearances are synthesized by the productive imagination — we should expect that the representational outputs of productive imagination would in general exist prior to the representational outputs of the understanding. These considerations motivate a general claim about the priority-relations between schemata and concepts, and I see no reason why these considerations should not carry over to the relationship between transcendental schemata and the categories. And indeed, in the very same passage in which Kant is describing the ‘intellectual function’ that imagination inherits when apperception is ‘added’ to it, he says that ‘[t]hrough the relation of the manifold to the unity of apperception... concepts that belong to the understanding [*viz. the categories*] can come about, but *only by means of the imagination* in relation to the sensible intuition’ (A124, my emphasis).

We ought to be motivated, then, to look for a genetic role for transcendental schemata to play with respect to the categories, and in what follows I will attempt to identify that role. As I do so, I will need to respect two sets of constraints. First of all, the account of the role of transcendental schemata must be consistent with the status of the categories as pure intellectual concepts — concepts whose matter is given by an act of the intellect. Second of all, the account needs to make the right predictions about the contents of the categories. It must be compatible with the fact that the pure categories, their general orientation toward sensible intuition notwithstanding, contain no trace of spatiotemporal content.

Let us begin, then, by situating transcendental schemata in relation to reflection. So far, we know that reflection maps manifolds to functions of judgment, thus creating the forms of concepts; and we know that the categories, as ‘thought-forms for the concept of an object of intuition as such’ represent the forms that this manifold-function mapping can take. We thus have a systematic account of what reflection is and its relationship with the categories. But what we are missing so far is any account of *which features* of a manifold’s rule of apprehension (and the resulting representation) are the ‘reflectively relevant’ features. That is, for any given manifold that reflection maps to a specific form of judgment, we can reasonably ask, what are the features of that manifold in virtue of which reflection maps it to one form of judgment rather than another? This, I suggest, is the question that Kant sets out to answer in the schematism chapter. Transcendental schemata represent the reflectively relevant features of sensible manifolds, which constitute the sensible underpinning of the ‘difference in reflection’ between formally distinct concepts.

We can arrive at this understanding of transcendental schemata through a study of what Kant means when he identifies them as ‘transcendental time-determinations’. It is helpful to unpack each element of this formulation in turn. First of all, ‘time’. As Nick Stang points out, we can distinguish between time as the form of inner sense — the form in which we intuit representations that are ‘in us’ — and *objective* time — the time in which we represent the objects of outer sense. We could distinguish these as subjective and objective time, and we can ask which notion is relevant to the status of transcendental schemata as *time*-determinations. Stang argues, and I agree with him, that the ‘time’ at issue here must be subjective time.¹⁴⁶ As transcendental

¹⁴⁶ Kant will have to do some very intricate work in the Analogies and the Refutation of Idealism to demonstrate both the possibility and the necessity of representing outer objects as also being *in time*. At this point, in the Schematism, Kant can only assume that representations of outer objects are *in time* (because all representations, as states in us, are in time)... At this point in the *CPR* it cannot be that

time-*determinations*, I take it that transcendental schemata represent (‘determine’) subjective temporal features of representations. And the primary point of calling transcendental schemata *transcendental* time-determinations, I take it, is to point to their origins in the productive imagination. For Kant calls the schemata for the categories ‘transcendental products’ of the imagination, and recall that he attributes the imagination a ‘transcendental function’ precisely insofar as it qualifies as a productive faculty (A123).¹⁴⁷

We saw in Chapter 6 that the ‘intellectual function’ or ‘aim’ of the productive imagination is to bring about ‘unity in the determination of sensibility’ (A140/B179), and we suggested there that schemata in general are the representations that productive imagination forms in pursuit of that aim. Consider now Kant’s characterization of the specific subjective temporal features that transcendental schemata represent. The transcendental schema, Kant says,

concerns the determination of the inner sense in general, in accordance with conditions of its form (time) in regard to all representations, insofar as these are to be connected together [*zusammenhängen sollten*] *a priori* in one concept in accordance with the unity of apperception.

A142/B181, my emphasis

Transcendental schemata concern the way in which inner sense must be ‘determined’ *insofar as* a set of inner representations are to be ‘connected together... in one concept in accordance with the unity of apperception’. But to connect representations ‘in one concept in accordance with the unity of apperception’ just is to *grasp them together*. And since reflection precisely represents the ways

[transcendental schemata] immediately determine outer objects in respect of time, for Kant has not yet built the machinery for doing so (primarily, the Analogies). Instead, schemata immediately determine the inner states by which subject objects are given to us (intuitions, which qua states in us are in time). Specifically, they determine the temporal properties of those states’ (Stang 2022: 9).

¹⁴⁷ Here, I think Stang is wide of the mark: he argues (2022: 36) that the schemata of the categories are ‘transcendental’ only in the specific technical sense that they are relevant to explaining how *a priori* cognition of objects is possible (A56/B80–81). While they surely *are* transcendental in this sense, Kant’s primary reason for calling them transcendental is to point to their origin in productive imagination.

in which representations can be grasped together, this passage tells us both i) that the reflectively relevant features of sensible representations are their subjective temporal features, and ii) that these features are represented by transcendental schemata. Synthesizing in accordance with transcendental schemata, the productive imagination produces spatiotemporal manifolds that admit of reflection — manifolds that can be regarded as determined with respect to specific logical functions of judgment. Kant then pairs specific transcendental schemata with specific categories. The schema for a specific category represents the subjective temporal feature in virtue of which a spatiotemporal manifold can be regarded as determined with respect to the logical function contained in that category. The schema for the category of substance, for example, represents the subjective temporal feature in virtue of which a given sensible manifold can be thought as determined with respect to the categorial function of judgment.¹⁴⁸

Unless the productive imagination synthesized in accordance with transcendental schemata, reflection could not get off the ground, for the understanding would not find appearances to be constituted in accordance with the conditions of its synthetic unity. Transcendental schemata are thus conditions on the possibility of reflection; and since reflection is the act that brings forth the categories, transcendental schemata are conditions on the possibility of the categories. However, in order to respect the status of the categories as intellectual rather than sensible concepts, we must keep in view that it is *reflection*, not the transcendental synthesis of the imagination, that produces categories. To hold on to this point, we should draw a distinction between the matter of a concept, on the one hand, and, on the other, the features that we must discern in order to become conscious of that matter. The reflectively-generated matter for each

