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Kant's Theory of Intuition: On Singularity and Unity

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Kant's Theory of Intuition
On Singularity and Unity

Rahel Villinger

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Abstract

The dissertation defends an interpretation of Kant's critical philosophy on which singular and immediate representation of objects is independent of the kind of unity that is the characteristic contribution and function of discursive human understanding. It includes sustained critique of a widely accepted reading according to which Kant holds that the singularity of space and time, as the forms of reception and individuation of human sensible representation, is itself an achievement of understanding *qua* spontaneous capacity of cognition. The argument draws on a neglected critical doctrine according to which the attribution of perception and imagination to non-rational animals and not-yet-rational children cannot be excluded a priori. Kant embraces a view on which empirical intuitions and their associative-imaginative reproductions are indeterminate and not distinguished from their objects prior to the application of understanding. Further considerations establish that space and time, as singular forms of all human sensible intuitions, could not in principle depend on discursive understanding in Kant's sense. The critical epistemology entails that humans sensibly represent an actual infinity of continuous filled space and time on the occasion of affection; further, that a discursive understanding cannot represent such infinity. It follows that the discursive, i.e. successively operating understanding Kant attributes to human beings cannot in principle determinately represent, at each moment of self-conscious perception, the singularity and continuity of spaces given in receptive intuition. An inherent limit of conceptual representation in Kant's sense, one certainly absent from later logics allowing the representation of infinitary structures, thus constrains his account of the relation of sensibility and understanding. It is further argued that interpretations on which the singular form of spatiotemporal intuition depends constitutively upon understanding cannot explain the unity of human spontaneity itself as an irreducibly discursive (non-intuitive) self-consciousness. Finally, the dissertation offers a reading of the project of a Transcendental Deduction of the Categories as defensible on the assumption that intuition of objects is entirely independent of discursive understanding. The only possible role of such an understanding in cognition according to the tenets of critical philosophy is the combination of several intuitions in accordance with laws of unity.

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Note on Sources

Quotations from Kant's works, apart from the *Critique of Pure Reason*, cite the volume and page number of the Academy edition (*Gesammelte Schriften ed. Königlich Preussische Akademie der Wissenschaften*, Berlin: de Gruyter, 1902- , Volumes 1–29). Quotations from the *Critique of Pure Reason* are cited according to the standard A and B pagination for the first and second editions, respectively. Translations of texts are my own, though I have often consulted and made use of different available translations. For translation of the text of the *Critique of Pure Reason*, specifically, I have made extensive use of Paul Guyer's and Allen Wood's translation in P. Guyer and A. Wood (eds. and trans.), Cambridge: Cambridge UP, 1998.

Abbreviations used in Citing Kant's Works:

Anthropology	Anthropologie in pragmatischer Hinsicht (1798) [*Anthropology from a Pragmatic Point of View*], Ak 7.
ID or *Dissertation*	De mundi sensibilis atque intelligibilis forma et principiis (1770) [*On the form and principles of the sensible and intelligible worlds*], Ak 2.
Correspondence	Philosophische Korrespondenz (1759–1799) [*Philosophical Correspondence*], Ak 10–11.
Critique	Kritik der reinen Vernunft (1781, 1787) [*Critique of Pure Reason*].
KpV	Kritik der praktischen Vernunft (1788) [*Critique of Practical Reason*], Ak 5.
KU	Kritik der Urteilskraft (1790) [*Critique of the Power of Judgment*], Ak 5.
Logic	Logik (1800) [*Jäsche Logic*], Ak 9.
MSE	Die Metaphysik der Sitten (1797) [*Metaphysics of Morals*], Ak 6.

Logik Blomberg	Vorlesungen über die Logik Blomberg, Ak 24.
Logik Dohna-Wundlacken	Vorlesungen über die Logik Dohna-Wundlacken, Ak 24.
Logik Mrongovius	Vorlesungen über die Logik Mrongovius, Ak 29.
Logik Pölitz	Vorlesungen über die Logik Pölitz, Ak 24.
Logik Volckmann	Vorlesungen über die Logik Volckmann, Ak 24.
ME K	Vorlesungen über die Metaphysik, anonym, AK 28.
ME Mrongovius	Vorlesungen über die Metaphysik Mrongovius, Ak 29.
ME Pölitz	Vorlesungen über die Metaphysik Pölitz, Ak 28.
ME Volckmann	Vorlesungen über die Metaphysik Volckmann, Ak 28.
On a Discovery	Über eine Entdeckung, nach der alle neu Critik der reinen Vernunft durch eine ältere entbehrlich gemacht werden soll (1790) [*On a Discovery according to which any New Critique of Pure Reason is Rendered Dispensable by an Older One*], Ak 8.
On Kästner	Über Kästner's Abhandlungen [*Review on Kästner's Treatise*], in: Vorarbeiten zur Schrift gegen Eberhard, Kant's handschriftlicher Nachlaß, AK 20.
Progress	Welches sind die wirklichen Fortschritte, die Metaphysik seit Leibnizens und Wolf's Zeiten in Deutschland gemacht hat? (1804) [*What Real Progress has Metaphysics Made in Germany since the Time of Leibniz and Wolff?*], Ak 20.
Prol	Prolegomena zu einer jeden künftigen Metaphysik (1783) [*Prolegomena to Any Future Metaphysics*], Ak 4.
Reflexionen	Kant's handschriftlicher Nachlaß, Ak 17–18.
Religion Pölitz	Vorlesungen ueber die philosophische Religionslehre Pölitz, AK 28.
Subtlety	Die falsche Spitzfindigkeit der vier syllogistischen Figuren (1762) [*The False Subtlety of the Four Syllogistic Figures*], Ak 2.

Citation of Leibniz's Works:

Discours de métaphysique [*Discours on Metaphysics*] (1686), reprinted in: H. Lestienne (ed.), Paris: Vrin, 1975. Cited by section number.

Essais de théodicée [*Theodicy*] (1710), reprinted in: [G] C.I. Gerhardt (ed.), *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*, 7 vols, Berlin: Weidman, 1875–90, IV. Cited by section number.

Nouveaux essais sur l'entendement humain [*New Essays*] (1765), reprinted in: [G] V. Cited by reference to the page number of the English translation in G.W. Leibniz, *New Essays on Human Understanding*, P. Remnant and J. Bennett (eds. and trans.), Cambridge: Cambridge UP, 1982.

Principe de la nature et de la Grace [*Principles of Nature and Grace*] (1714), reprinted in: [G] VI. Cited by section number.

Principes de philosophie ou Monadologie [*Monadology*] (1714), reprinted in: [G] VI. Cited by section number.

Citation of Crusius's Works:

Entwurf der notwendigen Vernunftwahrheiten (1745), reprinted in: G. Tonelli (ed.), Christian August Crusius, *Die philosophischen Hauptschriften* Bd. 2, Hildesheim: Olms, 1964–87. Cited by section number.

Introduction

Humans and other Animals

In an early essay titled *The False Subtlety of the Four Syllogistic Figures* (1762) Kant reflects on a criterion for defining what he calls "the higher power of cognition." This power, Kant argues, must consist in the capacity to judge,[1] which marks the difference between rational and non-rational animals:

> [T]he higher power of cognition rests absolutely and solely on the capacity to judge. Accordingly, if a being can judge, then it possesses the higher capacity of cognition. If one has cause to deny of this being that it possesses this capacity, then that being is incapable of judgment (…) This consideration may induce us to think more carefully about the essential difference between animals endowed with reason and those not so endowed. If one succeeds in understanding what the secret power is which makes judging possible, one will have solved the problem. My present opinion tends to the view that this power or capacity is nothing other than the capacity of inner sense, that is to say, the capacity of making one's own representations the objects of one's thoughts. This capacity cannot be derived from some other capacity. It is, in the strict sense of the term, a fundamental capacity, and can, in my opinion, only belong to rational beings. But it is upon this capacity that the entire higher capacity of cognition is based (*Subtlety* 2:59f).

[1] Béatrice Longuenesse proposes that in some contexts there is a relevant distinction between Kant's use of the term "capacity [*Vermögen*]" and his use of the term "power [*Kraft*]." A capacity or faculty (in Latin, *facultas*) is a potential to act, whereas a power or force (in Latin, *vis*) is the actualization of such a potential *on the occasion that it is determined to be so actualized by external conditions*. In particular, Longuenesse suggests that the *capacity to judge* as exposed in the Metaphysical Deduction of the Categories is a system of logical forms, which is actualized as *the power of judgment* "in relation to sensory perceptions" (Longuenesse (1998), 8). This actualization is the topic of the Analytic of Principles of the *Critique* and also the topic of the *Critique of the Power of Judgment* (see Longuenesse (1998), 7f). While I believe that Kant in many places does not adhere to a strict distinction between the concept of a capacity and the concept of a power, I do think that there is an important truth to Longuenesse's suggestion, in particular as regards the relation between the Metaphysical Deduction of the Categories, on the one hand, and the Analytic of Principles, on the other hand. Since Kant however seems to use the terms interchangeably in many other texts that I will discuss in what follows (as e.g. in the *Subtlety*), I shall not observe a strict distinction between the terms, unless otherwise noted.

The question about the "secret power" of judgment is the question to which Kant would devote decades of work on a *Critique of Pure Reason*. Later synonyms for "the capacity to judge" are "discursive understanding," "human understanding," or "the capacity to think" (see A81/B107), where these terms are employed in the broadest sense to stand for "the entire higher capacity of cognition" in a human subject.[2] And as in the pre-critical *Subtlety*, the question of judgment will remain for Kant throughout his life a question about a human capacity, which distinguishes us as rational animals from non-rational as well as from purely rational beings. Judgment consists in the use of concepts as a means for cognition and does therefore not pertain to the most perfect and highest conceivable intellect. God, according to the critical conception of a possible divine understanding (and also according to traditional theological arguments), does not use concepts but knows everything immediately through intellectual intuition. Following an example given in the essay quoted above, the act of recognizing some door as belonging to a particular barn is a judgment by which I specify and make "distinct" for myself a concept of this barn (see *Subtlety* 2:59f). By means of a distinct concept I can then cognize the difference between it and another barn. This discursive way of cognizing an individual object, e.g. the particular barn, by means of another, more specific concept (e.g. a concept of some feature of the door of this barn), is different from a divine, immediate mode of knowing the individuum. Kant appeals in many places to the difference between a thinkable intuitive understanding and discursive understanding, and I will return to that difference, which was as such self-evident at the time. The *Subtlety*, however, motivates

[2] Unless otherwise noted, I will use these terms in what follows as synonyms, i.e., in the broad, all-encompassing sense to stand for "the entire higher capacity of cognition" in a *human* subject. The critical philosophy further distinguishes three sub-faculties within this higher capacity of human theoretical cognition. These are "understanding," "the power of judgment," and "reason," defined in a more specific sense and as distinct from one another (see A130f/B169; *Anthropology* 7:196f).

the quest of a *Critique of Pure Reason* by way of asking for an irreducible, specific difference in cognitive capacity between rational and non-rational animals. Thus the essay's concern is to delimit the capacity to judge as a *higher* capacity in human beings, i.e., to oppose it to another cognitive capacity in such sensible beings, which stands in an essential and distinctive way *below* the capacity to judge.

The passage quoted appeals to an "inner sense" as the capacity to make one's own representations the objects or object of one's thoughts, and claims that judgment is dependent upon it (see ibid.). Here we find an idea in relevant ways similar or identical to key aspects of the later theory of "transcendental apperception."[3] [4] First of all, the decisive capacity appealed to in the pre-critical text is said to be a "fundamental capacity in the strict sense of the term [*ein Grundvermögen im eigentlichen Verstande*]," because it cannot be derived from another capacity, and is the capacity which grounds the "entire higher power of cognition." This accords with the critical definition of a "fundamental power [*Grundkraft*]," which is the common origin or first principle of several derivative faculties or powers, and which cannot in turn be derived from a more radical cognitive capacity (see A648f/B676f). And it accords with the claims that transcendental apperception is the absolutely first principle of human thought in general (see A118n1) and the ground of the possibility of human understanding as such (see B131; B137). Apperception is even identifiable with the understanding (see B134n1), surely because

[3] The term "apperception" was familiar to the reader of Kant's time, introduced by Leibniz as a capacity of reflective awareness a rational soul has of itself and its own internal states. If the *Critique* calls this power "transcendental," then this means that apperception is for Kant a capacity or principle which explains the possibility of a priori cognition (see B25; B132).

[4] There is good evidence that especially in pre-critical and early critical periods Kant does not yet distinguish apperception or capacity of self-consciousness from the notion of an inner sense, while transcendental apperception in the *Critique* is of course not identical to what Kant *then* understands by inner sense. See for such evidence chapter one of this thesis and compare McLear (2011), 9f; Naragon (1990), 12f.

discursive understanding or the capacity to think itself is an "absolute unity" (A67/B92), namely a unity of a system of pure concepts (see A65/B90), or the "common principle" of this system (see A80f/B106). The fundamental principle of discursive understanding is thus not distinct from transcendental apperception.

But moreover, to paraphrase the *Subtlety*, the decisive capacity at issue is a capacity to produce higher order representations, whose intentional objects are other representations of objects, which can be recognized *as one's own* and *as representations*. On such basis, representations can be distinguished from one another and from their respective objects. This capacity thus involves two aspects that are intrinsically related on the view, and we will see these reappear in the critical account of transcendental apperception. First, a consciousness of a self or an I, and second, a reflective turn, by means of higher order representations, on other representations, which are, cognized *as representations* (whose objects are thereby made the mediate objects of the higher order representations), attributable to oneself.[5]

Kant also appeals to a capacity of intuitive representation in non-rational animals from pre-critical to late critical periods of his work.[6] In most cases he does so for the sake of delimiting what it is that ultimately grounds an essential difference between

[5] This need not and should not be understood as entailing that any action of human understanding, such as may be involved in empirical concept formation or even already in some perceptual experience of an object, presupposes an explicit reflection of a self-conscious I on itself. The claim is, now in the more specific terminology of the *Critique*, that an action of understanding that is necessarily involved in all human experience involves a function of unity of representations, which in some way depends upon "transcendental apperception." This unity (of representations) is a necessary condition of the possibility to recognize of several distinct representations that they all can be attributed to a single I. And therefore, this transcendental unity is a necessary condition of one's ordinary consciousness of the identity of one's empirical self (e.g., Rahel's self) through time. From a phenomenological perspective however, it is important to add that an attribution of representations to an I does not explicitly take place in most cases. Rather, the way in which a capacity of self-consciousness and understanding is necessarily involved in human experience is tacit and goes unnoticed in the ordinary case.

[6] See e.g. *KU* 5:464n1; *Anthropology* 7:196f; 7:397; *Logic* 9:64f; *Logik Dohna-Wundlacken* 24:702; *ME Volckmann* 28:448f; 28:753ff; *ME Poelitz* 28:274–277; *Logik Mrongovius* 29:906; 29:1047; *ME Mrongovius* 29:883f; 29:888f. These texts are discussed in detail in chapter one.

sensibility, the lower capacity of cognition which humans share with non-rational animals, and the entire higher capacity of cognition or capacity to judge, which distinguishes us as rational animals. In these cases, the argument turns almost invariably on one point. A capacity of apperception or self-consciousness grounds discursive representation and so judgment, and the reason that one must deny to animals the capacity to judge is that one can assume that they lack a capacity of apperception. Behind this *prima facie* unsurprising claim stands a series of further assumptions and arguments, which not only testify to Kant's attribution to animals sophisticated cognitive power. They motivate a re-reading of the *Critique's* account of human intuition and imagination with far reaching implications for an interpretation of the critical philosophy as a whole. Correctly understood, Kant has a far more commonsensical but nonetheless critical, non-dogmatic theory of non-conceptual representation than standardly assumed, which is highly interesting for philosophy today. But moreover, it must be noted that Kant's reflections on the possibility of non-rational animal cognition serve him as much to gain an understanding of sensibility as an independent capacity of cognition, as they serve him to gain a more precisely delimited account of apperception or human reason. And indeed the overarching thesis of what follows can be summarized as the claim that the substantial force of the critical notion of human understanding in the broadest sense, which the *Critique* defines as spontaneity, and as absolute unity grounding in transcendental apperception, can be seen only in the light of an interpretation which does not underestimate the power of sensibility as a capacity of cognition.

The challenging interpretive discovery is this: Kant maintains that animals intuit and imagine[7] objects and so possess, just as humans and God, a singular, non-discursive form of objective representation (God's intuition is intellectual or spontaneous, and it causes the existence of its object in the act of intuiting it. Intuition in sensible beings is received and does not cause the existence of its object). Passages such as the following show that Kant obviously thought it unproblematic to stipulate intuition and imagination of objects as independent of the capacity of apperception (below Kant uses "consciousness" as synonymous with "self-consciousness" or "the consciousness of making oneself one's own object of intuition") which grounds the higher, rational capacity in humans:

> How then can we conceive of animals as beings below humans? We think to ourselves higher beings that do not need the obstacle or support of matter, [and] on the other hand we can think of beings below us, whose representations are not merely different in degree but in kind. We perceive in ourselves a specific mark of understanding and reason, namely consciousness, [and] if I remove this there remains something, namely *sensus*, *imaginatio*, the former is intuition in the presence of, the latter without presence of the object [*erstres ist die Anschauung bey der Gegenwart, leztres ohne Gegenwart des Gegenstandes*], and we can also conceive of a reproduction, [and] prevision, without the slightest self-consciousness, it is simply that such a being cannot prescribe rules to itself, for to the possibility of a rule belongs the consciousness of making oneself the own object of one's intuition [*denn das Bewustseyn sich selbst zum eignen Gegenstand seiner Anschauung zu machen gehört zur Möglichkeit einer Regel*] (*ME Volckmann* 28:449).

Since non-rational animals lack a capacity of self-consciousness and therefore lack understanding, they cannot experience (nor could they contemplate, i.e. judge aesthetically) objects, on the critical argument to the conditions of the possibility of experience. The challenge, therefore, is to offer an interpretation which explains how

[7] Unless otherwise noted, it suffices in what follows to understand "imagination" as a singular and immediate representation of an object in the absence of this object, and "intuition" as singular and immediate representation of an object that may actually be present to the senses of a sensible subject, but need not be.

sensible intuition of objects can be independent of all understanding in accordance with the *Critique*, while human experience presupposes it.

On the definition at 9:91 of the *Logic*, a non-conceptual or synonymously, non-discursive representation of an object is a representation that is not general, but singular.[8] Singular or non-conceptual representations of objects are intuitions—this is the traditional, exhaustive, and exclusive opposition between exactly two kinds of representations of objects (for all possible subjects of objective representation), which Kant presupposes: An intuition is singular (see A25/B39; A32/B47; A320/B377; *Logic* 9:91) and immediately related to its numerically singular object (see A19/B33; A68/B93; A320/B377); a concept is general and mediately related to its (many possible) objects (see A320/B377).[9] On this definition of intuition, as an immediate and singular representation of an object, a standard and dominant reading[10] of the critical epistemology must either ignore or dismiss as dogmatic and thus incompatible with the

[8] "Concept," "discursive representation," and "conceptual representation" are synonyms and defined as a general representation of an object by Kant (see *Logic* 9:91). The *Logic* explicitly notes that as a general representation a concept is "opposed to" (ibid.) singular intuition.

[9] The interpretation of the criteria of singularity, generality, immediacy and mediacy is a matter of scholarly debate. For a brief survey of this debate, and an explication and defense of my reading of the criteria, see chapter three. For the purposes of this introduction and the first two chapters I will presuppose the uncontroversial view that the singularity of a representation entails that the representation relates to or represents exactly one, numerically singular object. Since singularity is opposed to generality, it follows that on Kant's theory, concepts must relate to or represent more than one (possible) object. According to the *Logic*, what we call singular terms today are for Kant general concepts of which we make singular "uses" by convention (see *Logic* 9:91; and compare Thompson, (1973), 329–333; Wilson (1975), 250ff; Parsons (1992), 64f). A concept relates in principle to more than one object, because any concept can be further specified; there is no *infima species* (see *Logic* 9:97).

[10] I count as "standard" reading of the critical epistemology any reading on which it follows that an intuition as such necessarily presupposes understanding in some form, minimally exerted through a synthesis of the imagination that is either governed by transcendental schemata or rules or "stands under" transcendental apperception in some other way. As I read them, the following exemplary works propose a standard reading, so understood, and a list could probably be given that would be much longer than this one: Cohen (1885); Natorp (1910); Strawson (1966); Sellars (1968); Henrich (1969); Pippin (1982); Longuenesse (1998); Kitcher (1990); Allison (2004); Longuenesse (2005); Pippin (2005); McDowell (1996); McDowell (1998a); McDowell (1998b); Van Cleve (1999); Engstrom (2006); Ginsborg (2006); Land (2006); Haag (2007); Engstrom (2008); Land (2008); Ginsborg (2008); Grüne (2009); Kitcher (2011); Grüne (2011); Höppner (2011); Friedman (forthcoming). An early and most pronounced standard reader of Kant was his student Jacob Sigismund Beck. Compare a letter from Beck at *Correspondence* 11:311.

Critique Kant's repeated claim that we have good philosophical reasons to attribute intuitions and imaginations to non-rational animals.[11] On the standard reading, it is a core thesis of the *Critique* that any representation of an *object* as such presupposes understanding. By "representation of an object," I mean any contentful relation of a representation to a reality that is in a relevant way ontologically independent of the subject (for example the complex representation of a particular spatial arrangement of two material objects, that really are spatially arranged in this way from the viewpoint of a possible sensible subject of the representation at some time, independently of whether a particular such subject perceives the objects from this standpoint at this time). Many important passages seem to express this thesis:

> *Understanding* is (...) the capacity of *cognitions*. These consist in the determinate relation of given representations to an object. (...) Consequently the unity of consciousness [*i.e., the unity of transcendental apperception*] ist that which alone constitutes the relation of representations to an object (B137).

Here and elsewhere[12] in the *Critique,* the argument may seem to be that some action of the higher, rational capacity of cognition, which presupposes transcendental apperception and the "unity" it gives to one's representations, is presupposed for any representation of an *object* as such. Since intuitions are by definition singular representations of objects, even interpreters who defend or are sympathetic to so-called "non-conceptualist"

[11] Again, see chapter one for a discussion of animal cognition in Kant.
[12] Compare e.g. A79/B104f; B159f.

readings of Kant[13] will on these grounds deny that an intuition is possible without a higher capacity of cognition.[14]

A standard reading of the *Critique* may say that since all sensible beings are subjects of sensations, such beings are, through these representations (the sensations) causally related to their environment. However, non-rational animals cannot on a standard reading be subjects of representations with objective reference. They may at best receive, through sensible affection, data that would be relevant for such objective representation if the animal were human.[15] For on one frequent interpretation among

[13] To say that a representation of an object is non-conceptual (not general, but singular) is not necessarily the same as to say that a representation has non-conceptual content, in the different ways in which the latter is understood in contemporary so-called "non-conceptualist" readings of Kant's philosophy. I will specify in chapter four these different versions of what is meant by non-conceptual content in the contemporary debate.

[14] Stefanie Grüne, who has argued that Kant is "the founder of Non-Conceptualism" (Grüne (2011), 474n27; cf. Grüne (2009), 251-4), maintains: "[A]n intuition is (…) the outcome of an activity of mental processing which Kant calls synthesis of the understanding" (Grüne (2011), 476) and "no intuitions are formed without the categories functioning as rules for synthesis" (Grüne (2011), 480). As I understand them, while Longuenesse (1998; 2005); Haag (2007); Land (2008); Grüne (2009; 2011) offer a standard reading of the critical epistemology, they nevertheless propose that a sensible intuition does not presuppose the form of a judgment, because they take it that a sensible intuition does not presuppose a propositionally structured content. On this view, a sensible intuition necessarily presupposes concepts only in the form of rules for a synthesis of the intuition. For my main argument against standard readings see chapter four of this thesis. Against the latter proposal more specifically, I would argue that to use a concept (implicitly) as a rule for the synthesis of a determinate intuition amounts precisely to *implicitly* making a judgment (e.g. the judgment that would explicitly take the form, "everything that looks like this is a tree and so must be synthesized in accordance with a schematized concept of a tree"). An implicitly judgmental or conceptual cognition is not an instance of cognition that necessarily involves the silent or audible spelling out of a judgment in linguistic form. Rather, it is an instance of cognition that must apply a general representation; and this application can only be explained as an application of a function of judgment. In short, I cannot make sense of the proposal that there could be some action, use, or application of an essentially discursive understanding that would not amount to at least an implicit function of judgment.

[15] As proponents of a non-standard reading, Lucy Allais, Robert Hanna, and Colin McLear claim that intuitions of objects independent of all higher capacity are obviously possible on Kant's account, and that objective mental content and objective awareness can therefore be attributed to non-rational animals on the theory. On Allais' (2009) and McLear's (2011) interpretations, Kant attributes a form of objective consciousness or awareness to animals that involves more than merely the fact that animals are receptive and so responsive to sensible affection. The authors thus attribute to Kant a third notion of consciousness, for which I believe his philosophy offers no room, at least not with regard to sensible beings. For on their reading Kant attributes to non-rational animals an *objective* consciousness, which is distinct, on the one hand, from sensation—sensation for Kant is the "merely subjective" and sensible "consciousness" that accompanies all sensible representation as such—and also distinct, on the other hand, from transcendental apperception. Animal intuition thus appears, on McLear's and Allais' readings, in a relevant respect indistinguishable from intellectual or spontaneous intuition, namely indistinguishable from an entirely non-

standard readings, any empirical intuition of an object must be produced from such sense data through some data-processing synthesis of parts into a whole, in accordance with concepts or rules,[16] and so cannot be had without a capacity of discursive understanding.[17] There are many problems with such a view, apart from the fact that it fails to account for the textual evidence, which explicitly attributes intuition and imagination of spatio-temporal reality to non-rational animals (a famous passage refers for example to a vast field of unconscious intuitions, in humans and non-human animals, of the many stars that we see as a foggy milky way[18]). In what *form* is the data in question received? Is the view that mere successions of physical stimuli are somehow transformed into spatially complex, iconic representations? And why should a discursive understanding be required for, or even *apt* to perform such creative transformation? The account of human spontaneity that would seem to underlie any such suggestion resembles the idea of a magic machine that in an ultimately inexplicable manner spits out empirical

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discursive and so immediate *objective* consciousness of reality (as in a contemplation of a mind-independent object). Finally, the challenge for all three interpreters is to explain how Kant on their view can prove the apriori applicability of the categories to all objects of possible experience, specifically, how he can prove this a priori applicability of concepts to "everything that may ever come before our senses" (B160), as the second edition of the Transcendental Deduction of the Categories formulates the goal of the proof. Hanna (2011) argues that Kant is inconsistent and that the B-Deduction is indeed incompatible with the view that a sensible intuition of an object is independent of the understanding. Allais (2011) offers a reading of the Transcendental Deduction of the Categories, which does not however, as I read her, do justice to the fact that the proof Kant aims to give in this section is supposed to show more than merely that *whenever we cognize an object as an object, this involves some function of unity of the understanding*. (The latter is what Allais, as I read her, takes the Transcendental Deduction to establish). As Paul Guyer (2001; 2010) has emphasized in several works, the latter claim can be taken to be established already by the Metaphysical Deduction of the Categories, and the Transcendental Deduction is supposed to prove the stronger claim that the categories apply to whatever object of empirical intuition one can self-consciously relate to at all (whatever is not "nothing" for the subject). See chapters two and four for a more detailed explanation of the distinction between these two claims, and the division of labor between the relevant sections in which Kant aims to establish them.

[16] Rules are general (and so conceptual) representations. A synthesis that is governed by rules can therefore not be attributed to non-rational animals (see *Anthropology* 7:196f; *ME Volckmann* 28:449; *ME Mrongovius* 29:888f; *Logik Mrongovius* 29:1047).

[17] See Longuenesse (1998); Kitcher (1990); Longuenesse (2005); Grüne (2009); Kitcher (2011); Grüne (2011); Höppner (2011).

[18] See *Anthropology* 7:135.

intuitions of objects on the occasion of sensible affection. Such an idea cannot make sense of Kant's appeal to transcendental apperception as the first principle of discursive understanding. By contrast, the passage at B137 quoted above, for example, might correctly be interpreted as appealing to the argument that a cognition of an object of possible experience, which has a determinable truth-value,[19] presupposes (inter alia) a subject which can judge or understand of given representations *that they are* representations of an object, representations which in turn must have been determinately related to the object and so combined by herself as an identical thinking subject through time, and that these representations of hers are distinct from their object. As I shall argue, this is a reading that can make sense of the claim that discursive understanding and so transcendental apperception are necessarily required for "the determinate relation of given representations to an object" without appeal to a notion of a synthetic activity that is construed on a model of a mechanical-causal process (which would somehow transform data in the form of physical stimuli into the representation of spatial objects). Moreover, the passage so interpreted is for all that has been said so far entirely compatible with the view that the "given representations" it appeals to are intuitions, i.e., singular representations that immediately relate to their singular objects, which are originally received in specific forms of sensibility entirely independent of all capacity of understanding. This is possible if one takes into account that Kant presupposes four

[19] Kant defines "cognition" broadly as a conscious representation that relates to an object (see A320/B376f). Cognition in a more specific, narrow and technical sense of the *Critique* refers only to instances of *human* cognition or possible *human* experience, for it can be false (see A58/B83), while divine cognition (the intellectual intuition of an intuitive spontaneity) is always true. In the broader sense that Kant also employs, where "cognition" merely means "conscious representation of an object," the term can also encompass cognition in non-rational beings, because the form of consciousness of cognition in this broad sense is merely sensible or sensation (an affection of inner sense). For a defense of this reading of the broad notion of cognition, which corresponds to the sense in which both sensibility and understanding are each in themselves, and independent of the other capacity, called capacities of "cognition," see chapter one.

different notions of a relation between representations and their objects, from which derive different senses of the term "object" [*Objekt* or *Gegenstand*]—that there is a difference between an indeterminate and a determinate relation of an object to its representation, and a related difference between immediate and mediate relations, and that these differences produce at least two distinct senses of "object of representation." The latter expression may in some contexts refer to an object that is intentional in the sense that it can be distinguished, by the subject, from its mere representation. In another, less loaded sense, the expression merely refers to the content or reference of an objective representation. I hope to show in this thesis that Kant employs these different senses of the relevant terms both in the *Critique* and elsewhere. A passage such as B137 can then be read as stating that cognition of a determinate object presupposes unity of a transcendental apperception and so understanding, because it involves the act of determinately relating many given (objective) representations to a concept of the common object of which they all are one's (empirical or a priori) representations. Again, the subject need not be aware of the fact that she is so combining and determining her representations. Among these given representations are possibly concepts, too, but necessarily at least some intuitions, each of which has a singular, spatio-temporally structured content. On this reading, the respective immediate objects (contents) of these intuitions are logically distinguishable from one another and from the (spontaneously determined, mediate) object of possible experience that B137 explicitly refers to.

What are the motivations or reasons for defending a standard reading of the *Critique*? This question can perhaps not be asked in abstraction from the influence that German Idealism and Neo-Kantianism has had on the reception of Kant. Hegelian-

spirited readers today[20] join the argument of Kant's German Idealist successors, which in some ways is close to the NeoKantian[21] approach: The proper and philosophically most important goal of the *Critique* can only be achieved if it grounds all human cognition in a single ontological source that is ultimately intellectual. In particular, the Transcendental Deduction of the Categories, which aims to prove the applicability of a priori concepts (e.g. the concept of a cause) to all objects of possible human experience, and so indeed to all objects of human intuition, arguably fails unless a unity of principles of sensibility and discursive understanding can be defended. This position, however, does not do justice to sensibility as an indispensable and independent capacity of objective representation and a priori cognition to which Kant attributed full autonomy. Effectively, the role of sensibility is reduced by those critics who praise Kant for setting the proper goal of philosophy (and accuse him for failing to achieve it due to his divide between powers) to providing non-objective data relevant for objective cognition. Again, intuitions of objects must on these views be produced by means of a function of unity of the understanding (perhaps executed by a transcendental imagination).[22] However, it should strike the reader that while Kant clearly and strongly favors systematicity and unity, which is apparent even in the philosophical maxim to explain different forces or powers of the mind by deducing them, as much as possible, from common origins or more

[20] As I understand from conversations with Robert Pippin, he seems to be motivated partly by the argument that any alternative account, on which the conditions of human cognition have two ontologically distinct sources and so distinct objective principles, leaves Kant with a crudely idealistic, "impositionist" view, on which understanding must force on unruly received representations the form of a rule-governed cognition. This appears implausible on phenomenological grounds. On Pippin's view, sensible intuition and concept may thus be notionally or logically distinguishable, but are not ontologically separate. See also Pippin (1982; 2005).

[21] On Cohen's influential account, sensibility and discursive understanding must, if what Cohen took to be the core argument of the *Critique* is to succeed, ultimately root in a single intellectual principle. See Cohen (1885); Natorp (1910).

[22] Compare for example Longuenesse (1998); Engstrom (2006).

fundamental powers, he will maintain that a most radical such fundamental power [*Grundkraft*] or "common root [*gemeinschaftliche Wurzel*]" of sensibility and understanding can only be hypothetically and heuristically assumed (as conducive to the philosophical enterprise of finding unity among principles), but not be known or transcendentally proven (see A15/B29; A648f/B676f). The *Critique* explicitly develops an alternative to the single principle systems of Kant's Rationalist and Empiricist predecessors (see A271/B327). And yet recent literature has largely neglected Kant's reasons for a division between two stems of human cognition, a division which he did not arbitrarily or dogmatically adopt, and which he thought not only compatible with, but indeed indispensable to achieving his critical goals. This includes the goal set by the project of a Transcendental Deduction of the Pure Concepts of the understanding.

This thesis aims to illuminate some important grounds of the critical two-stems doctrine of human cognition, and defends it as tenable for Kant's purposes. Correctly understood, Kant's system resembles a Copernican re-interpretation of Leibniz's pre-established harmony, in so far as it forces us to assume, due to the critical limits of human knowledge, an "inexplicable harmony" between human sensibility and understanding. The argument of the Transcendental Deduction of the Categories explains why transcendental apperception must be presupposed for all combination of successive representations, and thus for the relation of these combined representations to determined objects of nature (i.e., to objects that are connected with one another through the most general laws of nature). However, the argument cannot explain, and does not aim to explain, how it is possible *that* our particular human sensibility is such that the form in which it gives us objects is suitable to an a priori combination and determination of these

objects by means of our understanding. Kant's critical withholding from all speculative attempts at single-principle systems grounds a fascinating theory of intuitive presentation, representation, and imagination on an autonomous (non-intellectual) principle. Crucial features and implications of this theory have been neglected or misunderstood in the reception of Kant, and they offer much to learn from for philosophy today. In particular, it is due to the fundamental, mathematical irreducibility of forms of human intuition to principles of discursive understanding that any intuition remains irreducible to and in this sense incommensurable with discursive representation. While it is not the topic of argument of this thesis, I hope that what follows nevertheless allows for the appreciation that this incommensurability and independency of sensibility and understanding is a foundation on which Kant's *Critique of the Power of Judgment* must be read and re-read, and in particular, a necessary foundation to ground the theory that a mere feeling can make justified claim to universality as a principle of taste.

The first chapter introduces the relevant definitions, of sensibility and understanding, intuition and concept, from which the *Critique* sets out. In addition, the chapter takes into account lecture notes, reflections, and passages in published texts on intuitive understanding, animal cognition, and unconscious representations, most of which date to the critical and late critical periods. Passages which discuss these topics show that throughout all periods Kant presupposes as unproblematic a separation between sensibility and understanding as two fundamental and ontologically independent capacities of cognition, and applies their distinction to the heuristic explanation of certain phenomena. These passages constitute a double challenge for an interpretation of the

Critique. For one must read it as compatible with the evidence that the distinction between intuition and concept is the distinction between singular and immediate representation of objects, on the one hand, and general and mediate representation of objects, on the other hand, while this latter distinction is for Kant not the independent, and equally fundamental distinction between sensible (received) and intellectual (spontaneously produced) representation of objects. In particular, the challenge is to understand the definitions of the singularity and immediacy criteria of intuition such that they apply to intellectual intuition, to sensible a priori[23] and a posteriori intuition, to unconscious intuition and to intuition that can become self-conscious in a sense (to be explained) that requires that the intuition is unified by a function of understanding. While the first chaper lays out this challenge, the remaining chapters as a whole offer a reading that successfully responds to it.

The interpretation offered in the remaining chapters is cautious to respect Kant's method of argument. While it is not the direct and explicit target of the thesis, the critical and transcendental methodology will be reflected and commented on throughout the chapters. One key point on method should be anticipated here: The *Critique* does not proceed from the metaphysical proposition that non-rational animals intuit and imagine objects, and so share the singular, non-conceptual form of objective representation with humans and God. Rather, because the limits of human discursive understanding entail that we (humans) cannot intuit objects intellectually, i.e., through spontaneity, we also cannot conceive the actuality of an intuitive understanding. Kant's transcendental arguments move regressively to the specific conditions of the possibility of human

[23] The notion of an a priori or "pure" *sensible* intuition is not a contradictory notion in the critical philosophy. See B147 and the discussion of a priori intuition in chapter three.

experience, and prove for it (and only for it) that it must necessarily involve both sensible intuition and concepts, which must ground or originate in two irreducibly and ontologically distinct capacities. On a correct interpretation of these arguments however, it does not contradict the possibility of human cognition to think of a purely intellectual (divine) cognition as intuitive and not discursive. And likewise, on a correct interpretation, the conditions of the possibility of human cognition must be compatible with the (heuristic) assumption that some living beings act in accordance with sensible intuitions of outer objects that can be construed exactly on the model of human intuition, while these beings lack all understanding or higher cognitive capacity.

Chapter two offers a first discussion of the task and proof-structure of the Transcendental Deduction in the *Critique's* B-edition, and criticizes an entrenched conflation of the singularity [*Einzelheit*] of intuition and the unity [*Einheit*] that is a function of human understanding in standard interpretations of this proof. Chapter three discusses Kant's proofs of the singularity of the forms of human intuition in the Transcendental Aesthetic. A misreading of these proofs has contributed to the standard view that spatiotemporally structured and individuated intuitions as such are synthetically produced by understanding (via transcendental imagination), and therefore always already unified by a function which presupposes transcendental apperception. For the standard reading assumes that such spontaneous-synthetic action, legislated by the understanding, is what first must constitute the singularity of sensible intuitions itself.

Chapter three offers a competing interpretation of Kant's notion of singularity. On this interpretation, human intuitions are singular on account of their mereological spatiotemporal form. On a correct understanding of the theory of sensibility, which Kant

developed on the threshold to his critical period, this form is not produced by the subject: It is a core argument of the *Critique* that the representation of a determinate time span or space presupposes infinitely divisible and immeasurable (unbounded or unlimited), holistic time and space as the given forms within which any determinate object must be represented (as a definite limit of the unbounded and continuous). These continuous and unbounded forms are thus not themselves objects of possible human experience, they are "nothing for cognition," even though all human experience presupposes them. Infinitely materially "filled" space is represented in any empirical intuition, but its infinity cannot be positively cognized as such. The argument turns on the fact that infinitary structures could not be expressed by concepts due to limits of the logic available at the end of the eighteenth century. Kant's theory of mathematics reflects this fact. The only way to represent geometrical infinity, at his time, was on the basis of the iterability of Euclidean construction.[24]

From a phenomenological perspective however, the argument remains valid today, where infinites as such can be expressed by polyadic logic. The continuous and unbounded forms of human intuition contain infinitely many parts or partial representations. A singular infinity must therefore be contained in any perception of a spatiotemporal object, and this infinity could not have been originally produced by a discursive, and thus finite capacity of understanding. The early Heidegger, who has offered an excellent close reading of the Transcendental Aesthetic,[25] adequately recognized Kant's unprecedented conception of sensibility as a power of cognition on these grounds, a conception which fundamentally differs from rationalist or empiricist

[24] See Parsons (1964) and Friedman (1985).
[25] See Heidegger (1995).

construals. Heidegger correctly emphasizes that on Kant's theory, it is human discursive understanding which is finite, not sensibility. We have an infinite capacity to immediately receive representations of objects (in sensible forms of intuition), but only a finite capacity to produce mediate and general re-presentations of them (by means of discursive understanding), and therefore, our cognition of determinate objects is necessarily finite, too. This brings out one key contrast between human discursive understanding and a conceivable divine understanding: Understanding or the intellect as such is the capacity to *produce* objective representation, and an intuitive understanding thus immediately produces, through intellectual intuition, the infinite, which humans may only relate to in sensible forms of time and space, and which they can only to a limited extent follow out discursively and self-consciously. At the same time, this brings out one feature that both sensible and intellectual intuition share: both contain an infinity.

The argument expounded in the third chapter explains why the critical philosophy must assume a fundamental and irreducible distinction, between human understanding as discursive capacity, and human sensibility as the capacity of intuition in the forms of time and space. A standard reading on which singular representation as such presupposes understanding does not respect this distinction. It is therefore vulnerable to the criticism that has famously been raised by the early Dieter Henrich against a reading common both to Neo-Kantian lines and Heidegger in the reception of Kant, on which sensibility and understanding must originate in a single underlying power (a "common root"). Henrich criticizes Heidegger for a reading of the *Critique* that is ironically analogous in crucial ways to the speculative reduction of the critical ontology to a one-root principle by

Idealists and Neo-Kantians, a reduction which Heidegger himself fiercely opposed.[26] Heidegger opposed the latter reduction because it marginalizes or eradicates sensibility as an autonomous capacity of cognition. Yet his reading is analogous in that it marginalizes or eradicates understanding as an autonomous capacity of ultimately independent objective principles.[27] Following Henrich's criticism, the fourth chapter explores a critical understanding of Kant's stipulation of a "transcendental imagination," as a capacity that successfully mediates between the irreducibly distinct objective principles of human sensibility and understanding. Imagination does not itself contribute any such principle, i.e., a principle, which a priori determines the content of any possible human cognition. And because the conditions of the possibility of a transcendental imagination cannot in turn be cognized (this would again presuppose a transcendental imagination), the resulting account must assume an "inexplicable harmony" between human sensibility and human understanding. The fourth chapter includes a criticism of interpretations that do not respect the unity of discursive understanding as a whole, by separating transcendental apperception or its execution via transcendental imagination from the function of unity constitutive of propositional judgment and all general form of representation. The chapter concludes with a reading of the Transcendental Deduction of the Categories that does not conflate the critical notions of unity and singularity.

