5

Directions in Space, Nonconceptual Form and the Foundations of Transcendental Idealism

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5.1 Introduction

The central aim of this chapter is to demonstrate an essential connection between Kant's nonconceptualism and his transcendental idealism by tracing this line of thinking in Kant's work directly back to his pre-Critical essay of 1768, *Concerning the Ground of the Ultimate Differentiation of Directions in Space* (*Directions in Space*, for short). What I shall argue is that Kant's nonconceptualism about the human mind goes all the way down into his metaphysics; that the apparent world fundamentally conforms to human sensibility even if it does not fundamentally conform to the human understanding; and that the basic source of all this is Kant's (pre-Critical but later also Critical) theory of space and how we represent it.

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5.2 Transcendental Idealism, Conceptualism, Nonconceptualism, Kantian Conceptualism and Kantian Nonconceptualism

In a nutshell, Kant's thesis of transcendental idealism states that the basic structure of the apparent or phenomenal world necessarily conforms to the pure or non-empirical (hence a priori) structure of human cognition, and not the converse (Bxvi–xviii). Or in other words, Kant is saying that the phenomenal world fundamentally conforms to the a priori structure of the human mind, and it is not the case that the human mind fundamentally conforms to the phenomenal world, or indeed to any non-apparent or *noumenal* world.

And here is Kant's primary argument for transcendental idealism. If the human mind fundamentally conformed to the world, whether phenomenal or noumenal, then since human knowledge of the world would be contingent on the existence and specific character of that world, then a priori human knowledge of the world would be impossible (Br, 10:130–1). But a priori human knowledge of the phenomenal world, for example, in mathematics, is already actual and therefore really possible. So the phenomenal world necessarily conforms to the a priori structure of the human mind. And in particular, the phenomenal world fundamentally conforms to our a priori representations of *space* and *time*, because that is the only acceptable philosophical explanation of the real possibility of mathematical knowledge (MSI, 2:398–406; A19–49/B33–73).

So if Kant is correct, then he is saying that the world in which we live, move and have our being (by which I mean the phenomenal, natural and social world of our ordinary human existence) is fundamentally dependent on *our* minded nature, and not the converse. Correct or incorrect, transcendental idealism seems to me to be a deeply important philosophical thesis. For one thing, if transcendental idealism is true, then we cannot be inherently alienated from the world we are trying to know, as global epistemic sceptics claim, and human knowledge—not only a priori knowledge, but also a posteriori knowledge—is therefore really possible.[1]

[1] Hanna (2015), esp. Chaps. 3 and 6–8.

In general, the thesis of conceptualism[2] states that the representational content of human cognition is essentially conceptual and necessarily determined by our conceptual capacities. *Strong* conceptualism states that our conceptual capacities are not only necessary but also sufficient for determining the content of human cognition, and *weak* conceptualism states that our conceptual capacities are not alone sufficient but also require a contribution from some or another nonconceptual capacity (e.g. the capacity for sense perception) in order to determine the (ultimately conceptual) content of human cognition. Correspondingly, the thesis of (essentialist content) nonconceptualism[3] states that at least some of the representational contents of human cognition are not essentially conceptual, and not necessarily determined by our conceptual capacities, and also that these contents, on the contrary, are essentially nonconceptual and necessarily determined by our nonconceptual capacities (e.g. the capacity for sense perception).

Although these distinctions might initially seem rather Scholastic or even trivial, the opposition between conceptualism and (essentialist content) nonconceptualism is a philosophically important one. This is because what is at issue is nothing more and nothing less than the nature of the human mind, and whether it is basically intellectual or non-intellectual. According to conceptualism, human minds are basically *intellectual* in character, having nothing inherently to do with the embodied, sense-perceiving, affective, desiring, animal side of human nature. By contrast, according to (essentialist content) nonconceptualism, human minds are basically bound up with the embodied, sense-perceiving, affective, desiring, animal side of human nature, and are *not* basically intellectual in character: on the contrary, the intellectual capacities of

[2] See e.g. McDowell (1994) and Sellars (1963, 1968).