¹⁴⁸ Specific sensible schemata should then be thought of as determinations of transcendental schemata, just as specific sensible concepts are determinations of categories. Each specific rule of apprehension that the imagination follows will be a rule for synthesizing a specific manifold in such a way that the manifold is determinable with respect to a specific function of judgment.

category is an agreement-relation between a manifold and a form of judgment; the subjective temporal features represented by transcendental schemata are the features that reflection must discern in order to represent a specific agreement-relation. But the matter for the category is the agreement-relation, not the subjective temporal feature, and the act that makes us conscious of this matter is the act of reflection, not transcendental synthesis. And because the subjective temporal features represented by transcendental schemata are not themselves part of the matter for the categories, we can acknowledge a genetic role for transcendental schemata in category-formation *without* injecting any temporal content into the category. We can thus carve out a genetic role for transcendental schemata without losing sight of the pure intellectual status of the categories or compromising the generality of their intuition-directed content.

4. The Transcendental Significance of the Pure Categories

The picture we have developed explains why any concept, just insofar as it is formed through the logical acts of comparison, reflection, and abstraction, will inherit categorial content. For every such concept constitutes a categorial determination of the concept of a transcendental object. The picture thus explains Kant's claim in the Eberhard essay that the acquisition of 'determinate concepts of things that are in accordance with' the forms of sensibility presupposes prior possession of the categories. Nevertheless, while the categorial element of conceptual content is the most fundamental layer of conceptual content, the picture we have developed does not require that we be distinctly conscious of this content prior to the formation of determinate concepts. Recall Kant's claim at the outset of the *Critique*:

[I]t could well be that even our experiential cognition is a composite of that which we receive through impressions and that which our own cognitive faculty (merely prompted by sensible impressions) produces out of itself, which addition we cannot

distinguish from that fundamental material until long practice has made us attentive to it and skilled in separating it out.

B1-2

There is a question, then, about how we attend to the reflectively-generated categorial element within determinate concepts, and ‘separate it out’ from the sensible elements with which it is combined. Kant enjoins us to perform this separation later in the Introduction:

Gradually remove from your experiential concept [*Erfahrungsbegriff*] of a **body** everything that is empirical in it — the color, the hardness or softness, the weight, even the impenetrability — there still remains the **space** that was occupied by the body (which has now entirely disappeared), and you cannot leave that out. Likewise, if you remove from your empirical concept of every object, whether corporeal or incorporeal, all those properties of which experience teaches you, you could still not take from it that by means of which you think of it as a **substance** or as **dependent** on a substance (even though this concept contains more determination than that of an object in general).

B5

In this example, we begin by removing the specifically empirical content from the concept; we then remove its pure spatial content; and what we are left with is pure categorial content. And *here* — not in the generation of categorial content but rather in the *isolation* of that content from the sensible content with which it is combined — abstraction *does* have a role to play.

In the *Phenomena and Noumena* section, Kant discusses the status of what he calls ‘pure categories’. Pure categories, I suggest, are precisely the concepts that we isolate when ‘remove’ the empirical and sensible content from our empirical concepts. And Kant describes these concepts as the product of *abstraction*:

Now through a pure category, in which abstraction is made from any condition of sensible intuition as the only one that is possible for us, no object is determined, rather only the thought of an object in general is expressed in accordance with different *modi*.

A247/B304

Abstraction thus appears to play an important role in obtaining pure categories. However, it is important that we differentiate the abstraction involved in obtaining a pure category from the abstraction that first produces determinate concepts. Whereas abstraction as a logical act operates on sensible manifolds and thereby produces determinate conceptual contents, abstraction in the present sense of the term operates on existing conceptual contents to isolate their elements. Both kinds of abstraction involve selectively attending to elements of a manifold, but the manifolds at issue are different, as are the outputs of the two acts: the one kind of abstraction attends to a sensible manifold and outputs a determinate concept; the other attends to an extant concept and outputs clear consciousness of one of the concept's constituents, thereby rendering our consciousness of the input-concept distinct. Kant calls this second-order abstraction *analysis* and maintains that 'no concept arises analytically as far as content is concerned' (A77/B103). Abstraction, then, in the sense of analysis, isolates the pure categorial element of conceptual contents without thereby creating any new conceptual contents. In *this* sense, we could say that the pure categories are 'obtained' through abstraction, as long as we are clear that the abstraction at issue is not driving the creation of the pure categories as to content.

The question that Kant considers in the *Phenomena and Noumena* section is whether the pure categories that we obtain through this kind of abstraction have any cognitive value. Now, Kant's answer to this question treads a delicate path. On the one hand, he has principled reasons for denying that the pure categories, as indeterminate thought-forms, have any cognitive 'use'. Rather than admitting of a use of their own, 'they are merely the pure form of the use of the understanding in regard to objects in general..., yet without any sort of object being able to be thought or determined through them alone' (A248/B305). On the other hand, insofar as the pure categories are to count as *concepts*, they must be granted some kind of representational content in

virtue of which they can enter significant thought, even if they are debarred from entering cognition. Thus, Kant concludes that '[i]t may therefore be advisable to express ourselves thus: The pure categories, without formal conditions of sensibility, have merely transcendental significance, but are not of any transcendental use' (ibid.).