[26] See Henrich (1955).

[27] On Heidegger's interpretation, the pure concepts of human understanding are merely abstracted from the transcendental schemata of human imagination, which is the ultimately sensible, "common root" of human sensibility and discursive understanding. See Heidegger (1991; 1995).

Chapter One

Kant's Theory of Intuition

I. A Metaphysical Distinction between Capacities

The *Critique* sets out with the thesis that human cognition involves sensibility and understanding and so "originates" in two distinct "stems" (A15/B29). In the Introduction to the *Logic*, Kant differentiates between what he calls a "logical" and a "metaphysical" definition of these two capacities. The former is the distinction between the sources of two different kinds of cognitions or representations of objects (intuitions and concepts) in the *human* subject, the latter the distinction between a receptive and a spontaneous cognitive capacity as such.

> If we reflect on our cognitions [*Erkenntnisse*] with regard to the two essentially different fundamental capacities [*Grundvermögen*] of sensibility and understanding from which they spring, we encounter the distinction between intuitions and concepts. Viewed from this standpoint, all of our cognitions [*Erkenntnisse*] are namely either intuitions or concepts. The former have their source in sensibility, the capacity of intuition, the latter in understanding, the capacity of concepts. This is the logical distinction between understanding and sensibility, in accordance with which the latter delivers nothing but concepts, the former nothing but intuitions. Both fundamental capacities [*Grundvermögen*] certainly also allow of being viewed from another side and defined in a different manner; namely, sensibility as a capacity of receptivity, understanding as a capacity of spontaneity. However this mode of explanation is not logical but metaphysical. It is usual to term sensibility the lower and understanding the higher capacity (*Logic* 9:35f).[28]

[28] The same distinction between two ways to distinguish (and so define) sensibility and understanding is noted in the *Poelitz* logic lecture transcript (see *Logik Poelitz* 24:512).

In the first two sections of this chapter I would like to motivate the view that Kant's metaphysical distinction between sensibility and understanding is more comprehensive than and prior to the logical. The logical definition applies only and specifically to the human subject, and it is grounded in the critical philosophy upon the metaphysical distinction between cognitive capacities, which also defines the difference between three kinds of cognitive subjects (beings that represent objects), namely non-rational animals, rational animals, and God.

One question that will stand in the background of the argument throughout this chapter is the question of how to understand the term "cognition" in the various passages that will be discussed. For the moment, it should merely be noted that both in *Logic* 9:35f and *Logik Poelitz* 24:512, the logical distinction of sensibility and understanding is related to an exhaustive distinction between concepts and intuitions as the only and exactly two different kinds of human "cognitions [*Erkenntnisse*]." The distinction between the two kinds of representations is here also exclusive, for it depends upon the respective origin of the representations, and it is said that sensibility affords us "nothing but" intuitions, and understanding "nothing but" concepts. This is compatible with A320/B376f and the *Logic* at 9:91, where Kant classifies "cognition" as an objective perception, i.e., as a conscious representation related to an object, and draws again an exhaustive and exclusive distinction between intuition and concept as two kinds of cognitions. It need for now not be concluded that Kant refers in any of theses four passages to "cognition" in a narrow, technical sense of the term, which, as I suggested above, comprises only cognitions of determinate objects (objects of possible experience) that can be false (see A58/B83). For several passages discussed in this chapter claim that

both intuitions and concepts are indispensable components of any instance of possible experience, and that neither an intuition nor a concept by itself constitute such an instance.

In many places, the *Critique* defines sensibility and understanding *metaphysically*, as follows:

> The capacity (receptivity) to acquire representations through the way in which we are affected by objects is called *sensibility* (A19/B33).
>
> If we call the *receptivity* of our mind [*Gemüt*] to receive representations insofar as it is affected in some way [*auf irgend eine Weise*], *sensibility*, then on the contrary the faculty for bringing forth representations itself, or the *spontaneity* of cognition, is the *understanding* (A51/B75).

According to this definition, sensibility is a capacity to receive representations through affection, and distinct from understanding as a capacity for spontaneous production of representations. Spontaneity is understanding in a broad sense (not differentiating between different, specific intellectual capacities) and "sensibility" is a synonym of "receptivity." This very general, metaphysical distinction between the capacities also corresponds to the way Kant's pre-critical *Inaugural Dissertation* introduces their distinction at *ID* 2:392.[29]

However, the way Kant states the respective contributions of sensibility and understanding to human cognition in the *Critique* immediately involves further complexity, as it evidently presupposes both the metaphysical and the logical distinction between the two capacities, and presents them at once.

[29] For a helpful study of the nature of Kant's first distinction between human sensibility and intellect in the *Inaugural Dissertation*, see Carson (2004). Carson persuasively argues that Kant distinguishes the two capacities of cognition in the *Dissertation not* on the basis of the nature of the objects to which they relate, but on the basis of the very different nature of their *relations* to objects (reception vs. self-production of objective representation).

> Our cognition originates from two fundamental sources of the mind, the first of which is the reception of representations (…), the second the capacity for cognizing an object by means of these representations (…); through the former an object is *given* to us, through the latter it is *thought* in relation to that representation (as a mere determination of the mind). Intuition and concepts therefore constitute the elements of all our cognition, so that neither concepts without intuition corresponding to them in some way nor intuition without concepts can yield a cognition (…). It comes along with our nature that *intuition* can never be other than *sensible* (…). The faculty for *thinking* the object of sensible intuition, on the contrary, is the *understanding*. Neither of these properties is to be preferred to the other. Without sensibility, no object would be given to us, and without understanding, none would be thought (A50f/B74f).

And compare:

> [S]ensibility and understanding, through the first of which objects are given to us, but through the second of which they are thought (A15/B30).

> Objects are therefore *given* to us by means of sensibility, and it alone affords us *intuitions*; but they are *thought* through the understanding, and from it arise *concepts* (A19/B33).

> The understanding has been explained above only negatively, as a non-sensible faculty of cognition. Now we [i.e., human subjects] cannot partake of intuition independently of sensibility. The understanding is therefore not a faculty of intuition (…). Concepts are therefore grounded on the spontaneity of thinking, as sensible intuitions are grounded on the receptivity of impressions (A67f/B92f).

These passages assert in the form of a pair, and with some tendency to conflate: 1) sensibility is the (receptive) source of human intuitions, and 2) sensibility "gives" the objects of human cognition. An analogous pair of statements is made about the understanding: 3) human understanding is the (spontaneous) source of concepts, and 4) through understanding, the objects of human cognition are thought. The relation between 3) and 4) does not initially strike one as problematic, because it seems clear that 4) just says that human subjects think the objects of their cognition through concepts; concepts which are produced by a spontaneous capacity. More needs to be said about how the claim that humans receive intuitions through affection (1) relates to the claim that human receptivity "gives" the objects of human cognition (2). However, since an intuition is by

definition a representation of an object and immediately related to its object, I will suggest[30] (1) simply says that we receive intuitions *of objects* through affection. This would explain the relation of (1) and (2), and also help to explain why Kant, as we will see, often tends to equivocate on or conflate statements like "we are given intuitions in sensibility," "we are given objects in sensibility," "we receive representations through affection," and "we receive objects through affection."[31]

So with regard to human cognition specifically, Kant employs in the *Critique* also a logical distinction between sensibility and understanding, according to which the former is the source of intuitions and the latter that of concepts. However, this logical distinction does not define intuition as sensible per se. Indeed the key *problem* of the Transcendental Deduction of the Categories cannot be appropriately understood unless one appreciates Kant's insisting on a conceivable intuitive understanding, a divine capacity for spontaneous production of intuitions, which humans, qua sensible beings, lack. The Transcendental Aesthetic opens with the following sentences, which are modified in the second edition of the *Critique.*

> In whatever way and through whatever means a cognition may relate to objects, that through which it relates immediately to them, and at which all thought is directed as an end, is *intuition*. This [*Diese*, i.e., intuition], however, takes place only insofar as the object is given to us; but this in turn is possible only if it [*er*, i.e., the object] affects* the mind in a certain way (A19).

Kant notes in his own A-edition of the book at the place marked in the above quote with *: "If the representation is not itself the cause of the object." The B-edition then reads:

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[30] This suggestion is certainly not justified at this point. It will be defended through my reading of the immediacy-criterion (see chapter three), through the coherence it gives to Kant's theory of intuition as a whole, and through showing that it is compatible with the critical epistemological goals (see chapter four).

[31] I further agree with Lisa Shabel that "pure intuition" for Kant can signify a singular and immediate a priori representation *as well as* the object represented thereby. See Shabel (2010), 94n6.

> In whatever way and through whatever means a cognition may relate to objects, that through which it relates immediately to them, and at which all thought is directed as an end, is *intuition*. This [*Diese*, i.e., intuition], however, takes place only insofar as the object is given to us; but this in turn, **at least for us humans**, is possible only if it [*er*, i.e., the object] affects the mind in a certain way (B33, bold emphasis mine).

Both editions say that all relation of cognition to objects ultimately presupposes intuition, i.e. a representation that is immediately related to its object and that necessarily involves a "givenness" of the object. However, the given object of an immediate intuition need not be received through an affection of the mind by something external to it. The inserted note in the A-edition at * explains that an intuition could also itself be the giving cause of the object to which it is immediately related. In that case, the object of intuition would not be received, and therefore, the intuition too would not be sensible (see also B72). Throughout the text of the B-edition Kant further stresses what he must have found not to be clear to his readers of the first edition, namely that in order to fully grasp the question and the force of his Transcendental Deduction of the Categories, we need to consider a kind of purely intellectual intuition of objects, by way of contrast to sensible intuition. In the passages that were added to the second edition, Kant notes that "intuition [which] were mere spontaneous activity originating in the self [*Selbsttätigkeit*] [would be] intellectual (B68)," and contrasts a divine understanding, which intuits self-produced objects, with human understanding (see B134; B138f; B145; B159). As I read these passages, Kant construes a conceivable intuitive intellect here such that its spontaneous act produces (or, synonymously, "gives") an intellectual intuition, and "simultaneously [*zugleich*]" (B139; B145) "produces," "gives," or "causes the existence of" the object of this intuition (compare also B72). By contrast, human

understanding merely thinks objects that are given to it through *receptivity*, and so by a source that is *metaphysically* distinct from itself (distinct from human *spontaneous* capacity) (see B134; B138f). Human understanding thus produces spontaneously the concepts through which it thinks or determines objects, but it does not produce these objects themselves. So the terms "thought," "capacity of thought," "capacity of concepts," and "capacity to judge" are all synonyms of "discursive understanding," i.e., human understanding in a broad sense, the specifically human kind of spontaneity of concepts. It follows that "discursive thought" or "conceptual thought" are tautological terms on the critical theory. For all thinking pertains to sensible beings only (a purely rational, non-sensible subject would never think, but always intuit), and is defined as understanding or spontaneous cognition through concepts. And it is clear why God's cognition could not be a thinking, for to cognize objects through thought is ultimately to cognize received objects, or to depend on another, intuitive capacity for all cognitive relation to objects.

Although particular emphasis is put on a contrast between human cognition (through discursive understanding) and intuitive cognition (through an intuitive understanding) in the second edition of the *Critique,* the opposition of the two conceivable kinds of cognitions of objects is already present in the first edition of the book (see A67f/B92f). Further, Kant offers discussion of intellectual intuition in other texts[32] and already the *Inaugural Dissertation*, in which the critical position on human sensibility is first developed, introduces human sensible intuition in contrast to a divine-intellectual.

[32] See in particular *KU* 5:402ff; *Progress* 20:267; *Religion Poelitz* 28:1050ff.

> There is (for man) no *intuition* of what belongs to the understanding [*intellectualium*] (…) and cognition [*intellectio*] is possible for us only by means of universal concepts in the abstract (…) For all our intuition is bound to a certain principle of form, and it is only under this form that anything can be *apprehended* by the mind immediately or as *singular*, and not merely conceived discursively by means of general concepts (…). The *intuition*, namely, of our mind is always *passive.*[33] It is, accordingly, only possible in so far as it is possible for something to affect our sense. Divine intuition, however, which is the principle of objects, and not something governed by a principle, since it is independent, is an archetype and for that reason perfectly intellectual (*ID* 2:398f).

So the logical distinction between sensibility and understanding applies only and specifically to a human subject, but does not generally define the two capacities. For God's understanding is a source of intuitions. In light of Kant's insistence on the conceivability of intellectual intuition in the *Critique's* second edition, it becomes apparent that a problem, or perhaps *the* main problem that motivates the critical enterprise is that humans are sensible, and so determined in their cognition (dependent on affection and reception of objects in sensible intuition). In other words, the critical challenge is to prove that the pure concepts of our understanding are objectively valid, *although* humans are unlike God, i.e., *although* they cannot produce the object of their understanding through the understanding itself.[34] Compare here Kant's famous letter to Marcus Herz from 1772, which clearly states that object-giving representations are by definition intuitive (whether sensible or intellectual); and thus that a relation to an object through intuition is in fact entirely unproblematic. The problem of the relation between representation and object thus applies only to representations produced by an essentially

[33] The use of the adjective "passive" in this passage is unfortunate. It may here be explained by the fact that Kant intends to stress the difference between intellectual and sensible intuition. In comparison to the causal-creative power of divine intuition, human intuition may perhaps be called "passive," since it depends for its representation of objects on affection. But nothing in Kant's critical theory of sensibility, in my view, entails that it must be conceived of as a "passive" faculty of the mind, as opposed to an "active" human spontaneity. In any case, receptivity is not merely or simply passivity, just as spontaneity is not merely or simply activity.

[34] Compare for this reading Heimsoeth (1929), who argues that Kant problematizes the conditions of the possibility of human experience vis-à-vis intellectual intuition.

discursive capacity, which does not itself produce the objects of its representations:

> I asked myself: What is the ground of the relation of that in us which we call "representation" to the object? **If a representation contains only the manner in which the subject is affected by the object, then it is easy to understand (…) how this determination of our mind** [*Gemüt*] **can *represent* something, that is to say, how it can have an object** [*etwas vorstellen, d.i. einen Gegenstand haben könne*]. **Passive or sensible representations thus have an understandable relation to objects**, and the principles which are derived from the nature of our soul have an understandable validity with regard to all things in so far as they are objects of the senses. **In the same way: If that in us which is called "representation" were active with regard to the object, i.e., if it spontaneously produced the object itself from itself, just as we imagine divine cognitions as the archetypes of things; in this case, too, one could understand the conformity of these representations with the objects.** (…) Yet neither is our understanding through its representations the cause of the object (except in morality the cause of the good ends) nor is the object the cause of the representations of the understanding (*in sensu reali*). The pure concepts of the understanding thus cannot be abstracted from sensations (…), but must have their source in the nature of the soul, yet neither in so far as they are caused by the object, nor insofar as they produce the object. In my *dissertation* I was content to explain the nature of [our] intellectual representations in a merely *negative* way: namely that they are not *modifications* of the soul through the object. Yet I silently passed over the further question of how a representation that relates to an object without in some way being affected by it can be possible (*Correspondence* 10:130f, bold emphases mine).

II. Life

Kant not only contrasts human cognition with the divine, but also with representation of objects in non-rational animals. These lack intellectual capacity, yet both intuition and imagination of objects are attributed to them. Importantly, Kant discusses animal cognition explicitly in order to better understand, or to isolate, human understanding, by opposing it to sensibility as a cognitive capacity we may assume to be sharing with other, entirely receptive beings. So he maintains not a gradual, but a principled, specific and irreducible cognitive difference between humans and non-rational animals, constituted by the very divide between sensibility and discursive intellect.

The discussion of animal cognition sets out from a reflection on the fact that animals are living beings, and from a notion of life. Perhaps one of the most neglected and misconceived notions in the reception of Kant, I will not be able to offer here a full discussion of his theory of life. The principal idea however, is stated for example at the outset of the *Metaphysics of Morals*: "The capacity of a being to act in accordance with its representations is termed *life.* [*Das Vermögen eines Wesens, seinen Vorstellungen gemäß zu handeln, heißt das Leben*] (*MSE* 6:211)." Life is the capacity of a sensible being to act and change itself in accordance with its own representations. Kant also calls it an "inner principle" or force, a "force of representation [*vim repraesentativam*]."

> An internal active force in a being is called *life*, our own state is *status repraesentativus*, therefore we can conceive of a living being always as possessing a *vim representativam* (...) If [a being] (...) is living, it has an ability to act from an inner principle, and this principle is [that of] a subject possessing *vires representativas*. Life is really a capacity to act in conformity with one's representations. We call an animal living because it has the capacity to change its own state in accordance with its own representations (*ME Volckmann* 28:448f).

> From the fact that the human being uses *reason* in order to build, I cannot infer that the beaver must have the same sort of thing (…). Yet from the comparison of the similar manner of agency in animals [*Wirkungsart der Thiere*] (the ground of which we cannot immediately perceive) to that of humans (of which we are immediately conscious) we can quite correctly infer in accordance with the analogy [*nach der Analogie schliessen*] that the **animals also act in accordance with *representations* (and are not, as Descartes would have it, machines)**, and that in spite of their specific difference, they are still of the same genus (living beings) as human beings (*KU* 5:464n1, bold emphasis mine).

Non-human animals move themselves and accomplish tasks (e.g. building a shelter, recognizing their own barn) that appear much like rational—intentional, purposive, self-determined, systematic—actions. Therefore, Kant argues, their behavior cannot be explained merely by mechanical principles that govern inert matter. To account for the manifest similarities between animal action and human rational actions, one must

heuristically attribute to animals an "inner principle of life," and that is, a capacity of subjectively centered representation, in accordance with, or from which they act (see also *ME K* 28:753ff; *ME Poelitz* 28:274ff).

The Cartesian alternative, that movements of non-human animals are entirely governed by mechanical chains of outer affection-sensation-reaction, is insufficient to explain their seemingly self-determined behavior. However, despite the purposeful actions that we observe non-human animals accomplish, so Kant's argument continues, we can assume a difference in species between us and them. That is to say, one can maintain a specific difference between non-rational and humans. For actions of the former can fully be explained by attributing to animals sensibility as a lower capacity of cognition, or as an "*analogon rationis*."

> We can ascribe to animals an *analogon rationis*, that is, connection of representations in accordance with the laws of sensibility, from which the same effects follow as from the connection in accordance with concepts. Animals thus do not differ from the human soul in degree but in kind; for even if the animal soul increases ever so much in its sensible capacity, it will never reach consciousness of itself, the inner sense. Even if they [possess] better phenomena than us in sensibility, they lack inner sense (...) The consciousnesss of one's self, the concept of the I, does not occur in such beings as lack inner sense; thus no non-rational animal can think. I am (...) We see however animals undertaking actions that we could not accomplish except through understanding and reason. Thus our sensibility resembles a state of the animals; merely that their [sensibility] is far more advanced. We are however compensated for this lack by the consciousness of ourselves, and by the understanding which follows from this. In addition we are not at all forced to assume in animals reflection, but rather can derive all this from the power of presentation [*sondern wir können dieses alles aus der bildenden Kraft herleiten*]. We ascribe thus to these beings a capacity to sense, imagination etc, but all merely as sensible as a lower capacity, and not connected with consciousness (*ME Pölitz* 28:276ff).

> How then can we conceive of animals as beings below humans? We think to ourselves higher beings that do not need the obstacle or support of matter, [and] on the other hand we can think of beings below us, whose representations are not merely different in degree but in kind. We perceive in ourselves a specific mark of understanding and reason, namely consciousness, [and] if I remove this there remains something, namely *sensus*, *imaginatio*, the former is intuition in the presence of, the latter without presence of the object [*erstres ist die Anschauung bey der Gegenwart, leztres ohne Gegenwart*

> *des Gegenstandes*], and we can also conceive of a reproduction, [and] prevision, without the slightest self-consciousness, it is simply that such a being cannot prescribe rules to itself, for to the possibility of a rule belongs the consciousness of making oneself the own object of one's intuition [*denn das Bewustseyn sich selbst zum eignen Gegenstand seiner Anschauung zu machen gehört zur Möglichkeit einer Regel*] (*ME Volckmann* 28:449).

These two passages attribute to animals sensible intuitions and imaginations of outer phenomena. While we may thus think of a sensible capacity in non-rational animals as a capacity in this respect in no less powerful than ours, even infinitely more acute (they intuit or form "better phenomena"), we need not attribute to animals an "inner sense," here understood as a capacity of self-consciousness or apperception, and as a necessary condition of a discursive, higher capacity of cognition in humans. It is crucial to note how Kant uses the term "consciousness" in the cited texts. With respect to a distinguishing and specific human capacity, he employs it as an abbreviation for self-consciousness, or for a capacity of forming a concept of one's own I—this observation shall be confirmed in a number of texts below. For Kant certainly does not deny that animals are conscious in the sense that they are sensible subjects capable of sensation—the passages assert inter alia precisely that. In light of this terminological observation, the following passage at 9:64f of the *Logic* should be read together with *Logic* 9:91 and the "scale of representations" at A320/B376f, where Kant defines a "cognition" as an objective perception or *conscious* representation related to an object, and draws the exhaustive and exclusive distinction between intuition and concept as two kinds of such cognitions.

> The first degree of cognition is: to represent something; the second: to represent something with consciousness or to perceive [*wahrnehmen*] (*percipere*); the third: to be acquainted with something [*etwas kennen*] (*noscere*) or to represent something in comparison with other things both with respect sameness and difference; the fourth: to be acquainted with something with consciousness, i.e., to cognize it [*erkennen*]

> (*cognoscere*). Animals are also acquainted [*kennen*] with objects, but they don't cognize them [*sie erkennen sie nicht*] (*Logic* 9:64f).

On my reading of this passage, Kant uses both the term "consciousness" and the term "cognition" in two different ways, and these respective ways are related. On the one hand, there is a broad or all-inclusive notion of "cognition," the "second degree" of which is "conscious representation" or "perception [*Wahrnehmung*]" of something, which can presumably be attributed to animals (since even the "third degree" of cognition in this broad sense, "acquaintance" can be attributed to them).[35] However, in a narrow sense, only the "fourth degree" of the scale can be properly called "cognition," namely cognition that is "acquaintance with something with consciousness," and this kind of cognition narrowly defined cannot be attributed to non-rational animals. So non-rational animals *can* be acquainted with objects, and all that is denied for them—all that makes for the specific difference between rational and non-rational animal cognition—is the possibility to be acquainted with objects *with consciousness*. In accordance with the animal passages cited previously, this should thus be interpreted such that the kind of consciousness that is presupposed for the more narrow kind of cognition really involves a capacity of *self*-consciousness or a concept of an I. Now if one further assumes "acquaintance" with objects presupposes the capacity to perceive an object [*Wahrnehmung*], then a perception of an object, which is also glossed as "conscious representation of an object," must be conscious in a different sense, such that it does not presupposes self-consciousness. Such ambiguity of Kant's use of the term

[35] McLear makes a convincing case for reading the passage in this respect, i.e., that animals must be capable of perceptions of objects (second degree of cognition in the broad sense), if acquaintance with objects (the third degree of cognition in the broad sense) can be attributed to them. See McLear (2011), 5ff. Compare for a defense of the same reading of *Logic* 9:64f also Allais (2009) and Naragon (1990).

"consciousness" in *Logic* 9:64f would explain why non-rational animals can be acquainted with objects, and therefore presumably consciously represent (perceive) objects (and Kant claims they *do* perceive or intuit objects in so many other passages), but cannot have "acquaintance with something with consciousness." From here, let me return to 9:91 in the *Logic* and the corresponding passage at A320/B376f, as well as to *Logic* 9:35f and *Logik Poelitz* 24:512. All these four passages classify, as we saw at the outset of the chapter, intuitions and concepts as two exhaustively and exlusively distinct kinds of conscious "cognitions" of objects, and according to *Logic* 9:91 and A320/B376f. Compare in particular the often-cited A320/B376f in support of the suggestion, that "conscious" representation in this passage might mean nothing more than that the cognition is accompanied by sensation. This reading results if one pays attention, first, to the fact that "conscious representation" as such, if it merely relates to the subject, is in fact defined as nothing but "sensation," and second, if one pays attention to the "merely [*lediglich*]," which suggests an omitted "also" further below:

> The genus is *representation* in general (*repraesentatio*). Under it stands the representation with consciousness (*perceptio*). A Perception [*Perception* in the original, not *Wahrnehmung*], which relates **merely** to the subject as the modification of its state is a sensation (*sensatio*) [*Eine Perception, die sich **lediglich** auf das Subject als die Modification seines Zustandes bezieht, ist Empfindung*]; an objective perception [*Perception* in the original, i.e., a perception which **also** relates to an object] is *cognition* (*cognitio*). The latter is either *intuition* or *concept* (intuitus vel conceptus). The former is immediately related to the object and is singular; the latter is mediately related to the object, by means of a mark, which can be common to several things (A320/B376f, bold emphasis mine).

Logic 9:64f adds a major piece of evidence in favor of a reading according to which this "scale of representations" may well refer to "cognition" in a broad sense, which does not

exclude the possibility of cognition, so understood, in non-rational animals.[36] Cognition so broadly construed would include conscious states with objective representational content, where consciousness is understood not as self-consciousness, but merely as sensation, i.e., as an affection of inner sense, which is distinct from apperception in the *Critique*.[37] By contrast, cognition in the more specific, critical sense of possible experience is certainly intrinsically related to the capacity of *self*-consciousness and refers only to instances of *human* cognition or possible *human* experience, specifically. According to the first chapters of the *Anthropology,* which are much in line with Kant's reflections on animal cognition, experience requires time, affection, and a certain achievement on the part of a human subject to actualize an innate spontaneous capacity—apperception and through apperception discursive understanding (see *Anthropology* 7:127f). Very young children, who have not yet achieved this actualization, can therefore not be said to be having experience. They are merely subjects of "dispersed perceptions," perceptions which are not "unified" under a *concept* of the object. The *Anthropology*, therefore, employs the notion of a perception [*Wahrnehmung*] such that it does not presuppose self-consciousness.

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[36] On the basis of some of the same passages discussed in this sub-section, Grüne distinguishes in a crucially different way between a narrow and a broad notion of "cognition" in Kant: In a narrow sense, on her reading, a cognition presupposes an intuition and a judgment about the object of the intuition, grounded on the intuition. In a broad sense, a cognition does not presuppose any judgment, but it presupposes (obscure) concepts that constitute the very relation of an intuition to an object as such (see Grüne (2009), 27–33). So on Grüne's reading, any intuition as such (as defined, i.e., as a singular representation immediately related to an object) amounts to a cognition in the broad sense and thus presupposes concepts.

[37] Note that I am here trying to distinguish and delimit precisely different senses of "cognition" and "consciousness" in Kant. One might perhaps worry that mere sensation is too meager a notion of consciousness for an appropriate conception of a conscious representation of an object, i.e., of a perception of an object (which we might interpret today as a kind of phenomenal consciousness we assume is present in higher animals), but this is to hastly conflate contemporary philosophical notions of consciousness, sensation, and perception with those of Kant. Indeed, what Kant understands by a perception of an object that is conscious merely in the sense of being sensible and thus accompanied by sensation must amount to a very complex cognitive (mental) state, considering that it is what is essentially presupposed for any actualization of the capacity of life in its complex and purposive force (force of action in accordance with representation).

> The recollection of one's childhood does not however by far reach back to that time, since it is not the time of experiences, but merely of scattered perceptions, not yet unified under the concept of an object [*Die Erinnerung seiner Kinderjahre reicht aber bei weitem nicht bis an jene Zeit, weil sie nicht die Zeit der Erfahrungen, sondern blos zerstreuter, unter den Begriff des Objects noch nicht vereinigter Wahrnehmungen war*] (*Anthropology* 7:128).

Because very young children have not yet actualized their capacity of self-consciousness and understanding, they cannot unify and so subsume perceptions under a possible concept of their object, which explains why they possess no concept of what their perceptions are of, or were of, in the past, and so explains why we have no intentional memory of our earliest years. However, this does not exclude the possibility that the perceptions of children at this age do in fact have objective, intuitive content, and thus do relate to objects in this sense. This is, I suggest, Kant's notion of perception of outer phenomena that one can also heuristically attribute to non-rational animals. Again, sensible perceptions of outer objects are attributed to animals in the following passage:

> Understanding is the capacity of rules; without it we cannot think any rules, in fact without it we can think nothing at all. For thinking means to represent to oneself something through concepts. A concept, however, is when I think for myself the manifold of intuition under a certain rule. I can indeed have a sensible representation of something without concepts, e.g. (...) a tree. Here I have a manifold of intuition. But now I think it to myself under a unity and under the rule that everything that looks like this is a tree. In the merely sensible perception of the tree I have a confused representation of the manifold and think nothing. Animals have such sensible representations, but no concepts.—Through concepts I distinguish a thing from others and recognize its unity. The more concepts one has, the more our understanding is developed. Language consists of concepts, it seems it must therefore improve with the culture of the understanding, and since this was certainly very slow with the first humans, it must come at a very late stage. Animals therefore also lack language. (*Logik Mrongovius* 29:1047).

Here again, it is worth noting the explanations concerning basic epistemology Kant offers in the context of the animal discussion. Recall that Kant's main goal in this context is

always to delimit precisely the very cognitive capacities that come along only with self-consciousness and discursive understanding, and that could thus not be attributed to animals (or to very young children) although empirical intuitions (or perceptions) and imaginations of outer objects can be attributed to them. The passage last quoted uses three notions to which I will return in what follows. (1) Without capacity of concepts or thought, a sensible perception of an outer object is not thought "under a unity." (2) Without capacity of concepts or thought, the object of a sensible perception is not thought *as* unity and thereby distinguished from other objects. (3) Without capacity of concepts or thought, the object of a sensible perception is not thought at all, one possesses a representation of it but "thinks nothing."[38]

Three additional passages should be considered at this point:

> The concept is the conciousness that the same is contained in one representation of an object as in another representation of the same object [*Der Begriff ist das Bewußtsein, daß in einer Vorstellung desselben dasselbe enthalten ist als in einer andern*], or that the same mark is contained in several representations. It [*Dieser,* i.e., the concept] thus presupposes consciousness or apperception. Animals indeed compare representations with each other, but they are not conscious of that in which they agree or disagree. Thus they also have no concepts, and since the higher capacity of cognition consist in these [concepts], also no higher capacity of cognition. This [higher capacity] is thus distinguished from the lower capacity of cognition through apperception. As animals, we share the latter with animals, but the former lifts us as thinking beings above animals. (...) The understanding is the capacity of bringing different representations under a rule. It rests on apperception (...) But how are concepts possible through apperception? Through my representing the identity of my apperception in many representations (*ME Mrongovius* 29:888f).

> On Consciousness of Representation or Apperception
> This is the capacity of representation in relation to an object (which belongs to our state), which is not yet there in apprehension, but as it were brought about <grasped> [*sondern gleichsam hervorgebracht <gegriffen> wird*]. In the thought that a person can say, 'I am', very much is contained. [*In dem Gedanken, daß der Mensch sagen kann: Ich bin – liegt ausnehmend viel*.] The consciousness of our concepts is always difficult.

[38] The concept of "nothingness" offers a key to Kant's construal of sensible cognitions independently of or without a capacity of understanding (understanding in the broadest sense). I return to this.

> ((...) From lack of consciousness, animals are incapable of concepts—they do have intuition. The consciousness is a quite separate dimension of the capacity of cognition [*Aus dem Mangel des Bewußtseins sind auch Tiere keiner Begriffe fähig – Anschauung haben sie. Das Bewußtsein ist eine ganz aparte Dimension des Erkenntnisvermögens*] therefore there is no mere gradualism from animal to human.) (*Logik Dohna-Wundlacken* 24:702).

> The faculty of imagination can be divided a. into *facultas praevidendi* or *fingendi*, when my soul produces new representations through the imagination, and b. in *facultas reproducendi*, when it merely renews those already had (...) With it is connected c. *facultas praevisionis* (...) It is thus merely an application of the law of the reproductive imagination to future time. All these three cognitive capacities can be accompanied by apperception or not. If they are, they belong only to the human being, if not—then animals also possess them. We should therefore have two different names for each of them, but that is the case only for one of them, namely reproductive imagination; for this is called, accompanied by apperception, memory (*ME Mrongovius* 29:883f).

These passages confirm the following, previously made observations: Kant uses "consciousness" in many places in a narrow sense, as synonymous with "apperception," which he understands to be essentially a human capacity of *self*-consciouness, since it involves a concept of an I. All higher cognitive capacity broadly construed is said to be dependent upon apperception, so understood, and is identified with the capacity of using concepts or rules.

The next step in Kant's reflections in the above texts, essentially related to the first, is that we can attribute to non-rational animals non-conceptual representations of objects. For these do not presuppose apperception, but can be had independently of any capacity of self-consciousness and so independently of all understanding or higher cognitive capacity as such. Since non-conceptual representations of objects are intuitions, and since in the absence of the object that is the content of a current or actual intuition in a sensible subject, intuitions are called "imaginations," it follows that intuitions and imaginations of objects do not presuppose understanding or the higher

capacity of cognition, on the theory. It further follows that on Kant's theory intuitions and imaginations of objects can be "unconscious" *in the sense that* they are not or cannot as representations be self-consciously possessed or accompanied by the representation of an I. Obviously, this resembles a Leibnzian construal of representations and perceptions in humans and non-rational animals, which are "unconscious" in the sense that they are had independent of or without apperception.[39] And these conclusions follow since, as Kant argues, (we may assume that) animals do not possess a higher cognitive capacity, because we have no reason to attribute a capacity of apperception or self-consciousness to them. The reason in favor of this conclusion is the philosophical principle not to assume more or higher causes than necessary for explaining natural phenomena.

> We can think of beings which have only the lower capacity of cognition and wholly lack the higher (...) Do animals not have the higher capacity of cognition, or is it only buried in them? We cannot demonstrate that they don't have it. But why should we assume more than is required for the explanation of certain appearances—Thus we assume that animals might be around to eternity and increase in their powers and yet will never acquire understanding, because for that something essential would have to be added to their sensibility, through which alone understanding is possible, namely apperception. [*Daher nehmen wir an, daß Thiere in Ewigkeit fortdauren und an ihren Kräften wachsen können und doch nicht Verstand bekommen werden, weil dann zu ihrer Sinnlichkeit ein wesentliches Stück dazu kommen muß, wodurch nur eben der Verstand möglich ist, nehmlich Apperception*]. *("Von den Seelen der Thiere," ME Mrongovius* 29:906).

To recall the outset of Kant's reflections on animal cognition, it is because we can attribute to non-human animals a sensible capacity of virtual, subjectively centered representation of outer phenomena as a principle to govern their apparently purposive actions, it need not be assumed that they possess understanding, while avoiding the insufficient Cartesian alternative, that non-human animal behavior is entirely explicable

[39] See Leibniz's *New Essays* (1982), 133f; *Discourse on Metaphysics* §§34f; *The Principles of Nature and Grace* §§4f; and *Monadology* §§28ff.

on mechanical grounds (see again 5:464n1; 7:397; 28:449f; 29:906; 28:274–277). This shows, firstly, that Kant employs a rather sophisticated account of sensibility. Sensibility according to the theory surveyed thus far cannot be understood as merely a capacity of sense organs to react in a mechanically determined way to certain physical stimuli. Rather, it is a capacity of "mind" [*Gemüt*] and "cognition," and so a capacity of mental states that virtually represent the surrounding of an animal according to its singular subjective (perhaps spatio-temporal) perspective like infinite mirrors, and so can structure animal movement in a subjectively purposive way.[40]

Secondly, as we shall now begin to see, it is the very fact that as a *singular* representation of an object a sensible intuition does not achieve the *generality* proper to concepts or rules or schemata from which it follows that intuition as such does not presuppose any higher, intellectual or spontaneous capacity. The opposition of singularity and generality constitutes, for Kant, the *essential* distinction between intuition and conceptual representation, and this essential distinction informs in turn in a decisive way his distinction between lower, receptive and higher, spontaneous capacity in humans, specifically, a distinction which, as I already concluded in the previous section of the chapter, often implicitly conflates the metaphysical divide between receptivity and spontaneity with the opposition of an origin of singular (intuitive) and an origin of general (discursive) representation. So human understanding (in the broad sense) is

[40] Steve Naragon (1990) makes a convincing case for the claim that Kant's theory of animal cognition is largely Leibnizian. He argues, in particular, that while Kant's notion of life and living beings presupposes an immaterial principle of representation, this does not commit Kant to attributing (noumenal) freedom to animals, since Kant resorts to a quasi Leibnizian notion of "spiritual determinism" (e.g. the determinism of a perfect turnspit, "which when once wound up also carries out its motions of itself" (*KpV* 5:97)). Compare also: "When the dog smells a carcass, movement begins in it, which wasn't produced through mechanical laws by the smell but through an enlivening of the desire. In the case of animals, this is however as much an external necessitation as in machines; thus they are called automata spiritualia. But in humans the chain of determining causes is certainly cut (*Reflexionen* 17:313)."

called the "higher" capacity of cognition *essentially because* it is a capacity of *general* representation[41] in a sensible being. This allows one to see that it must be something about generality of cognition, which must require spontaneity, for Kant. Analogously, the fact that singular intuitions and imaginations as such do not presuppose generality must be understood as the decisive reason why Kant does not hesitate to attribute them to non-rational animals, or in other words, why they can have their source in a merely sensible faculty on his theory:

> Understanding, as the capacity to think (to represent something to oneself through concepts), is also called the higher capacity of cognition (to distinguish it from sensibility, as the lower) **because the capacity of intuitions (pure or empirical) contains only the singular in objects**, while the capacity of concepts contains the general in the representations of the latter, the rule, [*darum weil das Vermögen der Anschauungen (reiner oder empirischer) nur das Einzelne in Gegenständen, dagegen das der Begriffe das Allgemeine der Vorstellungen derselben, die Regel, enthält*] to which the manifold of sensible intuitions must be subordinated in order to produce unity for the cognition of the object—Understanding is indeed higher than sensibility, with which the non-rational [*verstandlosen*] animals can help themselves out of implanted instinct like a people without a sovereign; yet by contrast, a sovereign without a people (understanding without sensibility) can do nothing. There is therefore no conflict of rank between them, though one is titled higher and one lower. The word understanding is however also used in a special sense: since it is namely subordinated to understanding in the general sense as a member of a division with two others, and then the higher cognitive faculty is comprised of understanding, judgment and reason. [*Es wird aber das Wort Verstand auch in besonderer Bedeutung genommen: da er nämlich als ein Glied der Eintheilung mit zwei anderen dem Verstande in allgemeiner Bedeutung untergeordnet wird, und da besteht das obere Erkenntnißvermögen (…) aus Verstand, Urtheilskraft und Vernunft*] (*Anthropology* 7:196f, bold emphasis mine).

[41] The *Critique* also defines a schema as a "representation of a *general* procedure" or as a rule (see A140f/B179f, my emphasis), because schemata, like rules, correspond in some way to concepts and so depend in some way on the capacity of concepts (the higher capacity of cognition in the broadest sense). Thus according to his reflections on the possibility of animal cognition summarized here, Kant could not attribute any use of schemata to animals.

III. Unconscious Intuition and Nothingness

From the passages considered so far (including the key introductory passages of the *Critique*) one would prima facie assume that there is some sense in which humans, like all animals, may possess intuitions of objects prior to and independent of any involvement of the understanding. This is explicitly supported by additional passages in the *Critique*.

> The conditions under which alone the objects of human cognition are given precede those under which those objects are thought (A16/B30).
>
> [T]hat which, as representation, can precede any act of thinking something is intuition (B67).
>
> That representation that can be given prior to all thinking is called *intuition* (B132).
>
> The categories of the understanding do not represent to us the conditions under which objects are given in intuition at all, hence objects can indeed appear to us without necessarily having to be related to functions of the understanding (…) **[A]ppearances** can certainly be given in intuition without functions of the understanding (…) [I]ntuition in no way [*auf keine Weise*] requires the functions of thinking (A89f/B122f, bold emphasis mine).

The last passage quoted appeals to "appearance [*Erscheinung*]," and says it can "be given in intuition without all functions of the understanding." Appearance is defined as "the undetermined object of an empirical intuition," (A20/B34), i.e., an intuition which is related to the object through sensation (see ibid.). What does it mean for an object of a representation to be "undetermined"? There is good evidence that it means simply that the object is not (yet) re-presented and thus determined by concepts or rules, or by any general form of representation proper to the capacity to judge.[42] On my reading, the term

[42] This is precisely what Vaihinger maintains in his commentary on this definition of appearance, who quotes among others in particular Cohen saying that "the point is to emphasize: that the object as object of intuition is not *determined*, and that this non-determinedness constitutes its concept, i.e., the concept of an appearance [*Erscheinung*]. The object remains undetermined so long as it is given in sensibility. [*Darauf*

Kant uses for objects of human intuitions received through affection independently of and prior to all determination by spontaneity is thus "appearance."

> [T]here are two conditions under which alone the cognition of an object is possible: first, *intuition*, through which it [*derselbe*, i.e., the object] is given, **but only as appearance**; second, *concept*, through which an object is thought that corresponds to this intuition (A92f/B125, bold emphasis mine).