[3] See e.g. Evans (1982). In the contemporary debate about conceptualism vs nonconceptualism, it is now standard to draw a distinction between *state* (or possession-theoretic) nonconceptualism and *content* nonconceptualism. State nonconceptualism says that there are mental states such that the subject of those states fails to possess concepts for the specification of those states. Content nonconceptualism, by contrast, says that some mental states have content that is of a different *kind* from that of conceptual content. In turn, *essentialist* content nonconceptualism says that the content of such states is of a categorically or essentially different kind from that of conceptual content. For a general survey of nonconceptualism, see Bermúdez and Cahen (2015). For the distinction between state and content nonconceptualism, see Heck (2009). And for the distinction between non-essentialist and essentialist content nonconceptualism, see Hanna (2008, 2011, 2015, Chap. 2).

the human being constitutively presuppose, and are thereby grounded on and built on top of, the non-intellectual capacities.[4] Hence the philosophical debate about conceptualism vs nonconceptualism is really a debate about whether an *intellectualist* or a *non-intellectualist* conception of the human mind is the correct one. This has far-reaching implications not only for other parts of the philosophy of mind, but also for epistemology, metaphysics, ethics and even political philosophy, to the extent that it depends on ethics and philosophical anthropology.

Although both conceptualism and (essentialist content) nonconceptualism are competing theses/doctrines in contemporary philosophy of mind, their philosophical origins both go back to Kant.[5] Hence it is possible to defend either *Kantian* conceptualism or *Kantian* (essentialist content) nonconceptualism as competing interpretations of Kant's theory of human cognition in particular and of his philosophy of mind more generally.

Now according to Kant, our conceptual capacities are located in the *understanding* (*Verstand*), whose operations yield concepts, judgements/propositions and inferences, when those operations are also supplemented by our further intellectual capacities for apperception or self-consciousness, for judgement and belief, and for logical reason or inference. By contrast, according to Kant, our nonconceptual capacities are located in *sensibility* (*Sinnlichkeit*), which contains both a non-intellectual sub-capacity for sense perception and also a non-intellectual sub-capacity for imagination, and whose operations yield material or formal intuitions, material images, and formal images or schemata. Human sensibility for Kant, it must also be noted, *further* contains non-intellectual sub-capacities for feeling, desiring and sensible willing or "the power of choice" (*Willkür*). In other words, sensibility for Kant is as much non-cognitive or practical, as it is cognitive or theoretical. Since Kant believes that the understanding and sensibility, as capacities, are essentially distinct from and irreducible to one another, and also that both are required for ratio-

[4] The inherent connections between intellectualism and conceptualism, on the one hand, and between non-intellectualism and nonconceptualism, on the other, are developed in detail in Hanna (2015), esp. Chaps. 2–3, and Hanna (MS), Chap. 5.

[5] See e.g. Hanna (2005) and McDowell (1994).

nal human cognition (and in the case of human practical reason, a.k.a. "the faculty of desire", both are required for rational human action and agency), Kant is also a *cognitive capacity dualist*.

But is Kant a conceptualist or a nonconceptualist? Or in other words, is Kant a cognitive *content* dualist as well as a cognitive *capacity* dualist? Or in still other words, is Kant an *intellectualist* about the nature of the human mind, or a *non-intellectualist*? The intellectualist thesis of Kantian conceptualism states that for Kant the representational content of human cognition is essentially conceptual and necessarily determined by the understanding. And just as there are strong and weak versions of conceptualism in general, so too there are strong and weak versions of Kantian conceptualism.[6] By contrast, the non-intellectualist thesis of Kantian (essentialist content) nonconceptualism states that for Kant at least some of the representational contents of human cognition are not essentially conceptual, and not necessarily determined by the understanding, and also that these contents, on the contrary, are essentially nonconceptual and necessarily determined by our sensibility.[7]

The classical or standard line of Kant interpretation in twentieth-century Anglo-American philosophy simply took it as obvious that Kant is a conceptualist and also an intellectualist. So the nonconceptualist interpretation of Kant is importantly revolutionary and unorthodox, and even if it were not correct (although I do think it *is* correct), nevertheless it has forced conceptualist, intellectualist Kantians to rethink, re-argue and rework their previously unchallenged view.[8]

Now I can reformulate the main aim of this chapter more precisely, in four sub-claims:

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[6] See e.g. Bauer (2012), Bowman (2011), Ginsborg (2006a, 2008), Golob (2014), Griffith (2012), Grüne (2009), Land (2011), McDowell (2009, 2013), Pippin (2013), Wenzel (2005), and Williams (2012).