That is Kant's stated position, then, but one might wonder whether it is consistent with my account of the categories as thought-forms. If categories are mere forms of concepts, how can they have a content of their own? The answer to this question picks up on a point we made about the functions of judging in the previous chapter. What we saw in that discussion was that Kant does not generally deny that forms of representation can themselves have representational content. We saw that the logical functions of judgment simultaneously i) connect the matter of the judgment into a specific logical form, and ii) 'determine' the manifold by bringing it to the objective unity of apperception. We thus concluded that the form of the judgment itself represents the manifold as exhibiting the unity required to be related to an object. In the same way, I have argued that the categories represent the fundamental forms of the synthetic unity of apperception: the fundamental kinds of unity in virtue of which a sensible manifold can be determined with respect to a logical function. The categories determine the form of every determinate concept (since every determinate concept maps a specific feature of a manifold to a logical function); but considered in themselves, they also represent the fundamental forms of the objective unity of apperception. Thus, their status as forms is compatible with their possessing a transcendental significance through which 'the thought of an object in general is expressed in accordance with different *modi*'.¹⁴⁹

¹⁴⁹ To give some examples: the pure category of substance is the concept of that feature of an object in virtue of which its sensible intuition is determinable with respect to the categorical function of judgment. The pure category of reality is the concept of that feature of an object in virtue of which its sensible intuition is determinable with respect to the affirmative function of judgment. And so on. Very importantly, there is no trace of any reference to the human forms of intuition here. Equally importantly, though, the significance

The status of categories as thought-forms is thus compatible with them possessing their own transcendental content, hence qualifying as concepts. Nevertheless, in order to accommodate the status of categories as concepts, albeit indeterminate concepts, we will need to find a general account of concepts that can apply to both determinate sensible concepts and indeterminate categories.

In the previous chapter, I appealed to the notion of a mark in cashing out what a concept is. A mark, recall, is a ‘partial representation’ insofar as it is a ‘ground of cognition’. I argued that it is reflection that first generates grounds of cognition, because it is reflection that first represents a sensible manifold as the basis for an act of the discursive faculty of cognition. I then argued that it is abstraction that isolates a partial representation from within this manifold and represents it as a ground of cognition. It now turns out that the notion of a mark cannot in fact cash out the abstract notion of a concept in general but must instead be restricted to the class of *determinate* concepts.¹⁵⁰ For representation of marks — *partial* representations as grounds of cognition — is the achievement of abstraction, and I have argued that the categories are formed through reflection alone. Thus, we cannot identify concepts with the outputs of abstraction on pain of denying that the categories are concepts. The categories are conditions of marks, since without them we could not regard a sensibly given representation as a ground of cognition, but they do not themselves represent by means of marks. Instead, then, I propose that a concept in general is a representation of a sensibly given representation as a ground of cognition. There is then a distinction between categories and determinate concepts. Categories represent manifolds as grounds of cognition;

of the categories is restricted to *sensible intuition* in general, even while not being restricted to human sensible intuition in particular.

¹⁵⁰ Thus, when Kant makes blanket-assertions like ‘all our concepts are marks and all thinking is representation through them’ (*R* 2287, 16: 300; cf. *JL* 9: 58), my reading hears these claims as implicitly restricted to the domain of determinate concepts.

determinate concepts represent partial representations as grounds of cognition (hence they represent *via* marks).

This definition of conceptuality brings out a sense in which concepts, as the products of discursive understanding, are intrinsically oriented toward sensibility. Even the pure categories, in their transcendental significance, have intuition-oriented representational content. This orientation toward sensibility is compatible with the status of categories as pure intellectual concepts, because as we saw in part 2, a concept's status as intellectual or sensible depends upon facts about its genesis, not its content. The categories are intellectual because they originate, not just as to form but as to matter, through an act of the intellect. I will return to the relationship between concepts and sensibility at some length in the conclusion to the dissertation.

Conclusion

Our account of the logical acts of comparison, reflection, and abstraction is now complete. In our study of reflection in the previous chapter, we saw Kant claim that reflection creates the universal forms distinctive of concepts. In this chapter, we have seen grounds for thinking that reflection creates the categories. What we are describing here are not two separate by-products of reflection. The categories and the universal forms of concepts are one and the same. For the categories are simply 'thought-forms for the concept of an object of intuition as such', which is why there are as many categories as there are types of synthetic unity of apperception in the manifold of sensible intuition.

But it is not as indeterminate thought-forms that the categories relate to objects in the manner required for cognition. The pure categories merely express the thought of an object in general in accordance with different *modi*. To apply categories to specific objects, we must

determine the concept of the transcendental object, through the category, in relation to sensible *data*. This determination is precisely what takes place through the act of abstraction. The result is a determinate concept fit for use in cognition.

This account of the formation of the categories finds the origin of the categories within the acts that produce sensible concepts. It is thus exactly in line with Kant's description of the physiological derivation of the categories as a project of explaining the 'occasioning causes' of the categories by tracing their origin to the 'first endeavors of our power of cognition to ascend from individual perceptions to general concepts' (A86/B118-19). And an upshot of the account is that it provides a basis for Kant's claim that the derivative acquisition of determinate concepts presupposes the original acquisition of the categories. The acquisition of a sensible concept is simultaneously the determination of a category; thus no sensible concept would be possible without prior possession of the category. Still, the acquisition of the category does not take place through a separate series of acts that must be brought to completion before the process of acquiring empirical concepts can get started; instead, the original acquisition of the categories is immanent to the process of concept formation by which the mind ascends from individual perceptions to determinate sensible concepts.

Conclusion to Part III

When Kant discusses the logical acts, he does so primarily in unpublished notes and in the context of ‘general logic’, a science that abstracts from the particular content of concepts. Kant’s readers have thus tended to think that the doctrine of the logical acts is marginal to the central doctrines of his published works of transcendental logic. But what I have tried to show throughout this part of the dissertation is that the doctrine of the logical acts is integrally connected with the most famous doctrines propounded within published works. In my interpretation of comparison, reflection, and abstraction, I have recruited the notions of synthesis, schemata, categories, and apperception; and conversely, I have attempted to use the doctrine of the logical acts to shed light on these famous doctrines.

To see that the topic of concept formation is at the front of Kant’s mind throughout the *Transcendental Analytic*, let us remind ourselves of the way in which Kant states the conclusion of the *Transcendental Deduction* in both editions. At the end of each *Deduction*, Kant states his conclusion in terms of the notion of an agreement relation between apprehension and the unity of apprehension:

In accordance with this principle [*viz.* the principle of the unity of apperception] all appearances whatever must come into the mind or be apprehended in such a way that they are in agreement with the unity of apperception [*sie zur Einheit der Apperzeption zusammeneinstimmen*]

A122

In such a way it is proven that the synthesis of apprehension, which is empirical, must necessarily be in conformity with [*notwendig gemäß sein müsse*] the synthesis of apperception, which is intellectual and contained in the category entirely a priori.