This reading of A20/B34 agrees with the following passage, which would be in accordance with an interpretive result of the last section, namely that empirical intuitions just are perceptions:

> Sensation (…) if it is applied to an object in general without determining it, is called perception [*Wahrnehmung*] (A374).

"Perception [*Wahrnehmung*]" in this passage is synonymous with "empirical intuition" as defined in the Transcendental Aesthetic, namely as a representation which relates to an object with sensation. Through this (sensation) the object is however not determined, but left undetermined. Perception of (undetermined) objects or of "mere appearances" would thus be, on the reading offered thus far, completely independent of a higher capacity of cognition. However, the meaning of "perception" has further complexity in the *Critique*. Kant explicitly defines in §26 of the Transcendental Deduction of the Categories perception [*Wahrnehmung*] as a consciousness *of* an empirical intuition "*as* appearance" (B160). On this basis, Kant then says for example that "I make [i.e., I turn] (…) an

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kommt es an, den Nachdruck zu legen: dass der Gegenstand, als Gegenstand der Anschauung, ***unbestimmt*** *ist, und dass diese Unbestimmtheit seinen Begriff, den Begriff der Erscheinung bildet. Der Gegenstand bleibt unbestimmt, solange er innerhalb der Sinnlichkeit gegeben ist*] (Vaihinger (1881–1892, Vol. 1), 31)." Vaihinger quotes a series of additional passages in support of this reading, among them A92f/B125 (cited above); A266/B322f; A373f (cited below) and the following passage (see ibid.): "I will merely precede this with an explanation of the categories. They are concepts of an object in general, by means of which *its* [the object's] intuition is regarded as determined with regard to one of the logical functions for judgment. [*Begriffe von einem Gegenstande überhaupt, dadurch dessen Anschauung in Ansehung einer der logischen Functionen zu Urtheilen als bestimmt angesehen wird*] (B128, emphasis mine)."

empirical intuition (…) [into] perception" (B162).[43] So perception in the Transcendental Deduction of the Categories is distinct from a mere empirical intuition of an undetermined object, in that it is a consciousness of a representation *as an appearance,* and so as a *determinate* object (e.g. a house of a determinate spatial shape, see B162). In other words, perception as considered in the Transcendental Deduction of the Categories is always already a perception *for* a self-consciousness, i.e., an empirical intuition that is spontaneously distinguished from its object and so determined *as* one's perception (and therefore, as a perception that I can attribute to myself, it stands under the categories). On this reading, it would not be just to say that Kant's use of "perception" is inconsistent. Rather, in some contexts, Kant considers perception just as sensible intuitions or their immediate objects (mere appearances) independent of transcendental apperception, because he aims to isolate their specific non-spontaneous origin. In other contexts however, Kant considers perceptions or intuitions as they are spontaneously combined or "unified" with other empirical intuitions by transcendental apperception, and thus are themselves made determinate objects of concepts.

What does it mean, then, to be subject of a representation of an object prior to or without all involvement of the capacity of thought? As Kant puts it, without apperception of intuitions by the capacity of thought, they would always be "as good as nothing for" (A111) a self-conscious subject.

> Were [experience] not grounded on (…) [a synthetic unity in accordance with concepts], it would be possible for a swarm of appearances to fill up our soul without experience ever being able to arise from it. But in that case all relation of cognition to objects of experience would also disappear (…) and would thus be intuition without

[43] Wenzel argues on some of the same evidence that "perception" and "empirical intuition" do not have the same meaning in Kant, because perception essentially involves awareness while empirical intuition does not (see Wenzel (2005), 408). On this view, one may have an empirical intuition without thereby having a perception. This is the case whenever the empirical intuition is not conscious.

> thought, but never cognition, and would therefore be as good as nothing for us (…) and would be nothing but a blind play of representations, i.e., less than a dream (A110ff).

At this point, I suggest it might be conducive to return to another, to one of the perhaps most often cited passages of the *Critique*, part of which I quoted already above. My reason to here return to this passage is simply to consider the use of Kant's notion of a "blind intuition" in it, and to consider whether it might not have precisely the sense in which a "play of representations" or a "swarm of appearances" is "blind" according to A110ff. This would relate the notion of a "blind" intuition to the concept of "nothingness." My suggestion is thus that a "blind intuition" is a representation that is (and can remain) undetermined by discursive understanding (broadly), and so is *nothing for me* (for an I), because it is not reflected or distinguished from its object. It is "blind" because it doesn't see its own object, as it were, and it may also be received temporally prior to any actualization of spontaneity. It is important that Kant introduces the notion of a blind intuition in one of the most general introductory sections of the *Critique* (the opening of the Transcendental Logic), which outlines in most general terms the fundamental metaphysical distinction between sensibility and human understanding (human understanding in the broadest sense). This is a strong piece of evidence in favor of the thesis that blind intuitions are intuitions as they are completely independent of, or prior to all action of the understanding on them.

> If we call the *receptivity* of our mind [*Gemüt*] to receive representations insofar as it is affected in some way [*auf irgend eine Weise*], *sensibility*, then on the contrary the faculty for bringing forth representations itself, or the *spontaneity* of cognition, is the *understanding*. It comes along with our nature that *intuition* can never be other than *sensible* (…). The faculty for *thinking* the object of sensible intuition, on the contrary, is the *understanding*. Neither of these properties is to be preferred to the other. Without sensibility, no object would be given to us, and without understanding, none would be thought. Thoughts without content are empty, intuitions without concepts are blind. These two faculties or capacities cannot exchange their functions. (…) Only from their

> unification can cognition arise. **But one must not on this account mix up their roles, rather one has great cause to separate them carefully from each other and distinguish them. Hence we distinguish the science of the rules of sensibility in general, i.e., aesthetic, from the science of the rules of understanding in general, i.e., logic** (A51f/B75f, bold emphasis mine).

In the remainder of this section, I will present Kant's theory of "unconscious" or "obscure" intuition in non-rational animals and humans. I will argue that this theory must be understood such that for an intuition or imagination of an object to be "unconscious" or "obscure" entails that it is blind. An obscure representation may therefore be, and perhaps always remain, "nothing" for a self-consciousness or an I, who can reflect on representations and contents of representations that are attributable to herself, because she must have unified or combined them herself. On my reading, all intuitions and imaginations in non-rational animals are thus obscure, and a merit of the interpretation will be that it further illuminates the twofold use of the term "consciousness" in Kant. I further believe, but shall not present any further arguments for this merely terminological point, that a "blind intuition," for Kant, is nothing but an "obscure intuition." Similarly, "blind" workings of the imagination are processes of associations or reproductions of intuitions of which an I is not and might not be able to ever become aware.[44]

> A contradiction appears to lie in the claim *to have representations and still not be conscious of them*; for how could we know that we have them if we are not conscious of

[44] This perhaps brings out most explicitly my disagreement with Grüne's interpretation of Kant's theory of intuition. In her *Blinde Anschauung*, Grüne interprets Kant's notion of a "blind intuition" as a representation unified or synthesized by understanding by means of *obscure (unconscious) concepts*. Again, on her view, any intuition (any singular representation that immediately relates to an object) as such must presuppose a synthesis in some way governed by (the categories of) the understanding. Grüne therefore goes so far as to say that Kant could only attribute intuitions to non-rational animals or other sensible beings if these animals minimally possessed and used obscure concepts (see Grüne (2009), 202n16)—in that case, "blind" intuitions could be attributed to non-rational animals on her reading.

> them? Locke already raised this objection, and this is why he also denied the existence of representations of this nature. However, we can still be *indirectly* conscious of having a representation, even if we are not directly conscious of it. Such representations are then called *obscure*; the others are clear, and when their clarity also extends to the partial representations that make up a whole together with their connection, they are then called *distinct representations* (…). When I am conscious of seeing a human being far from me in a meadow, even though I am not conscious of seeing his eyes, nose, mouth, etc., I properly infer only that this thing is a human being. For if I wanted to maintain that I do not at all have the representation of him in my intuition because I am not conscious of perceiving these parts of his head (and also the remaining parts of his human being), then I would not be able to say that I see a human being; since the representation of the whole (of the head or the human being) is composed of these partial representations. **The field of sensible intuition and sensation of which we are not conscious, although we can undoubtedly conclude that we have them; that is, obscure representation in the human being (and also in animals) is immense. Clear representations contain only infinitely few points of this field, which lie open to consciousness; so that as it were only a few places of the vast *map* of our mind are illuminated.** This can inspire us with wonder over our own being, for a higher being need only call "Let there be light!" and then, without the slightest co-operation on our part (…), as it were set half a world before his eyes. Everything the assisted eye discovers by means of the telescope (…) or microscope (…) is seen by means of the naked eye. (…) **Thus the field of obscure representations is the largest in the human being** (*Anthropology* 7:135f, bold emphases mine).

Kant here terms representations that are "unconscious" in some sense—representations whose presence in us or in non-rational animals we can infer only indirectly—"obscure [*dunkel*]." Obscure representations are opposed to "clear [*klar*]" ones, which are "conscious," and the obscure representations appealed to in the passage are sensible intuitions and sensations. Since, as we saw in the last section, that sensation is by definition a *conscious* representation, or a consciousness, of a modification of the subject's state, I take it that the opposition of "conscious" (clear) and "unconscious" (obscure) representations is *not* an opposition of sensations and representations that would somehow be devoid of sensation, or that would not produce any effect on the sensible subject at all (I doubt that Kant's epistemology even leaves room for such a notion, if according to the *Critique* even conceptual or self-produced representations

constitute a self-affection of the human mind [*Gemüt*]).[45] Moreover, Kant here appeals to (obscure) empirical intuitions, and empirical intuitions are by definition accompanied by or related to sensation. Finally, it seems that the kind of consciousness proper to clear representations involves something like a possible unproblematic recognition of them as one's own, and so presumably amounts to a capacity of self-consciousness of representations. This reading is strongly supported by the introduction to the published *Logic*.

> All of our cognition has a twofold relation: first a relation to the object, second a relation to the subject. In the first respect it relates to representation, in the second to **consciousness, the general condition of all cognition whatsoever. (In fact consciousness is a representation that another representation is in me**.) In all cognition we must distinguish a matter, i.e. the object, and form, i.e. the way in which we cognize the object. –If for example a native sees from afar a house whose use he does not know: **he has indeed in his representation the same object as another who recognizes it determinately as a living space intended for humans.** But with respect to form, this cognition of one and the same object varies in the two. For the first it is mere intuition, for the other intuition and concept at the same time. **The difference in the form of the cognition rests on a condition accompanying all cognition, on consciousness.** If I am conscious of the representation: it is clear; if I am not conscious of it, it is obscure. Since consciousness is the essential condition of all logical form of cognition: logic can and should occupy itself only with clear, not with obscure, representations. (...) It (...) occupies itself merely with the rule of thought in concepts, judgments and inferences, as that through which all thought takes place (*Logic* 9:33, bold emphases mine).[46]

According to this passage, the consciousness proper to "clear" representations is "the representation that I am subject of another representation," "the general condition of all cognition as such," and "the essential condition of all logical form of cognitions." This conception of consciousness presupposed for clarity here corresponds very much with the conception of apperception or self-consciousness as the decisive and specific condition of all higher, discursive capacity as such, in the texts on animal representation discussed above. For this specific capacity was there, too, described as a capacity to make one's

[45] See B154-B157.
[46] Almost word for word identical with this passage is *Logik Pölitz* 24:510.

own representations the objects of other (higher order) representations, so that these higher order representations would relate at the same time to first order representations *and* to a concept of one's own self as subject of both first and higher order representations. But moreover, the formulations of *Logic* 9:33 clearly resonate the "I think" of the *Critique*, "transcendental apperception" as a representation which must be able to "accompany all my representations" (see B131f)—all those representations, to be precise, which I can attribute to myself because I must have combined them into a possible experience. For one may observe that the use of the term "cognition" in the above passage of the *Logic* would be ridiculously, obviously contradictory, unless one assumes that as we have seen for other passages as well, Kant at the same time employs a broad and a narrow sense of "cognition" without explicitly distinguishing the two. The consciousness proper to "clear" representations is evidently and minimally a condition of what I specified above as cognition in the narrow sense, since according to the above passage clarity is a condition of all cognition that involves the logical form of judgment, i.e., that involves any general form of representation and so any function of discursive understanding as such (the production or application of transcendental schemata, rules, concepts, judgments, or syllogisms). However, the passage also appeals to another kind or "form" of "cognition," which amounts to an "obscure" representation of an object, and is an "intuition without concept," or intuition without any involvement of the functions of understanding.

In sum, the following picture strongly suggests itself: Obscure intuitions of objects are sensible intuitions of objects that are had either without any capacity of understanding in the subject in which they inhere, or temporally prior to any possible

relation of this capacity to them (a possible relation to them as one's own representations). Again, the many reflections on animal cognition are relevant in this context mainly to provide evidence for how clear-cut Kant conceives of the independency of intuitions from all higher capacity as such. For clarity (non-obscurity) according to *Logic* 9:33 obviously involves an actualization of a capacity of *self*-consciousness or apperception, which is the first condition of the possibility of discursive understanding as such. This also explains why obscure representations are no object of *Logic*, since *Logic* only deals with the rules of understanding in this broadest sense. It thus follows on my reading that clear representations could not be attributed to non-rational animals.[47]

The published *Logic* and passages from different logic lecture transcripts further elaborate on the theory of clear and obscure representations as presented in the *Anthropology*: If in a "composite representation," i.e., a representation that is composed of parts, I clearly, i.e., through some exercise of my discursive capacity, discern the composite parts, the representation is "distinct [*deutlich*]" (*Anthropology* 7:135; *Logic* 9:34; *Logik Blomberg* 24:41; *Logik Pölitz* 24:510). However, if "the whole of the representation" is clear (e.g., I see a man at a distance, I see the milky way), but parts of the representation are obscure, which according to the interpretation offered thus far, they lack relation to understanding, and I thus cannot clearly discern the representation's parts (e.g., distinct parts of the face of the man, distinct stars), the representation is "indistinct [*undeutlich*]" (*Logic* 9:34; *Logik Blomberg*, 24:41; *Logik Pölitz* 24:510). The examples are Kant's. These specifications of the theory pose a problem to which I shall not be able to offer any complete resolution at this point. Indeed, the problem might as yet not even

[47] This is the key point of my disagreement with McLear's reading of animal representation, who argues that non-rational animals might well be subjects of clear representations, on Kant's account. See McLear (2011), 6.

be apparent, without further introduction to Kant's critical theory of spatiotemporal intuition and mathematics. I am here going to say what I take a question to be that will become apparent, and I will return to it in chapter three.

First, Kant seems to maintain that a clear intuition presupposes representation of *all* component material parts of its object, but that the representation of some of the parts may be obscure (see *Anthropology* 7:135f; *Logic* 9:34; *Logik Blomberg* 24:41; *Logik Pölitz* 24:510f). The example is that one perceives the milky way as a stream-like, spatial object, but does not see what one sees as one milky stream as many distinct stars (for the example see *Logik Blomberg* 24:41; *Logik Pölitz* 24:510). It seems that Kant makes a related claim in The Antinomies. He there seems to argue that any determinate intuition of a determinately delimited body presupposes the givenness, and so the subjective-intuitive representation, of an infinity of component material parts of real space (here the material parts are said to be the conditions of the whole representation, not the other way around). On these grounds he distinguishes between the *infinite* divisibility of real space and the merely *indefinite* extension of the world (see A512/B541–A515/B543 and A518/B546–A527/B556, I shall return to an in-depth discussion of these passages in chapter three). Yet Kant also argues in the *Critique*, as in the *Inaugural Dissertation*, that despite our positive and a priori knowledge that space and time are continuous, the given infinity of parts (or, "partial representations") in an empirical intuition cannot be discursively followed out such that one could obtain a collection of infinitely many discrete parts. That is, humans can experience only *indefinitely* many determinate parts and an *indefinite* extension of space and time. It would follow that humans cannot have any completely or absolutely distinct intuition, but that spatiotemporal intuitions in

humans are distinct only to certain degrees (more or less parts of an intuition are differentiated by discursive thought). Every sensible intuition thus is a representation in which some (likely most) parts are obscure. This might explain why Kant would speak, in the emphatic *Anthropology* passage at 7:135f, of an "immense," "vast" "map" of obscure representations in the human mind of which only "infinitely few points" are illuminated. It would also explain why he would assert, that "the field of obscure representations is the largest in the human being." According to these observations only purely conceptual representations ("empty concepts" without intuition or a priori concepts prior to any application to intuition) could perhaps be distinct representations in human beings, and there would be no distinct cognitions in the narrow sense of the term, since every possible experience involves spatiotemporal intuition. This is a strange result specifically with regard to Kant's account of the possibility of synthetic a priori cognition. The question in chapter four will be how to interpret §26 in light of these findings. A second noteworthy, but perhaps only seemingly problematic observation regarding the theory of unconscious intuition is that Kant maintains only composite representations can be distinct. "Simple [*einfache*]" representations cannot be distinct and must therefore be called indistinct (see *Logic* 9:35; *Logik Pölitz* 24:511). This may initially seem to pose a problem because there is no simple human intuition, all spatiotemporal intuition as such is composite, and the same thus follows for cognition in the narrow sense of possible human experience. But again, some purely conceptual representations could perhaps be simple, and so the definitions of and distinction between "distinct" and "indistinct" representations would on this interpretation apply to those pure (a priori) or empty concepts, either without intuition or prior to any application of these

concepts to intuition. For further support of this reading, consider one more passage on Kant's theory of clear and obscure intuitions. Inter alia, the following nicely confirms the previous evidence of a twofold, ambiguous and even contradictory use of "cognition" in Kant. On the one hand, clarity below is again characterized as condition of all cognition in a narrow sense, while further below the text refers several times to an infinite field of obscure "cognitions" in a human subject, in fact, to an infinite cognition of the world, a field which humans can however never completely cognize *in the narrow sense of the term*:

> The objective consciousness, or the cognition of objects with consciousness, is a necessary condition in order to have cognition of any object. (...) In what concerns this objective consciousness, representations of objects of which we are conscious are called clear representations; distinct representations are those of whose marks we are also conscious; obscure, those of which we are not conscious at all. (…) Leibniz said: The great treasure of the soul is comprised of obscure representations which only become distinct through the soul's consciousness. If we were immediately [*unmittelbar*] to become conscious of all our obscure representations and the whole extent of our soul through some supernatural relation, we would marvel at ourselves and the treasures of our soul, the wealth of cognitions it contains. When we train our eyes on the most distant heavenly bodies using a telescope; that telescope does nothing more than awaken in us the consciousness of countless heavenly bodies which cannot be seen with the naked eye but were already obscurely contained in our soul. If the human being could become conscious of everything he perceives in bodies through the microscope, he would have great knowledge of bodies, which he already really has, only he isn't conscious of it. (...) If God were to suddenly immediately [*auf einmal unmittelbar*] cast light into our soul so that we became conscious of all our representations, we would clearly and distinctly perceive all heavenly bodies as though before our eyes. Thus if in a future life our soul becomes conscious of all its obscure representations, the most learned will not advance beyond the least learned; it is just that the learned person is already here [in our life] conscious of somewhat more. If however in both souls a light is lit, both are equally clear and distinct. Thus, there lies a treasure trove in the field of obscure representations, an abyss of human cognitions, which we cannot reach (*ME Pölitz* 28:227ff).

IV. The Challenge

I have argued that Kant employs a narrow sense of "cognition," where empirical "cognition" in this sense is synonymous with "human experience." A key to this narrow definition of "cognition" can be found in §22 of the second (B) edition of the Transcendental Deduction of the Categories. This passage is worth quoting in full length, since Kant here isolates again the two necessary and sufficient components of all cognition in the narrow sense. Each of these two components is in itself and independently of the other a cognition in the broad sense (an empty concept or a blind intuition), where cognition in the broad sense is any representation that relates to objects at all, as opposed to relating *merely* to the subject.

> Two components belong to cognition: First, the concept through which an object is thought at all (the category), and second, the intuition through which it is given; for if an intuition corresponding to the concept could not be given at all, then it would be a thought as far as its form is concerned, but without any object, and by its means no cognition of anything at all would be possible, since as far as I know, nothing would be given nor could be given to which my thought could be applied. Now all intuition that is possible for us is sensible (Aesthetic), thus for us thinking of an object in general through a pure concept of the understanding can become cognition only insofar as this concept is related to objects of the senses. **Sensible intuition is either pure intuition (space and time) or empirical intuition of that which, through sensation, is immediately represented as real in space and time.** Through determination of the former we can acquire *a priori* cognition of objects (in mathematics), **but only as far as their form is concerned, as appearances**; whether there can be things that can be exhibited only in this form is still left unsettled. Consequently all mathematical concepts are not by themselves cognitions, except in so far as one presupposes that there are things that can be presented to us only in accordance with the pure form of sensible intuition. ***Things in space* and *time*, however, are only given in so far as they are perceptions (representations accompanied with sensation), hence through empirical representation. The pure concepts of the understanding, consequently, even if they are applied to *a priori* intuitions (as in mathematics), provide cognition only in so far as these *a priori* intuitions, and by means of them also the concepts of the understanding, can be applied to empirical intuitions.** Consequently the categories do not afford us cognition of things be means of intuition except through

> their possible application to *empirical intuition*, i.e., they serve only for the possibility of *empirical cognition.* This, however, is called *experience*. The categories therefore have no other use for the cognition of things except insofar as these are taken as objects of possible experience (B146ff, bold emphasis mine).

In order to make sense of a single line of argument in this section, we must read it such that here "perceptions [*Wahrnehmungen*]" are still treated as synonymous with "empirical intuitions" and independent of the understanding. (So on my reading of the Transcendental Deduction of the Categories, a further step is made in §26, which treats perceptions of objects *as perceptions for a self-consciousness*, as we saw above). Furthermore, as I read the above passage, Kant here (as in the Transcendental Aesthetic) treats as synonymous "form of human intuition," which are time and space, and "pure" or "a priori intuition." On this reading, the argument is that since only intuition (but not concepts) can "give an object," intuition is required for a cognition in the narrow sense at issue. However, since all human intuition is sensible (received), all cognition in the narrow sense further requires the application of a pure concept of an object in general (as such) either to an empirical human intuition or (provided there are existing things which can be exhibited to humans only in this form) to the form of all human intuition as such. In the former case the application constitutes an instance of actual experience or *empirical* cognition in the narrow sense. In the latter case, the application amounts to cognizing conditions of possible human experience, or synonymously, of *possible empirical* cognition in the narrow sense. The cognition of conditions of possible empirical cognition is an a priori cognition (all in the narrow sense). The *Critique* is concerned with the conditions of cognition in the narrow sense, and the following

passage from Kant's essay *What Real Progress has Metaphysics made in Germany?* (*Progress*) again nicely illustrates the narrow terminological usage of the term:

> But all experience consists in the intuition of an object, i.e., an immediate and singular representation, through which the object is given for cognition, and a concept, i.e., a mediate representation through a mark, which is common to several objects, through which the object is therefore thought.—Neither of the two kinds of representations constitutes a cognition on its own (*Progress* 20:266).

In the *Progress* essay, which summarizes the work of the *Critique*, Kant explicitly returns to the critical definitions we have seen above, of intuitions as singular and immediate object-giving representations, and concepts as general and mediate object-thinking representations. Now the *Progress* essay makes a further distinction we have not seen thus far. This is a distinction between intuitive "cognitions" as opposed to conceptual "cognitions" *in the narrow sense of the term.* Any such "cognition" requires both intuition (singular representation) and concept (general representation) and so is inseparably both intuitive, singular *and* conceptual, general, but whether it is categorized as "intuitive" or "discursive" depends on the "determining ground [*Bestimmungsgrund*]" (*Progress* 20:325) of the cognition at issue in the particular case or context:

> **As to man, however**, a cognition in him consists of concept and intuition. Each of these two is representation, indeed, but not yet cognition. To represent something through concepts, i.e., in general, is to *think*, and the capacity to think, understanding. The immediate representation of the singular is intuition. Cognition through *concepts* is called *discursive*, that in *intuition, intuitive*; for a cognition we in fact require both combined together, **but it is called after that to which I particularly attend on each occasion, as the determining ground thereof.** […] By the intuition that accords with a concept the object is *given*; without that [*dieselbe,* i.e., without the intuition] it is merely *thought*. By this mere intuition without concept the object is given, indeed, but not thought; by the concept without corresponding intuition it is thought but no object given; **thus in both cases it is not cognized** (*Progress* 20:325, bold emphases mine).

What is a "determing ground" of a cognition in the narrow sense of the term? Since such a cognition derives its specific name, "intuitive cognition" or "discursive cognition" from

the ground one attends to in a specific case and context, I take it that the two determining grounds of any cognition in the narrow sense just are: a capacity of sensible intuition, i.e., human sensibility and the capacity to judge.

Partly due to the immediate reception of the critical philosophy in German Idealism, there is an overwhelming tendency in the literature to date to take something that should according to the above quoted passage from the *Progress* be classified as intuitive "cognition" *in the narrow sense* to amount to Kant's notion of human intuition as such. In other words, whether this is explicitly reflected or not, interpreters hold that no human intuition of an object is possible that is not already, at least intrinsically, unified or re-presented by means of some logical or discursive (i.e., general and mediate) function, form or rule. There is much quarrel about what kind of, and how extensive an involvement of human understanding must be constitutively involved in this.[48] But on

[48] It is a laudable tendency in the literature today to show that Kant's account of perception and experience is phenomenologically much more plausible than often assumed, notably, that Kant is not committed to the phenomenologically absurd claim that just because any instance of experience presupposes human spontaneity—the capacity to judge—any instance of experience must therefore consist of actual judgments, i.e. must involve some actual application of concepts to sensible form as in predicative classification (see the sources cited in note 15 above and also Pippin in his new take on Kant's account of perceptual experience in a paper titled "Reason's Form," presented at the University of Chicago's *German Philosophy Workshop* on October 1, 2010). If the latter were Kant's view, he would maintain that a perception of a red flower in a vase in front of me, if it is a perception I could later recall (a cognition in the narrow sense of the term), presupposes absurdly many actual assertions of the propositional type of "There is an S that is P in front of me." Indeed, Kant's theory of transcendental imagination and transcendental time determinations (transcendental schemata), which execute categorial (conceptual) functions of the understanding in non-propositional manner, is construed to avoid such implausible account of human experience. However, even the schemata of transcendental imagination are still according to Kant's definition representations of a *general* procedure or manner to bring intuitions under transcendental apperception and categorial unity, and so the essential form of representation unique to *discursive* understanding—general and mediate representation of objects—is still as much at work at this level as at the level of actual, explicit judgment. Compare: "The schema is in itself always only a product of the imagination; but since the synthesis of the latter has as its aim no singular intuition [*keine einzelne Anschauung*] but rather only the unity in the determination of sensibility, the schema is to be distinguished from an image (A140/B179)." And: "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/B179f)." I argue in chapter four that phenomenologically cautious standard readings ignore Kant's critical reasons for a radical ontological separation between sensibility and understanding and their respective contributions to human cognition, and for this reason misrepresent Kant's notion of *discursive* (human) understanding (in the

the standard view, some action of understanding must in any case necessarily be presupposed for the intuition of an object.

In light of the textual evidence discussed in the present chapter, this may seem unbelievable. However, I have not yet presented what I take to be some important reasons for holding the standard view, which relate to the goal of the critical argument of the Transcendental Analytic as a whole. Presenting these reasons is the task of the remaining chapters, in which I offer a critique of the standard reading, and argue that it commits to a false conflation of the critical notions of singularity and unity. In chapter four I shall argue that it is not necessary to assume this conflation even on a promising interpretation of the Transcendental Deduction of the Categories.

A challenge that has been neglected in the secondary literature, because it could not become apparent on the standard reading, is to offer a coherent and comprehensive interpretation of the essential notions that ground Kant's distinction between sensible

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broadest sense). Since the activity of transcendental imagination essentially depends upon human understanding (and so depends upon transcendental apperception), important proponents of these readings effectively attribute to Kant a *non*-discursive (or "pre-discursive," Longuenesse (1998; 2005), Friedman (forthcoming)) spontaneity. The problem of some of these readings may be that they interpret too narrowly Kant's definitions of spontaneity and discursivity or conflate the latter with contemporary notions of the discursive.

Moreover, interpreters such as Allais (2009), Grüne (2009), and Longuenesse (1998; 2005) (as far as I can understand their argument) propose that in some cases only one category (or only one transcendental schema corresponding to a specific category), or even no general representation at all, but just some "first" or original action of transcendental apperception ground the intuition of an object. As I believe, such approaches are fundamentally mistaken. Kant thinks of discursive understanding as such as a unity, grounded in transcendental apperception. Therefore, any (first) actualization of apperception must always already amount to an (implicit) actualization of the systematic totality of functions of discursive understanding as such. In other words, activities of discursive understanding are ontologically *and epistemologically* to be understood as an all-or-nothing affair, any cognition that presupposes understanding in any way presupposes the whole of it. So it is never the case that just some isolated part of the system of functions of the understanding would be sufficient either to ground (ontologically explain and justifiy) or to (epistemologically or subjectively) enable a cognition, which does presuppose understanding. An excellent argument to the same conclusion, even if on the basis of very different reasons than I hope to give, has been offered in Guyer (1987; 2001). Guyer argues that Kant proves in the Analytic of Principles that each category necessarily applies to each possible object of experience. Guyer thinks that the Transcendental Deduction of the Categories does not succeed in showing this, but that Kant accomplishes the set goal of the Transcendental Deduction in the Analytic of Principles. Compare for this thesis also Guyer (2010).

intuition and concept, and so between sensibility and *human* understanding as such, i.e., human understanding in the broadest sense. These are the notions of singularity, or singular form of representation (form of intuition) and generality or general form of representation (form of non-intuitive understanding, logical form).[49] The reason that this challenge has been neglected is that it has on the standard reading not been recognized that Kant distinguishes between the following three different kinds of intuitive representations; obscure or "blind" intuitions (or imaginations) of undetermined objects, intuitive human "cognitions" in the narrow sense of "cognition" (both empirical and a priori), and intellectual or divine intuition. It has not been a recognized challenge to interpret the defining criteria of intuition, singularity and immediacy, such that they apply to all these three kinds. Interpreters frequently agree that the criteria should be applicable to intellectual (divine) as well as to human spatiotemporal intuition.[50] Yet in this context no discussion to my knowledge has been offered that would even pose the following questions: How must we understand the notions of singularity and immediacy of intuition in the critical philosophy, such that they apply to intuitive representations that are prior to and possible without all "higher" cognitive capacity in a sensible being? How must we understand them such that they at the same time apply to possible human perceptual experiences, as well as to a thinkable intellectual intuition? *Furthermore*, how must we understand them such that we can make sense of the claim, through a related interpretation of generality and mediacy, that human experiences are representations of objects that are somehow at the same time singular and general, immediate and mediate? This set of questions is not an intricate interpretative puzzle of interest only to a few

[49] Generality, just like its opposite, singularity, is a "form" of a representation (see *Logic* 9:91).
[50] See Parsons (1992), 66.

expert scholars. Rather, as I hope to show, understanding correctly the defining distinction between singularity and generality, the related distinction between immediate and mediate relations of representations to objects, and the relation of these notions to Kant's concept of unity, offers a key to a new outlook on the critical epistemology and ontology as a whole, in all its many aspects that remain interesting for philosophy today.

Chapter Two

Singularity and Unity

In what follows I show that many of the *Critique's* widely accepted interpretations today rest on an entrenched conflation of Kant's notions of singularity [*Einzelheit*] and unity [*Einheit*]. Since unity is a "function" of understanding (see A68/B93), these interpretations cannot explain the evidence for the claim presented in the above, that qua defining criterion of intuition, singularity in the critical philosophy must be independent of the human capacity to judge (in the broadest sense). Instead, the conflation gave rise to what I call a standard reading of the *Critique*, which maintains that an intuition as such presupposes understanding.

Scholars today often follow Karl Ameriks' reading of the Transcendental Deduction of the Categories, the argument that lies at the heart of the *Critique* as a whole.[51] Ameriks interprets the Deduction as a "regressive," non-skeptical,[52] but not therefore circular or trivial proof. It depends upon a corresponding, regressive, non-skeptical strategy he attributes to other arguments of the Transcendental Doctrine of Elements (which includes the two main parts of the *Critique*, the Transcendental Aesthetic and the Transcendental Logic). For my purposes I may presuppose as correct

[51] See for example Allais (2009); Hogan (2009a).
[52] See Ameriks (1978; 2003). This reading is directed against earlier influential readings in Strawson (1966); Bennett (1966), and Wolff (1963), who in Ameriks' understanding interpret the Deduction as progressive argument, which addresses skepticism (see Ameriks (2003), 55-60).

the following proposal of Ameriks as regards a general methodological strategy of the *Critique*:

Kant's argumentative starting point, i.e., what is presupposed and not called into doubt, is "common experience."[53] This notion as Ameriks understands it includes not only the ordinarily unquestioned assumption that we are embodied, sensible beings receptive to affection by others and by a mind-independent reality,[54] but also more specific, non-philosophical "everyday core beliefs"[55] about human life and a shared world, beliefs that are either true or false.[56] So the valid human experience that is assumed includes on the view "claims to objective statuses of some kind—e.g., 'the sun warms the stone.'"[57] It thus classifies as an instance of what I interpreted as cognition in the narrow sense of possible experience. Kant's arguments are not however circular or trivial in that they would assume the a priori forms and principles of possible experience they aim to prove. Rather, they are moderately regressive in that they presuppose and then analyze experience to show that time and space as pure forms of sensibility and a system of a priori concepts, from which some most general a priori principles of physics can be derived, are necessary conditions of this experience, and restrict all possible human cognition.[58] Therefore, "the initial *definition* of experience, and the common manner in which it is recognized in ordinary life, need not contain any explicit pure components. These components are rather something that comes to awareness as such

[53] Ameriks (2003), 5.
[54] See Ameriks (2003), 25-30.
[55] Ameriks (2003), 7.
[56] See Ameriks (2003), 9.
[57] Ameriks (2003), 11.
[58] See Ameriks (2003), 5-10.

only upon philosophical reflection and argument (10)."[59] Moreover however, and this will be important for my reading of the Transcendental Aesthetic, Kant not only presupposes ordinary experience (i.e., Kant does not call into doubt that our representations have a valid relation to the objective world), but also the validity and *apriority* of mathematical (geometrical) cognition. He is concerned with proving necessary conditions of this a priori cognition, but does not initially call it into doubt. Rather, he will appeal to the fact that we *do possess* a priori cognition in geometry, and purports to show what must be presupposed to explain the possibility of this kind of synthetic a priori cognition.

As a core part of the Transcendental Logic, the Transcendental Deduction of the Categories assumes, on Ameriks' reading, objective empirical cognition as a premise (not Newtonian science, just some common experience) to prove that the condition of its possibility is that the categories or "pure concepts of the understanding" are universally valid, i.e., that they apply to all objects of possible experience. Let me here offer some brief orientation as to how the Transcendental Deduction of the Categories thus figures as a component and key step of the Transcendental Analytic (the first part of the Transcendental Logic). At the outset of the Logic, Kant offers, in a section titled "On the logical use of the understanding in general," a first "positive" definition of *human* understanding. He notes that in the earlier part of the book, i.e., in the Transcendental Aesthetic, he had appealed only to a "negative" notion of understanding, as a non-sensible capacity of cognition (see A68/B92f). Now, in the Transcendental Logic, the task is a positive understanding of this capacity in humans, and Kant's first argument on

[59] Ameriks (2003), 10.

this issue at A67ff/B92ff leads him to conclude that, "the understanding *in general* can be represented as a capacity for *judging,*" because "all actions of the understanding can be traced back to judgments" (see ibid.). How did Kant arrive at this conclusion? First, since Kant here refers to the "understanding in general" he means our specific *human* understanding *in the broadest sense*, and not any kind of understanding, intellect, or spontaneity. Again, Kant begins the reflection with the premise of the negative notion of understanding or spontaneity as a non-sensible faculty of mind. The next step is to say that since all our (human) intuition is sensible, our understanding is a non-intuitive kind of understanding, and that since beside intuition the only other means of objective cognition are concepts, our understanding must be an understanding through concepts (discursive understanding). The essential thesis that is developed on this basis is then the aforementioned: "The only use" understanding can make of concepts, and so the only possible use of a discursive understanding as such, is "to judge by means of them" (A68/B93); which is why discursive understanding or thought in general can be defined as a capacity to judge. Kant here develops this thesis on the basis of a reflection on the mediacy of concepts. I shall return to the mediacy of general representation below, but the key points for Kant at A68f/B93f in any case are that "all judgments are functions of unity among our representations" (A69/B94), and that the totality of the functions of the human understanding thus can be deduced from a complete table of "functions of unity in judgments" (see ibid.). We must thus understand the functions of concept formation, of subsumption of intuitions under concepts, of subsumption of specific concepts under more general ones, and of inferential reasoning in general as functions of a capacity to judge (see A68f/B93f and also A130f/B169). On this view, all of the former cognitive

activities are "functions of unity among representations," and more specifically, they are all instances of several particular logical functions of unity manifest in the logical forms of judgment. For if the human understanding as a whole is nothing but a capacity to judge, then the totality of functions of the understanding is identical to the totality of functions present in judging, and these functions are manifest in linguistically explicit, logical forms of judgment (e.g., all S are P, if p then q, etc.). Kant's idea is thus that if one sets up at a complete table of our explicit logical forms of judgment, one can derive from it the totality of conceptual functions, which he argues is the totality of functions through which we can think *objects* at all (see A79f/B105f).[60] Paul Guyer puts the point concisely when he says that the insight is that because judgments are about objects (which are not produced by the capacity to judge, but given by a source that is metaphysically distinct from it), then the concepts by means of which judgment relates to given objects must have the same logical forms as judgments.[61] And since these conceptual functions are derived from the pure logical forms of judgment, they are pure concepts (the categories) that have their formal origin in human understanding alone (see A80/B106).

> In this way there arise exactly as many pure concepts of the understanding, **which relate *a priori* to objects of intuition in general** [*welche a priori auf Gegenstände der Anschauung überhaupt gehen*], as there were logical functions of all possible judgments in the previous table: for the understanding is completely exhausted and its capacity entirely measured by these functions (A79/B105, bold emphasis mine).

[60] See for a detailed discussion of this issue Longuenesse (2006), 140ff; Guyer (2010), 120f; 125ff; and for a beautiful discussion of the project Kant later called the Metaphysical Deduction of the Categories Forster (2008), 70-75.

[61] See Guyer (2010), 120f; 125ff, in particular: "The general ways in which understanding has to conceive of its intuitions as objects for its judgments are determined by the ways in which understanding structures its judgments themselves (…), [so that] the forms of general logic will be used to think about objects, and (…) the concepts of objects must [always already, i.e. a priori] be structured accordingly (Guyer (2010), 127)."

It is important to here anticipate a difference that Kant sees between the way in which a logical function in a judgment gives unity to representations, and the way in which a category is a function of unity among representations. The categories have been deduced one-to-one from the logical forms as functions of unity of representations in an *intuition*, specifically:

> The same function that gives unity to the different representations *in a judgment* also gives unity to the mere synthesis of different representations *in an intuition*, which, expressed generally, is called the pure concept of understanding. (A79/B104f).

At this introductory stage, I only want to note a number of questions to be kept in mind here before I turn to Ameriks' influential reading of the Transcendental Deduction of the Categories. What are the "different representations in an intuition" supposed to be, to the "mere synthesis" of which a category gives "unity"? What kind of "unity" is this supposed to be? And even before we may ask the latter question, we must ask what notion of "mere synthesis" is at work here.

I said earlier that the Transcendental Deduction of the Categories assumes, on Ameriks' reading, objective empirical cognition as a premise to prove that the condition of its possibility is that the categories are universally valid. In other words, it must be proven that they apply to all objects of possible experience, and such objects are given only in human sensible intuition. To put precisely the claim to be proven at issue, it must thus be shown that the categories apply to all possible objects of human sensible intuition (e.g. to some outer object I perceived as a very little child, even though I did not and could not self-consciously experience it at that time). While what Kant calls a Metaphysical Deduction of the Categories proves their origin in pure understanding alone (by deriving them solely from the forms of judgment), the Transcendental Deduction

must prove that they are the conditions of the lawful combination (into a possible system of nature) of anything that can come before our senses. It must thus prove that the categories are the conditions of anything that is a perception that can be integrated into the unity of an experience of a single empirical self through time.[62] Ameriks discusses in detail only the second (B) edition of the proof because he heavily orients himself toward Dieter Henrich's reading of that version as structurally divided into two steps.[63] My own view is that the first (A) and second (B) versions of the argument are compatible, that the second version is more precise and explicit as far as argument structure and goal are concerned, and that the first version is not obsolete for interpretations today because it contains informative details that the second version omits. For Kant developed the second version of the entire proof for the explicit reason of clarification, but does not therefore reject the first version as false (see B xxxvii f). However, I also think that precisely because of Kant's desire to disambiguate relevant terms in the second version, its formulations are in one crucial respect misleading, in which they aren't in the first. I will return to that point in chapter four. For the purposes of the present chapter, where I am concerned with a certain conflation of concepts in the secondary literature, it is sufficient to limit the discussion to the B-edition. This is especially so since the majority of interpreters seem to consider that version as authoritative or even superior to the first.[64]

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[62] For further discussion about the division of labor between the Metaphysical Deduction of the Categories and their Transcendental Deduction see Horstmann (1981); Guyer (2001); Guyer (2010). I agree in particular that the set task of the Transcendental Deduction of the Categories is not merely the prove the conditional, that whenever we have experience of objects, the categories apply to it (which would not amount to the proof that the categories apply to all possible objects of nature). See Guyer (2010), 121f.

[63] Henrich (1969).