[7] See e.g. Hanna (2008, 2011), Hanna and Chadha (2011), Laiho (2012), and Tolley (2013). Weaker versions of Kantian nonconceptualism are defended by e.g. Allais (2009), McLear (2015), Onof and Schulting (2015), and Rohs (2001).

[8] See e.g. McLear (2014b).

(i) That Kant is an (essentialist content) nonconceptualist.
(ii) That there is a specifically non-intellectualist version of Kant's transcendental idealism that depends inherently on the nature of human sensibility.
(iii) That Kant's (essentialist content) nonconceptualism is foundational for any philosophically defensible version of his transcendental idealism.
(iv) That this line of thinking in Kant can be traced directly back to his pre-Critical *Directions in Space* essay.

Or in other words, what I want to claim is that Kant's non-intellectualism about the human mind goes all the way down into his *metaphysics*; that it is defensibly arguable that the apparent world fundamentally conforms to human *sensibility* even if it does not fundamentally conform to the human *understanding*; and that the basic source of all this is Kant's (initially pre-Critical but later also Critical) theory of *space* and how we represent it.

5.3 Directions in Space and the Essentially Nonconceptual Form of Our Representation of It

Kant's *Directions in Space* essay contains an argument against the *relational* or Leibnizian view of space and in favour of the *absolute* or Newtonian view of space, but this merely scratches the surface of Kant's argument. The relational theory of space states that the nature of space is necessarily determined by extrinsic relations between objects in space. By contrast, the absolute theory of space, as Kant understands it, states that the nature of space is necessarily determined by a single universal framework—a *global space-frame*—in which physical objects are inherently embedded or located as filling up and realising proper parts of the global space-frame, whose structure necessarily includes certain special intrinsic relational topological properties that allow for fundamental *asymmetries*, in addition to the familiar Euclidean relational topological properties and relations, which are symmetrical.

According to Leibniz, who was a relationist about space, the objects standing in extrinsic relations are monads. So space is actually a "well-founded phenomenon" for Leibniz, and strongly supervenient on the intrinsic non-relational properties of noumenal monads. Nevertheless, other relationists about space, including Kant himself in the *Physical Monadology*, hold that these objects are actually material point-sources of causal forces in real physical space. So the version of relationism that Kant was working with in *Directions in Space* is not an orthodox Leibnizian theory.

According to Newton, who was an absolutist about space, the single universal framework in which physical objects are embedded is itself a noumenal entity. But Newton was unaware (as far as I know) of the idea that the structure of absolute space contains special asymmetry-allowing intrinsic relational topological properties. Hence the version of absolutism that Kant was working with in *Directions in Space* is also not an orthodox Newtonian theory.

According to Kant in *Directions in Space*, space does indeed constitute a global frame for embedding or locating physical objects, like Newtonian space, but also and much more importantly it is an *egocentrically centred*, *orientable space* with inherent structural asymmetries such as mirror-reflected incongruence or "handedness" in qualitatively identical objects (enantiomorphy),which Kant also calls "incongruent counterparts" (see GUGR, 2:378–83). "Orientable spaces" are spaces with intrinsic directions, and "egocentric centring" means that the specific characteristics of an orientable space is fixed indexically and locally by conscious embodied perceivers who are themselves actually embedded or located within the total global space-frame.

In *Directions in Space*, Kant discovered that structural asymmetries such as handedness can be detected and differentiated only by the essentially non-intellectual, nonconceptual, outer sensibility of living, embodied, conscious, cognising subjects like us, who are actually embedded or located in such a global space, and therefore that there is a necessary isomorphism between the representational form of the outer sensibility of such subjects, the abstract structure of that global space, and the material structure of perceivable objects also embedded or located in that global space. Kant writes:

> Because of its three dimensions, physical space can be thought of as having three planes, which all intersect each other at right angles. *Concerning the things which exist outside ourselves: it is only in so far as they stand in relation to ourselves that we have any cognition of them by means of the senses at all. It is, therefore, not surprising that the ultimate ground, on the basis of which we form our representation*[9] *of directions in space, derives from the relation of these intersecting planes to our bodies*. The plane upon which the length of our body stands vertically is called, with respect to ourselves, horizontal. This horizontal plane gives rise to the difference between the directions which we designate by the terms *above* and *below*. On this plane it is possible for two other planes to stand vertically and also to intersect each other at right angles, so that the length of the human body is thought of as lying along the axis of the intersection. One of these two vertical planes divides the body into two externally similar halves, and furnishes the ground of the difference between the *right* and *left* side. The other vertical plane, which also stands perpendicularly on the horizontal plane, makes possible the representation of the side *in front* and the side *behind*. (GUGR, 2:378–9; trans. amended and emphasis added)

> Since the distinct feeling of the right and left side is of such great necessity for judging directions, *nature has established an immediate connection*

[9] I have substituted "representation" (*Vorstellung*) here and further below for Kant's "concept" (*Begriff*). My rationale is this. In Hanna (2006), Chap. 5, while working out a rationally charitable step-by-step argument-reconstruction of the Transcendental Aesthetic (TAe), I argued for Kant's shifting from a general, loose sense of "concept" in the pre-Critical and proto-Critical writings, where it basically means the same as "representation", to a narrower, technical sense of "concept", which means an essentially general, descriptive or "attributive" representation, in TAe and the rest of the First *Critique* and other Critical and post-Critical writings (including the *Jäsche Logic*), where it sharply contrasts with his use of "intuition", which means an essentially singular or "directly referential" representation. This sharp contrast between the meanings of "concept" and "intuition" begins to emerge in the "Inaugural Dissertation", but unfortunately they are not made fully terminologically explicit there. Moreover, and to make things even worse for interpreters, in TAe Kant *still* does not fully terminologically update the material he took from the "Inaugural Dissertation", and occasionally uses "concept" of space (or time) when he really means "representation of space (or time)" or "pure intuition of space (or time)". This causes not only significant interpretive confusion, it also gives the false appearance of occasionally making Kant seem blatantly self-contradictory—e.g. when he says explicitly that the "concept" of space (or time) is *not* a concept but instead a pure intuition, etc. Assuming all this is true, and again applying rational charity in philosophical interpretation, we can avoid equal confusion in the retrospective, proto-Critical direction only by substituting "representation" for "concept" in *Directions in Space*, when Kant would, with philosophical hindsight, clearly intend to be talking either neutrally about representations that are either "concepts" or "intuitions" in the later, narrower, technical senses of those terms, or else specifically about "intuitions" in the later, narrower, technical sense.

> *between this feeling and the mechanical organisation of the human body*. (GUGR, 2:380; emphasis added)

In short, the apparent or phenomenal world must conform to the form of our embodied outer sensibility, that is, the apparent or phenomenal world must conform to the form of human outer intuition.

Now for Kant the form of human outer sensibility or intuition is *essentially nonconceptual* for three reasons. First, Kant says explicitly in the *Critique of Pure Reason* that intuitions of outer sense or inner sense, which pick out appearances—the undetermined objects of empirical intuitions (A20/B34)—are possible for us independently of the functions of our understanding, that is, independently of our concepts:

> Since an object can appear to *us only by means of … pure forms of sensibility, i.e., be an object of empirical intuition*, space and time are thus pure intuitions that contain *a priori* the conditions of the possibility of objects as appearances, and the synthesis in them has objective validity. (A89/B121–2; emphasis added)

> Objects can indeed appear to us *without necessarily having to be related to functions of the understanding.* (A89/B122; emphasis added)

> Appearances can certainly be given in intuition *without functions of the understanding.* (A90/B122; emphasis added)

> Appearances could after all be so constituted that the understanding would not find them in accord with the conditions of its unity, and … in the succession of appearances nothing would offer itself that would furnish a rule of synthesis and thus correspond to the concept of cause and effect, so that this concept would therefore be entirely empty, nugatory, and without significance. *Appearances would nonetheless offer objects to our intuition, for intuition by no means requires the functions of thinking.* (A90–1/B123; emphasis added)

> That representation that can be given prior to all thinking is called *intuition*. (B132)

> The manifold for intuition must already be *given prior to the synthesis of understanding and independently from it.* (B145; emphasis added)