B162n

Now, as we have seen in some detail, precisely what it is for apprehension to agree with the unity of apperception is for the manifold to be apprehended in such a way that it admits of determination through a logical function of judgment. And it is only manifolds that have been apprehended in this way that are subject to reflection. Since Kant has argued that all manifolds are apprehended in this way, he can take himself to have answered the question he had set himself at the outset of the Deduction, why the understanding finds appearances in accord with conditions of its synthetic unity. The Deduction is thus nothing other than an inquiry into the conditions under which concept formation is possible: an account of the conditions under which sensible representations can constitute matter for a possible concept.

Final Conclusion

To conclude our investigation, I want to dwell on some of the ramifications of the account developed in the previous pages. I will begin by discussing several of the implications of our findings for Kant's theory of concepts. In closing, I dwell on the broader picture that has emerged of the relationship between understanding and sensibility.

1. Concepts and Rules

In Chapter 2, we saw that Kant scholars almost universally identify concepts with rules. Some readers make the equation casually, while others base whole readings around it. Now, there are two ways of construing the concepts as rules reading: either as a metaphysical claim about what concepts *are* or as a semantic claim about what they *represent*. Understood in the metaphysical register, the view has the revisionary implication that concepts should not be situated as a kind of mental representation. Understood in the semantic register, the view is less revisionary: it assumes a conventional account of the kind of entity a concept is (namely, a mental representation) and then advances a specific claim about the representational contents of concepts. I want to return now to both variants of the proposal, beginning with the more radical variant.

As I pointed out in Chapter 2, the concept as rule reading, in its metaphysical guise, is particularly germane to conceptualist readers.¹⁵¹ Still, the reading is not the exclusive property of conceptualists, and there are numerous texts that could suggest the reading to an unbiased reader. What is very clear is that Kant recognizes a close connection between concepts and rules. If we are to depart from the proposal, then, we will need an alternative account of the relationship between concepts and rules, one that brings them into close proximity without collapsing the distinction between them.

And that, I think, is one thing that the account developed in part 3 does. On the account I developed there, rules of apprehension are conditions on the possibility of concepts. These rules govern the synthesis of productive imagination *via* schemata. Were they not both efficacious and discoverable, concepts would be impossible: unless our imaginative representations were subject to these rules, the understanding would not find appearances in accord with the conditions of its synthetic unity, for it is only as subject to a common rule of apprehension that apprehended representations can constitute matter for a common concept. And the reflection that generates the thought-forms for concepts represents specific ways in which manifolds, in virtue of their rules of apprehension, are determined with respect to logical functions. It is thus no surprise that the understanding, the faculty of concepts, is at the same time and for that very reason a ‘faculty of rules’ — that is, a faculty that is constantly busy poring through appearances with the aim of finding some sort of rule in them. Could it find no such rule, it could never form a concept.

¹⁵¹ Why? Because these readers want the understanding to play a role in generating intuitions. Now, since intuitions are the proximal products of sensibility, not understanding, this role cannot be direct, and the concept as rule proposal gives conceptualists a way of identifying an indirect role for concepts in intuition-production. On the (not unreasonable but nevertheless, I have argued, false) assumption that imagination produces intuition, the conceptualist then argues that concepts (at least the categories) are rules that govern the imagination’s synthesis, thereby indirectly contributing to intuition formation.

But it follows from the integral role that rules play in concept formation that concepts are not simply the same as these rules. The rule is more metaphysically basic than the concept: it is a condition on the possibility of the concept. The concept itself is a mental representation that comes into being in part through the discovery of a rule of apprehension. The two are thus integrally related but not identical.

Is it then correct to say that the concept *represents* a rule? In general, the answer to this question is 'no'. We saw in Chapter 7 that, in the formation of determinate concepts through the transition from reflection to abstraction, the rule of apprehension drops out of the content of the concept. Abstraction simply represents a feature of a manifold as being determined with respect to a logical function of judgment. We could not have arrived at this eventual representational content had we not been conscious of a rule of apprehension, but reference to the rule is absent from the content of the determinate concept once formed.

Now, I think that rules of apprehension do enter into the content of categories, albeit at a very high level of abstraction. Perhaps the most perspicuous rendering of the content of a category, say, the category of substance, would be the following: the category of substance represents *that feature of an object in virtue of which it is subject to a rule of apprehension such that the manifold of its intuition is determined with respect to the categorical function of judgment*. At a very high level of generality, then, the rule of apprehension does end up in the content of the category. But it would be misleading in the extreme to propose that the concept of a rule gives us an exhaustive characterization of the representational contents of concepts just as such, or even an exhaustive characterization of the representational contents of categories.

2. Conceptual Universality

In Chapter 1, we saw that Kant claims that concepts are universal representations, differing in this fundamental respect from intuitions, which are singular. I distinguished two ways of understanding this contrast. We could understand the contrast in *extensional* terms, as drawing a distinction between the number of entities to which the two kinds of representation could apply. Intuitions, in virtue of their causal relation to an affecting object, can at most ‘apply’ to one object; concepts, because they can be taken up in acts of judgment, can apply to pluralities of objects. There is no doubt that the contrast does have this extensional dimension, but I also suggested that we can understand it as an intensional contrast between the *ways* in which the two kinds of representations represent. The *reason* that concepts can be employed to represent multiplicities of objects, I suggested, is because they represent a kind of entity that can itself be common to several objects. I recruited a distinction Heidegger draws between *Gemeinheit* — ‘commonness’ — and *Allgemeinheit* or *Allgemeingültigkeit* — universality or universal applicability — and suggested that the extensional universality of concepts (their *Allgemeinheit*) depends upon their intensional universality — the fact that concepts represent a distinctive kind of *Gemeinheit*.

