

The Unity of Kant's Forms of Intuition

Much recent scholarship on Kant's first *Critique* has focused on whether and, if so, how the understanding shapes determinate intuitions. There has been considerably less work on exactly how the understanding might shape the forms of intuition themselves, and most of that work has argued that it simply cannot. In this essay, I clarify how the understanding can shape the forms of intuition. Specifically, I develop an interpretation of Kant's notions of analytic and synthetic unity according to which the forms of intuition have both analytic unity, contributed by sensibility, and synthetic unity, contributed by the understanding.

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Recently, there has been much debate within Kant scholarship about whether intuitions depend for their unity on the understanding. Much of this debate has focused on determinate intuitions (say, of a house or a line) and has been discussed in terms of whether Kant is a conceptualist or a non-conceptualist about perceptual content.¹

Some of the recent debate, however, has focused not on determinate intuitions, and not on the nature of perceptual content, but rather on our original intuitions of space and time. The question at issue in this debate is whether the unity of space and time is indebted to the understanding. It has seemed to many that Kant's conception of the unity of the understanding makes it unfit to provide unity to space and time – on this line of thought, the unity of space and time comes from sensibility.² Moreover, those who defend that the understanding is fit to provide unity to space and time have not articulated the structure of the unity that the understanding provides.³

In this essay, I attempt to remedy this lack by articulating the structure of the unity the understanding gives to space (and time, though my explicit focus will be on space). In addition to helping advance the above-mentioned debate, getting clear about this unity will help us get clear

about what, most fundamentally, each of the two stems of our cognitive faculty contributes to experience on Kant's view. In particular, we can come to better understand what each stem supplies such that our knowledge of the world depends on their cooperation.

To articulate the unity that the understanding gives to space and time, it is important first to explore Kant's notions of unity – in particular, of analytic and synthetic unity. As Kant understands these notions, I argue, they are relational: a representation is a unity in relation to other representations, representations which it is common to (analytic unity) or which it is the combination of (synthetic unity).

For ordinary employments of the understanding – deploying concepts in judgments or inferences (and, more controversially, providing unity to determinate acts of intuition) – a representation cannot be both an analytic and a synthetic unity in relation to the same set ('manifold') of representations. Not so, I argue, for the unity that the understanding gives to the pure intuitions: pure intuitions are both analytic and synthetic unities of the same manifold of representations. In our case, space is the analytic and synthetic unity of the manifold of spaces, and time is the analytic and synthetic unity of the manifold of times. Moreover, I argue that the analytic and synthetic unity of a form of intuition are really just two aspects of one unity, such that we can notionally distinguish between the two aspects of unity but not really separate them. Finally, I show that we can make sense of the structure of this unity as one in which the understanding contributes synthetic unity while sensibility contributes analytic unity.

Throughout this essay, I will draw on Kant's own descriptions of unity, space and time, and the understanding – that is, I take it that I must make my interpretation exegetically plausible. I will not, however, try to show that my interpretation is the only plausible one. In particular, I will not try to contend with alternative interpretations which delink the

understanding from space and time. Those alternative interpretations need to be considered in a complete defense of the claim that the unity of space and time depends on the understanding.⁴ But here I only undertake the more modest task of exploring what one committed to that claim might say to clarify the unity that the understanding provides and its relation to what sensibility provides. This might be of use to parties from both sides of the debate, as it gives a more fleshed out picture of what is (or, more cautiously, may be) involved in defending the claim that the unity of space and time depends on the understanding.

§1

In this section, I clarify the notions of analytic and synthetic unity. Analytic unity is a one (a unity) that is contained in many, while synthetic unity is a one that contains many.⁵ Or, equivalently, analytic unity is a mark, characteristic, or feature that is common to many different representations, while synthetic unity is a combination of many different representations in one representation. An example of an analytic unity is the concept furniture in relation to different kinds of furniture: the concept furniture is contained in and so common to the concepts chair, table, desk, etc. And an example of a synthetic unity is the concept chair in relation to the concept furniture and (let's suppose) the concept for-sitting: the concept chair is the combination of those two concepts (it is furniture that is for sitting), and so it contains them.