Second, Kant explicitly claims in some pre-Critical writings and also Critical writings alike that at least some non-human animals (e.g. oxen) and some non-rational human animals (e.g. ordinary human infants) are capable of sense perception and thus capable of inner and outer sensory intuition, but do not possess conceptual capacities.[10]

Third, and most importantly for our purposes, our pure or non-empirical representation of space picks out egocentrically centred, orientable, asymmetric structural topological properties of space that *cannot* be represented by the understanding and concepts. This is shown by the "incongruent counterparts" argument, which, in a nutshell, says:

> **P1**: Incongruent counterparts, like our right and left hands, by hypothesis, are such that they possess all their *conceptually* representable qualities in common, yet they still are essentially different because they are incongruent.
> **P2**: This incongruence and the essential difference between our right and left hands is immediately and veridically represented by human cognisers, but only by means of our empirical *intuition* of real objects in physical space and also our pure sensory *intuition* of the structure of space, as necessarily conforming to the form of our outer sensibility or intuition.
> **C**: Therefore, our pure or non-empirical (hence a priori) representation of space is necessarily underdetermined by concepts.[11]

When the conclusion of the "incongruent counterparts" argument is conjoined with the first two reasons, then it follows that the form of our outer sensibility or intuition is essentially nonconceptual and also a priori. Therefore, in *Directions in Space*, at least implicitly, Kant is saying that the basic structure of the apparent or phenomenal world necessarily conforms to the essentially nonconceptual a priori form of human embodied outer sensibility or intuition.

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[10] See e.g. McLear (2011).

[11] For more fully spelled out versions of this argument, see Hanna (2008, 2011).

This line of argument is made even more explicit in, and furthermore is strongly supported by, Kant's doctrine of the nature of space in the "Inaugural Dissertation", *On the Form and Principles of the Sensible and the Intelligible World* (1770), by his argument for the transcendental ideality of space in the *Prolegomena to Any Future Metaphysics* (1783), and by his later discussion of geographical spatial orientation in the essay "What Does It Mean to Orient Oneself in Thinking?" (1786):

> *The representation*[12] *of space is … a pure intuition*, for it is a singular concept, not one which has been compounded from sensations, although it is the fundamental form of all outer sensation. Indeed, this pure intuition can easily be seen in the axioms of geometry, and in any mental construction of postulates, even of problems. That space does not have more than three dimensions, that between two points there is only one straight line, that from a given point on a plane surface a circle can be described with a given straight line, *etc*.—none of these things can be derived from some universal concept of space; they can only be *apprehended* concretely, so to speak, in space itself. *Which things in a given space lie in one direction and which things incline in the opposite direction cannot be described discursively nor reduced to characteristic marks of the understanding by any astuteness of the mind. Thus, between solid bodies which are perfectly similar and equal but incongruent, such as the left and right hands (in so far as they are conceived only according to their extension), or spherical triangles from two opposite hemispheres, there is a difference, in virtue of which it is impossible that the limits of their extension should coincide—and that, in spite of the fact that, in respect of everything which may be expressed by means of characteristic marks intelligible to the mind through speech, they could be substituted for one another. It is, therefore, clear that in these cases the difference, namely, the incongruity, can only be apprehended by a certain pure intuition.* (MSI, 2:402–3; emphasis added)

> What … can be more similar to, and in all parts more equal to, my hand or my ear than its image in the mirror? And yet I cannot put such a hand

[12] See note 9 above, and also Hanna (2001), Chaps. 4 and 5.

as is seen in the mirror in the place of its original; for if the one was a right hand, then the other in the mirror is a left, and the image of the right ear is a left one, which can never take the place of the former. Now there are no inner differences here that any understanding could merely think; and yet the differences are inner as far as the senses teach, for the left hand cannot, after all, be enclosed within the same boundaries as the right (they cannot be made congruent), despite all reciprocal equality and similarity; one hand's glove cannot be used on the other. What then is the solution? These objects are surely not representations of things as they are in themselves, and as the pure understanding would cognize them, rather, they are sensory intuitions, i.e., appearances, whose possibility rests on the relation of certain things, unknown in themselves, to something else, namely our sensibility. Now, space is the form of outer intuition of this sensibility, and the inner determination of space is possible only through the determination of the outer relation to the whole space of which the space is a part (the relation to outer sense); that is, the part is possible only through the whole, which never occurs with things in themselves as objects of the understanding alone, but well occurs with mere appearances. *We can therefore make the difference between similar and equal but nonetheless incongruent things (e.g., oppositely spiralled snails) intelligible through no concept alone, but only through the relation to right-hand and left-hand, which refers immediately to intuition.* (Prol, 4:286)