Chapters 7 and 8 give us the resources to spell out that *Gemeinheit*. I argued in Chapter 7 that the determinate concepts formed through abstraction represent a ‘feature’ (*Beschaffenheit*) as a mark (*Merkmale*). That is, a concept represents an element of a manifold as determined with respect to a logical function of judgment, which is to say, it represents an element of a manifold as the ground of an exercise of the discursive faculty of cognition. Now, this way of construing the content of concepts makes it sound as if concepts represent properties of *representations* rather than properties of *objects*. But I think that Kant’s position is in fact that we are free to move between object-level and representation-level descriptions of conceptual content. Kant identifies the *synthetic* unity of apperception with the *objective* unity of apperception. Insofar as the manifold

of a given intuition is united in a single consciousness in accordance with the transcendental unity of apperception, this manifold is *thereby* related to an object. Every concept that represents a specific way in which a manifold admits of unification in accordance with the transcendental unity of apperception for that very reason qualifies as a determination of the concept of an object in general. We can therefore choose between saying that a specific determinate concept represents that property *of a representation* in virtue of which it can be brought to the objective unity of apperception, and saying that the concept represents that feature *of an object* in virtue of which its intuition can be brought to the synthetic unity of apperception.

My account of the content of concepts is thus in the family of views that situate the contents of concepts at the level of *properties*. For a shorthand, we could say that on my account concepts represent *cognitively significant* properties of objects: that is, properties of objects in virtue of which the intuition of those objects can be brought to the objective unity of apperception.

Now, since I have situated the contents of concepts at the level of property, in opposition to the much more demanding account of conceptual contents as *essences* that Newton advocates, I need to contend with her claim that an account such as mine collapses the distinction between conceptual generality and the mere classificatory generality characteristic of animal representation. Now, let me begin by noting that I am extremely sympathetic to Newton's insistence that the universality distinctive of concepts is not the only kind of universality that can be present in consciousness. Here, Newton is an important ally in my project of defending the account of the logical acts against the typical circularity objection, which tacitly assumes that Kant simply equates conceptual representation with universal representation *tout court*. But I also think that my account is equipped to show why this assumption is false.

For in the course of our investigation, we have already encountered multiple levels at which universality is present in our representation in the absence of conceptuality. *First*, we have seen that transcendental schemata represent rules of apprehension. These rules, Kant says, are ‘in themselves universal’: the rule is a *Gemeinheit* common to every representation apprehended in accordance with it. But, as I argued in Chapters 6 and 8, it is extremely important on systematic grounds that we keep schemata separate from concepts. Thus, here we have a species of representation that represents universality but is not yet conceptual.

A case that we did not discuss but which might plausibly be thought of as another level of pre-conceptual universal representation is the image that the productive imagination produces in accordance with schemata. Heidegger calls such images ‘schema images’ and claims that the images themselves have a kind of general content, which they inherit from the way in which we are conscious of them in relation to a range of further possible images. Here is Heidegger discussing the Schema Image of a house:

In what way does the look of this house show the ‘how’ of the appearing of a house in general? Indeed, the house itself offers this determinate look, and yet we are not preoccupied with this in order to experience how precisely this house appears. Rather, this house shows itself in exactly such a way that, in order to be a house, it must not necessarily appear as it does. It shows “only” the “as...” in terms of which a house can appear.

‘This ‘as’, which goes with the ability something has to appear empirically, is what we represent in connection with this determinate house. A house could so appear. By appearing within the range of possibilities of appearing, this house which is straightforwardly at hand has assumed one determinate appearing. But the result of this assuming interests us just as little as the result of those determinations that have failed due to the practical appearing of other houses. What we have perceived is the range of possible appearing as such

Heidegger 1929/1997: 67

On this account, the image itself represents a *Gemeinheit* — a phenomenal ‘look’ common to objects of a certain kind. Heidegger himself would deny that schema images are an instance of preconceptual universality because he effectively equates concepts and schemata, and so he would claim that the universality of the image is imparted to it by what is ultimately itself a concept. But if we could take this account of Schema images and embed it in the preconceptual account of schemata that I have proposed, we would have a second species of preconceptual universality, at the level of the image.

Then, at the level of comparison, there is once again representation of a *Gemeinheit* that is not yet conceptual. For comparison, I argued in Chapter 6, represents the same rule of apprehension imaginatively represented at the level of schemata. But comparison is not a sufficient condition on concept formation and hence its outputs are not to be counted as concepts.

At all of these levels, the mind is sensitive to similarity-relations, but at none of these levels is it representing conceptually. And in every case what is missing is the same: consciousness of that which is represented as *a ground of cognition*. A concept does not merely represent a feature (*Beschaffenheit*), even a feature that is common to several manifolds. It represents a feature *as a ground of cognition* — as determined with respect to a logical function of judgment. And the capacity to represent a property in this way, we have seen, requires much more than the mere sensitivity to similarity-relations that underlies animal representation.

3. The Scope of Conceptual Representation

Now, our characterization of the contents of concepts leaves us with a question about the scope of conceptual representation. Concepts, we have said, represent cognitively significant properties. If every property of every object is a cognitively significant property, then there is no

region of objective reality that is in principle outside the scope of conceptual representations. But if there is a class of cognitively insignificant properties, those properties will be impervious to concepts.

Are there cognitively insignificant properties? One way in which a property of an object would be cognitively insignificant is if it could not be intuited at all. If a property of an object could not be intuited, then *a fortiori* the intuition of that property could not be brought to the objective unity of apperception (for there would *be* no such intuition). But I suspect that Kant ties the notions of intuition and objectivity so close together as to preclude the possibility of such a property: in the *Prolegomena*, in a passage to which we will return, Kant maintains that ‘to each object there must... correspond some possible intuition or other’ (*Prolog* 4:317). It thus does not seem that Kant recognizes any daylight between i) being an object, and ii) being an object of a corresponding intuition. I take that to imply further that there is no property of an object that is not also in principle representable in a corresponding intuition.

But appeal to the notion of an un-intuitable property is not the only strategy for defining a non-empty class of cognitively insignificant properties. A property would still be cognitively insignificant if it could be intuited but were also such that it could not be brought to the objective unity of apperception.