Evidence for these definitions can be found in many places in Kant. Consider, for instance, his claim in the B-Deduction that

The analytical unity of consciousness pertains to all common concepts as such, e.g., if I think of **red** in general, I thereby represent to myself a feature that (as a mark) can be encountered in anything.... A representation that is to be thought of as common to **several** must be regarded as belonging to those that in addition to it also have something **different** in themselves; consequently they must antecedently be conceived in synthetic unity with other (even if only possible) representations... (B133-4; cf. also A77-8/B103-4).⁶

In this passage Kant links the notion of analytic unity to being common, specifying that all concepts are analytic unities when considered in relation to the many different representations they (can) belong to. He further clarifies synthetic unity in terms of the combination of representations: a common concept must be understood as possibly combined with other, different representations, forming thereby a synthetic unity with them.⁷

I want to note two points about my gloss on analytic and synthetic unity. First, analytic and synthetic unity are ways of *relating* different representations. A representation considered by itself is neither an analytic nor a synthetic unity – it is an analytic unity in relation to those representations that it can be common to, and a synthetic unity in relation to those representations that it can contain or be the combination of. So, when speaking about a representation as an analytic or a synthetic unity, it is always crucial to ask ‘With respect to what?’ The answer should specify a manifold of representations, and thereby specify the relation between the first representation and that manifold. The concept furniture is not by itself an analytic or a synthetic unity: it is an analytic unity with respect to the manifold of representations that contain it (the concepts chair, table, desk, etc.) and it is a synthetic unity with respect to the manifold of representations it combines.

Second, I want to relate the two kinds of unity to the understanding and sensibility. Though Kant introduces the two kinds of unity in relation to the understanding, nothing he says obviously precludes our discovering that sensibility might be usefully characterized in terms of analytic and synthetic unity. It is part of my thesis that they can be. Because Kant primarily uses the notions of analytic and synthetic unity in relation to acts of the understanding and not to sensibility, there is a sense in which my discussion of the pure forms of intuition through these terms represents an extension of their use in Kant.⁸ But I will argue that it is a natural extension.

§2

To get any further with my account, I need to sketch what I take the purpose of the Transcendental Deduction to be. I do not have the space to try to justify the account I offer. Instead, I will describe the Deduction's task in a way that is neutral on the main points of contention about the relation between the understanding and sensibility.

Near the beginning of the Transcendental Deduction, Kant argues that the representation of the synthetic unity of apperception precedes and makes possible any more determinate thought of objects given to us in intuition (this is the point of §16). So, in taking up into thought any manifold that is given to us, we are constrained to think it through the synthetic unity of apperception: whatever I am thinking about, I *must* be able to combine my thought of it with my other thoughts (minimally, they must be relatable to one another in relations of compatibility, incompatibility, support, etc.). This 'must' comes from our nature as thinking beings. But it cannot be a merely arbitrary imposition that we make on what is given to us in sensibility: Kant has to show that what we think about, the objects given to us, can be accurately characterized in thoughts that are so related to one another.⁹

For example, I know that that is a tangerine, and that tangerines are carbon-based, and so I know that that is carbon-based. In making that inference, I purport to arrive at knowledge of an object given to me in intuition. My knowledge involves the combination of my thoughts, a combination the most generic form of which is the synthetic unity of apperception. For my inference to be justifiable, then, my imposing that form must not be an arbitrary imposition on the tangerine. It must be the case that the nature of tangerines is or can be accurately captured by the laws of the combination of the judgments that make up the inference, laws which emerge not

from the nature of the tangerine (or from the nature of sensibility) but from the nature of the understanding.

So, Kant has to show that we are justified in thinking about any object given to us in intuition through the synthetic unity of apperception (which, again, is the generic form of combination – the specific forms of combination that Kant is interested in are outlined in the Metaphysical Deduction). We cannot show this by appealing to an empirical characteristic of a particular intuition or set of intuitions – for then we will have abandoned the universal and necessary applicability of the synthetic unity of apperception that is key to Kant’s deduction of the validity of the categories. So, we must instead show that we are justified in ‘subjecting’ any intuition as such to the synthetic unity of apperception (at least when we take it up into thought) by appealing to some *a priori* characteristic of our intuitions. And so we have to show that the synthetic unity of apperception can apply to any intuition in virtue of something about the forms of our intuition themselves.¹⁰ Through being applicable to the *a priori* form of intuition, the synthetic unity of apperception is applicable to every intuition.¹¹