[64] Martin Heidegger, who offers an important exception to this tendency, criticizes the Neo-Kantian school for an interpretation of the *Critique* such that the B-edition, which arguably produces the impression of a more "intellectualized" account of experience (more on this point below), became conceived of as superior to the A (see Heidegger (1995), 212-17). Heidegger himself gives priority to the first, "more genuine and

As Kant clearly indicates in §21 of the B-Deduction (see B144), the proof comes in two parts, one completed with §20, and one completed in §26. Henrich has drawn the attention to the importance of understanding the exact difference and relation between these two steps. Ameriks follows Henrich in arguing that up to §20, it has been established that intuitions are subject to the categories insofar as they, as intuitions, already possess unity. So with §20 it has been established that any *One* intuition [*Eine* Anschauung]—where the capital letter, following Kant's usage at B143, is to indicate that the intuition has or is a *unity*—presupposes some application of the categories, because it presupposes the logical functions of the understanding, and the categories are just the ways transcendental apperception unifies intuitions in accordance with these logical functions.[65] Now first, one might wonder what if anything this adds to the earlier established result of §10, where the table of the categories has been derived from the logical forms of judgment as functions of unity with respect to sensible *intuition, specifically*. Furthermore, neither Henrich nor Ameriks explains what it means to say that an intuition has or is a unity (as opposed to not being a unity), and why the proof (at least up till this point) establishes only that the categories must apply to an intuition, i.e., to a representation, while the initial task arguably was to prove that the categories must apply to all mind-independent, real *objects* of possible experience, and so to all *objects* of human intuition (as opposed to applying merely to a representation itself). However, Ameriks expresses an important point relevant to the issue clearly and correctly in my view, although he does not explicitly comment on it: There is a peculiar expression which

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more radical [*echter und radikaler*]" (216) version of the proof. Henrich maintains that the second version is the tenable one (see Henrich (1969)).

[65] See Ameriks (2003), 63f.

Kant repeatedly uses in §§20 and 21—it appears twelve times in these two sections alone (see B143-146). The expression is "the manifoldness of a given intuition" or, synonymously, "the manifoldness given in an intuition." Ameriks seems to interpret this expression as in turn synonymous with "the many representations contained in an intuition," and the claim Kant is concerned with in §§20 and 21 as the claim that unity of an intuition presupposes that *many* representations must be integrated into, or must be made *One*, i.e., a numerically singular *and* unified representation. So any capitalization of the word "One" in these sections would be read as intended to capture two relevant senses simultaneously, namely the sense of the German indefinite article "eine" and the sense of the noun "Einheit." "Unified" should then presumably be taken to mean, in this context, that many representations are *systematically* or *lawfully* combined in a numerically singular representation. So on a charitable reading, Ameriks really claims, more precisely, that with §20 it has been established that many representations contained in *One* intuition are subject to the categories, because these just are the functions by which many representations are combined into *One* numerically singular *and* unified intuitive representation in accordance with the logical functions of judgment.[66]

This at least would, in my view, be a *step* towards the correct reading of the sense in which an intuition is said to be or possess unity, merely on textual grounds, both as regards the passages in the relevant sections of the B-Deduction, and as regards those in §10. Again, this is a point of merely textual, terminological observation, and I shall provide further evidence for it below.

[66] See ibid.

Henry Allison and Béatrice Longuenesse, although differing fundamentally about what the argument of the Transcendental Deduction proves and how, agree that the first part of the argument makes appeal to the categories as "pure intellectual concepts of the unity of synthesis of any intuition, as long as the latter is sensible (receptive, not spontaneous)."[67] On their view, a "significantly new move"[68] is made in the second step, in which the forms of *human* sensible intuition, space and time, play the crucial role (Allison and Longuenesse disagree about what more precisely the new move is).[69] This interpretation is compatible with the Henrich/Ameriks reading presented thus far, but it makes more out of the proof division. For it adds the important point that it is not essential to an understanding of the role of the categories as such that human sensible intuition happens to be spatiotemporal. The role of the "Remark" (§21) that follows after §20 seems to be to explain a division of the overall argument-structure in precisely this respect.

> The beginning of a *deduction* of the pure concepts of the understanding has [thus] been made [in the above]. Since the categories arise independently from sensibility merely in the understanding, I must [i.e., I had to] abstract in this beginning from the way in which the manifold for an empirical intuition is given, **in order to attend only to the unity that is added to the intuition through the understanding by means of the category.** In the sequel (§26) **it will be shown from the way in which the empirical intuition is given in sensibility** that its unity can be no other than the one the category prescribes to the manifold of a given intuition in general according to the preceding § 20 (B144f, bold emphases mine).

As I read it, this says that until §20 the focus of the proof had solely been on the categorial unity that is brought into an empirical intuition, by abstraction from the specific form in which the intuition is given. In particular, while Kant already appeals to

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[67] Longuenesse (2005), 32.
[68] Ibid.
[69] For Allison's reading see Allison (2004), 161-201.

the spatiality of human intuition in an example in §17, the entire first step of the proof allegedly abstracts from the fact that all human intuitions are succeeding in time. (On my interpretation of the first proof step in chapter four of this thesis, I will show that without at least an exemplary or implicit appeal to the fact that our intuitions *are* succeeding in time, the argument is not intelligible.) A second and related point of the "Remark" of §21 is that what has been accomplished until §20 only makes sense as an argument aiming at non-intellectual intuition. Put more strongly, it only makes sense as an argument that assumes receptivity of intuition and so of object (of intuition), and a *discursive, non-intuitive* understanding whose whole spontaneity in cognition amounts to connecting, ordering, and unifying intuitions of objects that are given to it from a source that is distinct from itself.

> In the above proof, however, I still could not abstract from one point. Namely, I could not abstract from the fact that **the manifold for intuition must already be *given*** prior to the synthesis of understanding and independently from it; how, however, is here [still] left undetermined. For if I would think of an understanding that itself intuited (as, say, a divine understanding, which would not represent given objects, but through whose representation the objects would themselves at the same time be given, or produced), then the categories would have no significance at all with regard to such a cognition. They [the categories] are only rules for an understanding whose entire capacity consists in thinking, i.e. in the action of bringing the synthesis of **the manifold that is given to it in intuition from elsewhere** to the unity of apperception, which therefore *cognizes* nothing at all by itself, but only combines and orders **the material for cognition, the intuition, which must be given to it through the object** (B145, bold emphases mine).

In sum, the proof up till §20 goes through the argument on a general, more abstract level and leaves more or less "indeterminate" the *specific* singular form of the sensible intuition in question.[70] Section §24 begins by restating the same point again. All of this is intended by Kant to clarify the order of argument:

[70] This agrees with how Paul Guyer summarizes his reading of the proof division in Guyer (2010), 142ff.

> The pure concepts of the understanding are related through the mere understanding to objects of intuition in general, **without it being determined whether this intuition is our own or some other but still sensible one** [*beziehen sich durch den bloßen Verstand auf Gegenstände der Anschauung überhaupt, unbestimmt ob sie die unsrige oder irgend eine andere, doch sinnliche sei*], but they are on this account mere *forms of thought*, through which no determinate object is yet cognized (B150, bold emphasis mine).

Before I turn to Ameriks' reading of the second half of the deduction (concluding in §26), let me now say what I take some additional and essential steps in the first half (§§15-20) to be, that do in fact add something constitutively new to the proof, in particular over and above what has already been established by the Metaphysical Deduction of the Categories in §§10-12. The argument of §§15-20 is more complex than presented in what follows, but since I intend to limit my discussion for the moment to the relation of unity and singularity (and to explicit or implicit interpretations of this relation in the literature), I will only offer a sketch of what I take some overall relevant aspects of the proof to be. On my view, §§15-20 treat the intrinsic relation between transcendental apperception and the unifying function of the human capacity to judge in general, independent of the particular form of human sensibility, which "gives" the intuitions and so the specific objects that are unified by these functions. So the new aspect (in particular beyond §§10-12) is the role of transcendental self-consciousness in the proof. One may read this first part of the deduction such that Kant here assumes the phenomenologically ordinary experience of a self-conscious sensible being, who possesses and uses the concept of an I as a self-identical subject of representations through time (who can follow up on and recall her experiences through time). Kant calls this common or ordinary representation of the identity of my "I" in all my other conscious representations through time the "analytical unity of apperception" (see B133).

The proof assumes this self-consciousness, which I take it is part of what Ameriks would call the "common experience" that is not called into doubt in the *Critique.* Kant then argues that a necessary and universal condition (the "real ground") of such ordinary self-conscious experience is the "synthetic unity of transcendental apperception."[71] One may here compare an emphatic footnote in §16 at B134, which says that this "synthetic unity of transcendental apperception" is "the highest point" of all use of the understanding, even of "the whole of logic," and is "the capacity which is the understanding itself." And in the preceding section §15, Kant anticipates and prefaces this introduction of a "transcendental apperception" in §16 by saying that it is a representation of a unity which grounds all concepts of combination, moreover, which "contains the ground of the unity of different concepts in judgments, and so even the possibility of understanding, in its logical use" (B131). It is therefore that I read the *Critique* such that "transcendental apperception" is not another capacity apart from human discursive understanding, but rather, is the grounding and unifying principle of human understanding as such and in the broadest sense. Importantly, the "synthetic unity of transcendental apperception" constitutes an "objective unity of self-consciousness" (see B138ff), and this in turn is an objective, i.e. rule-governed, non-arbitrary conjunction among given representations constituted by a function that is manifest in (and so analyzable in) our logical forms of judgment. Now compare the following passage:

> The thought that these representations given in intuition all together belong *to me* means (…) the same as that I (…) can unite them (…); **for otherwise I would have as multicolored, diverse a self as I have representations of which I am conscious.** Synthetic unity of the manifold of intuitions (…) is thus the ground of the identity of apperception [i.e., analytical unity of self-consciousness] itself (…). Combination does not lie in the objects, however, and cannot as it were be borrowed from them through perception (…), but is rather only an operation of the understanding, which is itself

[71] Compare for discussion Wunderlich (2005), 222f.

> nothing further than the faculty of combining *a priori* and bringing the manifold of given representations under unity of apperception, which principle is the supreme one in the whole of human cognition (B134ff, bold emphasis mine).

Ameriks himself has offered a detailed defense of a reading along the very general lines I just suggested, where a passage such as the one just quoted would be interpreted such that the "supreme" condition of all possible human experience, which is at the same time the condition of analytical unity of consciousness through time (the condition of a *non*-schizophrenic state of mind), is the synthetic and *objective* unity of transcendental apperception. How this argument works—i.e., how Kant can prove that all lawful combination of representations presupposes the synthetic unity of transcendental self-consciousness—is the question to which I return in chapter four. For now, what matters is the general point, that synthetic unity of transcendental apperception grounds at once the analytical unity of Rahel's self-consciousness through time and an objective unity of many partial representations contained in received intuitions. There is a good way of putting the key point in Ameriks:

> [W]hatever the *general* conditions are for representations being represented as in *one* consciousness, these conditions must be met for representations to be represented in a particular (ostensibly identical) consciousness such as my own. (…) [T]hese conditions (…) involve a synthetic unity in that the unity which is the representation of x and y as my representations is not something entailed by the mere facts that I have a representation of x and I have a representation of y. The unity involves a complex which must be synthetic (…) in the sense that it involves a genuine conjunction of distinctly (even if *qualitatively* identical) occurring representations.[72]

In light of this background, compare now again in full length the passage in §20, which summarizes the central idea of the first part of the proof, and which contains the

[72] Ameriks (1983), 176f.

sentences on which both Henrich and Ameriks base the interpretations I appealed to above.

> That action 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 (§19). Therefore all manifold, insofar as it is given in *One* empirical intuition, is *determined* in regard to one of the logical functions (…), by means of which, namely, it is brought to a consciousness in general (B143, bold emphasis mine).

First the terminological issue, which I take to be central, again: This passage nicely supports my earlier anticipated view that the expression "manifoldness of a representation" cannot be taken to be a synonym of a term which in my opinion is meaningless and as far as I can see nowhere employed by Kant, namely that of "raw sense data." Concepts can contain or be a "manifoldness" according to this passage. Recall that Kant returns in B143 to the very general idea introduced in §10, that the understanding is a capacity to judge and that judgments are "functions of unity" among different (among more than one) representations. The same is expressed on my reading by saying that judgments are functions of unity for "a manifold of representations." And the very general idea of a "function of unity" according to §10 seems to be that by this function, *many* representations are "drawn together in" or are being subsumed under *One* [Eine] *general* or "higher" representation of an object.

> All judgments are (…) **functions of unity** among our representations, since instead of an immediate representation [i.e., an intuition] a higher one, which comprehends this and other representations under itself, is used for the cognition of the object, and many possible cognitions are thereby drawn together into **one** (A69/B94, bold emphases mine).

So the claim of §19 on this reading is that whatever "manifold" of representations (be it many concepts or many intuitions) is brought under the conditions of a synthetic unity of

consciousness, must be brought under it through the logical functions, and this entails that One [*Eine*] representation is being made out of *an indeterminate set of many ones*. But what kinds of representations are being unified in One intuition, where this means that the intuition is or has a unity? More precisely put, what are the "different representations in an intuition," to the synthesis of which the category confers unity, according to the famous passage at A79/B104f?

In a recent article, Till Hoeppner has offered a thorough and detailed version of a standard interpretation of the *Critique* that offers an answer to this question. On Hoeppner's reading, Kant defines "function" as a specific type of action or activity of the understanding, where this activity is either analytic or synthetic, and is the ground or cause of the unity that pertains to a representation or to a cognition.[73] If the function is analytic, it is an action of judgment or an action of concept formation, and it consists in "ordering different representations *under* a common one (A68/B93)." This means that through the analytical function of the understanding, numerically different representations are subsumed under a concept, which represents an objective content that is common to the objects of all the different representations that can be subsumed under it: "Analytisch werden verschiedene Vorstellungen unter einen Begriff gebracht (78/B104)." However, the action or activity of the understanding—the function of the understanding—can also be synthetic. In that case, as Hoeppner rightly claims (and this now also is compatible with Ameriks' reading as outlined and supported thus far), it is the activity of combining numerically different representation not under but *in* one numerically singular intuition. So synthetic unity is not achieved through an action of

[73] See Hoeppner (2011), 201.

subordinating many less general representations under one more general concept, but through a horizontal, mereological combination of parts or partial representations into a whole:

> The act of analysis paradigmatically brings about the unity of a concept representing a property that is common to the objects of different representations, while the (...) act of synthesis brings about the unity of an intuition representing a singular whole, in which the elements of this intuitive manifold are unified as parts of this whole.[74]

Hoeppner's correct claim is that the analytical and synthetic functions of the understanding are two complex, structurally analogous activities (on his reading, consisting of three analogous "partial acts"), or two mental activities of the same type.[75]

This gets me to the crucial point of disagreement with Hoeppner. He writes:

> The activity of synthesis is thus also directed, like that of analysis, to numerically different representations ('*Vorstellungen'*). These are however not already intentional and thus analyzable representations, but merely the elements ('sensations,' 'impressions') of an intuitive manifold.[76]

First of all, this sounds very vague. What are these mere sensational "elements of a manifoldness" supposed to be? But secondly, we can say what, on Hoeppner's reading, the many representations that are being combined into One intuition by a function of the understanding could not be. For Hoeppner claims that these many representations, while they *are* numerically distinct on his view, *are not* (prior to this action of the understanding) themselves representations with objective content or with relation to an

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[74] [*Der (...) Akt der Analysis bringt paradigmatisch die Einheit eines Begriffs hervor, der eine Eigenschaft repräsentiert, die den Gegenständen verschiedener Repräsentationen gemeinsam zukommt, während der (...) Akt der Synthesis die Einheit einer Anschauung hervorbringt, die eine einzelne Ganzheit repräsentiert, in welcher die Elemente einer anschaulichen Mannigfaltigkeit als Teile dieser Ganzheit vereinigt sind*] (Hoeppner (2011), 206).

[75] See ibid.

[76] [*Auch die Aktivität der Synthesis richtet sich demnach, wie die der Analysis, auf numerisch verschiedene Repräsentationen (‚Vorstellungen'). Diese sind jedoch keine bereits intentionalen und somit analysierbaren Repräsentationen, sondern lediglich die Elemente (‚Empfindungen',‚Eindrücke') einer anschaulichen Mannigfaltigkeit*] (Hoeppner (2011), 198).

object. And so they are in themselves, independently of a function of the understanding, not intuitions. For singularity, as opposed to generality, is just defined as the relation of a representation to one, numerically singular, *object*, and a singular representation in turn is non-conceptual or intuitive by definition. On Hoeppner's view, it is only through the very function of unity, legislated and exerted by the understanding, that something can become or be an intuition as defined, because it is only through this act that a representation can relate to an object at all. Why does this follow on his view? On the one hand, one should note that Hoeppner's interpretation of Kant's theory of the "function" of the understanding already sets out with the assumption that this theory is a theory of any mental relation to objects as such.[77] On the other hand, while the reading defends a detailed interpretation of this initial assumption, according to which Kant defines "function" in general as a "complex unity of three partial acts of the relation to objects,"[78] it is clear from the context that Hoeppner in passages such as the latter really means to refer only to what he calls an "*intentional* relation to objects," which is constituted by an action of the understanding that determines at the same time the "*intentional* content" of the representation that through this action relates to an object. Hoeppner's interpretation therefore relies on at least one unjustified assumption (paradigmatic of standard readings of the critical philosophy): Hoeppner assumes that any concept of a relation to an object in Kant must be a conception of a relation that we might call "intentional."

But not all relation of representations to objects is intentional according to the *Critique*, if we assume that the Kantian notion for what Hoeppner calls "intentional"

[77] See Hoeppner (2011), 193.
[78] Hoeppner (2011), 206.

relation would be a relation that is constituted through or dependent upon synthetic unity of apperception, because it is a determinate relation of representations to a determinate object. As we saw in, appearance is defined as the undeterminate object of an empirical intuition, which is completely independent of any higher capacity of cognition, given in sensibility. On this basis, I propose that the structural analogy between the functions of synthetic and analytical unity that Hoeppner points out goes in one crucial respect further than on his account: The latter is the subsumption of different less general representations under a more general concept, the former is the lawful combination of many singular, mereologically structured intuitions into One (greater and unified) singular whole of intuition. This is a reading that makes the analogy between the two instances of "function of unity" even tighter, because in both cases the respective relevant "input" and the respective relevant "output" of the function are representations of the same kind (in the case of a production of analytic unity, general cognitions, in the case of a production of synthetic unity, singular cognitions: Even though the subsumption of several intuitions under a concept constitutes a case of production of analytic unity, intuitions so analytically unified presuppose that they are already synthetically unified, which means that they are already both singular and general in form, and their general form is relevant for the production of the analytic unity in question. Analogously, while a synthetic unity of intuition is general and singular in form, its singular form is the relevant output in the case of synthetic cognition, yielded by its specific singular inputs). So on my view, the many intuitions which are unified into *One* intuition are, even prior to or "before" any such action of synthetic unification, numerically distinct representations that relate to singular objects. Indeed, even though the *Critique* itself of course does not employ the

notion of an "obscure" representation, I would say that nothing in the Transcendental Deduction of the Categories on a plausible reading contradicts the idea that the representations to the mere synthesis of which a pure concept must first confer unity are *obscure* or *"blind" intuitions* in the sense in which I interpreted these notions in chapter one. Furthermore, on my reading the entire A-edition of the *Critique* allows for a reading of the term "synthesis" or "mere synthesis" of intuition such that this synthesis is an action of the imagination that can in principle also be blind, i.e., entirely independent of the understanding, and so is possible in non-rational animals. Transcendental apperception is the condition of *unity* of such synthesis, and another expression to denote the action that confers this unity is just to say that "representations are brought under 'synthetic unity of apperception.'" But not all synthesis as such already presupposes the function of unity, or stands already under "synthetic unity of apperception," at least not on Kant's usage of the term in the first edition of the *Critique.* The B-edition, unfortunately or misleadingly, may seem to suggests (but doesn't, if one really precisely reads §15) an identification of the mere action of "synthesis" as such with "combination" or the action (function) of bringing representations under "synthetic unity," and the assumption that the *Critique* demands this identification is reflected in standard readings of the critical philosophy, for example in the quotations of Hoeppner's article above, who treats as synonymous "(action of) synthesis" with "function of synthetic unity."

How does Ameriks interpret the second proof step, and so the completion of the deduction in the notorious §26? It seems clear by now that in the second proof step, that is, from §21 to §26, Kant turns from the discussion of the possibility of unified intuitions as such, to unified human spatiotemporal intuition in particular. Much more still needs to

be said about the correct understanding of the second proof step, but it is also obvious, I think, that §26 focuses on the case of connected human *empirical* intuitions, in other words, it focuses on the possibility of human experience, and experience is nothing but "cognition through connected perceptions" (B161). So human experience as the target of §26 is a complex representation of a determinate empirical object, constituted by a unified connection or combination of several empirical intuitions. Ameriks thus phrases the question of §26 as follows: "Need the empirical synthesis of apprehension conform with intellectual synthesis of apperception?"

Here is Amerik's answer:

> It is very significant that Kant's answer here is not to directly invoke the conditions of the unity of consciousness, but to argue along lines set down by the Aesthetic, which had shown that all *our* representations must be in space or time and that we are a priori certain of the unity of space and time. Kant now argues that since all unity (and hence this unity too) 'presupposes a synthesis which does not belong to the senses' (B160 n.) but to the understanding and its categories, 'everything that is to be represented as determined in space and time must conform' (B161) to the categories. It is thus the universality and unity of space and time, not the unity of consciousness as such, which is invoked to guarantee the 'universal validity' of the categories for us. In this way Kant's deduction in the Analytic depends on the doctrine of idealism in the Aesthetic, for only the thesis that space and time are forms of the mind, dependent on it and a priori knowable, can justify the certainty that they are unities determining all our representations.[79]

This answer is unfortunate, and fundamentally mistaken in a key respect. For where in the Transcendental Aesthetic did Kant deduce the *unity* of space and time as a priori forms of human sensibility or a priori intuitions? What Kant did explicitly do in the Aesthetic is to prove the *singularity* of these forms (which shows that time and space are originally intuited and could not as such be represented merely through concepts), and my main point in the below and the following chapter will be that a common

[79] Ameriks (2003), 64f.

misunderstanding of §26 seems to be connected to a confused reading of these proofs of the Transcendental Aesthetic.

But first to the immediately obvious problems with the response quoted. Ameriks' answer is unfortunate, because it implies a position Ameriks himself seems to oppose in his writings on Kant. The implication of what is said in the above is that Kant would in §26 have ruled out the possibility of sensible representations of objects that are not and cannot be made explicitly self-conscious. Every human intuition as such would always already be intergrated into the unity of a transcendental apperception, since the sensible forms of human intuition, time and space themselves, would be the singular forms of receptivity they are only by way of being subject to, and dependent upon, the unifying function of the understanding. So the only way I see to read the passage quoted above is that the "dispersed perceptions" of very young children, obscure intuitions, hallucinations, schizophrenic and other intuitive states in humans that transgress the unity and finite boundaries of a possible self-consciousness (a unity of experience) through time would not be possible or explicable. This is unfortunate, since in other writings Ameriks' himself points the reader to Kant's theory of intuition and imagination of objects in non-rational animals, in order to make the argument that Kant seems to think sensible intuition as independent of discursive understanding.[80]

More importantly however, the reading is wrong because it rests on a confusion or conflation of the critical notion of the singularity of human intuition with the notion of the unity of human understanding. The confusion becomes glaringly visible here. For Ameriks has just carefully reconstructed the first proof step up until §20, and on this basis

[80] See notably Ameriks (1983).

he correctly maintains that the conditions that have just been proven to be the conditions of the unity of any intuition whatsoever (the categories), must therefore, if the whole proof-structure is to make sense at all, also be the conditions of the unity of human intuitions of space and time. And therefore, they must also be the conditions of our empirical intuitions of "everything that is to be represented as determined in space and time." This is the next correct point of the reading: If we have a unified intuition of space and time, then anything that is represented *as determined in* the space and time which we so represent with unity, must therefore also be the object of an intuition that has unity. The unity conferred by the understanding to an intuition of space and time unifies at the same time anything represented *in* the space and time so intuited. That is the very argument of §26. But why should it then—to show this—all of a sudden be necessary to have a priori certainty of another, additionally necessary unity, apart from the categories, if such appeal to another source of unity of intuition was not required in the first proof step, which discussed the exact same argument for *any* unified—any One—sensible intuition whatsoever? In other words, Ameriks' confusion is that he adds on to what would otherwise be an acceptable reading of §26, a reading that would make good sense of the overall proof-structure of the deduction, an alleged appeal on the part of Kant to a unity of space and time as forms of human sensibility as such. By contrast, a correct reading of §26 turns on the distinction Kant makes between forms of intuition and a "formal intuition" of space or time as determinate objects of a possible and so necessarily *unified* experience, a distinction of which he reminds the reader in the famous footnote to §26.[81] The latter presupposes the function of the understanding, the former don't.

[81] Just one more note on this footnote in anticipation of my argument in chapters three and four. I am very

Clearly, the task for any interpretation of the Transcendental Deduction of the Categories is to show how it proves that the categories apply to all objects of possible experience, and so apply to all possible objects of our senses and intuition as such—to objects, for example, which I perceived as a very young child. (The categories must apply to these objects even though I cannot even recall my "dispersed perceptions" of them, and I cannot recall them because on Kant's very reasonable view *I* did not unify my perceptions of these objects at that time, as a very little child). However, a convincing reading of the deduction should at the same time be able to explain the possibility of sensible intuition in humans—of our singular and immediate representation of objects—as entirely independent of the understanding. I will offer a conclusive reading of the proof of the Transcendental Deduction of the Categories, a compatible with this independency, in the last chapter of the dissertation (chapter four). All I have done in the present chapter is to point to what I take to be some first and important grounds of a standard conflation of singularity and unity in the reception of Kant. The next chapter

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well aware of the sentence of §26 to which Kant adds the note, and in particular the part of it emphasized in the following quote: "But space and time are represented not merely as *forms* of sensible intuition, but also as intuitions themselves (which contain a manifold), **and thus with the determination of the *unity* of this manifold in them *a priori* (see the transcendental Aesthetic)**. Note: Space, represented as *object* (as is really required in geometry), contains more than the mere form of intuition, namely the *comprehension* of the manifold given in accordance with the form of sensibility in an *intuitive* representation, so that the *form of intuition* merely gives the manifold, but the *formal intuition* gives unity of the representation (B160f, bold emphasis mine)."

Here is what am I going to say with respect to the reference to "unity" in the sentence emphasized, and its reference in turn to the Transcendental Aesthetic: Kant discusses in the Transcendental Aesthetic the character of our human representations of space and time and proves the *origin* of these representations in pure sensibility (and sensibility alone). However, and this accords with the general proof strategy pointed out above, Kant must assume for all of these proofs an exemplary, imaginable, even if perhaps abstract representation of space (or time) that we can refer to, describe, talk about, and analyze; in other words, a representation of space as an object that is *not "nothing"* to a self-conscious subject. Therefore, the proofs must of course assume unified intuitions of space and time, respectively (unified by transcendental apperception), and according to §26, they must thus appeal to a "formal intuition" of space (or time). Yet Kant nevertheless can show that there is some character proper to these representations (namely their singularity), which can only ground in sensibility and could not be constituted by human discursive understanding.

(chapter three) will be concerned with the proofs of the singularity of our representations of space and time in the Transcendental Aesthetic and their predecessor arguments in the *Inaugural Dissertation*. In chapters three and four I will show that an argument to the effect that singularity presupposes unity is also present in three other influential interpreters of the critical philosophy, Henry Allison, Michael Friedman, and Béatrice Longuenesse. Partly on the grounds of what Kant says in §26, these interpreters assume that it is necessary to re-read the Aesthetic in certain crucial respects from the point of view of the later Transcendental Deduction of the Categories.

Chapter Three

The Representation of Space

The goal of this chapter is to offer a reading of singularity and immediacy as the defining criteria of intuition that is compatible with sensible intuitions being independent of understanding. The clue to Kant's understanding of the singularity and immediacy of human intuitions, specifically, can be found in the Transcendental Aesthetic. Kant there proves that space and time are pure intuitions *because* they are singular and immediate a priori representations. I show in my interpretation that the intelligibility and force of the argument that time and space must be a priori depends upon the insight that they are represented as continuous (infinitely divisible) mereological wholes. At the same time, this continuity, i.e., the containment or givenness of infinite further parts within the whole, accounts for the fact that space and time must be intuitions, i.e., that they must be singular and immediate representations. One aspect of my interpretation is thus that I believe the separation of the later so-called Metaphysical Exposition of the Concept of Space (and *mutatis mutandi* for the corresponding section on time) into four sub-arguments is merely superficial. These arguments are not independent of one another. Rather, they constitute a single proof to the conclusion that space (just as time) originates in pure sensibility.

My reading takes into account that Kant's theory of the apriori is *dispositional*. That is to say, Kant holds that there are no innate representations whatsoever, but that *any*

representation as such must first in time be "originally acquired" on the occasion of sensible affection. Kant's position is thus that any contingent sensation must "fill" these continuous forms down to infinity with reality, and thereby actualize a representation of a given infinity (of infinitely many material parts) in sensibility. For there is no sense in which we could produce or abstract a pure intuition of space and time prior to first sensible affection. Rather, the pure intuitions or pure forms of space and time are first in time *acquired* on the occasion of such an affection, which actualizes them down to infinity. On the basis of this dispositional view of the a priori, and the related, epistemological priority that real continuous space thus gains in the critical philosophy,[82] it first becomes obvious why the forms of space and time could never be spontaneously produced by human understanding. For an immediate intuition of an infinity cannot be attributed to a discursive or finite understanding; it could only be produced by an intuitive understanding. Humans can therefore represent an actual infinity only in sensible intuition, i.e., in a form that is metaphysically distinct from human understanding. This

[82] By "epistemological priority" of real space I only mean to denote the fact that some representation of materially filled space (which is nevertheless on the critical theory transcendentally ideal, i.e., a mere representation) is necessary to subjectively enable a geometrical or empirical representation of an object which involves discursive understanding. The reverse is not true, because e.g. children or animals might not be capable of determining a geometrical representation, but are able to represent real continuous space. An outer appearance is certainly not on my view *ontologically prior* to the form of space as a pure form of sensibility, which grounds outer appearances. Moreover, empirically real space is not determined as what it is (the world, distinct from the I) independent of or temporally prior to human understanding. It is beyond the scope of this essay to comment in detail on the different ways in which my reading relates to the monumental scholarly work of Guyer (1987), who argues that Kant's only successful proof of the objective validity of the categories by 1787 is completed in the Analytic of Principles and presupposes some representation of real space. Spatial appearances on this view are *ontologically prior* to all time determination, because the representation of something persistent that is distinct from the empirical self is presupposed by this determination. The analysis of the condition of possibility of the practice of time determination in turn alone justifies the universality and necessity of the categories, which must be applied in the form of transcendental schemata, to make possible a temporal determination of objective states of affairs and even of merely subjective succession of representations. On Guyer's reading, even the application of categories-cum-transcendental time determinations to the succession of representations in inner sense thus presupposes a representation of empirically real space, i.e., of something persistent that is external to and therefore exists independently of the empirical (embodied) self. I will return in chapter four to my differences with Guyer as regards what I consider Kant's (best) argument to the objective validity of the categories.

chapter thus expounds a positive critical argument for a necessary ontological or metaphysical independence of human sensible intuition from human understanding.

A guiding thread of discussion in the chapter is a recent paper by Michael Friedman.[83] Friedman in this paper proceeds from the distinction Kant emphasizes in the larger context of his controversy with the Leibnizian philosopher J.A. Eberhard between geometrical space, represented as a determinate object, and the *singular*, *infinite*, "metaphysical, i.e. original, but merely subjectively given space" (see *On Kästner* 20:420f). Friedman applies this distinction first to what Kant titles in the *Critique's* B-edition a Metaphysical Exposition of the Concept of Space[84] in the Transcendental Aesthetic, and turns from there to a reading of §26 in the Transcendental Deduction of the Categories. I shall follow below this order of discussion of passages.

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[83] Friedman (forthcoming).

[84] According to Kant's own explanation, a "Metaphysical Exposition" of a concept involves exhibiting the concept "*as a priori given*," and so asks for the concept's non-empirical origin (see A23/B38). This would seem to mean that the Metaphysical Exposition of the concept of space will either show this concept to originate in pure understanding, or will conclude that it must originate in pure sensibility. One may ask why Kant formulates the project of the section in this way, since a concept could of course not originate in pure sensibility alone, and since the section will in fact prove that the representation of space is originally intuitive and so could not be conceptual. Here is my suggestion as to why Kant presents the exposition of the representation of space in this way: Kant's explicit position is that we cannot represent our forms of sensibility or forms of intuition *as* objects (or make them objects of reflection) independently of the understanding, and so that we cannot, independently of the understanding, represent as objects our pure intuitions of space and time (in the sense in which Kant uses the term "pure intuition" in the Transcendental Aesthetic, namely as synonymous with "pure form of sensibility," see A20/B34f and A21/B35). An intuitive representation that we can represent as an object and so talk about, philosophically analyze, and so forth, is always determinately bounded and hence finite, namely spatially and temporally bounded. By contrast, an originally infinite form of intuition itself, which grounds or enables finite intuitions of determinate spaces or times ad infinitum, can never be made the determinate object of a concept. Therefore, the Metaphysical Exposition of the Concept of Space can only prove that any representation of space *as* an object (which is always already a representation that is both intuitive and conceptual) must originate in or "belong to" pure and entirely sensible intuition, which can however not in itself, apart from the understanding, become an object of knowledge. Compare a closely related reading offered by Lorne Falkenstein on the basis of some of the same observations: According to Falkenstein, we must take literally a) Kant's claim in the Aesthetic that "pure intuition" and "form of sensibility" are synonymous, b) the notorious "intuitions without concepts are blind," and c) Kant's title, in the B-edition, of a Metaphysical Exposition of the *Concept* of Space (my emphasis). Falkenstein insists that Kant does *not* intend to prove, in this Exposition that our representation of space is intuitive (and hence, not a concept). Rather, he claims, Kant proves that our representation of space is a "concept of the form of intuition" (Falkenstein (2004), 63).

I. The Distinction between Metaphysical and Geometrical Space

The relevant passage from Kant's review of a treatise of Kästner's begins with the following list of distinctions between space as it is represented and discussed in metaphysics (I shall henceforth appeal to this as "metaphysical space") and space as it is represented and discussed in geometry ("geometrical space"):

> Metaphysics has to explain how one can **possess** the representation of space, while geometry teaches how one can **produce** a space, that is, exhibit it a priori in representation (not through a drawing [*Zeicnung*]). In the former, we regard space **prior to all determination** in accordance with a certain concept of the object, **as it is given**; in the latter, a space is **constructed**. In the former, space **is original and only one (unitary) space** [*nur ein (einiger) Raum*], in the latter it is **derived and there are (many) spaces**, regarding which the geometer must however admit, in agreement with the metaphysician, that they can only be thought as parts of the one unitary original space (*On Kästner* 20:419, bold emphasis mine).

The opposition between metaphysical and geometrical space is thus the opposition between one numerically singular, unitary [*einig*], originally given, and subjectively possessed space, in which many possible derivative spaces can be described, exhibited, or "made," and any one such derivative (geometrical) space, which can be thought of only as a part of the original (metaphysical) space. Metaphysics asks for the origin or source of an original representation of space and considers space "as it is given prior to all determination of it." What follows is Kant's explanation and defense of the claim that geometrical space, or rather, geometrical spaces, can only be thought of as parts of one original, singular space and so must ground in the metaphysical representation of space:

> Now a magnitude in comparison to which every given magnitude of the same kind is equal only to a part of the former cannot be other than infinite. Thus the geometer, as well as the metaphysician, represents original space **as infinite and indeed as a given infinite**. For the representation of space (and also of time) has this characteristic that is not found in any other concept: **that all spaces are only possible and thinkable as parts of a singular space.** When the geometer says that a line can always be further extended no matter how far it has already been extended: that doesn't mean what is said

> in arithmetic of number, that numbers can always be further increased through addition of other units or numbers (for the added numbers and magnitudes thereby referenced are possible in themselves, without belonging to the earlier ones as parts of a whole), rather that a line can be extended to infinity means: the space in which I describe the line is greater than any line I may describe in it; and thus the geometer grounds the possibility of his task of enlarging a space (of which there are many) to infinity in the original representation of a unitary infinite subjectively given space [*auf der ursprünglichen Vorstellung eines einigen unendlichen, subjectiv gegebenen Raumes*] (*On Kästner* 20:419f, bold emphasis mine).

The argument offered here is based on the geometrical claim that a line can be extended infinitely. This claim is not called into doubt and then proven in this passage; rather, it is presupposed as a justified claim. Kant here aims to explain that geometry (any geometrical claim such as the one at issue) presupposes the representation of an original space as singular and unitary, and that this original space must be infinite, and therefore (subjectively) given.

On my reading, Kant develops the key to this argument already in the *Inaugural Dissertation*, and two main predecessor arguments of the review *On Kästner* quoted are the two so-called "intuitivity arguments" of the Metaphysical Exposition of the Concept of Space. My thesis is that these arguments, which derive the intuitivity of the original representation of space from its singularity and immediacy, do not show or assume that every object of spatial representation has a singular location in the single totality of the space of possible experience. For this totality is a world, and the world (as defined in the *Critique*) is One [*Ein*] materially "filled" space existing in One [*Einer*] *unified* time. The arguments at issue do not show or assume as a premise that the representation of space is singular in this sense. Rather, they only aim to prove that geometry presupposes a numerically *singular, because* "unitary" *in the sense of continuous* original representation of space. In other words, they only aim to show that the form of representation of space

originally given to humans could not be general, i.e. that there could not be indefinitely many numerically distinct, finite, and independent instances of it, because this could not ground the infinite potential of geometrical representation. However, the Metaphysical Exposition of space does not and could not prove the claim that our original and singular representation of space—the metaphysical representation of space—must be a unity [*Einheit*], or must be unified, in the sense in which (as is specified in the Transcendental Logic) unity is a function of human understanding, or could be produced by it.

Friedman offers a highly valuable interpretation of Kant's conception of geometrical space. According to Friedman's interpretation, a geometrical space is a Euclidean construction of a mathematical or "pure sensible" concept (e.g. the concept of a line, a circle, a triangle, and so on) in pure intuition.[85] Such construction is executed by "pure productive imagination" in accordance with a schema. As Friedman correctly points out, Kant defines a schema for a mathematical concept as a "rule of synthesis" (A141/B180) or as "[the] representation of a *general* procedure of the imagination" (A140/B179f, my emphasis). So for example, on Friedman's proposal, the schema of the concept of a triangle can be understood as the representation of a function or constructive operation which takes three arbitrary lines (such that two together are greater than the third) as input and yields a triangle constructed as output.[86] Friedman also cites the following, important passage, to emphasize that a schema, unlike an image, must always be general (see also A138/B178):[87]

> The schema is in itself always only a product of the imagination; but since the synthesis of the latter has as its aim **no singular intuition** [*keine einzelne Anschauung*] **but**

[85] See Friedman (forthcoming), 6–13.
[86] See Friedman (forthcoming), 7.
[87] See Friedman (forthcoming), 7n9.

> **rather only the unity in the determination of sensibility,** the schema is to be distinguished from an image (A140/B179, bold emphases mine).

And compare:

> No image of a triangle would ever be adequate to the concept of it. **For it would not attain the generality of the concept,** which makes this valid for all triangles, right or acute, etc. (…) **The schema of the triangle can never exist anywhere except in thought** [*in Gedanken*], and signifies a rule of the synthesis of the imagination with regard to pure shapes in space (A141/B180, bold emphasis mine).

Friedman emphasizes the generality Kant attributes to schemata, since on Friedman's argument it allows Kant to develop a theory of mathematical cognition, which could not ground in discursive cognitive resources alone but would nevertheless reach (and first produce) a strict generality and necessity of mathematical propositions. I do think this last point is misleading, since the generality of schemata derives of course precisely from the function of unity proper to *discursive* understanding. Kant explains very clearly that a schema is general *only because* or *only in so far as* imagination in its schematism relates not only to sensibility, but also to concepts or rules of the understanding;[88] either to antecedently available concepts, which are simply "translated" into rules of synthesis, or to a "mere" function of synthetic unity in the determination of intuition, through which pure sensible concepts are generated. While Kant thinks that we cannot explain the subjective possibility of the latter case, i.e., that we cannot ultimately explain *how* our

[88] "[A transcendental schema] must stand in homogeneity with the category on the one hand and the appearance on the other (…) Now a transcendental time determination [i.e., a transcendental schema] is homogeneous with the category (which constitutes its unity) in so far as it is general and rests on a rule a priori [*mit der Kategorie (die die Einheit derselben ausmacht*) *so fern gleichartig, als sie allgemein ist und auf einer Regel a priori beruht*] (A138f/B177f)." And compare further: "Even less does an object of experience or an image of it ever reach the empirical concept, rather the latter [concept] is always immediately related to a schema of the imagination, *as a rule for the determination of our intuition in accordance with a certain general concept* [*als eine Regel der Bestimmung unserer Anschauung gemäß einem gewissen allgemeinen Begriffe*] (A141/B180, my emphasis)." And: "The schema of a pure concept of the understanding (…) is something that can never be brought to an image at all, but is rather only *the pure synthesis in accord with a rule of unity according to concepts in general* [*die reine Synthesis gemäß einer Regel der Einheit nach Begriffen überhaupt*] (A142/B181, my emphasis)."

understanding can first, and indeed successfully, legislate synthetic unity of sensible intuition—where the implicit, discursive or rule-governed activity consists in running through, reproducing through the passing of time in accordance with transcendental time determinations (i.e., transcendental schemata), and recognizing given parts of an intuitive whole *as determinate parts of a determinate whole*—executed via pure imagination,[89] he would nevertheless not allow for the speculative attribution of any non-discursive (i.e., intuitive) or infinite capacities to human understanding; not even in its "first" and synthetic application of functions of unity to sensibility. Mathematics therefore derives its apriority and necessity as much from the *discursive* generality of schemata as from the apriority of the singular, i.e., intuitive forms of space and time.