Now, a significant subclass of the properties that we humans represent in spatiotemporal intuition are such that we cannot apprehend them. Due to limitations of our faculty of imagination, the range of properties we can intuit outstrips the range of properties we can apprehend.¹⁵² Must Kant deny that we can form concepts of these intuited but non-apprehensible properties?

¹⁵² For very helpful discussion of this point, Tracz 2019.

In his discussion of the postulate for actuality, Kant discusses a hypothesized ‘magnetic matter penetrating all bodies’. This magnetic matter is in one sense outside of the scope of apprehension given contingent features of our constitution: ‘an immediate perception of this matter is impossible for us’ (A226/B273). Yet Kant claims that we cognize the existence of this matter; clearly, then, we can form a concept of it. I think the reason why Kant holds that this property of objects falls within the scope of conceptual representation is that we *do* in some sense apprehend this matter. For Kant says that we ‘append’ this matter to ‘perception’ in accordance with empirical laws. When we immediately perceive ‘attracted iron filings’, we append magnetic matter to our perception — which I take to mean that we indirectly perceive the magnetic force by directly perceiving its hypothesized consequence. There is thus a sense in which intuited properties that cannot be directly apprehended can nonetheless be indirectly apprehended *via* their effects, which brings them into the sphere of cognitive significance.

Given that Kant has argued that all apprehension agrees with the unity of apperception, if every property given in spatiotemporal intuition can in principle be apprehended — either directly or indirectly *via* its effects — Kant is thus entitled to conclude that every such property is potentially cognitively significant. Of course, this does not commit him to the implausible claim that the human mind already has concepts of all such properties; what he can conclude is that no such property is in principle beyond the reach of human concepts.

Moving from the spatiotemporal domain, there is room in logical space for properties of objects that *cannot* be intuited by humans but *could* be intuited by other kinds of mind — either discursive minds with non-spatiotemporal forms of intuition or intuitive intellects. *We* cannot directly or indirectly perceive these properties. Is there any sense in which we could nevertheless represent them as cognitively significant? In principle, yes. We could conceptually represent these

properties *indirectly* by forming second-order concepts of first-order concepts of them. A first-order concept of a property is available to a mind that apprehends the property (directly or indirectly). But a second-order concept of a property would be available if we could form a concept of an understanding for which first-order concepts of the property are possible. In forming the concept of such an understanding, we could then represent the property indirectly, as the object of a first-order concept that such an understanding could form.

The problem, though, is that Kant appears to deny that we *can* form concepts of non-human minds:

[T]he human understanding cannot even form for itself the least concept of another possible understanding, either one that would intuit itself or one that, while possessing a sensible intuition, would possess one of a different kind than one grounded in space and time.

B139

If we cannot form the concept of such a mind, then we cannot form a concept of the objects that such a mind would form concepts of, and that leaves it unclear how we could form concepts of such objects at all. Kant appears to reason in exactly this pattern in the following passage from the *Prolegomena*, to which I have already alluded:

[I]ntelligible means *objects* insofar as they can be represented *only through the understanding*, and none of our sensory intuitions can refer to them. Since, however, to each object there must nonetheless correspond some possible intuition or other, we would therefore have to think of an understanding that intuits things immediately; of this sort of understanding, however, we have not the least concept, hence also not of the *intelligible beings* to which it is supposed to refer.

Prolog 4:316n

Note the inference pattern in this passage: we do not have a concept of an understanding that would intuit things immediately; ‘hence also’ we lack concepts of the objects that would correspond to its intuitions. We might think of this claim as unpacking what Kant means when he denies in the B-Deduction that the categories have any significance for an intellect that would intuit (B145).

Kant seems, then, to limit the reach of the conceptual to the domain of the objects of minds we can conceive of, and this limitation seems to entail that we cannot form concepts of the objects of intuitive intellection.

But this apparent limitation of our concepts is utterly perplexing given other claims. In the B-Deduction, Kant maintains that

the categories are not restricted in **thinking** by the conditions of our sensible intuition, but have an unbounded field, and only the **cognition** of objects that we think, the determination of the object, requires intuition

B166

In the B-Preface:

I can **think** whatever I like, as long as I do not contradict myself, i.e., as long as my concept is a possible thought, even if I cannot give any assurance whether or not there is a corresponding object somewhere within the sum total of all possibilities.

Bxxvi

And then in the Amphiboly, Kant says that the concept of a *noumenon* — that is, the concept of the object of an intuitive intellect — is one that ‘one thinks, to be sure, without contradiction’ (A291/B347). As *per* one set of passages, we have ‘not the least concept’ of the objects of an intuitive intellect; as *per* another, we think such objects without contradiction, to be sure.

And really, Kant needs *noumena* to be thinkable, for the very thinkability of the doctrine of transcendental idealism depends on there being a coherent conceptual content corresponding to the word ‘*noumena*’; otherwise, there would be no judgable content corresponding to sentences such as ‘*noumena* cannot be cognized by humans’. I think the state of play here is that there is a genuine tension in Kant’s view. Kant wants —*needs*— it to be possible for the human mind to use concepts to represent objects that cannot in principle be cognitively significant for us. But he has a theory of concepts that makes it extremely difficult for him to secure this possibility.

My suspicion is that the rhetoric in the first set of passages — which denies that we can form ‘the least’ concept of a non-human intellect — is ultimately too strong. I think that what Kant really means to deny in these passages is that we can form any ‘positive’ concept of such a faculty and its corresponding objects. We obtain the concept of an intuitive intellect not by fusing our general concept of a mind with some additional conceptual content that would allow us to positively characterize such a mind, but simply by negating elements of our concept of the human mind to form the bare concept of a mind that does not think. We can then avail ourselves of a correspondingly bare concept of the objects of such a mind — this, I think, is what Kant has in mind when he claims that the ‘concept of a *noumenon* is merely a **boundary concept**, in order to limit the pretension of sensibility, and therefore only of negative use... it is connected with the limitation of sensibility, yet without being able to posit anything positive outside of the domain of the latter’ (A255/B310-11).