I have just introduced a new bit of Kant’s terminology, ‘form of intuition’. As I understand it, Kant typically uses this term (and its cognates ‘pure form of sensible intuitions’, ‘pure form of sensibility’, and ‘pure intuition’ – cf. A20/B34) to designate the *a priori* features of our intuitions, by which I mean whatever is true of what we intuit simply in virtue of its being intuitable by us through outer or inner sense.¹² For instance, there are a number of things true of this tangerine, an object of my intuition: it is a fruit, it is carbon-based, it is extended in space and has a shape. The first two claims are true of the tangerine in virtue of its peculiar character – they are not true of just anything that we intuit through outer sense. The second two claims are true of the tangerine in virtue of its being in space, and so are not peculiar to it – they are true of

just anything we intuit through outer sense. So the features of the tangerine that those two claims express are features of our form of (outer) intuition.¹³

Given the task of the Deduction as outlined above, we know that there must be some form of intuition, and that this form must license the fact that every intuition can be taken up into thought and so unified by the synthetic unity of apperception. What characteristic of our forms of intuition licenses that fact? This characteristic must express a nature that is common to any possible intuition, shared by them all. So it must be an analytic unity, something that is common to all possible intuitions.

It is uncontroversial that there is an analytic unity associated with our forms of intuition. For instance, Kant says that space ‘is nothing other than merely the form of all appearances of outer sense’ (A26/B42). And he notes at the outset of the Metaphysical Exposition of space that, through outer sense, ‘we represent to ourselves objects as outside us, and all as in space’ (A22/B37). That is, the objects outside of us all have the common character (or feature or mark) of being in space. So, being in space is an analytic unity, provided for by the form of intuition (space).

But I am claiming more than this: I am claiming that the form of intuition is itself an analytic unity, or that space (and not simply being in space) is common to every object outside of us. To see this, we need to consider the fact that a particular space is what it is only in virtue of having a relation not to being in space as a general feature but rather to space as ‘singular’ and ‘all-encompassing’ (A25/B39). As Kant notes in the Aesthetic, we can only pick out or determine a region of space in relation to the all-encompassing space of which it is a part (cf. A25/B39). But this is not a feature simply of our manner of representing space – it gets at something essential to the nature of being a space. Namely, each determinate region of space is

what it is only in virtue of sharing in common with every other space a relation to the all-encompassing space. Kant makes this point explicitly in the *Prolegomena*: ‘the inner determination of any space is possible only through the determination of the outer relation of the whole space of which the space is a part (the relation to outer sense)’ (*Prol* 4:286).¹⁴

Contrast what Kant says about space with a normal case of analytic unity, where, e.g., the concept tangerine is common to many different objects. Determining that an object is a tangerine does not require delimiting the concept tangerine and knowing this object to be a part of that concept (it is not); but determining that this is a space require delimiting the whole of space. And what it is for this object to be a tangerine is not for it to have a determinate relation to the ‘whole of tangerine’: the only whole to speak of in this vicinity would be the whole domain of tangerines, and this tangerine is only related to other tangerines in virtue of sharing the general feature of being a tangerine. But what it is for this to be a space is for it to have a determinate relation to the whole of space, and that involves not just sharing the general feature of being in space but being the space it is only by being related to other spaces (e.g., inside of this one, to the right of that one, etc.). So, sharing the general feature of being in space is not enough to give us what is common to every outer intuition. Not only are they all in space, but every space contains the ‘single, all-encompassing space’ as that through the determination of which it is the space that it is. Of course, no particular region of space contains the whole of space *as a spatial part*. But every particular region of space contains the whole of space *as what makes it the space it is*.

I have noticed, in presenting this paper and receiving feedback on drafts of it, that this is the point that people have had the hardest time with: why say that the whole of space is in any sense contained in every region of space? What is the point of insisting that the relation between

the whole of space and a particular region of space is a kind of being common to (of analytic unity)?

Let's start with the uncontroversial claim that being a space is common to the manifold of spaces: they are, one and all, a space. The fact that the manifold of spaces are all spaces does not suffice to ensure that they are all within the same space, nor does it suffice to ensure that they are spatially related to one another: they may all be spaces, but belong to different, incommensurable spaces. The intuitive response to this, I think, is to say that they must share more than simply being spaces: they must share the same space, such that they can be intelligibly related to one another. That very same space, and not simply being a space in general, must be common to each particular space. This fact is implicit in Kant's claim that they are, one and all, in space (cited above). The 'in' really makes sense only in light of taking it that what is common to them all is that they are parts of the single, all-encompassing space, and so rests on thinking of that space as common to them all.