In the proper meaning of the word, to *orient* oneself means to use a given direction (when we divide the horizon into four of them) in order to find the others—literally, to find the *sunrise*. Now if I see the sun in the sky and know it is now midday, then I know how to find south, west, north and east. *For this, however, I also need the feeling of a difference in my own subject, namely, the difference between my right and left hands. I call this a* feeling *because these two sides outwardly display no [conceptual] characteristic difference in intuition*. If I did not have this faculty of distinguishing without the need of any difference in the objects, between moving from left to right and moving in the opposite direction and thereby determining *a priori* a difference in the position of the objects, then in describing a circle I would not know whether west was right or left of the southernmost point of the horizon, or whether I should complete the circle by moving north and east and thus back to south. Thus even with all the objective data of the sky, I orient myself *geographically* only through a *subjective* ground of differentiation. (WDO, 8:134–5; trans. amended and emphasis added)

This way of reading *Directions in Space*, however, is confusingly concealed by the way that Kant formulates his main thesis in the essay:

> My purpose in this chapter is to see whether there is not to be found in the intuitive judgements about extension, such as are to be found in geometry, clear proof that: *absolute space, independently of the existence of all matter and as itself the ultimate foundation of the possibility of the compound character of matter, has a reality of its own*. (GUGR, 2:378)

In other words, the notion of *absolute* space, as Kant is using it in *Directions in Space*, is ambiguous between

(i) a *global space-frame* with orientability, egocentric centring and structural asymmetries that fundamentally conforms to the essentially nonconceptual representational structure of human outer sensibility or intuition,

and

(ii) *noumenal* space, as in Newton.

But by the time of the "Inaugural Dissertation", however, and then later in TAe in the *Critique* and throughout the Critical period, it is perfectly clear that for Kant the global space-frame must be transcendentally ideal, and cannot be noumenal.

5.4 The Essentially Nonconceptual Form of Our Representation of Space and Transcendental Idealism for Sensibility

So for all these reasons I want to claim that the central argument in *Directions in Space* is almost certainly the major philosophical breakthrough that Kant famously reports when he says in one of the *Reflexionen* that "the year '69 gave me a great light" (Refl 5037, 18:69).

To be more precise, what Kant had discovered between 1769 and 1772 is what I call *transcendental idealism for sensibility*. In 1772, Kant told Marcus Herz that if the human mind conformed to the world, whether phenomenal or noumenal, then a priori knowledge would be impossible (Br, 10:130–1). But by 1770 Kant already also held that a priori knowledge of the phenomenal world is actual and therefore really possible in mathematics, hence the phenomenal world must conform to the non-empirical sensible structure of the human mind, and more specifically must conform to our a priori representations of space and time, since that is what makes mathematics really possible (MSI, 2:398–406). In other words, then, transcendental idealism for sensibility says that the apparent or phenomenal world fundamentally conforms to the essentially nonconceptual a priori forms of human sensibility, our representations of space and time.

In turn, this line of thinking is so important to Kant's later philosophical development during the fully Critical period from 1781 to 1787, spanning the A and B editions of the First *Critique*, and also during what I like to call his *post*-Critical period after 1787, that I think we should explicitly isolate the period from 1768 to 1772, and call it Kant's *proto*-Critical period, in order to distinguish it sharply from his dogmatic slumber-filled Leibnizian-Wolffian *pre*-Critical period.

In any case, Kant worked out explicit proofs for transcendental idealism for sensibility in the "Inaugural Dissertation" and again in TAe in the First *Critique*. The simplest version of the proof, provided in TAe, goes like this:

> **P1**: Space and time are either (i) things in themselves, (ii) properties of/relations between things in themselves, or (iii) transcendentally ideal.
> **P2**: If space and time were either things in themselves or properties of/relations between things in themselves, then a priori mathematical knowledge would be impossible.
> **P3**: But mathematical knowledge is actual, via our pure intuitions of space and time, and therefore really possible.
> **C**: Therefore, space and time are transcendentally ideal. (A23/B37–8; A38–41/B55–8)

There is, of course, much more that can and should be said about this highly controversial argument. What is most crucial for our purposes

here, however, is that this version of transcendental idealism relies *only* on essentially nonconceptual content and the nature of human sensibility, and *neither* relies on concepts and the nature of human understanding, *nor* does it entail that the phenomenal world necessarily conforms to our concepts and the nature of human understanding.