Thus, when Kant denies that the categories have significance for a nondiscursive intellect (B145), we should not take him to mean that the categories cannot be employed to represent the objects of such an intellect. If the human mind can represent such objects, it must do so *via* the categories. Instead, I think that the claim Kant is making in the B-Deduction is simply the claim that such an intellect would not *itself use* the categories — which is consistent with claiming that *we ourselves* can use the categories to think both this mind and its corresponding objects.¹⁵³ A later essay clarifies Kant’s position on the relationship between the categories and the intuitive intellect:

¹⁵³ Both William Bristow (2002) and Markus Kohl (2015) argue that the categories cannot be used to think *noumena*. They thus argue that Kant places the human mind at two degrees of representational removal from *noumena*: not only is sensibility precluded from representing *noumena*, but so is understanding. *Noumena* are outside the scope of cognition, then, not simply because they cannot be intuited but also, more radically, because they cannot be thought. But this conclusion, it seems to me, is simply a *reductio* of their arguments, for any reading on which *noumena* are unthinkable renders transcendental idealism literally unthinkable. One reader who embraces and explores this conclusion is Adrian Moore (1997). Moore appeals to the early Wittgensteinian distinction between saying and showing to argue that transcendental

It should be noted, however, that these categories, or predicaments (as they are otherwise called), presuppose no particular kind of intuition which (like that which alone is possible to us men) is sensory as space and time are; they are merely thought-forms for the concept of an object of intuition as such, of whatever kind that may be, and even if it were a super-sensible intuition, of which we are unable to frame any specific concept. For we must always frame to ourselves through pure understanding a concept of an object of which we wish to judge something a priori even though we subsequently find it to be transcendent.

wF 20:272

We cannot form a *specific* — that is, I take it, positive — concept of an intuitive intellect; nevertheless, we can form some concept of such an intellect, and corresponding to that concept we can use the categories to ‘frame for ourselves through pure understanding’ a concept of the objects of such an intellect.

4. Concepts and Judgment

In Chapter 1, I contested an interpretation that I labeled *SPJ*, on which judgments are ‘semantically prior’ to concepts. As Leland expresses that view, it holds that ‘[j]udgments are prior to concepts in the semantic order of explanation, such that conceptual content originates in the propositional contents expressed in acts of judgment’ (Leland 2019: 281). This conception of the relationship between concept and judgment dovetails with what in Chapter 2 I called the No

idealism cannot be said but only shown. Thus, Moore accepts that transcendental idealism is, strictly speaking, nonsense; still, it is informative nonsense. But I think that this reading should be either off the table or a last resort. And we do not need to accept the reading on the basis of Kohl or Bristow’s arguments because both authors fallaciously move between the two claims I distinguished above. That is, they move from i) the claim that an intuitive intellect would not use categories to ii) the claim that the categories have no significance with respect to the object of an intuitive intellect. Marshall (2018) presses roughly this criticism specifically in relation to Kohl’s argument.

Special Object view, which denies that there is any distinctive kind of entity that concepts represent prior to and independently of their use in judgments.

In the first part of the dissertation I argued, negatively, that neither SPJ nor the No Special Object view can be read off from Kant's famous claims that concepts are mediate representations that can only be 'used' in judgment. Moreover, I argued that the best explanation of Kant's advocacy of the Universality Thesis — that concepts are universal representations — has him assigning concepts immediate representational contents — that is, contents that they possess prior to and independently of their combination with other concepts in judgment.

The picture developed in part 3 bears out my opposition to SPJ and the No Special Object view. There, I cast reflection and abstraction as the operations that generate conceptual content by representing a manifold as determined with respect to a logical function of judgment. On this picture, the determinants of the content of the concept are, on the one hand, the nature of the manifold that constitutes its matter, and, on the other hand, the transcendental unity of apperception. Whatever relations that the concept can subsequently enter into with further concepts are explained by, not explanatory of, the content that the logical acts generate.

Nevertheless, there is a very important sense in which judgment *is* prior to concept — it is simply not the sense that the SPJ reader wants. For we saw that the content of every concept is fixed with respect to the logical functions of judgment. These functions, as the modes of the activity by which any discursive understanding can bring a sensible manifold to the objective unity of apperception, exist prior to determinate concepts, and in the absence of these functions, concepts would be impossible. That is precisely what Kant claims, for he says that concepts *rest on functions*. But from the fact that the forms of judgment are metaphysically prior to concepts, it

does not even begin to follow that ‘conceptual content originates in the propositional contents expressed in acts of judgment’.

5. Understanding and Imagination

I would like to conclude the dissertation by dwelling on the account that has emerged of the nature of the relationship between understanding and sensibility. In the Introduction to this dissertation, I expressed my sympathy with the animating idea behind conceptualism. Conceptualists are rightly concerned to explain how concepts and intuitions could stand in the relations required for cognition, given Kant’s insistence on the radical gulf between them. As against the Leibnizeans and Lockeans, Kant wants to insist that the difference between concepts and intuitions is one of both origin and content; but that leaves us with a question about how concepts and intuitions could interact in the manner required for cognition. The conceptualist then proposes to find traces of the understanding’s activity in the genesis of intuition, with the hope that this interaction of faculties will get us some of the way toward understanding how cognition is possible.

The view I expressed in the introduction and attempted to bear out throughout Part 2 of the dissertation is that the conceptualist project grows out of a profound misconstrual of the theoretical role of the doctrine of imagination. Whereas the conceptualist wants to cast the synthesis of apprehension as the act that first generates intuitions — hence situating the doctrine of imagination within Kant’s account of intuition formation — I have argued that its fundamental place is within Kant’s account of concept formation. Intuitions, I have argued, exist independently of the actions of the imagination, which means that the conceptualist project of finding a pathway from concept to intuition *via* imagination is doomed to fail. But I suggested that the proper response here is not

to reject the proposal that some kind of faculty-interaction underwrites the possibility of cognition, but instead to reverse the relationship between the faculties and look for signs of the influence of sensibility in the formation of concepts. This orienting project guided the account that I have developed throughout the dissertation, and I would like to close by describing the view that has emerged of the nature of the relationship between understanding and sensibility.

We can describe a spectrum of possible views of this relationship. At one end is what I will call the ‘merely causal’ view, and at another end is the ‘identity’ view. The first view, I think, is far too weak, the second too strong. The view that I have developed throughout the dissertation attempts to chart a middle path.