So, I insist that the single, all-encompassing space is common to all of the spaces, and so an analytic unity of them, because sharing that space make them the spaces that they are. They do not only share being a space, or spatiality – they share the very same single, all-encompassing space. I take this to be an upshot of Kant's claim that the inner determinations of a space proceeds through a determination of the whole space, so that the inner determination of every space shares the same space in common.

It might help make this claim more digestible to describe a logically parallel case: consider the relation between parts and whole in Kant's notion of a kingdom of ends. A kingdom of ends is 'a systematic union of various rational beings through common laws' where the laws determine the ends of the rational beings (4:433). Being a member of the kingdom of ends is an

analytic unity common to every rational being. But to be a member of the kingdom of ends is to give the laws for the kingdom, not just for oneself but for every member of the kingdom: it is to be the author of the systematic union (cf. 4:431). It follows that the kingdom of ends is itself common to every member, as laying down those laws is what it means to be a member. The all that I legislate for is the same all that you legislate for, and it is only in virtue of being the same all that we are each members of the kingdom of ends. In the case of space, the parts do not author the whole – they do not determine it, but are determined by it through delimitation. But in both cases there is a systematic union of parts, such that we cannot make sense of the parts as parts unless their status as parts involves having the same whole in common.

It is immediately evident, and implicit in the difficulty that I just responded to, that the single, all-encompassing space is not only an analytic unity of the manifold of spaces – it also contains them and so is a synthetic unity (as I have defined that notion) of the same manifold. We have uncovered a representation that is an analytic and a synthetic unity in relation to the same manifold of representations.

To bring out what is significant in having uncovered this representation, it might help to situate my account in relation to the account offered by Thomas Land. Land argues that sensibility, at least our kind of sensibility, ‘is not self-standing’ because its acts depend ‘on spontaneity’ (Land 2014: 535). To clarify the contribution made by each of the two stems, he distinguishes between the ‘structure’ of a complex representation and the ‘unity’ of the complex representation: a complex representation’s structure consists in ‘the kinds of parts it is made up of as well as the manner in which these parts hang together’, while its unity consists in ‘the fact that it is represented *as* complex’ (Land 2014: 535). He argues that the structure of sensible

intuitions, including the structure of space, is supplied by sensibility, while its unity is supplied by the understanding (cf. Land 2014: §5).

This distinction might make it seem like, on Land's account, the understanding is responsible just for our consciousness of the complexity of the representation of space. But if that were all that Land meant, then sensibility would be a 'self-standing' capacity: it would supply us with complex representations that have whatever structure they have, though it would not be able to make us conscious of those representations as complex. But that is not Land's position: he claims that 'the actualization of the capacity for having outer intuitions... depends on the acts of the intellect', and so he cannot think there is an actualization of sensibility without at least the capacity to be conscious of the complexity of that act (Land 2014: 535). The difficulty is that is not at all clear how this could be true on his own account of what sensibility is responsible for. For 'structure', as he describes it, includes the manner in which the sensible representations hang together. If that structure comes from sensibility, as Land contends, then it is not clear how sensibility could need anything beyond it: it would supply the parts, specify their kind, and relate them to one another. What more could it need to be self-standing?

Given this problem in Land's account, we come to a crossroads: either we preserve Land's claim that sensibility is dependent on the understanding, and then we need to make the understanding responsible for the structure, or at least some aspect of the structure. Or we give up Land's claim that sensibility is dependent on the understanding, and then we need to make sense of how it can be a self-standing capacity that can nevertheless help license the application of the synthetic unity of apperception to our intuitions. My claim that the form of intuition is itself a synthetic unity suggests how we might take the former route: as I will go on to explain, the combination (hanging together) of the parts of space comes not from sensibility but from the

understanding, such that they could not be the kind of parts they are without the contribution of the understanding. Thus, we can preserve (what I take to be) Land's insight that sensibility cannot be a self-standing capacity.