Mathematics could not ground on mere concepts on Kant's theory because, as Friedman persuasively argues in his recent essay as well as in earlier works,[90] discursive understanding is limited in Kant's view to the logical forms of traditional, monadic subject-predicate logic, and these forms, in turn, are limited to essentially finitary representations. I shall return to Kant's theory of concepts and the limits of their specificability below, but Friedman in my view is correct when he says that

> [T]here are, for Kant, no Leibnizian 'complete concepts' comprising within themselves (that is, within their defining sets of marks [*Merkmale*] or partial concepts [*Teilbegriffe*]) an infinite manifold of further conceptual representations. But mathematical representations (including the mathematical representation of space) can and do contain an infinite manifold of further (mathematical) representations within themselves (as in the representation of infinite divisibility). So such representations, for Kant, are not and cannot be conceptual.[91]

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[89] Compare here a passage also cited in Friedman (forthcoming), at 8n10: "[A] postulate in mathematics is the practical proposition that contains nothing but the synthesis by which we first give to 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 such a proposition cannot be proven, because the procedure it requires is precisely that by which we first generate the concept of such a figure (A234/B287)."

[90] Friedman (1985; 1992).

[91] Friedman (forthcoming), 9.

Friedman defends this argument of Kant's as historically tenable, on the grounds that while today's developed polyadic logic allows for the representation of infinite mathematical structures (as e.g. the space of Euclidean geometry or the number series), monadic logic at the stage of its development in Kant's day could indeed not possibly represent these infinities.[92] On this reading, Kant, following Euclid, shows that we can represent, or cognize, that any line (or any other geometrical space) is infinitely divisible by means of (the representation of) a general rule of construction of a bisection that can be applied to any given line segment: This representation, which shows that we can iterate this bisection *indefinitely*, thereby represents the *infinite divisibility* of any such segment. In the passage from Friedman just quoted (see note 92), Friedman might therefore more precisely have said that "the mathematical representation of a space *is recognized in mathematics* to contain an *infinite potential* of further mathematical representations within itself (but does not contain within itself a collection of infinitely many actual, determinately represented, i.e., constructed mathematical or geometrical spaces)." The reason I think that this is a more precise formulation Friedman should accept is that he focuses on the review *On Kästner* precisely to stress the difference Kant draws between the necessary finitude of actual geometrical construction and the infinity of a singular metaphysical space, which the geometer can and must recognize (but which he could never produce in successive, iterative construction).[93] Here is the relevant passage, the first part of which Friedman quotes as well:

> That however the metaphysical, i.e. original, but merely subjectively given space, which can be brought under no concept capable of a construction **(because there are not many of it** [*weil es dessen nicht viel gibt*, i.e., because there are not many such

[92] See Friedman (1985); Friedman (forthcoming), 10.
[93] See Friedman (forthcoming), 12f.

> original spaces but only a singular one]), but nevertheless contains the ground of the construction of all possible geometrical concepts, that this space is infinite is merely to say: **that it consists in the pure form of the subject's sensible representation as an intuition a priori, thus in this, as a singular representation** [*in dieser, als einzelnen Vorstellung*], **the possibility of all spaces which goes to infinity is given**. This agrees with the fact that the mathematician has only ever to do with an *infinito potentiali*, and *actu infinitum* (the metaphysically given) *non datur a parte rei, sed a parte cogitantis*; which latter form of representation is not on this account fictitious and false, but rather grounds those constructions of geometrical concepts which proceed to infinity and leads metaphysics to the subjective ground of the possibility of space, i.e., its ideality, with which [doctrine] and the dispute regarding it, the geometer has nothing to do, unless he wants to take up the debate with the metaphysician on how to resolve the problem: that space and everything which fills it is infinitely divisible and yet does not consist of infinitely many parts (*On Kästner* 20:420ff, bold emphases mine).

I shall return below to the quite explicit, quite precisely and pointedly formulated claim here, that "in the pure form of the manner of sensible representation of the subject," *as* intuition or *as a singular representation* a priori, *the possibility of all spaces to infinity is originally given*. Friedman concludes from this passage that, "'metaphysical' space is the space considered in the Metaphysical Exposition of Space in the Transcendental Aesthetic, whereas geometrical space consists of the indefinitely extendible (but always finite) manifold of geometrical constructions which may (at any finite stage) be actually carried out starting from some (arbitrary) initial pair of points."[94] Now Friedman suggests turning to the Metaphysical Exposition of space itself, and specifically to its first argument.

[94] Friedman (forthcoming), 13.

II. The Apriority of Space

The first argument of the Metaphysical Exposition at A23/B39 aims to prove the apriority of the representation of space. On what I consider the textually most plausible reading,[95] this proof takes the following form:

(1) **The representation of space is presupposed by** the representation of objects **as spatially related** (namely, as spatially outside of me or outside of and alongside one another).

(2) **Therefore, the representation of space is not an empirical concept** abstracted from outer experience.

A standard and twofold objection to this reading is that premise (1) is trivially true or amounts to a tautology, and that the conclusion drawn from it would therefore prove too much.[96] In response to this objection, Daniel Warren proposes that the insight formulated

[95] I am greatly indebted in my discussion of this argument to Daniel Warren (1998).

[96] The idea is this: It is trivially true that we must have some representation of feature F if we represent objects as having feature F. So it seems that one could derive from Kant's argument that the representation of any feature (such as redness) is not an empirical concept. Partly on the grounds of this worry, Henry Allison has interpreted Kant's first argument to the conclusion of the apriority of space as appealing not to the possibility of representing spatial relations, but instead to the possibility of representing ontological distinctness of subject and object, and individuation of numerically distinct objects. Warren offers a detailed refutation of this reading, which Allison develops in Allison (1983), 82–86, on the basis of the latter's poor fit with Kant's text and on the basis of other, substantial interpretative disagreement. Such substantial problems are, inter alia, that humans do not need to consider the spatial features of objects A and B in order to infer the numerical distinctness of these objects, for example from the knowledge that at a given time, A is pink and B is not pink (see Warren (1998), 187). So space is not a necessary condition of representing individuation. For it will not do to escape this first objection by arguing that we need space for discerning qualitatively identical, prefect replicas. Even if we assume such perfect replicas exist (for all we know, they may not exist, which means that things could always be individuated by qualitative difference (see Warren (1998), 188)), the fact that Kant holds (in the Amphiboly) that spatial distinctness is sufficient for establishing numerical distinctness does not help here. The latter assumptions allow one to conclude that *only* the representation of space guarantees the possibility of distinguishing two distinct objects at any given time *no matter what* properties these objects have, and would allow this distinction even if they were qualitatively identical. However, on Allison's reading the premise of the first argument in the

by Kant in (1) is not reducible to the trivial statement that your representation of something as spatially related presupposes that you have *a representation of spatial relation* in the sense in which this is trivially true of the representation of *any* feature F: In order to represent something as F, I must have a representation of F, where this means I must have something like a capacity to represent F, or, e.g., a concept of F. Instead, Warren argues, the claim expressed in (1) is really, in "more articulated form,"[97] this:

> (1*) **When we represent objects as spatially related** (namely, as spatially outside of me or outside of and alongside one another), **we must represent them as occupying *places* or *regions of space.***

As I understand this interpretation of the argument, the representation *R1* of some spatially related empirical objects presupposes a representation *R2* of some space(-region) *in which* the objects of *R1* (may) occupy places. This is not a trivial claim, and it seems that it could not be asserted in analogous fashion about the representation of any feature F. But more importantly, there are cases in which an analogous claim can be formulated but would obviously have to be rejected as false, and are clearly rejected by Kant. For example, it is false that the representation *R1'* of the relation brighter-than between two objects x and y presupposes the representation *R2'* of a brightness-line on which x and y (may) occupy parts or points. For I might represent the brightness relation between x and y on a brightness-line, but I need not do so.[98]

Metaphysical Exposition of space is that the representation of space is necessary for distinguishing objects (perhaps spatially extended objects) *simpliciter*, *not* that it is necessary for such distinction under some logically and physically possible circumstances (see Warren (1998), 190). Allison accepts main aspects of Warren's critique in the revised and enlarged edition (2004) of his book and gives up his earlier "ontological" reading of the first space argument.

[97] Warren (1998), 202.

[98] Compare for this discussion and the following paragraph Warren (1998), 200–210.

This account aims at an explanation of what the first argument of the Metaphysical Exposition of space is presumably directed against, namely the view that our concept of space is abstracted from empirical, independently available representations of things that are spatially related. When Kant argues that "[s]pace is not an empirical concept that has been abstracted from [abgezogen von] outer experiences" (A23/B38), the kind of concept-acquisition here denied for the concept of space is presumably the following: From several experiences of a number of pairs of objects which bear relation R to one another, a subject forms the concept of relation R. An example of such a relation might be "x is brighter than y." From the concept of this particular relation, which is independently available, the subject may then form the representation of a brightness-*line*. The representation of a brightness-line would be empirical if the antecedently available relational concept from which it is formed (the concept of brightness-relation) is. The gist of the first-space argument, on this reading, is that an analogous acquisition of the representation of space—abstracted from a representation of spatial relation, which has been *independently acquired* (from perceptions of things that are spatially related)—is impossible. Warren suggests that the first space-argument addresses *only* a Leibnizian view of the kind here illustrated by the example of the empirical formation of the concept of a brightness-line, because this would be, on Kant's view, the "only viable account"[99] on which the representation of space *could* be seen to be derived from experience. Therefore, in ruling out the abstraction of a concept of space from representations of spatial relations between

[99] See Warren (1998), 206.

objects, Kant can regard his argument as sufficient to show that the representation of space is not empirical.

I will come back to this last point below—for the view that we could empirically *only* acquire a representation of space from antecedent and independently available representations of spatial relations can be questioned. Lorne Falkenstein, who also has defended a reading of the argument at issue in the textually literal sense as represented in (1) – (2), argues Kant defends (1) on the following grounds: By merely comparing the sensational matter of two or more objects of outer intuition (the perceived relata of a particular spatial relation), you cannot acquire a representation of their spatial relation. The representation of a spatial relation between things presupposes that they are already given to us *ordered in space.* Where Warren appeals to a comparison with a "brightness-space," which is not necessary for representing relations of brightness, Falkenstein appeals to a "color-space," which is not necessary for representing order (degrees of similarity and difference) of color.[100] I believe there is indeed a substantial force to the key insight which Kant's first apriority argument appeals to, and I read both Warren's and Falkenstein's expressions or formulations of this insight as getting at this same point.[101] Falkenstein offers more of an extensive account of what must have been Kant's positive support for (1),[102] and I shall follow this account to some extent.

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[100] See in particular Falkenstein (2004), 170f.

[101] In a footnote (see Warren (1998), 205n33), Warren takes pains to distinguish his reading of (1) from that of Falkenstein's. He claims that on his interpretation, (1) says it is necessary for a representation of spatial relations to represent, in addition to the relata, a space in which the relata (may) occupy regions. He then suggests that there might in principle be kinds of relations for a representation of which it is necessary that the relata be given in ordered form (in the sense in which Falkenstein suggests it is necessary for spatial relations), but which do not presuppose a representation of *regions of a space* in which the relata occupy places. However, I do not see in what positive and relevant way the two accounts could differ with respect to spatial relation, which is the only kind of relation (1) appeals to. Falkenstein's account of *space* as a specific kind of order, namely a "presentational order" (see Falkenstein (2004), 184f) *in which*, or *as parts of which* spatial relata must originally be represented, does not as far as I can see in a relevant, positive way

To clarify precisely the substantive claim at issue—the claim that our representation of space is a priori—it must however first be very clear what sense (or senses) of the a priori Kant employs here. The question of apriority is never the question of what is or must be represented first in time. All human cognitions must first or initially be occasioned by experience,[103] but nonetheless, some of them can be a priori, where this means, "absolutely independent of all experience" (B2), in that they must have their source in the mind [*Gemüt*] itself (see B1f). The representation of space, for example, must first be actualized through experience, although Kant purports to prove its origin in human sensibility. As we may read in the appendix to the Amphiboly: "Were light not given to the senses, and were extended beings not perceived, then it would also be impossible for us to represent any darkness or any space (A292/B349)." So the criterion of apriority is neither that a representation could somehow be had temporally prior to first sensations, nor that one could tell a story about self-conscious, explicit cognitive access to it as entirely independent of all experience. Following Leibniz, Kant holds what one may call a "dispositional"[104] model of a priori representation, on which cognition requires "absolutely no implanted or innate representations (…). One and all

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differ from the claim about space (of which perceived spatial relata must necessarily occupy regions) Warren suggests is made in (1).

[102] The main goal of Warren's reading is to motivate a non-trivial, historically and textually plausible reading of the premise of the first argument of the Metaphysical Exposition of space, which explains, again, what position the argument is *negatively* directed against. Warren thus limits himself to a very brief suggestion as to why Kant may perhaps have been *positively* committed to this premise. This suggestion is that certain a priori modal restrictions apply to spatial relations between objects, and we can recognize these restrictions only by employing an independent representation of space which is or can be occupied by spatially related objects. Thus the point is that our recognition of these modal features cannot be had prior to a representation of space, i.e. they cannot be independently acquired and *then* built into a representation of space which adheres to them (see Warren (1998), 207f). More would need to be said to comment on this suggestion, but I will not further pursue it here.

[103] "*As far as time is concerned*, (…) no cognition (…) precedes experience (…). But although all our cognition begins *with* experience, it does not on that account all arise *from* experience (B1)."

[104] Compare Hogan (2010), 25.

(…), the *Critique* considers them acquired (*On a Discovery* 8:221)."[105] The essay *On a Discovery*, from which this last passage is taken, contains a clear summary of both the sensible and the intellectual, "formal" and innate, but mere *conditions* of the possibility of (or "dispositions" for) representations *as such*—for again, no representation as such is innate on the critical theory. These conditions or *capacities* ground, on or after the first occasion of sensory impression, respective "original" *acquisitions* of representations. These original acquisitions, as opposed to "derivative" ones, are a priori.

> There is (...) **an original acquisition** (...) also **of that which previously did not yet exist at all**, and so did not belong to anything prior to this act [*mithin keiner Sache vor dieser Handlung angehört hat*]. According to the *Critique*, these are, in the first place, **the form of things in space and time**, and second, **the synthetic unity of the manifold in concepts**; for neither of these does our cognitive capacity get from objects as given therein in themselves, but rather it brings them about, a priori, out of itself. But then there must be a ground for this in the subject, which makes it possible that these representations can arise in this and no other manner, and moreover can be related to objects which are not yet given, and this ground at least is innate. (...) **The ground of the possibility of sensible intuition (...) is the mere receptivity peculiar to the mind**, to receive a representation in accordance with its subjective constitution when it is affected by something (in sensation). **Only this first formal ground, e.g., [the ground] of the possibility of an intuition of space is innate, not this representation of space itself**. For impressions would always be required in order to first determine the cognitive capacity to the representation of an object (which is always a subjective act). Thus arises the formal intuition called space, as an originally acquired representation (of the form of outer objects in general), **the ground of which** (as **mere receptivity**) is nevertheless innate, and whose acquisition long precedes the determinate concepts of things that are in accordance with this form; the acquisition of the latter is an *acquisitio derivativa,* in that it already presupposes **universal transcendental concepts of the understanding, which are likewise acquired and not innate, though their *acquisitio*, like that of space, is no less *originaria* and presupposes nothing innate save the subjective conditions of the spontaneity of thought (conformity with the unity of apperception)**. No one can be in doubt as to this meaning of the ground of the possibility of a pure sensible intuition, save someone who may be leafing through the *Critique* with the help of a dictionary, but has not thought it through (*On a Discovery* 8:221ff, bold emphases mine).

[105] Kant held this dispositional view of the a priori early on. Compare the *Inaugural Dissertation* (on the a priori intuitions of time and space) at *ID* 2:406.

Two "formal conditions" or "formal grounds" of human cognition are according to the above "innate" in a human subject: (I) a specific receptivity (the capacity to produce representations of a specific form on the basis of affection) and (II) "the subjective conditions of the spontaneity of thinking," synonymously, conditions of "the synthetic unity of a manifold in concepts," or, conditions of "accordance with unity of apperception". (II) is the innate condition of transcendental concepts (the categories), which are a priori in the sense that they are "originally acquired" at a certain age. Likewise, (I) is the innate formal condition of the a priori "forms of things in space and time," forms which are "originally acquired" on some (first) occasion of sensory impression. Kant here calls the first, originally acquired representation of space, the "representation of the form of outer objects as such," also "formal intuition," or "space" simpliciter. The *original* acquisition of this representation precedes (in time) the *derivative* acquisiton of "the determinate concept" of spatial objects, i.e., *of space as an object*, a concept which presupposes the categories. "Formal Intuition" in this passage thus cannot be the same as the "formal intuition" in §26 of the Transcendental Deduction of the Categories, since the latter presupposes a concept of space and a unity that is dependent on the categories. To map the *Discovery's* terminology onto other terminological distinctions introduced by other passages seen thus far, the follwing two vertical lists of equivalent terms suggest themselves:

Metaphysical Space (*On Kästner*)	**Geometrical Space** (*On Kästner*)
Space simpliciter or the **Formal Intuition of Space,** originally acquired or **a priori** (*On a Discovery*)	
Form of Intuition or **Form of Sensibility** or **Pure Intuition** (treated as synonymous in the opening sections of the Transcendental Aesthetic, see A20f/B34f)	
mere Form of Intuition (in the Transcendental Deduction of the Categories, §26).	a **Formal Intuition of Space** or a **Representation of Space as an Object** (in the Transcendental Deduction of the Categories, §26).

With these distinctions at hand, we can now ask in which of the two groups of terms belongs "the representation of space," which in the first two arguments of the Metaphysical Exposition of the Concept of Space is proven to be a priori, and which the remaining two arguments of the section prove to be intuitive. To see why this is a difficult question, and not only because both metaphysical space and geometrical space (or their respective synonyms) are both a priori and singular representations, we must also take into account Kant's notion of space as mere *ens imaginarium*, mere "being of the imagination." Consider first an additional passage on space and time, again from the *Discovery*:

> [O]ne can and must (…) admit, that space and time are mere creatures of thought and **beings of the imagination, not invented by the latter [imagination], but forms on which it [imagination] must ground all its compositions and creations** [*bloße Gedankendinge und Wesen der Einbildungskraft sind, nicht welche durch die letztere gedichtet werden, sondern welche sie allen ihren Zusammensetzungen und Dichtungen zum Grunde legen muß*], since they [space and time] are the essential form of our sensibility and of the receptivity of intuitions, through which objects are given to us at all, and whose general conditions are necessarily at the same time conditions of the possibility of all objects of the senses as appearances, and thus must agree with these (*On a Discovery* 8:203, bold emphasis mine).

Kant clearly states here that while space and time are "mere beings of the imagination," this is not meant to imply that they are produced by the imagination. Rather, all constructions or image-formations presuppose space and time so understood. "Space" as used here thus clearly is metaphysical space in the groups of terms distinguished above. This agrees with the *Critique's* usage of "*ens imaginarium*:" "[P]ure space and pure time (...) are to be sure something, as the forms for intuiting, but are not in themselves objects that are intuited (*ens imaginarium*) (A291/B347)." And "[although time and space are] surely something […they are] nothing *for cognition* (A292/B348)," for an *ens imaginarium* is "empty intuition without object" (ibid.). What I take to be at least one unmistakeable thesis contained in this somewhat enigmatic passage from the appendix to the *Amphiboly* is that *entia imaginaria*, while they are or possess *being*, are not represented (constructed in imagination) *as* objects. This is confirmed in the context by how the passage continues; with the claim quoted already in the above:

> [I]f extended beings were not perceived, one would not be able to represent space. (…) [T]he mere form of intuition [is], without something real, not (…) [an object] (A292/B349).

And compare the Transcendental Aesthetic:

> Time is certainly something real, namely the real form of inner intuition. (…) It is thus to be regarded as real, not as an object, but as the way of representing myself as an

> object [*Sie ist also wirklich, nicht als Object, sondern als die Vorstellungsart meiner selbst als Objects anzusehen*] (A37/B53f).

A proposition p is a priori, on Kant's explicit definition, if either the criterion of strict universality or the criterion of necessity (or both) apply to p (see B3f). However, not all representations are propositions or propositional (i.e., not all representations are judgments or implicitly contain the content or structure of a judgment that could be made explicit). What is the criterion of apriority for representations that are not (or at least might not be) propositional in form? How could one prove of any such representation that it is a priori? Furthermore, assume that "the representation of space" at issue in the Metaphysical Exposition of its concept in the Transcendental Aesthetic is metaphysical space according to our groups of terms above. That would mean that at issue is a representation of an infinity, which is nevertheless a mere "ens imaginarium" that we do not as such (independent of the construction of a finite spatial object of possible experience) construct in the imagination *as* an object. If this is the representation under consideration, then how could one go about to prove its apriority? In other words, how can one prove the apriority of a representation if one does not possess (a construction of) a concept of it (the representation) as a determinate object?

Falkenstein's discussion can help us to get clearer on the sense of apriority at issue in the first space argument of the Transcendental Aesthetic. He points out that even if space is *first in time* represented only along with or as integral part of a complex perception of outer, spatially related objects, it does not follow that its representation could have been abstracted from a bare, antecedent sensation of these objects. Falkenstein concludes that the sense of apriority at issue in this proof is simply that of "Non-Posteriority:" Kant shows that the representation of space is not posterior to the

representation of spatially related objects, because it could not have been abstracted from the mere sensations of these relata.[106]

It seems strange at first sight that Falkenstein limits himself to this response, because his very explication and defense of Kant's account relies on a strong, traditional understanding of apriority at work in the argument. On his interpretation, the proof attacks what Kant, in the corresponding predecessor-arguments on space and time in the *Inaugural Dissertation,* repeatedly refers to as the "vicious circle" of the Leibnizian relational view of space and time (see *ID* 2:399; 2:402; 2:404): The Leibnizian begs the question because she must presuppose space (or time) for the very conception of the relations between objects from which she purports to derive it. In the first time-argument of the *Dissertation*, Kant's point is most perspicuous. The claim is that the very conception of the relations of succession and simultaneity between objects presupposes the representation of time:

> I only understand the meaning of the little word *after* by means of the antecedent concept of time. For those things come *after* one another which exist at *different times*, just as those things are *simultaneous which exist at the same time* (*ID* 2:399).

This sentence is cited by Falkenstein in support of his interpretation of the first space-proof.[107] Kant argues that if the Leibnizian did not presuppose time, she could not understand what it means for things to come after one another, and thus could not derive a concept of succession. And here's what Falkenstein (I believe correctly) concludes from this:

> Kant is claiming (that) it is (...) the elements already arranged in the [presentational] order [i.e., in space] that comes first and serves as a ground of our perception of the relations (of position), not relations (…) that determine the [presentational] order [i.e.,

[106] See Falkenstein (2004), 173f.
[107] See Falkenstein (2004), 167.

> space]. This is what Kant means by saying that *space* literally lies as a ground of the spatial relations of externality and adjacency and that *time* lies as a ground of the temporal relations of simultaneity and succession.[108]

A different notion of apriority that is appealed to here reiterates an older sense of the a priori common in the German rationalist tradition and its schools, which is clearly adapted in Kant's writings: "Reason comprehends [something] when it cognizes it *a priori*, *that is, through grounds* (*Reflexionen* 17:511)." In Crusius and Leibniz for example, an a priori truth is only known or understood through, e.g., inferred from, a determining ground, which is the *metaphysical* ground or *cause* of this truth. So an a priori truth in this sense presupposes the *existence* of a determining ground on the basis of which it can be known.[109] Reconstructing Crusius' account more precisely, I know a truth about some x a priori iff I can only understand this truth through a representation (an ideal ground) of a real, metaphysical ground of x.[110] And it was Crusius, too, who already objected that the circular Wolffian-Leibnizian view of the acquisition of the representation of space really presupposes space as a *given* ground.[111] Space as such a "ground," following the older notion of the a priori, but with an adaption to transcendental idealism, would thus be represented a priori precisely in the sense that any determinate representation of space (i.e., any representation of determinate spatial relations between objects) presupposes (a representation of) given space. Furthermore, the young Kant himself at one time held a quasi-Newtonian view of space as an absolute, actual substance—space as analogous to God—which is the existing ground or possibility

[108] Falkenstein (2004), 171.
[109] Crusius, *Entwurf der notwendigen Vernunftwahrheiten*, §38 and Leibniz, *Theodicy*, §44.
[110] Crusius' notion of the a priori so interpreted has been attributed to Kant in Hogan (2009a), 52ff.
[111] See Crusius, *Entwurf der notwendigen Vernunftwahrheiten*, §50.

of other actual and possible things (inlcuding their relations). And so it appears quite plausible that even transcendentally ideal space (space whose metaphysical being or existence is now that of a mere *ens imaginarium*) is for Kant understood in the first apriority argument of the *Critique* quite analogously to his very early view of space, namely as a "real ground" of all outer objects and their spatial relations, and as the "ideal (i.e., representational) ground" through which we must cognize their form a priori. This is especially plausible since this argument of course cannot assume transcendental idealism as a premise (since transcendental idealism is supposedly proven only at the end of the Transcendental Aesthetic). Compare again the wording of the text: "[I]n order for me to represent [outer objects] as outside one another [and] (…) [as in different places] **the representation of space must already be their ground** [*dazu muß die Vorstellung des Raumes schon zum Grunde liegen*] (…) [Thus] this outer experience **is itself first possible** only through this representation (A23/B39, my emphases)."

These considerations make it very plausible that "the representation of space" in the first argument of the Metaphysical Exposition of the Concept of Space indeed stands for metaphysical space and its correpondent terms listed above. However, assuming this is correct, we can now also see why it is difficult if not impossible to show, with this argument, anything more than that space is not posterior to, or could not have been abstracted from, antecedently and independently available representations of spatial relata. For while metaphysical space indeed grounds and so is represented in any possible perceptual experience of outer objects, it is in itself (as a mere *ens imaginarium*), *independently of or prior to* a determinately limited possible construction or experience *within it,* no analyzable representation. As has frequently been noted, the first apriority

argument of the Transcendental Aesthetic does therefore not rebut the following Empiricist objection, first put forward by Kant's contemporary J.G. Maaß in 1789 (the following is an apt formulation of the objection by Warren):[112]

> Is it not possible that the representation of objects' spatial relations and the representation of space mutually condition one another, and thus that there really is no asymmetry with respect to their relative priority? Might not these two representations be jointly derived from experience, and in that way, both be empirical representations?[113]

The literature further has it that Kant may have encountered or anticipated this objection, and that a second apriority argument, inserted in the *Critique's* second edition, responds to it.[114] Here is the proof in full text:

> Space is a necessary representation, a priori, that grounds all outer intuitions. One can never represent to oneself that there be no space, though one can very well think that there are no objects to be encountered in it. It is therefore regarded as the condition of the possibility of appearances, not as a determination dependent on them, and is an a priori representation that necessarily grounds outer appearances (A24/B38f).

This argument does not appeal to some sort of subjective or psychological impossibility to represent the non-being of space that would be specific to a human subject. Rather, it argues that it is objectively impossible to represent the non-being of space, assuming one represents spatial objects. The important point is that the reverse is not true, i.e., that the representation of space does in no way objectively presuppose the representation of *actual* outer objects.[115] Thus one can reformulate the relevant premise of this argument as follows:

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[112] The original objection by J.G. Maaß can be found in Allison (1973), 35f.
[113] Warren (1998), 211f.
[114] See for example Warren (1998), 212; Paton (1970, Vol. 1), 112.
[115] For a beautiful and concise interpretation of the argument exactly along these lines see Horstmann (1997), 21f.

(I*) One cannot represent objects of outer sensible intuition (appearances) without representing space, but one can construct in imagination a space (e.g., one can construct a triangular figure), that is to say, one can imagine the spatial form of a possible object of outer intuition, without thereby representing *actual* objects of outer intuition.

This reconstruction[116] is motivated by the facts that

(i) the conclusion of the argument is a claim not about any objects of thought, but only about appearances as empirical objects of outer intuition.

(ii) the following is a non-contradictory proposition: 'There is no space.' So the point made is not that the absence of space is logically impossible.

(iii) (I*) preserves an analogy to the corresponding time-proof of the *Critique*.

If this reconstruction correctly represents the gist of the argument, then Kant has now slid from an appeal to metaphysical space (in the first space argument) to an appeal to geometrical space (in the second space argument). Incidentally, this is exactly what Friedman maintains about the two apriority arguments (Friedman interprets the second apriority proof in essentially the way I reconstructed it here.)[117] However, while I find it difficult to see how the second space proof could plausibly be interpreted differently, it could not satisfy, according to the reconstruction offered, Maaß's empiricist objection. For the empiricist can of course agree with everything that is said with (I*).

Yet perhaps the problem here is that it makes little sense to study the four parts of the *Critique's* Metaphysical Exposition of the Concept of Space in isolation from one

[116] A very similar reconstruction is offered in Parsons (1992), 69, and in Allison (2004), 107: "We cannot represent outer appearances that don't have spatial form, but we can intuit in outer sense objects devoid of sensational content (i.e., devoid of that which for Kant belongs to sensation, hardness, impenetrability, color etc., see A20f/B35)."

[117] See Friedman (forthcoming), 15.

other. Kant did not set out to show twice (via two isolated, independent arguments) that our representation of space is a priori, and then, again as it were completely independent from the preceding arguments, with two arguments in turn independent from one another, that it is an intuition. Rather, the explicit goal of the section is the proof that our representation of space has a non-empirical origin in human *sensibility*, as opposed to the intellectual faculty of the mind. The force of this proof can only be seen if one understands the underlying connection of the section's four sub-arguments, a connection that, as I believe, is more perspicious in the corresponding predecessor arguments of the *Inaugural Dissertation*.[118] In particular, as we shall see, the two so-called intuitivity-arguments of the *Critique* first make intelligible the sense in which space must be a priori, and this depends in part on their relating geometrical space to metaphysical space in the way Kant also (if more explicitly) relates them in the review *On Kästner.* For the gist of the first apriority argument as Warren has defended it—the point that we need to represent spatial relata as occupying *parts of* or as located *in* a *common* space region (which is correct, but not a claim Kant explicitly formulates like this in the first proof)—is really a point about the intuitive character of space, in fact, a feature of intuitivity which is needed to make the apriority of space and time intelligible.[119]

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[118] The style of the two Metaphysical Expositions of the concepts of space and time in the *Critique* is elliptical, and it is a plausible explanation of their summary-like presentation that they presuppose argumentative detail defended at length in the *Dissertation.*

[119] Warren (1998) argues at 203n31 that his reconstruction of the first space-argument "should not be understood as requiring that there be a single all-encompassing space. (...) [N]othing in this (...) argument would rule out that there might be a plurality of unconnected (spatially unrelated) spaces." (One consideration in the background is that Kant's early pre-critical work acknowledges the possibility that there exists a plurality of spatially unconnected spaces.) Warren concludes that therefore, "the considerations at work in the first apriority argument are separable from those that drive the 'intuition arguments,' specifically the 'singularity' of space." I agree that the first space argument (and specifically, the argument on Warren's reconstruction) does not presuppose that "there be a single all-encompassing space," in a sense which would rule out the logical (or pre-critical metaphysical) possibility of many disconnected spaces. But it does not follow from this that the first space argument on Warren's

III. The Continuity of Space

If we compare the structure of the Metaphysical Exposition of the Concept of Space with the structure of argument of a section that has the same philosophical aim—the proof that space is a pure intuitive form of sensibility—in the *Inaugural Dissertation*,[120] we note the following: The *Dissertation* sets out with an argument (contained in a paragraph *A*) that corresponds precisely to the first space-proof in the *Critique*.[121] However, no argument is offered that corresponds to the second space-proof of the *Critique*. Instead, the text in the *Dissertation* immediately continues in a paragraph *B* with an argument to the intuitivity of space. The first sentence of the following paragraph *C* then summarizes the conclusion of *A* and *B* with the claim that space is a *pure intuition* "*because* it is singular (…), not put together from sensations but the fundamental form of all outer sensations (*ID* 2:402, my emphasis)." *C* continues with an argument from geometry described as an illustration and confirmation of the result established in *A* and *B*.

The preceding section on time in the *Dissertation* proceeds in corresponding fashion. It offers two arguments that correspond to *A* and *B* in the space section, and the following third paragraph (corresponding to *C* in the space section) contains the statement that time is a pure intuition. The Concluding Remarks that follow after the pure intuitivity of time and space have been established in §§14 and 15 put in a nutshell what on my reading is not only the gist of these arguments in the *Dissertation*, but also

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reconstruction does not presupposes the singularity of space, unless one conflates the critical notion of singularity with the critical notion of a unity that is a function of the understanding.

[120] The passages that contain this argument are titled *On Space* and are part of the third section of the *Dissertation*, "On the Principles of the Form of the Sensible World."

[121] Warren (1998) offers an insightful analysis of the analogy between the two arguments (see 185n10 and 202n31).

the argument at the heart of the critical Metaphysical Expositions of the Concepts of Space and Time:

> These, then, are the two principles of sensible cognition, not general concepts, as is the case in intellectual cognition, but singular intuitions, **and nonetheless pure**. In these (intuitions) it is not true that the parts, **and especially the simple parts**, contain, as the laws of reason prescribe, the ground of the possibility of the composite; but instead, after the exemplar of sensible intuition, the infinite contains the ground of every part that is cognizable, **and finally the ground of the simple, or rather of the limit.** For only if infinite space and time be given can any definite space or time be assigned, through limitation of it [the infinite], **and neither a point or a moment can be cognized by itself, they can be conceived only in already given space or time, as limits therein**. Therefore, all primitive determinations of these concepts are beyond the jurisdiction of reason, and cannot in any way be intellectually explained (*ID* 2:405, bold emphases mine).

The key to understanding what I take to be the insight that drives this conclusion is Kant's notion of a "limit," which is related to the argument that there really are no spatial or temporal simples. Kant says in §15 of the *Dissertation* that this fact about space—that "we must necessarily represent space as a continuous quantum," i.e., that space is infinitely divisible—"is easily demonstrated" (*ID* 2:403n3). He therefore here "passes over" this proof (ibid.). The corresponding argument is however explicated for the continuity (the infinite divisibility) of time at *ID* 2:399. Kant adds to the proof in this passage on time:

> Therefore any part of time is a time. The simples that are in time, namely, *moments* [*momenta*], are not parts of it but *limits* [*termini*] between which there is time. For, given two moments, there is no time given with this unless actual things follow each other in between them; therefore, besides a given moment a time must necessarily be given in whose later part there is another moment (ibid.)

This passage says: (1) We cannot represent a timeless gap in, or timeless part of time ("every part of time is itself a time"), (2) we cannot represent "empty" time, i.e., a time that is not "filled," or in other words, in which there are no things existing, and (3) the representation of a determinate moment in time presupposes the representation of another

such moment, which is connected with the first in virtue of their both being limits of a *singular* and actually "filled" time.

(2) is a premise that Kant will repeatedly appeal to in the course of the critical proofs of the Analytic of Princples ("empty time cannot be apprehended" (A192/B237); and compare also: "time itself cannot be perceived" (B219; B257); "time cannot be perceived in itself" (A183/B226; B233)). And it seems to me that it is just the point about metaphysical time as *ens imaginarium*; "the mere form of intuition is without anything real [*ohne Reales*] no object," or "empty intuition without object" (see again A292/B348f). Perhaps the reader has wondered how the second apriority arguments of the *Critique* are compatible with the claim expressed also in (2). Recall that Kant says in these two corresponding arguments that one cannot represent appearances without representing time or space, but that one can very well represent time or space without appearances. Again, the solution to this puzzle is, in my view, that the second apriority arguments of the *Critique* appeal to posterior or abstract construction of a figure in the imagination (i.e., to a finite and determinate, geometrical representation of pure intuition), that exhibits the form of a possible object of outer or inner sense. The *Inaugural Dissertation*, by contrast, appeals straightforwardly and on the whole to what the critical philosophy would distinguish as metaphysical space: For whatever is said to be a necessary feature of our representations of time and space is said to be a feature of actual time and space simpliciter, and the overall conclusion is that time and space *are nothing but* a priori forms of sensible intuition.

In sum, we can infer from the passage just quoted that no moment of time (and by analogy, presumably, no point in space) can be represented if not as *limit* of a determinate

time-span (or line), which in turn must be determinately located *within* (i.e., must be a part of) a continuous, infinitely divisible or infinitely composite time (or space).

In the very footnote in which Kant says that he passes over the easy proof that we necessarily represent infinitely divisible space (that there are no simples in space) he also states that it follows, and this exactly corresponds to the passage on time we just saw, that every part of space is itself a space and that points in space are merely limits of such parts (see *ID* 2:403n3). Now one can see that these reflections on the continuity of time and space figure centrally (if perhaps implicitly) in Kant's various arguments for the intuitivity of time and space. Take first the argument for the singularity of time in the *Inaugural Dissertation*:

> The representation of time is singular and not general. For no time is represented except as a part of the same one boundless [*immensi*] time. One cannot represent two years save as being in a determinate position in relation to each other; and if they should not immediately succeed each other, one can only represent them to oneself as joined by some intermediate time (*ID* 2:399).

The argument here is not only that time is singular because every representation of a determinate time-span presupposes the representation of a greater time, which completely encloses and contains this span as its integral part. The argument is also that time is singular because it is continuous, i.e., because every smallest part of it, *down* to actual infinity, is itself a time (a composite whole), which grounds further (possible) limits of a single time ad infinitum. In other words, many different, perhaps multiply overlapping, but *determinately measurable* parts of time must be represented as parts of one singular, because continuous time, of which *all possible parts* are nothing but limitations. This point is even more explicit in the first argument for the intuitivity of space in the *Critique*:

> Space is no discursive or (…) general concept of relations of things, but a pure intuition. For, first, one can only represent **a single unitary** [*einen einigen*] space, and if one speaks of many spaces, one understands by that only parts of **one and the same unitary** [*eines und desselben alleinigen*] space. And these parts cannot as it were precede the unitary all-encompassing space as its components (from which its composition would be possible), but can only be thought *in it*. **It is essentially unitary, the manifold in it, thus also the general concept of spaces in general, rests merely on limitations.** From this it follows that an a priori intuition (which is not empirical) grounds all concepts of it [space]. Thus also all geometrical principles, e.g., that in a triangle two sides together are always greater than the third, are never derived from general concepts of line and triangle, but rather are derived from intuition and indeed derived a priori with apodictic certainty (A25/B39, bold emphases mine).

The key premise of this intuitivity-argument, as I read it, is that conceptually distinguishable spaces must be represented as parts of, and so ultimately as mere "limitations [*Einschränkungen*]" of, a singular because unitary or continuous space. Note that this argument makes no appeal to an infinite extendability of space. Rather, it merely says that the representation of space is singular because it contains all possible representation of determinate spaces as its parts and is in this respect (in that these parts presuppose the mereological whole) presupposed by them. But in what sense does the representation of a determinate space (e.g. in geometry) presuppose the representation of a singular whole of space? It doesn't presuppose it in the sense that a determinate object of geometry must have a singular location in the world. Rather, it presupposes a numerically singular but infinitely divisible space as a given, within which *all possible* spatial relations can be grounded. According to the notion of singularity to which this argument appeals, the numerically singular object of any outer (empirical or a priori) sensible intuition is thus indeterminate or determinate part of, and so individuated within, the continuous form of outer sense, metaphysical space. The picture on the whole will turn out to be more complicated, since outer intuitions are also in time, and are thus, along with their immediate objects, further individuated by continuous time. This

(immediate) relation of an intuition to its object is, and indeed must be on my reading, entirely independent of finite human understanding. For the Transcendental Deduction of the Categories does not, and could not, require that discursive understanding must produce the singular continuous forms of metaphysical time and space itself.