5.5 Transcendental Idealism for the Understanding and the Gap in the B-Deduction

Indeed, after his major philosophical breakthrough between 1768 and 1772, it took Kant another *15 to 17 years* to work out what he regarded as a fully cogent argument for what I call *transcendental idealism for the understanding*. More precisely, transcendental idealism for the understanding says that the apparent or phenomenal world necessarily conforms to the essentially conceptual a priori forms of human understanding, namely the pure concepts of the understanding or categories. Kant's argument for this thesis is of course contained in the A (1781) and B (1787) edition versions of the Transcendental Deduction of the Pure Concepts of the Understanding (TD). But given what Kant says in the B-Preface to the First *Critique*, we must take the B-Deduction to be the *definitive* version of the argument. In turn, the explicit conclusion of the B-Deduction is that the pure concepts of the understanding or categories are necessarily applicable to "all objects of the senses in general", that is, to all actual and possible appearances (B150–61).

It is also to be particularly noted that if the B-Deduction is sound and transcendental idealism for the understanding is true, then at the very least weak Kantian conceptualism is true. But contrapositively, if Kantian nonconceptualism is true, then all forms of Kantian conceptualism are false, transcendental idealism for the understanding is false, and the B-Deduction is unsound. Moreover there are strong Kantian nonconceptualist reasons for thinking that TD, in *either* version, but particularly the B-Deduction, is unsound. Elsewhere, I have called the Kantian nonconceptualist argument for the unsoundness of the B-Deduction "The Gap in the B-Deduction" (Hanna 2011, 2016). The Gap argument, in a nutshell, goes like this:

P1: If the B-Deduction is sound, then the pure concepts of the understanding or categories are necessarily applicable to all appearances.
P2: But if Kantian nonconceptualism is true, then there are actually, and therefore also really possibly, at least some appearances, veridically cognised by empirical and pure intuition, that necessarily fall outside the categories, which I call "essentially rogue objects". The most obvious example of this would be a conscious but non-rational animal's veridical intuition of the difference between the right and left sides of its body.[13] More precisely, incongruent counterparts, as cognised by animal perceivers without conceptual capacities, are essentially rogue objects.
C: Therefore, the B-Deduction is unsound.

Correspondingly, it also follows that transcendental idealism for the understanding is false: not all appearances necessarily conform to the categories and concepts more generally; indeed, at least some appearances *cannot* conform to the categories or to any concepts whatsoever.[14]

5.6 Conclusion

If the arguments I have briefly summarised here are sound, then (i) transcendental idealism for sensibility and transcendental idealism for the understanding are logically independent, (ii) transcendental idealism for sensibility—based in particular on Kant's arguments in *Directions in Space* and more generally on his philosophical breakthrough between 1768 and 1772—is true, and (iii) transcendental idealism for the understanding is false.

Correspondingly, then, the most important implication of the central argument in *Directions in Space* is that Kant's nonconceptualism is foundational for any *philosophically defensible* version of his transcendental idealism, namely, transcendental idealism for sensibility. Hence it is impossible to put forward a philosophically defensible but also recognisably Critical-period Kantian metaphysics or theory of cognition without also being a

[13] There are also several more exciting but also less obvious examples, all of which have to do with the real possibility of human freedom. See Hanna (2011, 2016).
[14] See also Schulting (2015b).

Kantian nonconceptualist and thereby necessarily relying on some arguments from Kant's proto-Critical period.

This in turn implies, as I mentioned above, the philosophically important claims that Kant's non-intellectualism about the human mind goes all the way down into his metaphysics; that the apparent world fundamentally conforms to human sensibility even if it does not fundamentally conform to the human understanding; and that the basic source of all this is Kant's (proto-Critical but later also Critical) theory of space and how we represent it.