§3

On the line that I am taking in this essay, the synthetic unity of the forms of intuition has its source in or is produced by the understanding. As noted in the introduction, I will not try to defend this interpretation against other interpretations on which sensibility is a self-standing capacity. My point is rather to explain what the unity that the understanding provides to the forms of intuition might be. In this section I consider the objection that the understanding can provide no unity to the forms of intuition because it always proceeds compositionally while the forms of intuition are not structured compositionally. I argue that the understanding does not always proceed compositionally, thus opening up room for the claim that it provides synthetic unity to the forms of intuition.

According to the objection that I will respond to, the synthetic unity of the understanding is the unity of a whole that is built out of parts, such that the wholes are posterior to the parts. But the forms of intuition are such that the whole is prior to the part: that is, the parts of space are only representable through determining the prior representation of the single all-encompassing space (as I noted in the previous section). So, the understanding cannot provide synthetic unity to the forms of intuition. This response has been developed at most length in McLear 2014, and it warrants a longer response than I can give in this essay (I develop such a response elsewhere). Here I will only note a counter-example to McLear's claim by considering the non-

compositional synthetic unity of the system of our cognitions provided by the transcendental ideas.

Kant makes the point that the transcendental ideas provide non-compositional synthetic unity in the Appendix to the Dialectic. There he notes that reason is responsible for the ‘systematicity’ of our cognition

i.e., its interconnection based on one principle. This unity of reason always presupposes an idea, namely that of the form of a whole of cognition, which precedes the determinate cognition of the parts and contains the conditions for determining *a priori* the place of each part and its relation to the others. Accordingly, this idea postulates complete unity of the understanding’s cognition, through which this cognition comes to be not merely a contingent aggregate but a system interconnected in accordance with necessary laws (A645/B673).

So, an idea ‘postulates’ (or, as he puts it on A647/B675, ‘projects’) that the cognitions we have through the understanding have a certain kind of unity, specifically the unity of a ‘whole of cognition’ or a system. The unity that the idea postulates precedes the actual acquisition of the cognitions of the understanding, and it makes their relations within the system possible.

Moreover, it clearly provides unity for that whole by providing us with the principle or principles for combining the various parts: the idea postulates that the cognitions of the understanding form ‘a system interconnected in accordance with necessary laws’. So, the idea postulates a unity of our cognition, and the activity of combining our cognitions under the guidance of that unity (i.e., so that they form a system) is an activity of combination that cannot proceed part to whole as the whole precedes and determines the places of the parts.

Importantly, my claim against McLear does not turn on the cognitive status of the appeal to systematicity under the ideas, whether merely logical or also transcendental. Kant clarifies that the systematic unity at issue in the passage quoted above concerns ‘a **logical** principle’ as distinct from a transcendental principle of systematic unity that would ‘determine the constitution of

objects' and 'the nature of the understanding to systematic unity' (A648/B676). There has been much debate about the status of this logical principle and about whether Kant affirms that there is also a legitimate transcendental principle.¹⁵ The point that I am making against McLear does not require taking a stand on these issues: whether merely logical or transcendental, it reveals a non-compositional whole with synthetic unity.

So far, however, what I have quoted does not suffice to establish that the combination in question (of the cognitions of the understanding into a system) actually takes place: Kant has said so far only that we postulate the unity of that combination, not that we actually perform such a combination. This matters, because McLear's argument turns on whether the understanding ever actualizes synthesizes from the whole to the parts, or whether it always synthesizes from the parts to the whole. So, McLear can concede that the idea postulates a synthetic unity that proceeds from the whole to the parts, but still maintain that that unity is never the unity of an actually accomplished synthesis of the cognitions of the understanding. Indeed, if the unity is only projected, such that we must not 'regard it as given in itself but only as a problem' (A647/B675), then it seem like we cannot in fact perform the syntheses, perhaps precisely because it would be non-compositional.

I acknowledge that the systematic cognition of nature is never complete. But my point against McLear only requires that the syntheses that we undertake in pursuit of the complete systematic cognition of nature be themselves systematic – i.e., that they form a partial whole the parts of which can only be understood through their place in the (only ever partially arrived at) whole. To show this, I just need to show that, as Kant understands it, particular concepts that play a role in our systematic accounts are what they are only in light of the whole to which they (are thought to) contribute.