The merely causal view holds that understanding is dependent upon sensibility in the following minimal sense: until objects affect the mind and thereby produce sensible representations, the understanding is a dormant faculty; it is only through sensible representation that it is stimulated or awakened into activity. There is no doubt that Kant has sensibility playing a role of this kind, for he says as much at the very beginning of the *Critique*:

There is no doubt whatever that all our cognition begins with experience; for how else should the cognitive faculty be awakened into experience if not through objects that stimulate our senses and in part themselves produce representations, in part bring the activity of our understanding into motion to compare these, to connect or separate them, and thus to work up the raw material of sensible impressions into a cognition of objects that is called experience?

B1

Kant is as explicit as one could want: the only way in which the understanding could be ‘put into motion’, or ‘awakened into experience’, is through the stimulation of our senses. No stimulation of our senses, no awakening of the understanding. Now, if one holds that this minimal causal dependency *exhausts* the understanding’s dependency on sensibility, then one holds what I will call the merely causal view.

At the other end of the spectrum is what I call the ‘identity view’. This is the view advocated by Heidegger. Heidegger claims that transcendental imagination is the ‘common root’ of sensibility and understanding, which constitutes the ‘original being’ of understanding. At bottom, then, understanding comes out on this view as *identical* to the faculty of imagination. In Chapter 8, we saw Heidegger, like Longuenesse, pointing to a special ‘prediscursive’ use of the understanding which takes place *via* schemata, a kind of ‘thinking’ which he claims to be prior to ‘judging’. For Heidegger, this prediscursive use is the most fundamental operation of the understanding. Yet it is *imagination* that enacts this pre-judgmental thinking:

[P]ure schematism, which is grounded in the transcendental power of imagination, constitutes precisely the original Being of the understanding, the “I think substance,” etc... Now if Kant calls this pure, self-orienting, self-relating-to..., ‘our thought’, then ‘thinking’ this thought is no longer called judging, but is thinking in the sense of the free, forming, and projecting (although not arbitrary) ‘conceiving’ of something. This original ‘thinking’ is pure imagining.

Heidegger 1929/1990, 106

Now, Heidegger thinks that Kant ‘shrinks back’ from his recognition of the original identity of understanding and imagination, re-writing the *Critique* with the primary intention of forcing the two faculties further apart than they had been in the first edition (Heidegger 1929/1990, 112–120). But even as a reading of the A-edition, Heidegger’s proposal is too strong, for I argued throughout Part 3 of the dissertation that collapsing the distinction between concept and schema, which both Longuenesse and Heidegger are ultimately guilty of doing, seriously distorts the role of imagination in Kant’s analysis of the faculty of understanding.

Nevertheless, I think that Heidegger’s reading is rich in insight and is a helpful corrective to the merely causal account of the relationship between understanding and sensibility. What I have tried to show is that we can retrieve these insights without simply collapsing the two faculties.

There are three respects in which the merely causal account does not go far enough.

First, the account assumes that the faculty of understanding already exists, albeit in a ‘dormant’ state, prior to being stimulated by the impressions of the senses. But I have argued that this is false. Sensibility does not bring an already-existent faculty *into exercise*: it plays a role in bringing the faculty of understanding *into existence*. For the faculty of sensibility (which jointly comprises sense and imagination) is among the subjective sources that, according to Kant’s *Zergliederung* of the faculty of understanding, make possible the understanding itself. As Kant says at the close of the Schematism chapter, sensibility ‘*realizes* the understanding at the same time as it restricts it’ (A147/B187, my emphasis).

Second, the merely causal account is compatible with thinking that, once it is stimulated into activity, the understanding itself can source its own matter and thus produce pure intellectual concepts whose content is entirely insulated from sensibility. Indeed, the way that Kant continues the passage at the opening of the B-Introduction encourages this sort of picture:

But although all our cognition commences **with** experience, yet it does not on that account all arise **from** experience. For it could well be that even our experiential cognition is a composite of that which we receive through impressions and that which our own cognitive faculty (merely prompted by sensible impressions) provides out of itself

B1

Once the understanding has been prompted into action by sensible impressions, on this picture, it discovers in itself a store of purely intellectual matter, which it then converts into categories. The resultant concepts are themselves devoid of any reference to sensibility, even though, *via* schemata, they can be applied to objects of intuition.

I have contested this account of the sense in which the categories are pure intellectual concepts that are given *a priori*. The matter for the categories, I have argued, is *given* through the understanding, but it does not *originate* in the understanding. For the categories represent the

fundamental kinds of agreement that can exist between the unity of apperception and the manifold of a given intuition, and we could not represent these agreement-relations independently of the acts of imagination that bring given manifolds to consciousness. Thus, we can discover traces of sensibility even in the contents of the pure intellectual concepts of understanding, which already orient them toward the sensible domain (though not the spatiotemporal domain).

And we discover traces of sensibility in the *essence* of understanding, too. This brings us to the *third* respect in which the merely causal account does not go far enough: it is compatible with a conception of the kind of faculty the understanding *is* that makes no reference to sensibility. Compatibly with the merely causal account, we could describe the faculty of understanding simply as a faculty of thinking — a faculty that, as a contingent matter of fact, needs to be activated by sensible prompting but which is not oriented toward sensibility by its very nature. We would then need to explain how it is that the understanding can apply its concepts to sensibly given objects. But discursive understanding is the realization of the faculty of apperception in relation to a sensible manifold. It is oriented toward sensibility from the very start — what is mysterious is not how the understanding can apply its concepts to sensibly given objects but how it can apply its concepts to *anything but* sensibly given objects. For its characteristic activity is the activity of ‘bringing the synthesis of the manifold that is given to it in intuition from elsewhere to the objective unity of apperception’. As Kant defines the faculty at the outset of the *Transcendental Analytic*: ‘[t]he faculty for **thinking** of objects of sensible intuition... is the **understanding**’ (A51/B75, my italics). To *understand* is, in the first instance, to think of an object of sensible intuition. In this dissertation, I have attempted to chart the complex interplay of capacities that makes this achievement possible.

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