It might now be evident to the reader why I take it that the first intuitivity-proof of the Transcendental Aesthetic explains the substantial force of the first apriority argument. The intuitivity-proof shows that the original representation of space must be singular *because* the imaginative determination and distinction of all different possible spaces presupposes (the representation of) a singular continuous space, within which these different spaces are all mere limitations. Now the fact that this singular space must be continuous supplies an additional, if for Kant certainly implicit premise, which is invulnerable to Maaß's objection. Warren argued that the representation of spatial relations presupposes the representation of a common, *i.e., a singular* space region within which the spatial relata occupy parts or places. If one adds that to ground all possible relations, this common space must not merely be numerically singular, but that it is singular only because it is continuous, one can see why the grounding representation of space could not have been empirically acquired from perceptual experiences of (a finite number of) determinate objects related in space. It is key to understand that the argument presupposes the infinite potential of spatial relations—and this is evident by the fact that Kant illustrates his argument to the singularity of space with an example from geometry

(as he does in the *Dissertation*), and that the proof explicitly refers to "an *a priori* intuition (which is not empirical)."[122]

For much the same reasons, it also follows that discursive understanding could not only never complete the specification of an adequate concept of (the original representation of) space, but also, that *successive synthesis of parts into a whole* by the imagination (perhaps in threefold steps, apprehension, reproduction, and recognition of parts, in accordance with general schemata or other discursive representation), could never produce infinite (not infinitely extended, but infinitely composite or mereological, i.e., continuous) metaphysical space itself. Rather, the infinite possibility of such imaginative syntheses *presupposes as immediately given* a singular continuous form of space. The second intuitivity-argument in the B-edition of the *Critique* makes explicit the relevant point again, namely that "all parts of space to infinity are simultaneous:"

> Space is represented as an infinite given magnitude. Now one must (…) think every concept as a representation that is contained in an infinite set of different possible representations (as their common mark), which thus contains these *under itself*; but no concept, as such, can be thought **as if it contained an infinite set of representations *within itself*. Nevertheless, space is so represented (for all parts of space to infinity**

[122] This does not entail that my reading would deduce the apriority of space from geometrical propositions about Euclidean space. Rather, the space arguments of the Transcendental Aesthetic move regressively to the conditions of the possibility of geometry, whose a priori certainty is a given factum. While Lisa Shabel (2010) suggests in a footnote that the first critical argument to the intuitivity of space merely appeals to ordinary phenomenological experience, and not to mathematics (see Shabel (2010), 100n18), her reading of the Transcendental Aesthetic as a whole, in particular in its relation to §26 of the Transcendental Deduction of the Categories, nevertheless strongly supports the main points I am arguing for here. Shabel holds, first, that metaphysical space, i.e., the representation that is the target of the Metaphysical Exposition of the Concept of Space "*alone* (…) explains the possibility of and provides the condition for the derivation of mathematical truths" (Shabel (2010), 104, my emphasis) and that "Kant evidently takes the original *a priori* representation of the single and infinite space to be the fundamental source of (…) *all* mathematical cognition (Shabel (2010), 106). I agree that it is only in the Transcendental Exposition of the Concept of Space (a section that was however added only in the second edition of the *Critique*), where Kant first *explicitly* argues for the claim that the apriority of synthetic judgments in mathematics can in their possibility only be explained by appeal to the intuitivity and apriority of metaphysical space. Nevertheless, it is not contradictory to this reading that, as I think, the singularity-proof presupposes and appeals to the continuity of space. Second, Shabel reads the notorious footnote of §26 essentially in the way I do, namely such that metaphysical space is the mere "form of intuition" in this footnote, that geometrical space is a "formal intuition," and in particular that unity or unification of space is produced only in the latter (see Shabel (2010), 106n33). Shabel thus offers a non-standard reading of the critical philosophy.

> **are simultaneous).** Therefore the original representation of space is an *a priori intuition*, not *a concept* (B39f, bold emphases mine).

The gist of this argument has been interpreted in the literature as follows: No matter how great a determinate space you represent or construct in imagination, you must represent it as completely enclosed by, i.e. as a part of, a singular greater, and thus infinitely extensible space. Therefore, the original representation of space is singular and thus intuitive.[123]

However, if that was all the argument could show, on what grounds could Kant assert that space "is thought to contain an infinite set of representations within itself" (as opposed to merely asserting that it contains or grounds indefinitely many determinate representations of *successively* representable spatial parts)? Differently put, what does Kant appeal to with the premise that "all parts of space to infinity are *simultaneous*"? And how does this premise figure in an argument to the conclusion that the representation of space is originally intuitive and could not be conceptual?

As I noted with Friedman in the discussion of the review *On Kästner*, Kant's logic was limited to essentially finitary representation, which could not, by means of mere concepts, capture the infinitary structures. Recall that at the end of the first section of this chapter, I argued that Kant's theory is thus that perhaps not the ordinary perceiver, but at least the geometer must recognize (and grant the metaphysician), that all

[123] Allison suggests that the "given infinity" of space appealed to here is simply the unboundedness or limitlessness of the spatial horizon, which extends beyond, and is always presupposed by the representation of, a definitely limited space or time-span. See Allison (2004), 112ff. On these grounds I can only read Allison as interpreting the argument as appealing to infinite extendibility. While Allison is certainly correct in noting that the presupposed unbounded horizon of any determinate inner or outer intuition is "not actually intuited as an object" (Allison (2004), 113), he is wrong I think, in claiming that the thesis that "space is represented as an infinite given quantum [*Größe*]" is therefore not to be taken to appeal to an actual *representation* of an infinity of space (see Allison (2004), 113f).

representation of space presupposes metaphysical space, *an actual infinity*, as intuitively given. This infinite set of possible constructions remains for the mathematician however, more precisely formulated, *a mere potential*, because while he must recognize this potential, he could never complete an infinite series of actual imaginative constructions. Recall the key passage:

> That however the metaphysical, i.e. original, but merely subjectively given space, which can be brought under no concept capable of a construction **(because there are not many of it [*weil es dessen nicht viel gibt*, i.e., because there are not many such original spaces but only a singular one]),** but nevertheless contains the ground of the construction of all possible geometrical concepts, that this space is infinite is merely to say: that it consists in the pure form of the subject's sensible representation as an intuition a priori, **thus in this, as a singular representation** [*in dieser, als einzelnen Vorstellung*], the possibility of all spaces which goes to infinity is given. This agrees with the fact that the mathematician has only ever to do with an *infinito potentiali*, and *actu infinitum* (the metaphysically given) *non datur a parte rei, sed a parte cogitantis*; which latter form of representation is not on this account fictitious and false, but rather grounds those constructions of geometrical concepts which proceed to infinity and leads metaphysics to the subjective ground of the possibility of space, i.e., its ideality, with which [doctrine] and the dispute regarding it, the geometer has nothing to do, unless he wants to take up the debate with the metaphysician on how to resolve the problem: that space and everything which fills it is infinitely divisible and yet does not consist of infinitely many parts (*On Kästner* 20:420ff, bold emphases mine).

As in the emphatic concluding statement of the *Inaugural Dissertation's* section on time and space, and as in the fourth space argument of the Metaphysical Exposition of the Concept of Space, this passage links the apriority and singularity of metaphysical space (the purity of a form of intuition) to an *actual* given infinity (an *infinitum datum*). This relation in turn is in the review *On Kästner* linked to the infinite *divisibility* (the continuity) of *real, materially "filled"* space. Yet in contrast to the fourth space argument of the Aesthetic, which says that "all parts of space to infinity are simultaneous," the review maintains that real space does *not* consist of infinitely many parts. How can we resolve this discrepancy of the two passages? To answer this

question, we first need to consider in some more detail the critical account of the continuity of real space.

IV. Real Space

As we saw in chapter one, appearances are *the immediate, indeterminate objects of empirical intuitions*. Now the *Critique* clearly states that *because* space and time are continuous quanta, all appearances are, both as regards their degree of sensation (consciousness) and their extension in the form of intuition, continuous as well.

> Space and time are *quanta continua*, since no part of them can be given except as enclosed between boundaries (points and moments), thus only in such a way that this part is again itself a space or a time. Space therefore consists only of spaces, time only of times. **Points and moments are only boundaries, i.e., mere positions of their limitation** [*Grenzen, d.i. bloße Stellen ihrer Einschränkung*]; **But positions always presuppose those intuitions that they [i.e., the points or moments] are to limit or determine** [*Stellen aber setzen jederzeit jene Anschauungen, die sie beschränken oder bestimmen sollen, voraus*], and from mere positions [i.e., points or moments], as components that could be given prior to space and time, neither space nor time can be composed [*zusammengesetzt*]. (…) All appearances whatsoever are accordingly continuous magnitudes, [continuous] as extensive magnitudes as well as [continuous] in their mere perception (sensation and thus reality), as intensive ones (A169/B211f, bold emphases mine).

According to this passage, any act of determining, i.e. delimiting [*einschränken*] intuitions presupposes *as given in continuous time and space the very (as yet indeterminate, as yet unlimited) intuitions that are thus to be determined*. The conclusion of the passage is that therefore, all the way down to infinity, appearances are continually spatio-temporal in form and filled with reality. Note that as with so many other passages, I can only make sense of this line of argument if Kant here (implicitly) conflates indeterminate appearances with their immediate empirical intuitions.

A second important clue to the way the *Critique* conceives of the empirically real space of possible experience can be found in the Antinomies, where Kant defines precisely his positive notion of infinity (of an actual infinitum) with regard to the continuity of real space, as opposed to the merely negative infinitude (a mere in*de*finiteness) of its total extension.

> One can rightly say of a straight line that it could be extended to infinity, and here the distinction between an infinite progress and a progress of indeterminate length (*progressus in indefinitum*) would be an empty subtlety. (…) Yet if we are talking only about what *can* be done, then the first expression is entirely correct, for you could always make it greater, to infinity. (…) It is entirely otherwise with the problem: how far does the regress extend when it ascends from the given conditioned to its conditions in a series; whether I can here say it is *a regress to infinity* or only a regress extending *indeterminately far* (*in indefinitum*); (…) **To this I say: If the whole was given in an empirical intuition, then the regress in the series of its inner conditions goes to infinity.** But if only one member of the series is given, from which the regress to an absolute totality is first of all to proceed: then only an indeterminate kind of regress (*in indefinitum*) takes place. **Thus of the division of matter (of a body) that is given within certain boundaries, it must be said that it goes to infinity. For this matter is given as a whole, and consequently with all its possible parts, in empirical intuition.** Now since the condition of this whole is its part and the condition of this part a part of this part itself, etc., and in this regress of decomposition an unconditioned (indivisible) member of this series of conditions is never encountered, not only is there nowhere an empirical ground to stop the division, **but the further members of the continuing division are themselves empirically given prior to this ongoing division**, i.e., the division goes to infinity (A511ff/B539ff, bold emphases mine).

The relevant distinction that Kant draws here between the infinite divisibility of the matter of a given (definitely limited) body and the merely indefinite extension of the world turns upon the question of whether the totality of conditioning members searched for are *already given*, *before* the successive-regressive determining of these conditions, *in an empirical intuition*. Yet no human subject could ever complete the infinite determination of all possible material parts of a given empirical object. This is precisely what Kant must mean in the review *On Kästner* when he states that we cannot say real space consists of infinitely many parts, while it is nevertheless infinitely divisible. If the

review is to be read as compatible with the Antinomies, its statement can only mean that we cannot enumerate or collect in the regressus of discursive understanding infinitely many determinate parts of a given object of empirical intuition. But on what grounds, then, can Kant assert the asymmetry with respect to our knowledge of the infinite divisibility of real space, on the one hand, and our knowledge of its merely indefinite extension, on the other hand, if this asymmetry cannot ground in a feature of human understanding? For again, the successive activity of understanding remains always finite, i.e., it always only goes indefinitely far. And yet now one *cannot* say that the actual infinity of the a priori form of space (the infinity of metaphyscial space) is a never actualized, *mere potential* of infinitely many partial empirical intuitions, or of infinitely many real spatial parts. For the stated view is that any possible *material* appearance is continuous as well, just as the degree of sensation, which accompanies it, and moreover, that its smaller material parts are conditions that *precede* the sum total material of an appearance (and not the other way around). By sharp contrast, while Kant grants that in geometry, we *are* justified in saying that we *can* extend a given line segment infinitely (see the first sentences of the here quoted passage of the Antinomies), we can nevertheless only claim to know that the world is in fact in*de*finitely (and not infinitely) extended. So with regard to extension, infinity really just remains a potential for human cognition, but the stated view is that with regard to the divisibility of real space, we are subjects of an actual infinity of partial representations.

How can this position be further explained in accordance with other tenets of the critical philosophy? Metaphysical space and time or the forms of intuition are as *a priori* representations "originally acquired." This means for Kant that sensibility, as a *cognitive*

capacity, must actively (through an "act [*Handlung*]") bring forth or: *must actualize* its *specific forms* of receptivity, the a priori forms of space and time, on the first occasion of sensible affection. For the a priori is not innate. But then it follows that first sensible affection ("first in time") must actualize the infinitely divisible or holistic forms of receptivity such that the sensations produced by this affection are simultaneously (at once) received and ordered in these continuous forms. This is entirely independent of a *higher* capacity of cognition, and so if we assume a non-rational animal shares our specific forms of sensible intuition, the same actualization could be attributed to the animal. This reading woud explain why the text of the review *On Kästner* asserts that *an actual infinity* (metaphysical space) is given in sensibility, while the geometer can only recognize an infinite *potential* of determinate constructions in (partial representations of) space. Likewise, this reading would explain why the fourth space argument of the *Critique*'s B-edition can assert that an *actually* infinite set of parts is originally represented in space (*because* all parts of space to infinity actually *are* simultaneous). The reason is that space as a pure form of receptivity is a continuous form *within which* outer sensations "down to infinity" are ordered on any occasion of affection. For the ordering of sensations in a continuous form of receptivity must take place all the way down to infinity, if some contingent sensible affection is what is presupposed to first actualize these a priori continuous forms. This then also explains the asymmetry that the Antinomies state with regard to the merely *indefinite* extension and the *actual, infinite* continuity of the empirically real (materially "filled") space of the world. Moreover, it explains the passages cited in the first chapter, which claim that an infinite field of unconscious intuitions—a field which comprises "half a world" or "all bodies of the

world" is *actually*, if obscurely, represented in the intuition of any sensible being. And lastly, the contrast between this actual infinity of spatial representations given in obscure intuition and the *finite* set of determinate intuitive (geometrically determinate) representations that a discursively (successively constructing or synthesizing) understanding can achieve explains why it is not the case that a human subject can ever make self-conscious *all* her obscure representations. To recall the central passages:

> The field of sensible intuition and sensation of which we are not conscious, although we can undoubtedly conclude that we have them; that is, obscure representation in the human being (and also in animals) is immense. Clear representations contain only infinitely few points of this field, which lie open to consciousness; so that as it were only a few places of the vast *map* of our mind are illuminated. This can inspire us with wonder over our own being, for a higher being need only call "Let there be light!" and then, without the slightest co-operation on our part (…), as it were set half a world before his eyes. (…) Thus the field of obscure representations is the largest in the human being (*Anthropology* 7:135f).

> If the human being could become conscious of everything he perceives in bodies through the microscope, he would have great knowledge of bodies, which he already really has, only he isn't conscious of it. (...) If God were to suddenly immediately [*auf einmal unmittelbar*] cast light into our soul so that we became conscious of all our representations, we would clearly and distinctly perceive all heavenly bodies as though before our eyes. Thus if in a future life our soul becomes conscious of all its obscure representations, the most learned will not advance beyond the least learned; it is just that the learned person is already here [in our life] conscious of somewhat more. If however in both souls a light is lit, both are equally clear and distinct. Thus, there lies a treasure trove in the field of obscure representations, an abyss of human cognitions, which we cannot reach (*ME Poelitz* 28:228f).

On my reading, sensibility in Kant is thus a capacity to represent an actual infinity of appearances. It is a cognitive capacity of mind [*Gemüt*] through the actualization of which humans, and possibly other non-rational animals (if their forms of sensibility are continuous), become subject of an infinity of obscure intuitions of the world, independently of any higher capacity of cognition. It is very important to keep in mind here that Kant does not define receptivity as passivity and that spontaneity is not

identified with activity. Rather, both are *capacities* of (apriori) cognition and mind [*Gemüt*] in a *receptive* subject who can actualize these representations on the basis of first affection. Recall, too, that Kant defines life as "the capacity to determine one's actions in accordance with one's representations," and that he does not see any problem with attributing this spiritual or mental activity of representation to non-rational animals. If one still doubts that the power to represent an actual infinity could be attributed to a merely sensible faculty, one should turn again to the *Inaugural Dissertation*. In this pre-critical text (one of the last ones before the critical period) Kant quite unmistakeably develops precisely this view of sensibility and the phenomenal world. Sensible cognition is in this text separate and fundamentally independent of the understanding and the intelligible world, which Kant then still took to be the proper object of the latter faculty.

The *Dissertation* first defines the pure form of sensibility or pure intuition, just like the Transcendental Aesthetic, as a singular representation and so as one that is "not general or logical," and *even where pure, not one of the intellect*:

> Whatever, as object, relates to our senses is a phenomenon. But whatever objects, without touching the senses, contain only the singular form of sensibility, belong to pure intuition (that is to say, an intuition devoid of sensation but not for that reason deriving from the understanding). (…) Yet pure (human) intuition is not a universal or logical concept *under which*, but a singular representation *in which*, all sensible things whatever are cognized. [*formam tantum singularem sensualitatis continent, pertinent ad intuitum purum (i.e. a sensationibus vacuum, ideo autem non intellectualem). (...). Intuitus autem purus (humanus) non est conceptus universalis s. logicus,* sub quo*, sed singularis*, in quo *sensibilia quaelibet cogitantur*] (*ID* 2:397).

When Kant then proceeds to the section on time and space from which I already quoted passages in the above (I quoted the arguments that are usually recognized in the secondary literature to correspond to the proofs of the critical Metaphysical Expositions

of the Concepts of Space and Time), he introduces the task of the section with this paragraph:

> The world, in so far as it is regarded as a phenomenon, i.e., the world in relation to the sensibility of the human mind, does not recognise any other principle of form that a subjective one, i.e., a fixed law of the mind, in virtue of which it is necessary that all the things which can be objects of the senses (through these objects' qualities) are seen as necessarily belonging to the same whole. [*Mundus autem, quatenus spectatur ut phaenomenon, h.e. respective ad sensualitatem mentis humanae, non agnoscit aliud principium formae nisi subiectivum, h.e. certam animi legem, per quam necesse est, ut omnia, quae sensuum obiecta (per istorum qualitatem) esse possunt necessario pertinere videantur ad idem totum*.] Accordingly, whatever the principle of the form of the sensible world may, in the end, be, its embrace is limited to *actual things* (…) capable of *falling under the senses*. (…) I shall now show that there are two such principles, namely, space and time (*ID* 2:398).

So the set task is to show that time and space are those "merely subjective forms," "first conditions," or "principles" of the world as appearance (where this means, according to the above, "the world in relation to human sensibility"), *which make it the case that anything that is sensed is a priori represented as part of a singular whole*. In an earlier passage of the text, Kant had formulated the latter more precisely as the claim that *the apriori form of intuition always already orders the manifold sensations "into a whole of representation."*[124] What this says, in my view, is precisely that we do not receive in

[124] *ID* 2:392f distinguishes the form of sensible intuition from its matter or sensational content. The passage clearly explains how an empirical intuition can relate to an object, and represent this object through both sensation and form, while the specific form is nevertheless a priori and does not lie in the objects themselves. In particular, the form of intuition orders the manifold sensations "into *a whole of representation*:"

"In a sensible representation there is, first of all, something which you might call the *matter*, namely, the *sensation*, and there is also something which may be called the *form*, i.e., that aspect of sensible things which arises as the various things which affect the senses are co-ordinated by a certain natural law of the mind. (…), the form (…) is undoubtedly evidence of a certain relation in what is sensed, though properly speaking it is not an outline or any kind of schema of the object itself, but only a law of the mind by means of which it co-ordinates for itself that which is sensed through the presence of the object. For objects do not strike the senses in virtue of their form. Accordingly, if the various factors in an object which affect our sense are *to coalesce into some representational whole* there is needed an internal principle in the mind, in virtue of which those various factors may take on a form or shape (…) [*…forma, nempe sensibilium species, quae prodit, quatenus varia, quae sensus afficiunt, naturali quadam animi lege coordinantur. Porro, quemadmodum sensatio, quae sensualis repraesentationis materiam constituit, praesentiam quidem sensibilis alicuius arguit, sed quoad qualitatem pendet a natura subiecti (...); ita etiam eiusdem*

sensibility any unstructured, non-extended, or otherwise "raw" (whatever is meant by this term) data; rather, whatever is received in the forms of sensibility always already comes in the continuous and singular form of an intuition. Kant then proceeds to prove the apriority and intuitivity of both time and space, and after the completion of these proofs concludes about both in two corresponding paragraphs:

> *Time is not something objective and real*, nor is it a substance, nor an accident, nor a relation. Time is rather the subjective condition (…) necessary for the coordinating of all sensible things in accordance with a law [*sed subiectiva condicio per naturam mentis humanae necessaria, quaelibet sensibilia certa lege sibi coordinandi, et intuitus purus*] (*ID* 2:400).

> *Space is not something objective and real*, nor is it a substance, nor an accident, nor a relation. It is rather subjective and ideal; it issues from the nature of the mind in accordance with a stable law as a schema, so to speak, for co-ordinating everything which is sensed externally [*sed subiectivum et ideale et e natura mentis stabili lege proficiscens veluti schema omnia omnino externe sensa sibi coordinandi*] (*ID* 2:403).

Kant thus takes himself to have shown at this point that the a priori, continuous intuitions of time and space are precisely those subjective principles or forms, within which what is sensed by a human subject is a priori co-ordinated into singular wholes of representation. And then the section finally concludes precisely with the emphatic assertion that we already know from the essay *On a Discovery*, namely that while these continuous intuitions are a priori, they are actively *acquired* only on the occasion of affection.

> Without any doubt [both time and space are] *acquired*, not, indeed, by abstraction from the sensing of objects (for sensation gives the matter and not the form of human cognition), but from the very action of the mind, which coordinates what is sensed in accordance with permanent laws. (…) For while sensations awake this action of the mind, they do not influence the intuition, and there is nothing innate here except the law of the mind (…) [*ab ipsa mentis actione, secundum perpetuas leges sensa sua*

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repraesentationis forma testatur utique quendam sensorum respectum aut relationem, verum proprie non est adumbratio aut schema quoddam obiecti, sed nonnisi lex quaedam menti insita, sensa ab obiecti praesentia orta sibimet coordinandi. Nam per formam seu speciem obiecta sensus non feriunt; ideoque, ut varia obiecti sensum afficientia **in totum aliquod repraesentationis coalescant***, opus est interno mentis principio, per quod varia illa secundum stabiles et innatas leges speciem quandam induant*] (*ID* 2:392f, my emphasis)."

> *coordinante, (…). Sensationes enim excitant hunc mentis actum, non influunt intuitum, neque aliud hic connatum est nisi lex animi, secundum quam certa ratione sensa sua e praesentia obiecti coniungit*] (*ID* 2:406).

Again, the view I think must be defended on the basis of this argument in Kant is that since sensible affection must prompt the mind to first actualize its continuous forms of time and space, a particular, contingent sensation must "fill" those forms all the way down to infinity with (its particular) reality. So singular intuitions of outer appearances, which are infinitely specific in the spatial structure of their matter, are continuously succeeding one another in time (inner sense), within which infinitely many sensations are received. Kant realized in the critical period that to distinguish and determine anything given within this continuous succession *as* an object required the capacity to judge. At the same time, he restricted the valid application of concepts of the understanding to empirical reality. However, on my reading his account of sensibility did not change during the critical period in any relevant way after the time he wrote the *Inaugural Dissertation*. Sensibility thus gives us infinitely many intuitions of objects independently of the understanding. The *Critique of Pure Reason* is not directly concerned with this, but rather with a new account of the human capacity to judge, as "the entire higher capacity of cognition" in a human sensible subject. Specifically, it is concerned with the relation of a "function of unity" proper to this higher capacity to those sensible forms in which a given (infinite) manifold of singular, spatially continuous intuitions is continuously succeeding. In particular, this required the theory of an actualization of the capacity to judge through a transcendental imagination, which could unify these successions by means of "transcendental time determinations" (as Kant calls the transcendental schemata).

V. Singularity and Immediacy

In light of the findings of the last section, we can now resolve the interpretation of the second intuitivity argument of the Transcendental Aesthetic. I will do so in the context of this section's interpretation of singularity and immediacy as defining criteria of intuitive representation. These criteria are exclusively opposed to those of conceptual representation.

> Intuition is a singular representation (*repraesentatio singularis*), concept a general one (*repraesentatio per notas communes*) or reflected representation (*repraesentatio discursiva*) (*Logic* 9:91).

A concept is general in so far as it is "*repraesentatio per notas communes*," i.e., a representation of an object by means of common marks. In a note to the quoted passage, Kant then adds:

> The concept is opposed to intuition, for it is a general representation or a representation of that which is common to several objects, thus a representation insofar as it can be contained in different ones (ibid.).

So the notion of generality (as opposed to singularity) is the notion of a form of a representation[125] of a property that is common to several, numerically distinct objects. This in turn is said to just mean that a concept can in principle always be *contained in* several distinct, other conceptual representations (I return to this in a moment). The opposition with intuition produces the definition of singularity as the form of a representation, which relates to exactly one, numerically singular object. This is confirmed by another note to *Logic* 9:91, which says that there are no singular conceptual representations (a concept is general by definition), and that only the *use* of concepts can be said to be singular.

[125] Generality is the *form* (as opposed to the matter) of a concept (see *Logic* 9:91). This form of a discursive representation is always "made" [*gemacht*] (see *Logic* 9:97) by the mind.

> It is a mere tautology to speak of general or common concepts—an error grounded in an incorrect division of concepts into general, particular, and singular. Not concepts themselves, but only their use can be so divided (*Logic* 9:91).

It has convincingly been argued that what Kant has in mind with a singular use of concepts here must be the familiar idea that, for example, I can use the concept of a house to refer to a particular, individual house, as e.g. in using the expression, "This *F* here."[126] Concepts cannot be singular because Kant maintains against Leibniz that there is no *infima species*, a concept of a lowest species, or of an individual (see *Logic* 9:97). Kant offers no ultimate explanation of this theory of concepts in the *Logic*—perhaps because the *Logic* abstracts from all metaphysics. But he makes it clear that it is "impossible to determine" (ibid.) a concept of an individual. "Nur comparativ *für den Gebrauch* [*for the use of concepts*] giebt es niedrigste Begriffe, die gleichsam durch Convention diese Bedeutung erhalten haben, sofern man übereingekommen ist, hierbei nicht tiefer zu gehen (ibid.)." That is, we agree not to specify objects according to more differentiated concepts, but we could in principle always do so.[127]

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[126] Critical commentaries on early influential readings offered by Hintikka (1969) and Parsons (1969) seem to have brought about a consensus in the literature, today, that Kantian intuitions cannot be identified with what we call singular terms. See notably the excellent article by Manley Thompson (1973), and compare also Howell (1973) and Wilson (1975). Parsons has a more recent article in which he adopts many of the latter authors' critical suggestions (see Parsons (1992)). See Hanna (2005; 2008) for very recent work on Kant's theory of intuition, who defends the same thesis.

[127] The concept of an *ens realissimum* is explicitly introduced by Kant as *the only possible concept* which is a singular representation, in that it is necessarily a concept of a "singular [*einzelnes*] being" (see A576/B604). Only in this case is a "general concept (…) through itself thoroughly determined and [therefore] recognized as the representation of an individual" (ibid.). The reason is that the concept of an ens realissimum constitutes an *ideal* of the singular being or the unlimitedness [*Unbeschränktheit* or *All*] of reality (*omnitudo realitatis*), to which all possible predicates of being apply (see ibid.). Now one can see that it neither makes sense to say that the concept of this being contains other, more specific concepts *under itself*, nor to say that this concept is *contained in* every possible predicate of reality. (Notice here the analogy to the pure *unlimited* intuitions of metaphysical time and space). It is therefore not a concept that fits Kant's theory of concepts *as general and discursive* representations, which are exclusively opposed to intuition. It is precisely this what makes it an *ideal* of reason. From the point of view of the question of the possibility of valid theoretical cognition, a concept is empty if no sensible intuition can be given to which it applies. If however a sensible intuition is given or possible to which a concept F applies (which is not the

Since "general representation" is glossed as "representation by means of common marks," and since according to the *Critique* concepts are "mediately" related to an object "by means of a mark [*Merkmal*]," i.e., the representation of a feature which "can be common to several things" (A320/B377), we can tentatively conclude that there must be some intrinsic connection of generality (relation to more than one object by means of marks) and mediate relation to an object. We may thus furthermore expect a related intrinsic connection of singularity (relation to exactly one, numerically singular object) and immediate relation to an object. Consider on this basis again the opening passage of the Transcendental Aesthetic, from which we may infer two crucial points concerning the relation of these two pairs (generality-mediacy and singularity-immediacy):

> In whatever way and through whatever means a cognition may relate to objects, that through which it relates immediately to them, and at which all thought is directed as an end, is *intuition*. (…) All thought, whether straightaway (directe) or through a detour (indirecte), must, by means of certain marks, ultimately be related to intuitions, thus, in our case, to sensibility, since there is no other way in which objects can be given to us (A19/B33).

The first crucial point made in this passage is that any mediate (conceptual) relation to an object by the capacity of thought in some ultimate sense presupposes or depends upon an immediate (intuitive) relation to the object. The second point is that concepts can be said to relate to *intuitions by means of marks* (as opposed to relate to *objects* by means of marks, as the formulation was in the above). In light of these findings consider then the following passage:

> 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). Judgment is therefore the mediate cognition of an object, hence the representation of a

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case for e.g. the Christian concept of God), it is immediately obvious, on my reading, that we can specify F further.

> representation of it. In every judgment there is a concept that holds of many, and that under this many also comprehends a given representation, which is then related immediately to the object (A68/B93).

As I read this, a representation R relates mediately to an object if and only if it relates to at least one other representation R* of the object. By contrast, if a representation R* relates immediately to an object, it does not represent the object by representing another representation R** of the object.[128] This may explain why Kant would maintain, as we just saw, that a mediate (conceptual) relation to an object in some ultimate sense presupposes or depends upon an immediate (intuitive) relation to the object. For otherwise there would be an infinite regress of representations; ultimately, a concept must relate to or represent an object by representing an intuition of this object.

According to the *Logic*, "higher," i.e., more general concepts contain more specific, or "lower" representations of objects "under" them, as their extension, and are contained "in" several lower concepts as these concepts' marks. A "mark" (higher concept) that is contained "in" a lower concept is also called a "partial representation" of the lower concept. In the paragraphs that explicate this theory, Kant however also says that general concepts contain objects "under" them, as their extension. The result is that e.g., the conceptual mark "animal" is contained in the concept "horse," while "animal" contains "horse" under itself, and also, ultimately, contains horses under itself (see *Logic* 9:91; 9:95f). In more explicit and precise formulation, the latter claim can only mean, of course, that "animal" contains *intuitions of horses* under itself, and (as in so many passages I have discussed in the previous sections of this and in the prior chapters; and I

[128] As I read them, I agree with Smit (see Smit (2000), 261-264) and Grüne (see Grüne (2009), 51f) on this reading of mediacy. However, unlike Smit and Grüne I believe that if a representation relates to its object(s) by means of marks, then this entails that the representation is mediate and so general. So on my view, an intuition could not relate to its object by means of marks.

often did mark the point in anticipation of my later argument), this must be interpreted as the usual equivocating of "object of intuition" and "intuition" in Kant.

The *Logic* further offers explanation as to how the two definitions of conceptual representation offered in §1 (generality and discursivity) are related. Concepts are general, they relate to several objects, because they are reflected or synonymously, discursive: They are in their general form "produced" (*Logic* 9:94) or "made [*gemacht*]" (*Logic* 9:93) by acts of "comparison" of, "reflection" on, and "abstraction" from several antecedently given representations (of objects).[129] We can here see, again, that the function of a *discursive* power of conceptual or general representation just is to unify several, distinct representations under a common (i.e., a general or higher) one. Recall that the *Critique* first introduces a positive notion of discursive understanding (as the capacity to judge) with the claim that

> All judgments are (…) functions of unity among our representations, since instead of an immediate representation [i.e., an intuition] a higher one, which comprehends this and other representations under itself, is used for the cognition of the object, and many possible cognitions are thereby drawn together into one (A69/B94).

To summarize the definitions of conceptual representation: A representation is mediately related to an object if and only if it represents at least one other representation of the object. A representation of an object is general if and only if it relates to the object by means of common marks, i.e., if it represents the object by representing features or properties of the object that can be common to several distinct objects. Both parts of the

[129] Kant seems to argue in the *Logic* that this statement is true even for pure concepts, which originate in the understanding, i.e., whose representational *content* is not derived from experience. He seems to say that the *general form* of these concepts, in virtue of which they apply to several distinct objects, is abstracted, as in the case of empirical concepts, from "given representations" of objects after prior acts of comparison and reflection (see *Logic* 9:93ff). This is a key point, in my opinion, but I think it requires explaining the task of the transcendental imagination before any sense can be made out of it. At this stage I will therefore bracket the question of how the theory of general representation can be spelled out for pure concepts on Kant's view.

definition of conceptual representation presuppose the notion of an intuition of an object. For a mediate representation of an object presupposes at least one immediate representation of the object, and the general form of a concept presupposes a discursive reflection on some singular representations of objects.

What then, are the positive criteria of intuition? First, it is uncontroversial that singularity means nothing but the relation of a representation to exactly one, numerically singular object (the object need not according to the definition be unique; it may well be qualitatively identical with others). Compare for a very explicit passage a premise of the first critical argument to the Intuitivity of time.

> A representation, which can only be given through a single object, is an intuition [*Die Vorstellung, die nur durch einen einzigen Gegenstand gegeben werden kann, ist aber Anschauung*] (A32/B47).

How is the singularity of a human sensible intuition constituted? Above, I argued in my reading of the first critical argument to the intuitivity of space that the numerically singular object of any outer (empirical or a priori) sensible intuition is an indeterminate or determinate part of, and so individuated within, the singular form of outer sense, metaphysical space. An indeterminate object of an intuition is on my reading an appearance or an object of a sensible representation prior to any application of the understanding (in the broadest sense) to this representation. Now recall that Kant moves from arguing, in the Transcendental Aesthetic's first argument to the intuitivity of space, that all (the infinitely many) possible spaces must be represented as parts of one singular space, to arguing, in the Transcendental Aesthetic's second intuitivity argument, that space "is thought to contain an infinite set of representations within itself" *because* "all parts of space to infinity *are* simultaneous." Again, the latter claim can only produce the

thread of a valid argument if the critical philosophy implicitly identifies in a certain respect the objects of intuitions with their intuitions, and if the view thus is that the human forms of sensibility (or forms of intuition) individuate any sensible intuition *at once* together with its respective object as singular. My proposal is thus that immediacy of intuition means minimally *simultaneity* of representation and givenness (or presence) of its object.[130] It thus entails precisely a logical or epistemological inseparability or indistinguishability of a sensible intuition and the singular object it yields. As in the case of intellectual intuition, where the representation produces or "gives" the singular object in the very act of its immediate representation (as I established in chapter one), Kant develops the notion of an entirely sensible intuition however such that here, too, the a priori form of intuitive representation, which is actively acquired by the mind, is in an important sense *ontologically* (if not temporally) prior to the objects it individuates.

On this reading, the second critical argument to the intuitivity of space first exposes the opposition between conceptual and intuitive representation (presumably, an assumed notion in play is some traditional notion of intuition, perhaps as in an intuitive, divine understanding). It states that while any concept can be further specified ad infinitum, no concept can be thought to contain an infinite set of representations within itself; it can only be thought to be contained in infinitely many different possible concepts as their common mark. A second (implicit) premise is the fact that space is continuous. On the basis of an implicit identification of all (the infinite) *simultaneous* parts of metaphysical space with an infinite set of partial representations simultaneously

[130] Compare: "Intuition is a representation as it would immediately depend upon the presence of the object [*Anschauung ist eine Vorstellung, so wie sie unmittelbar von der Gegenwart des Gegenstandes abhängen würde*] (*Prol* 4:281)." Compare also a suggestion by Parsons, "that the object of an intuition is in some way directly present to the mind, as in perception" (Parsons (1969), 569).

contained within any possible representation of space, the conclusion is that the original representation of space is a representation which cannot be conceptual, *because its infinity must be immediately represented.* Therefore, this original representation must be an intuition. This identification, again, presumably grounds in the traditional understanding of intuition as an immediate relation to a singular object, where the object is simultaneously given (and so this givenness is inseparable from) the very act of its intuition. Moreover, it presupposes the essential idea, as we saw in the last section of this chapter, that all a priori representations (and so metaphysical space) must be acquired on the basis of sensible affection, and so are acquired as actually composite all the way down to infinity, as an actual infinitum, and not just a mere potential of infinity. I thus think that the first argument to the intuitivity of space in the *Critique* establishes its conclusion by showing that space is singular, and the second by showing that space must be immediately represented. The same holds for the critical arguments to the intuitivity of time and is more explicit in these arguments.[131]

On this reading, every empirical intuition contains an infinite series of intuitive parts or partial representations (partial intuitions). It is singular (it relates to exactly one object), because its object is this very mereologically structured, continuous content from which it is, prior to any application of a function of unity to it—a function of unity on the basis of which an object of intuition can first be determined or thought *as an object*—

[131] **The first** critical argument to the intuitivity of time appeals to the fact **that time is a singular (because continuous) object**, and **the second** argues **that its "whole representation" is therefore immediate**: "The infinitude of time signifies no more than that every determinate magnitude of time is only possible through limitations of a single unitary [*einer einigen*] time grounding it. The original representation of time must therefore be given as unlimited. But where the parts themselves and every magnitude of an object can be determinately represented only through limitation, there the whole representation cannot be given through concepts (for they contain only partial representations), **but immediate intuition must ground them** [*da muß die ganze Vorstellung nicht durch Begriffe gegeben sein (denn die enthalten nur Theilvorstellungen), sondern es muß ihnen unmittelbare Anschauung zum Grunde liegen*] (B47f)."

epistemologically indistinguishable.[132] This, on my interpretation, is why Kant glosses appearances as "mere representations," and tends to equivocate the "objects given in sensible intuition" with mere "sensible intuitions" (prior to all thought).[133] I here agree with Henry Allison, who remarks that Kant uses the term "intuition" to apply to all of the following three: a) the object of a representation (the intuited) b) the representation or mental content (the intuition) and c) the act of representing (the intuiting).[134] I further agree that the distinction between indeterminate intuition (which does not presuppose concepts or discursive re-presentation) and determinate intuition (which does) applies both to empirical and pure intuition.[135] (Although, in the case of pure intuition, I would maintain against Allison that the appropriate notions are those of *unlimited* or *unbounded* metaphysical time and space as "mere forms" of intuition rather the notion of an *indeterminate* pure intuition.) While there may thus seem to be broad agreement between Allison's account of sensible intuition and my own, as I will now show, Allison nevertheless is a proponent of what I have above called the standard interpretation.

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[132] Kirk Wilson was the first (to my knowledge) who argued that a representation is singular if and only if it has the form of a mereological whole. See Wilson (1975), 252ff. I disagree with this, since it may not be true for intellectual intuition. Nonetheless, the notion of a mereological structure is key to illustrate how Kant understands the singularity of spatio-temporal intuition. Grüne also appeals to the notion of a mereological sum in order to explain the claim that a human intuition represents exactly one, numerically singular object (see Grüne (2009), 47).

[133] Wilson, from whose paper I have profited much in my understanding of Kant's theory of intuition, argues that an appearance is isomorphically identical with its representation. He concludes from this that immediacy in Kant is just this identity, a kind of "isomorphic identity," between an intuition and its object. See Wilson (1975), 264f.

[134] See Allison (2004), 82. I think that these three senses are generally *all* understood in the German noun "Anschauung" and that Kant's use is quite ordinary in this respect. Note in particular that the verb [*anschauen*] ("to intuit") from which the noun derives is transitive, it requires an object, and thus that there cannot be an intuition [*Anschauung*] without a subject intuiting an object. In German as well as in English, you can say, without further qualification, "I am thinking [*ich denke nach*]." But it makes no sense to say, without further qualification, "I am intuiting [*ich schaue an*]." For there is no intuiting without an object that is being intuited (by a subject), and without saying that, your sentence is not complete. (This in my opinion best illustrates why famously, it is concepts, which can be empty, but not intuitions).

[135] Ibid.

Allison distinguishes "formal intuition" (which he interprets as a determinate pure intuition) from "form of intuition" (indeterminate pure intuition, or as I would rather say: unbounded *ens imaginarium*). Formal intuition is geometrical space and as a hybrid representation, it requires both concepts and intuition. The "form of intuition" does not presuppose the understanding. Thus far, we completely agree. However, "form of intuition" in turn has two senses, according to Allison (and from here his reading disagrees with mine): It can mean form or manner of intuiting, where this is to be understood as an innate capacity or disposition. Or it can mean form of the intuited. Space as a form of an intuited is on Allison's reading the single, all-inclusive space that the Transcendental Aesthetic's intuitivity-argument appeals to and is the space Allison thinks Kant claims is transcendentally ideal.[136] At the same time, however, Allison claims that *only a determinate intuition* is *a singular representation*, because understanding is required for the relation of a representation to an object.[137] This contradicts his reading of the first critical argument to the intuitivity of space. For Kant intends to prove in this argument that the original representation of space is an intuition *because it is singular*. This original representation of space, which the argument appeals to is on Allison's reading the "form of the intuited" or a pure indeterminate intuition. However, an indeterminate intuition is not a singular representation on Allison's account.

I showed above that the mere unlimited forms of intuition, metaphysical time and space as *entia imaginaria*, are "without real [*ohne Reales*] no object" of or "nothing for" cognition. Prior to a sensation, which fills these continuous forms with reality and thereby first actualizes them, one cannot abstract a determinate (limited) intuition of

[136] See Allison (2004), 115f.
[137] See Allison (2004), 81f.

geometrical space. To produce this abstraction (as yet indeterminate) empirical intuitions of appearances must first be given. For the "matter [*Materie*]" of an appearance is what "relates to," "corresponds to," or is "an object of" sensation (see A20/B34, A143f/B182f, B207), which in turn is "the material condition of experience" (A218/B266). The matter comprises all the appearance's extra-formal properties and qualities, e.g., qualities of touch, sound, color, which are thus immediately represented in the forms of human intuition as spatially extended, related, and as succeeding one another in time. I thus agree with Manley Thompson, who also appeals to the continuity of time, and reads Kant's claim that empirical intuitions are given in (the form of) time as entailing that every moment of time gives a different "intuition without regard for concepts."[138] This last expression in Thompson appeals to an "indeterminate empirical intuition," on my reading of this term. Because the form of time is continuous, empirical intuitions are successive, or continuously succeeding one another. And because the form of space is continuous, each such empirical intuition relates to a holistically structured, infinitely complex slice of real, materially "filled" space. This explains the passages which refer to an inexhaustible, ever mutating and changing *plurality* or "blind play" of appearances or intuitions "without concepts." In other passages, Kant's expression for this is "the manifold of intuition." On my reading, intuitions that are not brought under the unity of transcendental apperception do not remain self-identical through time. And because discursive understanding is limited, only a finite part of human empirical intuition can ever be lawfully connected with others, and turned into an experience of an object. This further explains why for intuitions to become self-conscious experiences, they must be

[138] Thompson (1973), 327f.

schematized by a transcendental imagination, i.e., their unity must be determined by means of what Kant also calls "transcendental time determinations." While I cannot here provide a detailed account of the Schematism, I think it is clear that the relation between inner sense and the transcendental imagination must be such that the transcendental schemata work as general "filters" or functions for infinitely many succeeding intuitions, and determine the unity of these with regard to categorial criteria. (One such transcendental schema determines, e.g., whether a certain material property persists through time).