Consider Kant's discussion of the logical law of genera (always seek a higher genus). Kant says that 'a certain systematic unity of all possible empirical concepts must be sought insofar as they can be derived from higher and more general ones' and he claims that without this 'there could be no use of reason' (A652/B680). As an example, suppose that I claim that planets orbit in circles and comets orbit in parabolas. According to McLear, these claims must be compositional: so, I start with the concept planet and the concept circle (and orbit, etc.), and I combine them to form the judgement which is then understood to be composed of its parts (and similarly for the other judgment). Is this compatible with Kant's logical law of genera?

I contend that it is not. First, note that I only take my evidence as evidence in favor of the claim that *planets* orbit in circles, and not evidence in favor of the claim that heavenly bodies orbit in circles, or that planets in this solar system orbit in circles, or that planets at this point in the ageing of this galaxy orbit in circles, because I have already assumed (in accordance with the logical law of genera) that there is an explanation for why comets move differently from planets (and not, say, an explanation for why these planets move differently from other planets; or these comets move differently from planets; etc.). That is why Kant says, of reason's systematic unity as idea that 'it helps to find a principle for the manifold and particular uses of the understanding, thereby guiding it even in those cases that are not given and making it coherently connected' (A647/B675).

But this means that the synthesis that I perform in forming the judgment that planets orbit in circles is not simply or merely compositional. It is true that I possess the component concepts and combine them to form the whole. But this would only be compositional if the possession of the parts was not already determined by my representation of the whole (my representation of the whole system of heavenly motion). Now I have not yet attained completed cognition of that

whole (and I never will, according to Kant). But my understanding of it as a whole is prior to and determines my grasp of the parts (why planets and circles are the right sort of parts to be combined given the evidence that I have).¹⁶ The synthesis of the judgment that planets orbit in circles is not merely or wholly compositional: along at least one dimension (namely, that of determining which parts to pick), it proceeds from whole to parts.¹⁷

Against my claim to have found a non-compositional act of the understanding in the systematicity of the ideas, it might be objected that the transcendental ideas come from reason and not the understanding. As the claimed synthetic unity of the forms of intuition would have to come from the understanding, it can seem as though my counterexample is irrelevant to the overall case I am making in this essay.

The synthetic unity in question is that of reason, but Kant claims that it is an application of the synthetic unity of apperception. The ideas, he argues, ‘arise’ from the understanding since ‘reason cannot generate any concept at all’ but only frees the concepts of the understanding from their limitation to experience in seeking the unconditioned (A408-9/B435-6).¹⁸ So, the synthetic unity that the ideas postulate arises from the synthetic unity of apperception (the understanding). Whatever one wants to say in general about the difference between the understanding and reason, what matters in this context is whether wholes with this synthetic unity are always composed of their parts. That it provides unity to a whole that is not composed of its parts, even if this application of it belongs to reason, is enough to open up space for a similarly non-compositional application responsible for the synthetic unity of our forms of intuition.¹⁹

Indeed, one might find this parallel illuminating when considering Kant’s claim in the infamous footnote to §26 of the B Deduction that ‘the unity of this *a priori* intuition belongs to space and time, and not to the concept of the understanding’ (B161). One could easily imagine

Kant making the parallel claim about the unity of the system of our cognition belonging to reason. So, if we really take the fact that the ideas belong to reason seriously, then the parallel between the ideas and the forms of intuition actually comes out more clearly. That is, just as the understanding provides synthetic unity to the system of our cognition while the character of that system as a whole is nevertheless belongs to reason, so too the understanding may provide synthetic unity to space and time while the character of space and time as wholes (single all-encompassing intuitions) belongs to intuition.

Importantly, reason does not furnish us with knowable objects, while intuition does. This means that there is an asymmetry in the cognitive status of the system demanded by reason and space and time. As Kant says, the unity of the ideas – that of a completed system of cognition – is projected onto our cognitions, while space and time are really given as wholes. This asymmetry emerges because we lack a form of intuition that would be capable of providing us with objects for the ideas (cf. A664-5/B692-3), whereas we do have a sensible capacity that enables us to be given objects in space and time. But this asymmetry is neither surprising nor unwelcome for my account: I am highlighting a way in which the understanding plays parallel roles with respect to sensibility and to reason; the difference between the two cases just noted is not explained by the understanding but rather by what the other capacity contributes, and so is completely compatible with my claim that the understanding contributes the same thing (synthetic unity) in both cases.