VI. The Challenge Revisited

Recall what I called a "challenge" of interpretation at the end of the first chapter. I quoted the *Progress* essay, where Kant notes that while all human cognitions (in the narrow sense of possible experience) involve concept and intuition, each of which is by itself "mere" representation, purely sensible or purely intellectual, such a cognition is considered intuitive (singular and immediate) or conceptual (general and mediate) depending on which "determining ground" of the cognition one attends to. I suggested that this means, whether we attend to the sensible or the intellectual origin of the hybrid cognition (cognition in a narrow sense, cognition that can be false[139]). I have thus far offered an account of the immediacy and singularity of intuitions independent of a unity

[139] Cognition (intuition) of objects in non-rational animals, just like obscure intuition in humans and divine intuition, can never be false. This follows because in all these three the relation to the object is immediate, i.e., because it does not presuppose judgment. With regard to cognition in non-rational animals, this statement is trivial, and perhaps one might even want to say that it makes no sense to speak of truth with regard to animal representation (though I think that would be the wrong way to go). For a truth value-apt structure is of course only produced by a self-conscious subject, who can reflect on her objective representations (and who can misrepresent or correctly re-present them in a general form); and the reason that non-rational animals cannot represent a falsity is that they lack the capacity for such reflection.

of representations produced by the understanding. The question now is in what sense intuitive cognitions in the narrow sense, i.e., intuitions that have been given unity by a function of the understanding (intuitions whose combination amounts to a possible experience), can, on my reading of the respective criteria of intuitions and concepts, be *both* intuitive (singular and immediate) and conceptual (general and mediate).

Let's take the latter first, because it is obvious. It is obvious in what sense a possible perceptual experience of e.g. the almond tree in my grandmother's garden would be general and mediate. It would be mediate because it would presuppose a relation of (among other concepts) the concept of an object and the concept of space to the many intuitions of some (indeterminate) space that I might perceive at some (indeterminate) time. It might also involve my relating the concept of an almond tree to this space at this time, but not necessarily. It would be general because these concepts (of an object, of space, of an almond tree)[140] each apply to more than just one possible object of experience; many objects could be perceived or imagined to which they apply.

Nevertheless, it is also true that making this experience would necessarily involve my immediately relating to a singular object of intuition. For each of the infinitely many ("manifold") perceptions presupposed by or connected in this experience would simultaneously comprise or "give" an indefinitely extended and continuous whole of real space at any moment of time.

Now consider further that sense (inner or outer) is really only the capacity of intuition in the actual presence of an object (to the senses), and *imagination* is a capacity of intuition in the absence of an object (see *Anthropology* 7:153). So in what sense is an

[140] The concept of an object and the concept of space are of course both contained in the concept of an almond tree.

imagination appropriately called singular and immediate, on my account of these criteria? Imagination is "reproductive," a power of "derivative representation," where it recalls previously received empirical intuitions (see *Anthropology* 7:167). Reproductive imagination, whether "blind" or not (in non-rational or rational animals), thus simply reproduces or associates previous singular and immediate representations. There is also "productive" imagination, which is a power of "original [*ursprüngliche*] representation" if and only if it is a priori (see ibid.). Productive a priori imagination is what is involved e.g. in geometrical representation. An answer to the question in what sense geometrical space is an a priori intuition (i.e., in what sense a representation in mathematics is singular and immediate while it is also, since it is determinate, and so presupposes e.g. the concept of a triangle, mediate and general) has already been offered in my reading of the critical arguments to the intuitivity of space. But Kant also counts *a posteriori* poetic invention among "productive" imagination (see ibid.), and here he adds that human imagination is never "creative [*schöpferisch*]" (see *Anthropology* 7:168)—that is, all possible material "content [*Stoff*]" (ibid.) of imagination is originally derived from the senses (see ibid.). Productive a posteriori imagination recombines this content in an arbitrary fashion, thus producing a new composition of an object of intuition. In the *Critique* Kant uses "productive imagination" of dreams and delusions in this sense, too (see B278). Importantly, the dreams (again, "mere representations") do not involve the mind-independent existence of their objects (see ibid.). Nevertheless, we can say that these "mere imaginations" are immediate representations of singular objects, on my account of the criteria. Note that a standard reading, by contrast, cannot explain in what sense "mere imaginations," dreams and delusions are intuitive.

In this chapter, I have followed up on Friedman's interpretation of the distinction of and relation between metaphysical space and geometrical space in the review *On Kästner* and in the Metaphysical Exposition of the Concept of Space. I found no essential disagreement between his and my reading of these texts. Unfortunately, Friedman then turns to §26 of the B-Deduction and argues that metaphysical space or the form of intuition must presuppose transcendental apperception (and that Kant implicitly presupposed this all along in the Transcendental Aesthetic).[141] So, Friedman commits to a standard reading of the *Critique.* In the following, concluding chapter I now turn to §26 and the question of the goal of the Transcendental Deduction of the Categories. Specifically, I return to transcendental apperception as a "fundamental capacity [*Grundvermögen*]" of the mind, i.e., a capacity which must admit of a first principle of all its distinct functions and forms.

[141] Friedman (forthcoming), 20f.

Chapter Four

Transcendental Apperception

I. Problem and Goal of the Transcendental Deduction

The goal of the Transcendental Deduction of the Categories is to show the following: The pure concepts, which have been deduced from the logical forms of judgment as the complete but merely subjective conditions to think objects, necessarily apply to all possible objects of experience (see A89/B122). The problem of this deduction is thus that since objects of human cognition are given in sensible intuition independently of the understanding, it is not at all obvious or necessary that given objects conform to our *subjective* conditions of thinking (see A89ff/B122f).

The proof however establishes that

> *whatever objects may come before our senses*, **not as far as the form of their intuition, but rather as far as the laws of their combination are concerned** [can be cognized a priori through the categories]; and thus [we shall explain] the possibility of as it were prescribing the law to nature and even making the latter [i.e., nature] possible. For if the categories did not serve in this way, it would not become clear why everything that may ever come before our senses must stand under the laws that arise *a priori* from the understanding alone (B159f, bold emphasis mine).

This is how the second edition formulates the ultimate target of the Transcendental Deduction in §26, but the same goal is formulated in the first edition. It is *not* to show that the singular, spatiotemporal form of human intuition must be produced by the understanding. It is rather to show that the categories must apply to all possible objects of human empirical intuition, because these objects must stand under a system of those

most general laws of physics which constitute a nature as such (see A126ff). The first edition, too, says quite explicitly, that

> [W]e ourselves bring into the appearances that order and regularity in them that we call *nature,* and moreover we would not be able to find it there if we, or the nature of our mind, had not originally put it there. **For this unity of nature must be a necessary, i.e. *a priori* certain unity of the connection of appearances**. But how should we be able to establish a synthetic unity *a priori* if subjective grounds of such a unity were not contained *a priori* among the original sources of cognition in our mind, and if these subjective conditions were not at the same time objectively valid (…)? (A125f, bold emphases mine).

According to these passages, what we call "nature" is a necessary (i.e., an a priori certain) order, regularity, or unity in the "connection" or "combination" of appearances. This unity, and so the system of laws which express this unity, must originate in our understanding. For otherwise we could not claim to know these laws a priori.

Section §26 at B164f contains a summary of how the Transcendental Deduction of the Categories together with the work accomplished in previous sections of the *Critique* purports to achieve this stated goal. A corresponding summary of the whole argument is offered in the first edition at A128ff. It says that the overall goal presupposes (1) transcendental idealism, and presupposes (2) that all combination of representations is itself a representation that can only be spontaneously produced. Claim (1) has been established in the Transcendental Aesthetic. Claim (2) is to be established in the Transcendental Deduction of the Categories itself, in the B-edition notably in §§15-18, by showing that all combination presupposes transcendental apperception. (1) and (2) are both steps that are to overcome in an analogous way the idea that was dreadfully mistaken if not absurd to Kant, namely the idea that mind-independent objects could somehow "migrate [*hinüberwandern*]" into a priori cognitions of them (*Prol* 4:282; cf. *Correspondence* 10:130f; Bxvif). Moreover, the Transcendental Deduction of the

Categories explains how (1) and (2) can be intrinsically connected in a single inference, and in the B-edition this is done in particular in what has come to be known as the second proof-step. Here is the relevant summary in full text:

> It is by no means stranger that the laws of appearances in nature must agree with the understanding and its form *a priori*, i.e., its capacity of *combining* the manifold in general, than that the appearances themselves must agree with the form of sensible intuition *a priori*. For **laws exist just as little in the appearances, but rather exist only relative to the subject in which the appearances inhere, insofar as it has understanding,** as appearances do not exist in themselves, but only relative to the same being, insofar as it has senses. To things in themselves there would pertain a lawfulness necessarily even without an understanding that cognizes them. But appearances are only representations of things that exist without cognition of what they might be in themselves. **As mere representations**, however, **they stand under no law of connection at all except that [law] which the connecting faculty prescribes**. (…) [H]ence all appearances of nature [must], as far as their combination is concerned, stand under the categories, on which nature (considered merely as a nature in general) depends, as the original ground of its necessary lawfulness (as *natura formaliter spectata*). The pure capacity of understanding does not suffice, however, to prescribe to the appearances through mere categories *a priori* laws beyond those on which rests a *nature in general* as a lawfulness of appearances in space and time (B164f, bold emphases mine).

This passage asserts, first, that appearances exist merely in relation to a *sensible* subject, in other words, in relation to a particular receptivity. Appearances neither exist on grounds of the sensible subject's possessing understanding, nor in themselves. Since all appearances are immediately received and individuated in pure forms of intuition, forms which are nothing but the very forms of human sensibility, it is evident why any object of human sensibility must "conform with" its sensible representation. Indeed, as we saw earlier, mere appearances as indeterminate and immediate objects of empirical intuitions are not distinguished from their intuitions. The general point is also expounded in detail at A89ff/B121ff [142] and in Kant's famous letter to Marcus Herz in 1772:

[142] See in particular: "For that 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* (A90/B122f, my emphasis)."

> I asked myself: What is the ground of the relation of that in us which we call "representation" to the object? **If a representation contains only the manner in which the subject is affected by the object, then it is easy to understand (…) how this determination of our mind** [*Gemüt*] **can *represent* something, that is to say, how it can have an object** [*etwas vorstellen, d.i. einen Gegenstand haben könne*]. **Passive or sensible representations thus have an understandable relation to objects**, and the principles which are derived from the nature of our soul have an understandable validity with regard to all things in so far as they are to be objects of the senses (*Correspondence* 10:130, bold emphases mine).

As the passage at B164f makes clear, it is central to the argument of the Transcendental Deduction of the Categories that the pure forms of human intuition are nothing but forms of sensibility. It is central that things in themselves cannot possibly also exist in space and time independently of our receptivity. For then they would stand under laws by which they would be connected and related in their possibility and existence independently of us. Thus we could neither explain the apriority of mathematical cognition nor the apriority of the most general laws of physics (cf. A128ff; *Prol* 4:282f). However, assuming that transcendental idealism is proven and that §§15–18 of the B-Deduction show that all combination is a representation that can only be spontaneous (could not be receptive), we can conclude with certainty that all combination of appearances or empricial intuitions is a priori lawful and depends solely on the function of unity proper to our understanding (and so on the categories).

Before defending a reading of these first sections of the B-Deduction on which they do succeed in establishing the aforementioned goal (2), I first return to a point already addressed in chapter one of this thesis, namely the question of how "perception" is used by Kant in §26. The passage at B164 just cited says that all possible perception depends on a synthetic unity conferred by the categories:

> Now since all possible perception depends on the synthesis of apprehension, but the latter itself, this empirical synthesis, **depends (…) on the categories**, all possible perceptions, hence everything that can ever reach empricial consciousness, i.e. all appearances of nature, **as far as their combination is concerned, must stand under the categories** (B164, bold emphasis mine).

One might read this passage as claiming that perception of objects as such depend on the categories. This would not be compatible with my reading defended in the previous sections, on which empirical intuitions just are perceptions and independent of the understanding. However, as we saw earlier, Kant defines "synthesis of apprehension" at B160 as denoting a "composition" of the manifold partial representations contained in an empirical intuition. This composition first produces empirical consciousness or perception of an object *as appearance*. So perception in §26 is distinct from a mere empirical intuition of some undetermined object. Perception here is a consciousness of a representation which I distinguish as an appearance, and so as a *determinate* object (e.g. a house of a determinate spatial shape, see B162) of my representations. This explains why B164 above claims not that perceptions as such, but self-conscious perceptions of objects as appearances of a possible nature, depend on the categories, and depend on them only as far as their combination is concerned.

The substantial force of this reading can only become apparent after we see why combination is a representation that must be spontaneous. This in turn will show that in order to defend a strong and convincing account of human spontaneity as a unity grounding in transcendental apperception (an account which does not conceive of spontaneity as some magical creative power which produces iconically structured, infinitely filled objects of representation entirely from itself), Kant in fact needs the

theory I have claimed on independent grounds he adheres to, namely a theory of singular intuitions succeeding one another in continuous time entirely independent of spontaneity.

II. Unity of Transcendental Apperception

Here, then, is the opening paragraph of the Transcendental Deduction's second edition:

> **The *combination* (*conjunctio*) of a manifold in general, this alone can never come to us through the senses**, **and therefore cannot already be contained in the pure form of sensible intuition**; for it is an act of the spontaneity of the power of representation (…). [A]ll combination, whether we are conscious of it or not, whether it is a combination of the manifold of intuition or of manifold concepts, and if the first case, whether of sensible or non-sensible intuition, is thus an action of the understanding (…). [S]uch that we can represent nothing as combined in the object without having previously combined it ourselves. (…) [A]mong all representations *combination* **is the only one that is not given through objects but can be executed only by the subject itself**, since it is an act of its spontaneous activity originating in the self [*Selbsttätigkeit*]. One can here easily see that this action must originally be unitary and equally valid for all combination, and that the dissolution (*analysis*), that seems to be its opposite, in fact always presupposes it; for where the understanding has not previously combined something, it cannot dissolve anything, for only *through it* can something have been given to the power of representation as combined (B129f).

All combination, whether a subject is explicitly conscious of it or not, whether it is a combination of many concepts or of many intuitions, whether of sensible or intellectual intuition, must be spontaneous. According to this opening section of the B-Deduction, combination cannot be received and so cannot be contained already in the pure form of sensibility. The reason that combination must be spontaneous (produced by the subject) is that I could not represent something as combined if I had not so combined it myself. This is the thesis that lies at the heart of the Deduction, and it requires discussion.

One can see that the following is entailed by this general thesis: a certain synthetic action of the putting together of representations must be more fundamental than an analytic action of dissolving representations, in the sense that the latter presupposes the

former. For if it is true that I cannot represent something as combined if I have not so combined it myself, then it follows that I could not dissolve a combination as such, if I had not previously produced it myself. For this reason Kant here first says that we would supposedly refer to "combination" with "the general term *synthesis* [*die wir mit der allgemeinen Bennennung Synthesis belegen würden*]" (B130). However, the next paragraph corrects this tentative statement. It says that more precisely, there is a fundamental representation of unity, which together with the representation of a manifold as such first makes possible the representation of a combination: "The representation of this [fundamental] unity cannot (…) arise from combination, rather, by being added to the representation of the manifold, it first makes the concept of combination possible (B131)." So the representation of a combination is really *the representation of a synthetic unity of a manifold* (see B130f), rather than the representation of a mere synthesis.[143]

Why can I not represent something as combined unless I have combined it myself? Translated in the appropriate terms just specified, this question asks: Why can I not represent a synthetic unity of a manifold unless I have produced this unity in the synthesis of this manifold myself? The main step towards an answer to this question is given in the next section, which is titled §16 "On the Original-synthetic Unity of Apperception."

> [T]he empirical consciousness that accompanies different representations is in itself dispersed and without relation to the identity of the subject. The latter relation therefore does not yet come about by my accompanying each representation with consciousness, **but by *adding* one representation to the other and being conscious of their synthesis** [*sondern dadurch, daß ich eine zu der andern hinzusetze und mir der Synthesis derselben bewußt bin*] (B133).

[143] This explains on my reading why syntheses of the empirical imagination can be blind or merely associative (without unity) and are also possible in non-rational animals.

As we saw in the first chapter of this thesis, empirical consciousness is sensation, and sensations accompany all representations that are succeeding in inner sense. However, as such and in itself, this empirical consciousness is "dispersed," it has no constitutive relation to the identity of an I. On the reading I offered in the previous sections of this thesis, it is clear why it does not. For intuitions are continuously succeeding each other in inner sense entirely independent of spontaneity. Even if each of these singular representations is accompanied by sensation, this would by itself always only amount to a non-identical consciousness, another self in every moment of time: "I would have as multicolored, diverse a self as I have representations of which I am conscious (B134)."[144]

Kant makes what I take to be this very point in a letter to Marcus Herz from 1789. He there argues that independently of the human subjective conditions of understanding, *singular* representations could indeed succeed in inner sense, could be reproduced or associated by a blind imagination, could affect desires and feelings, and could amount to a complex, regular, and highly effective "play" of representations. And each such singular representation can in itself thus well be accompanied by a consciousness (a sensation). However, without a determinate relation of those many representations to the unity of a representation of their common object, which in turn depends upon a synthetic unity of their apperception—and that is, as we shall now see, a "taking up" of these different representations that is a unity only in virtue of the fact that it is self-consciously executed as the whole complex or synthetic act it is—one would self-consciously cognize nothing at all:

[144] Compare the A-edition: "If every singular [*einzelne*] representation were entirely foreign to the other, as it were isolated and separated from it, then there would never arise anything like cognition, which is a whole of connected and compared representations (A97)."

> I wouldn't even be able to know that I have them [i.e. the singular representations], thus they would be absolutely nothing for me as a knowing being [*als erkennendes Wesen*], though—when I think of myself as an animal—as representations that are connected by an empirical law of association and so influence feelings and the will in me, unconscious of my own being [*meines Daseins unbewusst*] (granting I would be conscious of each singular representation [*jeder einzelnen Vorstellung*], but not their relation to the unity of the representation of their object by means of the synthetic unity of their apperception), they would be able to continue their play regularly, without my cognizing anything through this, not even this my own state. (*Correspondence* 11:52).

The central thesis at issue here is thus that the representation of an identity of an I is essentially related to an action of synthesis of succeeding representations *that must itself, as this synthesis,* be performed self-consciously.

> The latter relation therefore does not yet come about by my accompanying each representation with consciousness, **but by *adding* one representation to the other and being conscious of their synthesis. Therefore it is only because I can combine a manifold of given representations *in one consciousness* that it is possible for me to represent the *identity of this consciousness in these representations* itself, i.e. the *analytical* unity of apperception is only possible under the presupposition of some *synthetic* one.** The thought that these representations given in intuition all together belong *to me* means (…) the same as that I unite them [in a self-consciousness] (…); for otherwise I would have as multicolored, diverse a self as I have representations of which I am conscious (B133f, bold emphasis mine).

A self that is a different one in every moment of time is no self-consciousness. For self-consciousness, at least in the human case, where the universal form of receptivity is time, is a consciousness of oneself as self-identical through time. However, this consciousness of this identity of my I, which Kant calls an analytic unity, and which contains the recognition that different representations that I receive through time belong to me as the same identical receptive or empirical subject of them, cannot be in turn received. Rather, it presupposes, according to the passages just cited, a spontaneous action of unification of those manifold received representations that I can attribute to myself. In other words, this

synthetic unity, which first grounds the analytic unity of my empirical self, is an implicit representation of my own active combining of a dispersed manifold into a unity. The whole point is that one cannot possibly represent a unity of manifold representations without the concept of an I—the representation that is called *transcendental* apperception, because it is the ultimate or radical ground (see A114) of the possibility of all determinate cognition (see B132; B134n1; B135) of which no further ground can be given. This point is expressed in the sentence at B133 already cited,[145] which on my reading contains the central thought that the A-Deduction intended to express by reference to a "three-fold" synthesis of representations. Transcendental apperception is accordingly introduced in the A-Deduction in the section which expounds *the ultimate basis* of this three-fold synthesis. This is the section titled "On the Synthesis of Recognition in a Concept" (see A106ff). For the apprehension and imaginative reproduction of numerically distinct intuitions through time, and the recognition of their unity in a concept ultimately presupposes a consciousness of the identity of a *subject* of action of this three-fold synthesis through all this time:

> [F]or the mind could not possibly think the identity of itself in the manifoldness of its representations, and indeed think this *a priori*, **if it did not have before its eyes the identity of its action,** which subjects all synthesis of apprehension (which is empricial) to a transcendental unity (A108).

I can see the river when I look through my window. This ordinary perceptual experience or contemplation of this river presupposes (implicitly) a recognition that all my continuously succeeding representations *R*....*R'* of what I see from the perspective where

[145] "The latter relation therefore does not yet come about by my accompanying each representation with consciousness, but by *adding* one representation to the other and being conscious of their synthesis (B133)."

I sit represent (inter alia) this *same* determinate river. But this recognition, which is an example of what Kant calls a threefold synthesis, already presupposes self-consciousness or the concept of an I. In exactly analogous fashion, the recognition that my empirical self, which receives many different representations through time, is one and the same receptive self (of so many different impressions of the river on so many different days), already presupposes self-consciousness. It therefore presupposes an ultimately spontaneous representation of a single thinking subject of this entire complex or composite (synthetic) recognition. That is to say, it presupposes an I which represents itself as the producing subject of this complex recognition. This I, the ultimate or first principle of the entire spontaneous power in humans, can only be constituted or produced through itself, because it cannot be derived from any further ground. So I interpret transcendental apperception as the representation of a simple (B153), numerically singular, otherwise empty (contentless), bare thinking (i.e., "representation-unifying") *subject* of representation.[146]

For to be precise, Kant really wants to argue for the claim that I can only represent as combined what I can explicitly represent as being combined in a representation by myself (see again B133f). This is how we must understand the claim that I can only represent as combined what I have combined myself. In sum, the central thesis Kant aims to defend in §16 is thus the following: The analytical unity of one's I

[146] One of the key differences that I see between Guyer's interpretations of Kant's various versions of a Transcendental Deduction of the Categories and my own is this: Guyer does not, in so far as I understand him, distinguish transcendental apperception from the analytical unity of an I. This analytical unity is on my reading a posterior representation of the I as an identity, or of the I as a self-identical *object* through time. However, this representation of the I as an object presupposes what transcendental apperception really consists in, namely the representation of the I as a subject of an action. For some explicit statements of Guyer's reading see in particular Guyer (2010), 123, 124, 132, 133, 139, 142. These passages claim that some application of the categories or functions of judgment either produces or is a necessary condition of the unity of transcendental apperception—where this unity of apperception on Guyer's reading is thus a derivative *product* or *object* of conceptual representation, and not its first principle.

(the identity of oneself as a receptive subject of a manifold of representations) depends upon a combination of these different or manifold representations. This combination is a unity only in virtue of the fact that it can be explicitly attributed to one's thinking I as its sole productive subject. It need not be explicitly self-consiously produced. But it presupposes the concept of an I as the productive or spontaneous subject of all possible combination.

Spontaneity in Kant is therefore not simply activity but ultimately, even if not ordinarily or explicitly so recognized, self-conscious activity or spontaneous activity originating in the self [*Selbsttätigkeit*]. Likewise, it should also be evident that this whole account of human spontaneity as a necessarily self-conscious capacity of combination (the representation of the *unity* of *a manifold*) depends upon the fact that we are receptive and receive manifold content, manifold partial intuitions within intuitions down to infinity, entirely independent of our particular spontaneity.[147]

> This principle of the necessary unity of apperception (…) declares as necessary a synthesis of the manifold **given in an intuition**, without which that continuous [*durchgängige*] identity of self-consciousness could not be thought. **For through the I, as a simple representation, nothing manifold is given. It can only be given in the intuition, which is distinct from it**, and be thought through *combination* in a consciousness. 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 find the intuition in the senses (B135f, bold emphases mine; compare B138f).

[147] The A-edition therefore opens the entire argument of the Transcendental Deduction with the following fundamental remark:
"From whenceever our representations may originate, whether through the influence of external things or as the effect of inner causes, whether they have come to be *a priori* or empirically as appearances—as modifications of the mind [*Gemüt*] they nevertheless belong to inner sense, and as such all of our cognitions are in the end subjected to the formal condition of inner sense, namely time, as that in which they must all be ordered, connected, and brought into relations. *This is a general remark on which one must ground everything that follows* (A98f, my emphasis)."

III. Determinate Relation of Singular Representations to an Object of a Concept

After Kant has established in §16 that the analytical recognition of the identity of one's empirical self through all changes of time presupposes synthetic unity of transcendental apperception, he turns in §17 to a defense of the claim that all possible determinate cognition of an *object* presupposes transcendental apperception. The section first explicitly defines a narrow concept of cognition, on which all cognition is determinate. Cognition so narrowly defined is always a conceptual representation, i.e. a representation produced by a discursive power of understanding. As we saw in earlier sections of this thesis, the broader notion of cognition (objective representation) which Kant also employs includes indeterminate intuitions of undetermined objects (mere appearances). Here is the narrow definition for the purposes of the argument of §17:

> *Understanding* is, generally speaking, the capacity of *cognitions*. These consist in the determinate relation of given representations to an object. An *object*, however, is that in the concept of which the manifold of a given intuition is *united* [*Object aber ist das, in dessen Begriff das Mannigfaltige einer gegebenen Anschauung vereinigt ist*] (B137).

The opening of the next section repeats this central claim (established in §17).

> The *transcendental unity* of apperception is that unity through which all of the manifold given in an intuition is united in a concept of the object. It is therefore called *objective* (B139).

The argument of §17 is that all determinate cognition presupposes that the many partial intuitions contained in a given intuition are unified in a concept of an object. This action of unification is the action of determinately relating many given singular representations to an object of a concept (an object of general representation). The footnote to the

opening section of §17 is inserted for the purposes of reminding the reader that because time and space are singular intuitions, they contain partial singular [*einzelne*] intuitions within themselves (as we saw earlier, this composite containment goes ad infinitum). I here quote the first sentence of the note.

> Space and time **and all their parts** are *intuitions*, and **thus singular** [*einzelne*] **representations** together with the manifold that they contain in themselves (see the Transcendental Aesthetic) (B136n1, bold emphasis mine).

The footnote is inserted to prepare the reader for the illustration of the argument of §17, where the example is the cognition of a determinate line in space. At the same time, it is to anticipate the argument to the conditions of the possibility of determinate cognition of appearance in time in §25 (see ibid.). The footnote says that since intuitions contain their manifold partial representations *in* themselves, unity of intuitions by means of transcendental apperception must be *synthetic*. For it presupposes an implicit consciousness of an I or subject that determinately re-presents and (in virtue of the self-consciousness of the action) unifies the *composite* whole of intuition, not necessarily as composite, but necessarily as one (or as an objective unity).

This can best be understood in the light of the example Kant himself gives in §17. Here is the example:

> In order to cognize anything in space, e.g. a line, I must *draw* it, and thus synthetically bring about **a determinate combination of the given manifold**, **so that the unity of this action is at the same time the unity of consciousness (in the concept of a line)**, and thereby an object (**a determinate space**) is first cognized. The synthetic unity of consciousness is therefore an objective condition of all cognition, not something I merely need myself in order to cognize an object, but rather **something under which every intuition must stand *in order to become an object for me***, since in another way and without this synthesis the manifold would *not* unite itself in a consciousness (B137f, bold emphases mine).

This passage says that a received intuition can only become an object for an I (more than "nothing" for a spontaneous subject of representations) on the following grounds: A finite part of an infinite given of spatial intuition must be determinately combined by an action that is a unity. However, an action can only be a unity on the grounds that it is self-conscious, namely, such that an I can attribute the whole action through time to itself because it acts from a single principle, or with reference to itself as the single subject of this action. Only such action of combination that itself is a unity can employ a general representation of an *object,* for example the concept or schema of a line. Such a general representation is the representation of an objective unity, because it is a representation of a common object of many singular intuitions. It can thus unify many indeterminate intuitive representations of space (many possible line segments) into a representation of a single determinate space (a certain line). However, a general representation of an object could not be used in this way without transcendental self-consciousness. In more Kantian terminology, *a concept is nothing but the objective representation of the unity of the subjective action of transcendental self-consciousness*. Compare first the A-edition:

> Without consciousness that that which we think is the very same as what we thought a moment before, all reproduction in the series of representations would be in vain. For it would be a new representation in the current state [*im jetzigen Zustande*], which would not at all belong to the act through which it should have been successively generated (…) If I forget, in counting, that the units that now hover before my senses were successively added to each other by me, then I would not cognize the generation of the set through this successive addition of one to the other [*Hinzuthuung von Einem zu Einem*], and consequently I would not cognize the number. **For this concept [i.e., the concept of number] consists solely in the consciousness of this unity of the synthesis**. The word "concept" [*Begriff*] itself could already lead us to this remark. For it is this *one* consciousness that unifies the manifold that has been successively intuited and reproduced into one representation. This consciousness may often only be weak (…), but without consciousness concepts and so cognition of objects would be entirely impossible (A103f, bold emphases mine).

The same central point is defended in the B-edition in §17. The point is that a general representation that gives unity to the synthesis of a singular manifold already presupposes the representation of an I that is the self-conscious subject of this representation.

> An *object*, however, is that in the concept of which the manifold of a given intuition is *united* [*Object aber ist das, in dessen Begriff das Mannigfaltige einer gegebenen Anschauung vereinigt ist*]. **Now all unification of representations requires unity of consciousness in the synthesis of them. Therefore, the unity of consciousness is that which alone constitutes the relation of representations to an object**, thus their objective validity, and consequently their becoming cognitions. It therefore grounds even the possibility of the understanding itself. Thus the first pure cognition of the understanding, on which the whole of the rest of its use is grounded, (…) is the principle of the original *synthetic* unity of apperception (B137).

The example Kant employed in §17 is the determinate cognition of a line in space. This example shows that the unification of a given manifold of representations in a concept, even where it is synthetic, i.e., where the given manifold representations are many intuitions, does not in any sense first produce the singular space which is our pure form of intuition. Rather, it first produces a determination of a given intuition of this space (a given singular and immediate representation—an indeterminate set of singular representations, which is itself singular). It does so by making this and many other as yet indeterminate intuitions contained in it, which are as yet neither determinately distinguished from each other, nor distinguished from their undetermined objects, themselves the determinate object of a concept. It is thus only through the act of determinately relating some set of singular intuitions to an object of a general representation, i.e., an act of cognition narrowly defined, that a representation is first distinguished for an I from its object. Such a representation is already (implicitly) conceptual, because it is mediately related to its object. The A-edition had still explicitly asked the central question in the background here, namely how we get from mere

appearances (the undeterminate objects of mere intuitions) to the representation of some *mind-independent* object x as such.

> We have said above that appearances themselves are nothing but sensible representations, which in themselves (…) must not be conceived of as objects (outside the power of representation). **What does one mean, then, if one speaks of an object corresponding to and therefore also distinct from cognition**? It is easy to see that this object must be thought of only as some x [*etwas überhaupt = X*], since except for our cognition we have nothing that we could set over against this cognition as corresponding to it [*weil wir außer unserer Erkenntnis doch nichts haben, welches wir dieser Erkenntnis als korrespondierend gegenüber setzen könnten*] (A104, bold emphasis mine).

Both editions of the *Critique*, on my reading, answer the question asked in the above as follows. The representation of a mind-independent object that corresponds in a truth-value apt way to our representations of it is first produced through the synthetic unity of transcendental self-consciousness of these given representations.

> All representations, as representations, have their object, and can themselves in turn be objects of other representations. **Appearances are the only objects that can be given to us immediately, and that in them which is immediately related to the object is called intuition. However, these appearances are not things in themselves, but themselves only representations**, which in turn have their object, which therefore cannot again in turn be intuited by us, and which may therefore be called the non-empirical, i.e., transcendental object = x. **The pure concept of this transcendental object** (…) is that which first of all **constitutes the relation** of all our empirical concepts to an object, i.e., their objective reality. Thus this concept (…) contains nothing but that unity which must be encountered in a manifold of cognition insofar as it [*es*, i.e., the manifold of cognition] stands in relation to an object. **But this relation is nothing other than the necessary unity of consciousness** (…) (A108f, bold emphases mine).

The B-edition says the same thing in a shorter manner:

> [F]or the cognition of **an object distinct from me** I need (…) an intuition in addition to the thinking of the object in general (in the category), through which I determine that general concept (B158, bold emphasis mine).

At this point let me recall some steps of the Transcendental Deduction of the Categories we already saw in the second chapter of this essay. Section §19 of the proof establishes

that the logical form of any judgment is constituted through the unity of self-consciousness, which unifies concepts in a judgment. The Metaphysical Exposition of the Categories has shown that the categories are derived from the logical functions of judgment as the totality of concepts through which we must think objects as such (because they are representations of the unity of a synthesis of object-giving representations, which are *intuitions*). Kant can then conclude in §20 from these two premises together with the argument of §17 that the categories are the totality of conceptual functions by which we represent *in an object* the unity of the synthetic *action* of a transcendental self-consciousness (a thinking *subject*). Through this action intuitions must be combined to first be made the determinate object of any possible concept. As we will now see, the *first* action of understanding on sensibility is objectively however not represented in the form of explicit concepts (the categories). It is, rather, objectively represented only in schematic representations of a pure or transcendental imagination, which must execute this first action to which apperception gives unity. These objective and general schematic representations, which correspond one-to-one to the categories, are in later sections of the book termed "transcendental schemata" or "transcendental time determinations." The reason is that all human intuitions succeed each other in inner sense, which is time, and that imagination is the capacity to represent or reproduce an intuition of an object that is (already) absent, because intuitions are continuously succeed each other in time.[148]

[148] "[*S*]*ynthesis* of the manifold of sensible intuition, which is *a priori* possible and necessary, can be called *figurative* (*synthesis speciosa*) (…). Yet the figurative synthesis, if it pertains merely to the original synthetic unity of apperception, i.e., this transcendental unity that is thought in the categories, must be called the *transscendental synthesis of the imagination. Imagination* is the capacity of representing an object even *without its presence* in intuition (B151)."

IV. Spontaneous Determination of Inner Sense

Section §24 of the Transcendental Deduction of the Pure Concepts of the Understanding leads up to the main argument of the second proof step of this deduction. As we saw in chapter two of this thesis, the second proof step develops the general argument of the deduction—the argument which is, as we now saw, that all combination must be spontaneous—on a concrete level that takes into account the human forms of intuition, space and time. To this end, section §24 introduces the imagination as a transcendental capacity, i.e., as a capacity we must appeal to in the explanation of the possibility of our *human* experience, specifically.

> [S]ince all our intuition is sensible, the imagination belongs to *sensibility*, on account of the subjective condition under which alone it can give a corresponding intuition to the concepts of understanding. **Yet insofar as its synthesis is still an exercise of spontaneity, which is determining** and not, like the sense, merely determinable, **and can thus determine the form of sense a priori in accordance with the unity of apperception, the imagination is to this extent a capacity of determining sensibility a priori,** and its synthesis of intuitions, *in accordance with the categories*, must be the transcendental synthesis of the *imagination*, which is an effect of the understanding on sensibility and its first application (at the same time the ground of all others) to objects of the intuition that is possible for us. As figurative, it is distinct from the intellectual synthesis without any imagination, merely through the understanding (B151f, bold emphasis mine).

An intellectual synthesis or combination of representations by merely discursive understanding is a combination in abstraction from the spatiotemporal form of human intuition (cf. B150). For the cognition of determinate objects of *our* sensible intuition, however, the understanding must combine (synthetically unify) succeeding intuitions in inner sense via the capacity of imagination. So while the imagination as such is a capacity of (pure and a posteriori) sensible representations, which represents objects in the form of spatiotemporal intuition, *transcendental* imagination is nonetheless spontaneous, because it is the imagination determined by the understanding. It is

determined by the understanding to unify and so determine what we intuit in inner sense, i.e., the time in which we receive intuitions. Kant expresses this in short by saying that transcendental apperception "determines inner sense:"

> That which determines the inner sense is the understanding and its original capacity of combining the manifold of intuition, that is, the capacity of bringing it under an apperception (as that on which its possibility itself [*seine*, i.e., the possibility of understanding] rests). (…) [The synthesis of the understanding], if understanding is considered in itself alone, is nothing other than the unity of the action, of which it [*er*, i.e., the understanding] is conscious as such even without sensibility, but through which it [*er*] is capable of even determining sensibility internally with regard to the manifold that may be given to it [*ihm*, i.e. given to the understanding] **in accordance with the form of intuition of this sensibility** [*der Form ihrer Anschauung nach*]. (…) Apperception and its synthetic unity is so far from being the same as the inner sense that the former (…), as **the source of all combination, relates under the name of the categories (…) to objects in general** [*auf Objecte überhaupt geht*]; while **inner sense, on the contrary, does not yet contain any *determinate* intuition at all**, **which is possible only through the consciousness of the determination** of inner sense through the transcendental action of the imagination (synthetic influence of understanding on sensibility), which I have named the figurative synthesis (B153f, bold emphasis mine).

To recapitulate, the general argument here is the same as the argument of §17, namely the question of the possibility of a determinate cognition of an object. The thesis is that a unity original to a synthetic action of transcendental self-consciousness, objectively expressed in pure concepts, is a necessary condition of all such determinate cognition. A determinate cognition is a mediate or second order re-presentation of an intuition *as a determinate object*. The new point of argument is only to take into account the specific form of human intuitions. To illustrate the argument at this specific level, Kant now returns to the example of a determinate cognition of a line already discussed in §17—which shows that the so-called first proof step really could not fully abstract from the human form of sensibility after all, because any example that could illustrate and make

sense of the argument already needed an appeal to the only form of intuition we can imagine.[149]

> We cannot think a line without *drawing* it in thought, we cannot think a circle without *describing* it (…), and **we cannot even represent time without**, **in the drawing** of 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 determine inner sense successively, **and thereby attending to the succession of this determination** in inner sense. Movement as an action of the subject (not as determination of a object), thus the synthesis of the manifold in space, if we abstract from space and attend merely to the action, through which we determine inner sense in accordance with its form, even first produces the concept of succession. The understanding therefore does not find such sort of combination of the manifold in inner sense, but *produces* it, by *affecting* inner sense (B154f, bold emphasis mine).

The complex thesis contained in the above is the following: "Movement as the *subjective* action of synthesis *in the form of space*," when we abstract from this form of space, and merely attend to the successive movement of the action, first produces the concepts of time and succession. By this very action we determine inner sense "in accordance with its form" *because* the form of inner sense itself is time, or successive.

The first important, indeed the central point to note for the interpretation of this argument to the conditions of the possibility of all determinate cognition is that it *presupposes* the form of space.[150] We here see confirmed the claim I defended in chapter three of this thesis. All possible objects of human cognition in the narrow sense (the

[149] For it is because we cannot imagine another kind of sensible intuition, that we also cannot comprehend the spontaneity of an understanding other than as an action on a kind of sensible intuition that is just like ours. Compare §17: "Yet [the principle of transcendental apperception] is unavoidably the first principle for human understanding, so that it [*er,* i.e. the human understanding] cannot even form for itself the least concept of another possible understanding, neither of one that would itself intuit, nor of one that, while possessing a sensible intuition as its ground, would possess one of a different kind than the one in space and time (B139)."

[150] Compare a footnote to B155, which explicitly describes the transcendental action at issue as subjective *description* of a determinate space that is constituted by a movement *through* or *in* the (continuous) form of outer intuition: "Movement of an *object* in space does not belong into a pure science, and consequently not to geometry, for that something is moveable is not cognized a priori but only through experience. But movement as the *description* of a space is a pure act of the successive synthesis of the manifold in outer intuition in general through productive imagination, and belongs not only to geometry, but even to transcendental philosophy (B155n1, Kant's emphasis)."

sense of possible experience) must be spatial. And this is because every *object* of sensible intuition as such, even independently of the understanding, is already spatial in form. For human intuitions are either originally received in outer sense, spatially composite intuitions which are "filled" with a continuous matter or reality to which they correspond, or associative-imaginative reproductions of such representations, or mathematical constructions that are produced by means of abstraction from any material properties of outer intuition. Representations that merely succeed each other in inner sense (time) and are not also already representations in the form of space are either *empty* concepts, volitions, or the feeling of pleasure and pain. Such representations are no *cognitions*, because they do not represent an object. Rather, they represent merely formal principles of the understanding, the subject of spontaneous representation in itself (the I), or merely this subject as subject of sensible representation and so sensation (they do not represent this subject's body, which is in space).[151] In a footnote to the Refutation of Idealism that was added to the second edition of the *Critique*, Kant states in the most pointed manner that the human capacity of intuition itself would be annihilated if space as its form were not given. The spontaneous determination of intuition through the imagination (in the representation of determinately delineated figures in space) thus presupposes space, and could not produce it.

> But it is clear that in order for us even to imagine something as external, i.e., to exhibit it to sense in intuition, we must already have an outer sense and by this means distinguish the mere receptivity of an outer intuition from the spontaneity that characterizes every imagining. For even merely to imagine an outer sense would

[151] "For the confirmation of this theory (…), the following remark is extraordinarily useful: that everything in our cognition that belongs to intuition (with the exception, therefore, of the feeling of pleasure and displeasure and the will, which are not cognitions at all) contains nothing but mere relations, of places in one intution (extension), alteration of places (motion), and laws in accordance with which this alteration is determined (moving forces) (B66f)."

> annihilate [*vernichten*] the capacity of intuition itself, which is to be determined through the imagination (B276f).

The cognition of a determinate space by means of a general representation of e.g. a line presupposes the form of space. Moreover, the argument illustrated at B154f presupposes the form of inner sense, time or continuous succession of representations. For the action of synthesis of a determinate space (the "movement" through space), executed via the transcendental *imagination*, determines inner sense "in accordance with its form." That is to say, imagination reproduces through time earlier apprehended parts of intuition of some outer space region for the cognition of the whole of a determinate, persistent object located in this space (e.g. a house). Furthermore, in the cognition of determinate movements and changes of objects in space, *transcendental* imagination, legislated by the understanding, determines what parts of the intuited object are correctly reproduced through time (because they persist) and what parts are changing (and so can be "let go"). (It is really only the Schematism and Analytic of Principles which first specify this last point, by explaining that the transcendental imagination employs schematized categories for these activities). Indeed, if time were not the given form in which all our intuitions continuously succeed each other already prior to all determination, it would not be explicable why Kant needs the appeal to imagination as the capacity to represent *res absentia* in *transcendental* philosophy at all. Compare the Transcendental Aesthetic with a passage added to the second edition of the *Critique*.

> It is exactly the same in the case of inner sense. Not merely that the representations of outer sense make up the proper content in it [inner sense], with which we occupy our mind [*Nicht allein, daß darin die Vorstellungen äußerer Sinne den eigentlichen Stoff ausmachen, womit wir unser Gemüth besetzen*], **but time**, in which we set these representations, **which itself precedes the consciousness of them in experience** and grounds the way in which we set them in the mind as a formal condition, **already**

> **contains relations of succession, of simultaneity, and of that which is simultaneous with succession (of that which persists)** (B67, bold emphasis mine).

But moreover, the passage at B154f explains that the action of the imagination, by which transcendental apperception executes its unification of any set of singular human intuitions into a determinate object of a concept is itself successive, i.e., in time. So even second-order, i.e., reproduced and determinate representations of objects of intuition succeed in time. However, we first gain a concept of time or succession if we reflect on the very successiveness of our action of combination of objects in space. *This* reflection is thus a second-order representation *Q* of a series of other second-order representations *R…R'*, where *R* is a combination of a determinate object in the form of outer intuition. *Q* is thus a reflection by which a transcendental self-consciousness "surveys" as it were, or more precisely, by which I objectively determine the temporal succession of my determinate representations of spatial objects. (This should not be understood as presupposing that *R…R'* must in its entirety be temporally prior to *Q*.) Determinate representations of spatial objects which succeed in inner sense include self-conscious perceptions, self-conscious imaginations, even perhaps self-conscious hallucinations or deceptive sensory experiences. But because the unity of the action of the apperception of their succession is according to Kant objectively expressed in the categories, every such self-conscious and determinate representation that succeeds in inner sense is implicitly already represented as standing in relation to objective criteria which determine e.g. whether one such object represented is real or a mere hallucination. In particular, these criteria determine the possible relations of any one determinate representation *R* to another such representation in a certain context.

We can now see why B154f argues that the understanding itself "affects" inner sense when it determines it, i.e., when it produces a combination of a given set of succeeding intuitions into a determinate object of cognition. For this combination itself is successive, and involves the production of second-order representations which themselves succeed each other in time. And to say that inner sense is affected only means that a representation is given or set in inner sense, the form of which is time. This again illustrates why it is only the representation of a standing and in itself empty and so *changeless* "I" as the thinking *subject* of such continuous action that can constitute any unity thereof. For this simple I is not given in intuition, and so no object of cognition, or, in other words, not represented in the form of space. Therefore, it does not need to be represented successively, which would lead to an infinite regress in the determination of our cognition. And it is also therefore why §24 at B156 concludes with the claim that we cognize ourselves, that is, represent ourselves as objects, only as we appear to ourselves (through time). This claim is immediately further pursued in §25. "Determination of inner sense" by spontaneity is according to these passages a determinate cognition of inner sense as my empirical self, which I cognize as a self-identical receiver of many different representations through some time. In other words: The cognition of a unity of a time in which representations succeed just is cognition of a unity of an empirical self. This self is *my* empirical self, if and only if I have produced its unity in the determinate combination of representations that succeed in time; representations that I can call mine if and only if I have so determined them.

V. §26 of the B-Deduction: Transcendental Apperception of Time and Space as Unities

The gist of the argument of §26 is that every possible combination of an object of perception presupposes synthetic unity of apperception of pure space and pure time themselves as determinate objects of all possible self-conscious perception. Continuous space and continuous time are the given singular forms of all human intuition independently of spontaneity. These forms themselves are first made determinate, albeit definitely bounded a priori objects only through the unity of the action of their transcendental apperception. But this unification of these pure forms of receptivity must of course take place in *any* possible instance of combination of a determinate perception, because objects of experience just have these forms. Moreover, this a priori unity of time and space as determinate intuitions is neither produced temporally prior to a first experience, nor produced independently of it on some abstract, itself timeless, or otherwise pure level. Compare the first, carefully rewritten sentences of the *Critique's* Introduction in its second edition, which make the point unmistakeably clear.

> There is no doubt whatever that all our cognition begins with experience; for how else should the cognitive capacity be awakened into exercise, if not through objects that stimulate our senses, in part themselves cause representations, and in part bring our activity of understanding into motion to compare these, to connect or separate them (…)? *As far as time is concerned*, then, no cognition in us precedes experience, and with experience every cognition begins (B1).

The argument of §26 is that since all objects of possible human intuition are given in the form of space and time, these forms themselves must necessarily be represented as unities *in the self-conscious determination* of any possible appearance (object of empirical intuition) given to my senses. Space and time must a priori be unified by this very action

of synthetic apperception of one's own receptivity. Therefore, *any object that I self-consciously perceive as an appearance* must stand under the categories. Moreover, and this is what is crucial to the success of the argument, time and space are continuous singular wholes within which all possible empirical intuitions must already be given independently of their self-conscious apprehension. Only on this basis can Kant now prove with *a priori* certainty that some most general laws of nature that are derivable from the categories must govern *whatever* (even infinitely small or merely obscurely represented) object exists in real time and space, even though a finite human subject does not (and could not) spontaneously represent the given continuity of real time and space *as an infinity*. So on my reading, I have only unified an indeterminate number of appearances, which I implicitly or explicitly represented with self-consciousness. Most of my intuitions must always remain unconscious, simply because I receive too many of them. Nevertheless, §26 now proves that if I did perceive real objects in an entirely dispersed manner as a child some time in a place far away from where I am now, which I did not bring under synthetic unity of apperception, whatever these real objects were, if they were real (received in the outer form of my receptivity), then they are objects of which it can be a apriori known that they stand under the laws of nature. Likewise, if I, or some non-rational animal of the same sensibility in my place at this time, obscurely intuit an infinitely small object, then even though this intuition is "nothing" to my self-consiousness and is not directly integrated into the unity of an action of my apperception of succeeding intuitions I do determine—because this infinitely small intuition is received in a singular continuous form of mere receptivity, it must stand under a priori knowable laws of nature (the laws that govern real objects in space and time). It must

stand under these laws because it can only be lawfully connected to other objects through our discursive spontaneity.

Central to a reading of §26 in this way is to realize, as I argued above, that Kant does not aim to show here that any empirical intuition as such is actually unified by a synthetic action of transcendental apperception. Rather, only a *determinate* empirical intuition that is represented as an appearance to an I, and can thus be distinguished as "my" representation, stands constitutively under this synthetic unity conferred by *discursive (successively apperceiving)* self-consciousness. In such a case I can determine in principle whether what I intuit is real or a mere dream. However, in other cases I may intuit objects in dreams of which I can never know that I did dream them, and not whether what they represented was real. Compare a number of additional passages:

> A manifold that is contained in an intuition **that I call mine** is represented as belonging to the necessary unity of self-consciousness through the synthesis of the understanding, and this takes place by means of the category (B144, bold emphasis mine).
>
> All intuitions are nothing for us and do not in the least concern us if they cannot be taken up into consciousness, whether they influence it directly or indirectly, and through consciousness alone is cognition possible (A116).
>
> For the standing and lasting I (of pure apperception) constitutes the correlate of all our representations, in so far as it is possible to become conscious of them (A123).
>
> Sensibility and understanding must necessarily be connected by means of (…) [transcendental] (…) imagination: **since otherwise the former would to be sure yield appearances but no objects of an empirical cognition, hence no experience.** (…) [The] (…) grounds of the recognition of the manifold (…) are (…) the *categories*. On them is grounded, therefore, all formal unity in the synthesis of the imagination and by means of the latter also [all unity] in all its empirical use (in recognition, reproduction, association, apprehension) **all the way down to the appearances, since the latter [appearances] belong to our cognition, to our consciousness, and hence to ourselves at all only by means of this [unity]** (A124f, bold emphasis mine).

We can now understand what perhaps is the main problem or mistake of a standard reading, on which singular representations of objects as such presuppose understanding.

This problem becomes apparent in Béatrice Longuenesse's powerful and influential reading of the B-Deduction, a reading which Friedman follows in his most recent work. The main problem is that Longuenesse's account cannot explain the unity of human understanding which grounds in a single fundamental principle of transcendental apperception. For human spontaneity is on the critical philosophy an essentially *discursive* power. That is, it is a power to *successively combine* or unify a given indeterminate set of singular representations of objects itself into a determinate object of general representation. And this power grounds in all its applications (whether at the level of syllogisms, at the level of explicit judgment, or at the level of schematic determination of time and space via the transcendental imagination) in the unity original to any successive or synthetic *action* that is (implicitly) *self*-conscious. In short, human spontaneity is a self-consciousness, which can only cognize objects successively. "Discursive," here, has the sense of "running through" a given. However, because Longuenesse does not assume as given the singular continuous forms of time and space, she must attribute to human spontaneity what she calls a "pre-discursive" power of what on my best understanding could only amount to an immediate production of these singular infinites themselves. Given Longuenesse's position, these infinities could thus only be produced in an act that would amount to an intellectual intuition on Kant's understanding of this notion. Here is what Longuenesse writes about the act of a "synthesis speciosa," the "first action of understanding on sensibility," which Kant introduces in §24 as an act that must be executed by human imagination.

> 'The transcendental unity of apperception,' which, Kant explains […] is the source of a synthesis of what is given in sensibility prior to any analysis (and thus prior to any concept). To describe this, I have used the expression 'pre-discursive understanding,'

> and I have proposed the idea that our 'capacity to judge' (*Vermögen zu urteilen*, to be distinguished from the power of judgment, or *Urteilskraft*), determining our sensibility (the expression is Kant's […]), generates the representation in imagination of one, undivided space and one, undivided time, within which all spatial or temporal extension is to be delineated.[152]

Longuenesse argues that the singular forms of human sensibility or pure forms of intuition, the forms which Kant introduces in the Transcendental Aesthetic and in which all appearances are continuously contained, are dependent on an original act of a "pre-discursive" understanding. The transcendental imagination, on this reading, thus *spontaneously produces* the singular intuitions of metaphysical space and time. Importantly, Longuenesse interprets the "first action of understanding on sensibility" as claiming that this action is not a discursive action, because it does not involve or presuppose any application of conceptual representations.[153] Rather, these general representations are only presupposed for the construction of determinate objects in time and space.

Longuenesse therefore conflates the mere singularity of continuous space and time as forms of intuition or pure intuitions, which ground the singularity of all received appearances, with Kant's critical notion of unity. For on her reading *singular* metaphysical space as such is produced only through *unity* of apperception. Yet we saw that all unity of cognition in the *Critique* grounds or originates in the unity of the essentially synthetic ("putting-together") and so successive action of a transcendental self-consciousness. This intrinsic relation of spontaneous (unifying) activity and essentially discursive unity does not in any way become apparent or evident on

[152] Longuenesse (2005), 68f.
[153] See Longuenesse (2005), 71f; Longuenesse (1998), 59–81.

Longuenesse's reading. This is because she does not interpret synthetic unity, which first produces analytic unity of concepts, as a successive or discursive action of re-presentation, which is a unity only in the virtue of the fact that it is self-conscious. For if one does not ultimately conceive of transcendental apperception as a *subjective* action, namely the action of an I (as opposed to the *objective* representation of the unity of this action in a concept), then the only way left to ultimately distinguish between synthetic and analytic unity of transcendental apperception is to conceive of the former as of an intellectual intuition, and the latter as of an intellectual concept. In other words, if one conceives of both synthetic unity and analytical unity of apperception as representations of *objects* (as opposed to a representation of an I or subject), the only way to ultimately distinguish the two representations is to conceive of the former as non-discursive. I believe this problem is what really plagues the majority of contemporary readings of the critical philosophy. Inseparably related to this problem is the neglect of the evidence that Kant thinks singular intuitions of objects as independent of understanding or self-consciousness, because they can be indeterminate and entirely obscure. I can only assume that Longuenesse believes any singular representation of an object must be represented as a singular representation. The latter would of course require that the singular intuition is unified, because it would require that the intuition itself is determined as an object. However, as we saw, singularity of representations is independent of their being thus apperceived on the critical philosophy.

Friedman adopts a position much like Longuenesse's. He argues that

> What unites (…) [metaphysical space—the space of our pure form of outer sensible intuition] into a 'single all-encompassing' space (…) is transcendental unity of apperception (…). This singular, all-encompassing and infinite space then grounds the possibility of geometrical constructions (…). Thus, the synthesis responsible for the

> characteristic unity and singularity of space (as the pure form of outer sensible intuition) does indeed belong to the understanding. It does not follow, however, that the unity in question is a *conceptual* unity. For (…) this [first] 'action of the understanding on sensibility' precedes all geometrical constructions, and thus all particular spaces (…)—since these are constructed *within* the singular, all-encompassing, and infinite space of pure intuition (…). Therefore, in the second place, the original transcendental synthesis of the imagination responsible for the characteristic singularity and unity of space also precedes all geometrical concepts (…). Finally, and in the third place, the same original synthesis precedes all (schematized) categories (…) and therefore precedes all (schematized) concepts whatsoever (…). The unity [of metaphysical space] in question is [thus] indeed intellectual, but it is nonetheless characteristic of an intuitive rather than conceptual representation.[154]

Friedman in this passage argues that the singularity of infinite metaphysical space as the pure form of outer intuition grounds in the unity of transcendental apperception. Much like Longuenesse, moreover, he interprets the "first" action of understanding on sensibility, which produces metaphysical space, as *prior* to all discursive action as such. While the act is intellectual, it produces an *intuitive objective unity*, and it does not employ any general representation in this production. So, Friedman commits to a standard reading, and in particular, to a standard reading which cannot explain the *unity* of discursive human spontaneity, i.e., discursive self-consciousness, as a "fundamental" capacity of cognition itself. What is more, Friedman in fact now attributes to human understanding the power to produce spontaneously an infinite totality—and this is surely something that exceeds precisely what the critical Kant would ever attribute to our understanding.[155] Why does Friedman commit to this view?

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[154] Friedman (forthcoming), 20ff.

[155] Charles Parsons has convincingly argued that you could not construct infinite, three-dimensional space out of sensations received in a finite time. It seems that this is however exactly the (impossible) constructive or successive achievement that standard readings must attribute to human spontaneous capacity, at least if they (unlike Longuenesse and Friedman) want to conceive of this capacity as discursive and not intuitive. See Parsons (1964), 187.

It is important to note that Friedman interprets metaphysical space as "[consisting] in the totality of possible perspectives from which the subject can be affected by outer objects."[156] Metaphysical space must therefore already be a unified totality (unified by transcendental apperception), which alone can guarantee that "any possible outer object is in principle perceivable by the *same* subject."[157] Now first, Kant nowhere characterizes or defines metaphysical space in this way. And indeed, it is clear why he doesn't. For this totality would be an intuitive, numerically single representation that would simultaneously represent all possible determinate perspectives of a single subject on, or perceptual relations of a single subject to, real objects in space. This clearly amounts to an intellectual intuition par excellence. Now perhaps Friedman does not want his account as asserting that metaphysical space would represent all these possible determinate relations *simultaneously*. But if the latter is the case, then nothing speaks against saying that metaphysical space is merely a given continuous form of intuition, such that wherever my body is spatially and temporally located in (what I can cognize as) the world, I receive continuously succeeding representations of real space that surrounds me as I move through it. I may not determine what I so intuit as an object of possible concepts. But another human subject in my place, or even, if we assume a form, acuteness etc. of sensibility in some non-rational animal species that is exactly like ours, and abstracting from individual bodily differences, a non-rational animal of this species in my place, moving exactly in the way I move through space at exactly the same time, would be subject of exactly the same, infinitely continuous, filled intuitions of spatial form succeeding in continuous time as I would, moving through this space at this

[156] Friedman (forthcoming), 20.
[157] Ibid.

time. The animal would not be *un*conscious of these representations if that were taken to mean that it would not visibly respond to them in a purposive manner. But it would not self-consciously, successively follow up on its representations to combine them into determinate objects of possible concepts. This theory in fact nicely explains why a non-human animal's movement through space and its responses to its surrounding seem so much more acute, so much more perfect than human responses. For their responses according to Kant's assumptions are entirely immediate, i.e., their relations to the world are all infinitely differentiated (singular) *and immediate in time*. Animals thus intuit "better phenomena," as Kant puts it in a passage we saw in the first chapter. For the non-rational animal does not delay its responses through self-consciously, successively following up on and determining in a second-order, abstract representation what it intuits. Without a concept of an I, the animal simply cannot distinguish its "own" representations from one another and from their object (the real world). It here becomes perhaps for the first time fully clear what an obscure or unconscious intuition in Kant really amounts to: A singular representation which is not unified by a *self*-consciousness, because it is not determined as an object of a concept.[158]

This view can satisfy Friedman's desideratum, that any possible outer object must in principle be perceivable by the *same* subject. For when Friedman says metaphysical space must guarantee this, then he presumably means to abstract from bodily differences and from all changes in sensibility of an empirical subject through time. Moreover, it seems he also assumes for the sake of argument an infinite capacity of perception. So let

[158] Kant's notion of an unconscious or obscure representation is surprisingly close to the sense in which a representation is unconscious in Freud. According to the *Traumdeutung*, unconscious representations are non-discursive, iconic, i.e. image-like representations or imaginative-associative chains of reproductions of such representations. They have a high impact on our affections and feelings and the way we react to our environment, but nevertheless we do not know what they represent (see Freud (1966)).

me make the same abstractions and furthermore let me heuristically assume subjects of exactly the same forms of intuition. Moreover, let me take it for granted that all representations received in the form of space are also continuous in time. Now if my account says that any subject in a certain defined place at a certain time would intuit the same, and that this holds for all possible places at all possible times, then this fulfills precisely what Friedman thinks an account of metaphysical space should guarantee.

VI. Limits of Transcendental Philosophy

In the letter to Marcus Herz from 1789, Kant answers an objection he attributes to Salomon Maimon, namely that one could only prove the objective validity of the Categories if one assumes that understanding itself must produce our intuitions of objects. Kant writes that

> [The objections] are (…) meant to prove: that if understanding is to have a law-giving relation to sensible intuition (not only to empirical but also to a priori intuition), (...) it must itself be the creator, either of these sensible forms, or even of the matter of these, i.e. of the objects, since otherwise the *quid juris* cannot be satisfactorily answered. (...) In essence the theory of Herr Maimon is this: the assertion of an understanding (and indeed the human understanding) not merely as a capacity to think, as it is in our case and perhaps in the case of all created beings, but in fact as a capacity to intuit (*Correspondence* 11:49f).

Kant here finds the same problem with Maimon's charge that I think befalls Longuenesse's and Friedman's accounts of the second proof step of the B-Deduction: A standard reading, on which intuition of objects necessarily requires the understanding, ultimately must conceive of our understanding as intuitive and not (merely) discursive. Now Kant takes up the substantial point of the objection, that if intuition and concept

origin in two distinct and entirely independent stems of cognition, the Transcendental Deduction of the Categories in any case could not succeed.

> Now Herr Maimon asks: How do I explain to myself the possibility of the agreement of intuition a priori with my concepts a priori when each has its specifically different origin, **since this agreement is indeed given as *factum*,** but its justification or the necessity of the agreement of two so heterogeneous kinds of representation cannot be made intelligible, and, conversely, how can I through my concept of the understanding, e.g. of cause, whose possibility in itself is of course only problematic, give the law to nature, i.e. to the objects themselves, and finally, how can I prove the necessity of these functions of understanding, whose existence in the understanding is also merely a *factum*, yet which must be assumed if one wants to subject things, however they may appear to us, to these [functions].
> To this I reply: This all happens in relation to an empirical cognition possible for us only under these conditions, thus in a subjective respect, which is however also objectively valid, **because the objects are not things in themselves, but mere appearances**, thus on the one hand, their form, in which they are given to us, also depends on us, with respect to what is subjective it in, i.e. the specific character of our mode of intuition, and on the other hand, they depend on our understanding, the unification of the manifold in one consciousness, i.e. with respect to thought of the object and cognition, **so that we can only have experience of them under these conditions, thus, if intuitions (of the objects as appearances) did not agree with this, they would be nothing for us, i.e., no objects of cognition, neither of us ourselves nor of other things** (*Correspondence* 11:50f, bold emphasis mine).

The answer Kant here gives to Maimon's challenge summarizes goal and strategy of the Transcendental Deduction as presented in the first section of this chapter:

Space and time are *nothing* but forms of sensibility, and so transcendentally ideal. Therefore, if appearances in space and time did not conform to the unity our understanding alone can give to them, they would simply be *nothing at all*. They would be nothing in themselves, and nothing for us. So, even if this were the case (that all our possible intuition were entirely obscure), we would not miss out on any hidden relation between our representations and objects distinct from them, i.e., a relation between our

representations and a mind-independent reality that could be deceptive or false, and so would be in need of justification.[159]

However, it is a fact that we do have self-conscious experience of the world, and a priori certainty in science. So all we need to do is to ask regressively for the *objective* conditions of the possibility of these facts, i.e., for the *objective* (object-constituting) principles that our capacities of cognition contribute to cognition. And here we find, that these principles, first, are space and time, which must be *mere* forms of merely sensible intuition. On the other hand, second, the combination or unity of some given set of objective representations must be of spontaneous origin, because a representation of unity *cannot be received*. On this basis we can prove with a priori certainty that any transcendental natural laws of the relation between objects in space and time must originate in our mind a priori.

Writing to Herz, Kant now turns to a question the Transcendental Deduction does not answer, and does not aim to answer. This question asks: How can we explain the possibility of the *actually successful* application of our spontaneity, which must (for all we can say with certainty, given our specific forms of intuition) be executed on a first level via the imagination, and which must (for all we can say with certainty) combine or re-present with unity, if not infinitely many, still very many representations in very

[159] As we saw in the first chapter, Kant assumes non-human animals are non-rational, because he finds their purposive behavior and actions are explicable on the basis of singular and immediate intuition alone. On this assumption, intuitions in non-rational animals are in fact entirely obscure. Nevertheless, the embodied animal moves through what humans cognize as real, but transcendentally ideal space and time—its body is a part of this empirical reality. However, since a non-rational animal's representations are entirely singular and immediate—since animals do not judge—they are immediately related to the world and thus cannot represent it falsely. For they do not take propositional stances toward their representations that could be false—they never commit to such a stance (they do not hold fixed a rule through time to check up on themselves or their representations, whether they conform to an independent standard of truth). Rather, they simply continuously adapt their own behavior in accordance with their own representations. And that is: they adapt it immediately, simultaneously, like little gods or as integral part of a whole of purposive nature.

complex ways, all throughout the time that we are awake and self-conscious? In other words, this question asks how self-conscious experience is *subjectively possible*. As he writes to Herz, this is not what Kant wants to answer, or needs to answer. And it is a question, which he says we cannot fully answer at all.

> But how such a sensible intuition (as space and time) [as] form of our intuition, or such functions of the understanding as logic develops out of it, are themselves possible, **or how it is the case that one form agrees with the other in giving rise to a possible cognition**, that is absolutely impossible for us to further explain, since for this [explanation] we would require another manner of intuition besides the one we possess and another understanding, with which we could compare our understanding (…): we can however judge any understanding only through our understanding and thus also all intuition only through our own. But it is also not at all necessary to answer this question (*Correspondence* 11:51, bold emphasis mine).[160]

The Preface to the first edition of the *Critique* already says that an answer to the question of how our spontaneous capacity *itself* is possible would be like searching for the cause of a "given effect" (see Axvii). In other words, Kant says it is a given fact that we have *self-consciousness* and we must not now search for the *subjective* conditions of the possibility of this actuality. This means, we must not now search for another principle, which would explain the possibility of transcendental apperception.

This argument bears resemblance to the older notion of the apriori that we saw was relevant for understanding Kant's notion of space (and analogously, time) as a priori, where space is a first ground of cognition (of all spatial objects) of which no further ground can be given. Likewise, transcendental apperception as the first principle of human spontaneity, as we saw in other passages and in the argument of this chapter, is a fundamental principle that cannot be derived from any further ground: You can never get

[160] Compare the *Critique*: "But for the pecularity of our understanding, that it is able to bring about unity of apperception *a priori* only by means of the categories and only through precisely this kind and number of them, a further ground may be offered just as little as one can be offered for why we have precisely these and no other functions for judgment or for why space and time are the sole forms of our possible intuition (B145f)."

behind the "I," the representation of yourself as subject of your unified representations, to derive its (alleged) further ground. For this would presuppose making this "I" the determinate object of a further second-order representation I* of yourself as subject of "I" (and so on in an infinite regress).

Moreover, you cannot derive an ultimate common principle of space, time, and the I. This is what a supposed "common root" of understanding and sensibility would amount to. The young Dieter Henrich has thus criticized Heidegger's notorious reading of transcendental imagination in Kant as precisely this "common root," the first principle of the forms of human sensibility and all human spontaneity, which first "gives" metaphysical space. As Henrich correctly points out, Heidegger's reading is ironically analogous to the reading of a Neo-Kantian line which Heidegger fiercely attacks, namely a view that closely resembles the position of Longuenesse and Friedman, on which transcendental imagination, while it is intellectual, produces metaphysical space and time themselves. Here, too, transcendental imagination thus appears as the common root of both sensibility and understanding. The relevant difference between such an account and the one of Heidegger's reading of the *Critique* is simply that the ultimate principle on the Neo-Kantian view is entirely intellectual, while Heidegger thinks it is ultimately *sensible* (temporal), yet nevertheless *spontaneous*. (It is beyond the scope of this essay to comment on how Heidegger proposes to resolve what appears from the point of view of traditional metaphysics of course as a simple contradiction of terms). Here is Henrich against any such uncritical proposals, and so against any possible standard reading:

> **Thus sensibiliy would offer intuitions, though of course ungrasped ones** [*unbegriffene*] **or blind ones, even without understanding.** And understanding without intuition would have at least the possibility of producing concepts. But (...) it makes no sense to think of it [imagination] even as possibly acting without both [given

> intuition and concepts]. It is thus clearly a capacity whose reality does not follow from the possibility of the understanding. (...) Imagination must therefore be assumed as a self-sufficient power of cognition. But since its task is to synthesize sensibility into perception in accordance with possible thought through understanding, it nevertheless makes good sense to say it is a capacity of the understanding, in the sense that understanding is immediately related to imagination, but imagination essentially is in need of the unity thought only in the understanding. **A more detailed account of how one is to represent or think to oneself this relatedness is in Kant's view an idle undertaking.** It may be that the capacity here termed imagination in itself involves multiple elements. **We don't know and can't know how it can apprehend the contingent form of time and whether it can mediate only this or also other possible forms [*Medien*]. All such questions ignore the methodological skepticism regarding the subjective deduction Kant sees as necessary.** Neither indeed do we know how, and on the basis of what conditions, the unity of what we call thought is possible. Imagination is (...) the term for the unity of the "actions" required above and beyond the objective principles of knowledge for the actuality of this knowledge to be intelligible.[161]

Henrich's central point in the above passage is that imagination in Kant is not a *fundamental* and *independent* capacity of *cognition* (i.e., of representation of *objects*) on a par with sensibility and understanding. For it does not contribute any fundamental and independent objective principle to cognition, in addition to those derivable from space, time, and the unity of our discursive understanding. Rather, imagination must be

[161] *[[S]o zeigt es sich, daß die Sinnlichkeit auch ohne Verstand Anschauungen darbieten würde, freilich unbegriffene, blinde. Auch der Verstand würde ohne Anschauung wenigstens die Möglichkeit haben, Begriffe zu entwerfen. Aber (...) [e]s ist sinnlos sie [die Einbildungskraft] ohne beides [ohne gegebene Anschauung und Begriffe] sich auch nur als mögliche Aktion zu denken. Sie ist also wohl ein Vermögen, dessen Wirklichkeit nicht aus der Möglichkeit des Verstandes folgt. (...) Sie muß deshalb als selbstständige Erkenntniskraft angenommen werden. Aber da es ihre Aufgabe ist, Sinnlichkeit gemäß der möglichen Denkbarkeit durch den Verstand zur Wahrnehmung zu synthetisieren, hat es dennoch einen guten Sinn, zu sagen, sie sei ein Vermögen des Verstandes; und zwar in dem Sinne, daß der Verstand unmittelbar auf sie bezogen, die Einbildungskraft aber der im Verstande gedachten Einheit wesentlich bedürftig ist. Wie man sich dieses Bezogensein nun näher vorzustellen hat, sich auszudenken, ist nach Kant ein müßiges Unterfangen. Mag es sein, daß die hier Einbildungskraft genannte Fähigkeit an ihr selbst wiederum vielgliedrig ist. Wir wissen es nicht und können es nicht wissen, wie sie die kontingente Form der Zeit apprehendieren kann und ob sie nur diese oder auch andere mögliche Medien vermitteln könnte. Alle solche Fragen verkennen den methodischen Skeptizismus gegenüber der subjektiven Deduktion, den Kant für notwendig hält. Wissen wir doch auch nicht, wie und aufgrund welcher Bedingungen die Einheit dessen, was wir als Denken begreifen, möglich ist. Einbildungskraft ist (...) der Terminus für die Einheit der „Handlungen", die über die objektiven Prinzipien der Erkentnis hinaus erforderlich sind, um die Aktualität dieser Erkenntnis verständlich zu machen]* (Henrich (1955), 53f, bold emphases in translation mine).

assumed to be involved in mediating between these two metaphysically independent capacities, given the facts that we *actually* do have self-conscious experience of objects in time and space and a priori knowledge in mathematical science. In other words, we must appeal to imagination as some principle that must necessarily be involved if experience is subjectively possible (i.e., possible in an individual human subject). Nevertheless, while the actuality of such experience is a fact, we cannot explain how it is possible that the transcendental imagination actually succeeds in this mediation, neither by deriving it as an ultimately spontaneous (i.e., self-produced) principle, nor by showing that the ultimate root or principle of all human cognition is given (e.g., time).

Therefore, Kant's account of the possibility of theoretical cognition resembles, at least from the point of view of the question how experience *is subjectively possible*, an unorthodox re-interpretation of Leibniz' pre-established harmony. This is Kant's own suggestion in his letter to Herz: Explaining how sensibility and understanding come together in a unity that is *actual experience*, in a single human subject, is beyond the limits of critical reason. Nevertheless, Kant writes, the idea of this supersensible unity or harmony of capacities in us must have been the idea at the heart of Leibniz' theory of a pre-established harmony between sensible and rational being. Even if, as the letter says, Leibniz himself could not clearly comprehend his own idea in this way.

> It is difficult to guess what thought may have hovered before a deep thinker, which he may not have been able to make fully clear to himself; I have however strongly convinced myself that Leibniz with his pre-established harmony (which he made very general, as did Baumgarten subsequently in his cosmology) had in view not the harmony of two different beings, namely sensible and intelligible beings, but of two different capacities of the very same being, in whom sensibility and understanding harmonize to give rise to an empirical cognition, of whose source [viz, the harmony], if we wanted to judge it, **even though such investigation lies completely beyond the bounds of human reason,** we could give no further ground than our divine creator,

though since it is indeed given we can completely explain the justification of a priori judgment by means of it (i.e. the *quid juris*) (*Correspondence* 11:51f, bold emphases mine).[162]

[162] Compare Henrich's comment on this passage: "The 'capacities' which in their totality make up the human 'mind' (...) form the unity of a structure in which cognition becomes first of all possible. Thus the understanding cannot achieve cognition without sensibility. And this sensibility must in turn be so structured that the understanding is in a position to determine it in accordance with the conditions of its unity, the categories. For appearances could after all be so constituted that the understanding would not find them to accord with the conditions of its unity. (…) From this perspective, Leibniz's pre-established harmony gets a surprising interpretation, one of course wholly inadequate to its author, for whom the thought of a pluralism of capacities of the soul was absurd. [*Die 'Vermögen', die in ihrem Gesamt das menschliche 'Gemüt' ausmachen (...) bilden die Einheit einer Struktur, in der Erkenntnis allererst möglich wird. So kann der Verstand nicht ohne Sinnlichkeit Erkenntnis erlangen. Und diese Sinnlichkeit muß wiederum so strukturiert sein, daß der Verstand in der Lage ist, sie den Bedingungen seiner Einheit, den Kategorien, gemäß zu bestimmen. Könnten doch Erscheinungen auch so beschaffen sein, daß der Verstand sie den Bedingungen seiner Einheit gar nicht gemäß fände. (...) Leibnizens prästabilierte Harmonie erfährt unter diesem Gesichtspunkt eine überraschende, ihrem Urheber freilich ganz unadäquate Interpretation, für den ja der Gedanke eines Vermögenpluralismus der Seele ein Ungedanke war*] (Henrich (1955), 44f)." Henrich argues that the limits of transcendental philosophy at best allow for a teleological assumption of a supersensible harmony between two metaphysically distinct capacities of cognition (see ibid.).

Conclusion

In this essay, I have presented arguments against what I call a "standard" reading of Kant's critical theoretical philosophy. On the standard reading, singular and immediate intuitions of objects presuppose unity of understanding. I have shown, first, that a standard reading cannot account for the immense textual evidence in Kant's corpus, which posits sensible intuitions of objects as metaphysically independent of spontaneity. In particular, Kant holds that the attribution of singular and immediate representations (perceptions or imaginations) of objects to young children and non-rational animals without any higher capacity of cognition is not a priori refutable or contradictory. A standard reading cannot account for this.

Beyond the issue of textual incompatibility, my substantial charge is that a misreading of aim and method of the Transcendental Deduction of the Categories has led interpreters to conflate the singularity of continuous metaphysical time and space, as pure sensible intuitions, or pure forms of human sensibility, with the unity original to transcendental apperception. As I have argued in the third chapter of this thesis, these pure singular intuitions immediately individuate as singular all possible empirical intuitions that can be received in them. On my reading of the respective criteria of intuition and concept, prior to any application of human *discursive* understanding to one's own, particular human kind of receptivity, these empirical intuitions are indeterminate and not distinguished from their objects (undetermined appearances). The

main problem of a standard reading that surfaces on a defensible interpretation of the Transcendental Deduction of the Categories is thus the following:

A standard reading cannot account for the unity of human spontaneity itself. This means, first, that it cannot account for the fact that human understanding is entirely discursive, i.e., non-intuitive. It neither produces intuitions, nor the objects of such singular and immediate representations. Rather, because human spontaneity is nothing but a capacity to judge, it produces and uses, at all levels, only general and mediate representations of objects. Transcendental schemata, too, are such general and mediate representations. Therefore, the first or fundamental principle of human spontaneity, which is transcendental apperception, must be interpreted such that it a) must ground all production and use of general and mediate representations in the cognition of objects at all levels (the levels are: syllogism, judgment, geometrical construction, experience); that transcendental apperception b) is not the necessary or sufficient ground of the production of any intuition; and that it c) is "fundamental" in the sense that it is not reducible to a further principle, e.g. a principle that would be a common root of both sensible intuition and discursive spontaneity itself. Either all these three points a) – c) or at least b) and c) are violated by any standard reading. By violating b), in particular, standard readings violate an additional argument for a strict irreducibility of pure intuition to principles of human understanding.

This additional argument is expounded in chapter three of this thesis: In the continuity of metaphysical time and space, an actual infinity is received by humans on any occasion of affection. However, a discursive understanding cannot represent a positive infinity. And one can see that despite the development of polyadic logics today,

which allow for the positive representation of infinities *in the abstract*, it still remains true that discursive understanding, as it is involved in ordinary, singular and subjectively individual experiences on Kant's account, could not at each moment of self-conscious perception determinately re-present the singular part of real continuous space it experiences in its infinite continuity and singularity.

I have offered a reading of the Transcendental Deduction which accounts for a) – c). This reading is thus compatible with the ontological and epistemologically *irreducible* independence of sensible intuition and discursive spontaneity. On the argument I defend, the proof must presuppose transcendental idealism, and it must explain the thesis that all combination or unity of representations must be a representation that cannot be received. Unity is necessarily spontaneous. Moreover, an account of the thesis that unity of objects of representations is not merely *a* representation that cannot be given, but *the only* such representation, first reveals the heart of Kant's conception of discursive spontaneity. And here it becomes clear that standard readings reduce the original synthetic unity of transcendental apperception to the production of an object (of representation) that can well be conceived to be given, namely metaphysical space and time.

On my reading, by contrast, Kant has offered a most impressive argument to the conclusion that all unity of sensible intuition must ultimately be represented as the unity of the action of their combination by a self-conscious I. This action is (represented as) a unity only in virtue of the fact that this I represents itself as this action's self-conscious, self-identical subject through all successive stages of the action and the action as a whole. Therefore, the original unity of transcendental apperception is the representation of an I

or of a spontaneous *subject* of representations. It is not, by contrast, the representation of an object. More precisely, it is the representation of the spontaneous, i.e., entirely *self-productive*, subject of all representation of *unity of representations*. And *this* representation, the representation of the I as the spontaneous and sole source of unity, cannot be received, because it is presupposed by all representation of a received representation *as such* (as received). For a representation of a representation as received already presupposes the unity of an action of this I. Again, this does not in any way rule out that we may receive very many representations of objects entirely independent of any action of self-consciousness. But I cannot self-consciously re-present in a second-order representation R' these representations as received without a prior representation of an I. In other words, I cannot represent them as "my" representations, received by myself as a self-identical subject through time, without the prior representation of my self-conscious I as the spontaneous or entirely subjective source of R'.

Second, my reading takes into account that unity of representations is *the only* representation that is necessarily spontaneous, on Kant's account of human spontaneity. This shows that he conceives of the action of our understanding such that it is essentially dependent upon *receiving all objects of possible theoretical cognition*. In other words, discursive understanding is essentially dependent upon immediately contentful sensible intuitions of objects. This is why the first or original action of transcendental apperception is necessarily *synthetic*. For this action is a successive combining or "putting together" of a received "manifold" of objective representations—an indeterminate set of representations, each of which is in itself singular, just as the indeterminate set itself (as a continous whole).

Self-consciousness and discursivity or the capacity to judge are inseparable on the account offered in this thesis. It should therefore be obvious that I reject as false or dogmatic the majority of so-called "non-conceptualist" readings[163] of the critical philosophy for the same substantial reason that I object to its standard readings. For contemporary "non-conceptualist" interpretations in most cases cannot account for the critical conception of human spontaneity as a unity, and as the necessary, sufficient, and sole possible source of all unity of representation itself. These readings argue that the critical philosophy is compatible with the view that a sensible subject could be conscious of its intuitions representing a certain object or content entirely independent of all understanding.[164] My account does not maintain this, for it entails that a sensible intuition, independent of or without all application of the understanding is not an intuition the objective content of which one could be aware of. Prior to this application, the singular intuition is not held fixed in consciousness as an object of contemplation or determination.

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[163] "Non-conceptualist" readings of the critical philosophy argue that Kant holds a theory of non-conceptual content. Allais differentiates between two senses of non-conceptual representational content in Kant. She distinguishes what she calls with Speaks "relative" as opposed to "absolute" non-conceptual content. On the view, a representation of an object possessed by a subject has relative non-conceptual content iff the subject merely need not possess the relevant concepts to describe that content (see Allais, (2009), 386). By contrast, non-conceptual content of a representation is absolute iff the representation has an intrinsically different structure than discursive representation, and is therefore irreducible to concepts in principle (see ibid.). On my reading of the exclusive and exhaustive concept-intuition distinction in Kant, where concepts and intuitions are the only possible kinds of representation of *objects*, Kant's theory of non-conceptual content is, to go with the Speaks-Allais distinction, entirely absolute. And all non-conceptual representations of objects are intuitions. A notion of "relative" non-conceptual content thus cannot possibly be applied to Kant's philosophy. For a concept is simply a general and mediate representation of an object, so that even a transcendental schemata is conceptual. While it is certainly possible that I self-consciously observe in all its details a certain rare species of a plant, without possessing a concept of the particular species and family of this plant, I nevertheless must possess concepts which would, if they were made explicit, describe what is see in exactly the relevant specific ways I see it. For these general and mediate representations are presupposed for my self-conscious perception of the plant in this specific, distinct, and highly distinguishing way.

[164] See Hanna (2005; 2008; 2011); McLear (2011). On the most charitable reading I can give her, Allais (2009) also commits to this view. Even if she does not, however, her account is certainly a standard reading, in so far as she follows and applies the view proposed by Longuenesse, that an original and non-discursive act of transcendental apperception must first produce metaphysical space. See Allais, (2009).

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