§4

Having attempted to clarify that the understanding produces non-compositional synthetic unities by considering the system of cognitions of the understanding (under the guidance of the

ideas), I want to further clarify the synthetic unity of space by considering the way in which it is related to the analytic unity of space.

Space is the joint product of the analytic unity provided by sensibility and the synthetic unity provided by the understanding. Sensibility is the capacity to be given an indefinite manifold of representations all of which have something in common. It cannot determine the order between the manifold. The understanding is the capacity to combine a manifold of representations and thereby determine the order obtaining between them. It is not a capacity to be given the manifold that it orders (and it cannot produce the manifold either). Space, as what determines the nature of every outer intuition by being the all-encompassing whole within which they are all to be found, is intelligible only in light of the cooperation of both capacities.

The prior paragraph points to what it means to say that there are two aspects of the unity of a form of intuition. Kant, of course, does not speak like this in the Aesthetic, but that is because he is not concerned there to explain what aspect of the forms of intuition is due to the understanding (that would not make any sense prior to the Analytic). I think he does make something like the above points in the infamous footnote to §26, where he notes that the form of intuition ‘merely gives the manifold’ while representing that manifold as an object requires in addition the ‘**comprehension** of the manifold’, or the together-grasping (*Zusammenfassung*) of that manifold in one representation (B160). That is, he distinguishes between the manifoldness that is due to sensibility and the order that is due to the understanding, and notes that both are required to represent the form of intuition as an object. Of course, how to interpret this footnote is extremely controversial (what is involved, for instance, in representing the form of intuition as an object?), and I am not trying to rest any weight on my interpretation of it. I only want to note

that the development of my account in the previous paragraph need not be taken as foreign to Kant's own way of describing the form of intuition.

In the previous section, I considered an objection to the effect that the understanding couldn't contribute synthetic unity to our forms of intuition. I want now to consider an objection to the effect that sensibility cannot contribute analytic unity to our forms of intuition – that the analytic unity must also come from the understanding.²⁰ Specifically, in the footnote to §26 Kant notes that '**the form of intuition**' – which comes from sensibility – 'merely give the manifold' (B160). This might suggest that sensibility cannot provide even analytic unity, since it merely provides a manifold. If that is right, then how can the analytic unity of space and time come from sensibility?

In response to this objection, note first that even if it is right, much of my thesis still remains: the synthetic unity of the forms of intuition comes from the understanding, in an act that involves a non-compositional application of the synthetic unity of the understanding, such that the representation of space is a representation of both the analytic and synthetic unity of the same manifold. Sensibility, moreover, provides the manifold on both my view and on the view of the objection. The one point of disagreement is over whether sensibility also provides the analytic unity of the manifold.

In defense of my claim that it does, consider second that, in providing the manifold, sensibility must also have an *a priori* form. That is, the manifold, insofar as we have the capacity to sense it, must have some common character which makes it all sensible. And this common character must come from sensibility, because we might have had the same understanding but different *a priori* forms of intuition (cf. A27/B43, B72, and §§21-2). Thus, what explains why all our intuitions are spatial and temporal must be our particular kind(s) of sensibility. So, the

analytic unity of our forms of intuition, the character common to the manifold in virtue of that manifold being sensible by us, must come from sensibility.

Having substantiated the claim that sensibility must supply the analytic unity of our forms of intuition, I turn to show that the analytic unity/indefinite many-ness and the synthetic unity/ordering relation are inseparable: to grasp the contribution of one at least implicitly presupposes grasping the contribution of the other. Start with the analytic unity: to grasp this, we have to grasp what the different intuitive representations have in common. We cannot understand this common character to be a general representation that is instantiated by the different representations within the manifold. For doing that, we no longer think of sensibility as a capacity to be affected but rather as a capacity to think (to be mediately related to objects through a concept or general representation).

If the common character is not a general representation, it must rather be a singular representation. And that means it must be common in virtue of also being that which contains the manifold of which it is the analytic unity. Moreover, we must grasp this simply in grasping the common character as stemming from sensibility and not from thought. Hence, we must understand that the common character is common in virtue of also containing the manifold it is common to, such that each representation has in common with every other that they are together contained in one space. Thus, our representation of the analytic unity of our forms of intuition is inseparable from grasping the synthetic unity which (on my account) comes from the understanding.

Now to consider the inseparability from the other side: to grasp the synthetic unity that provides order to different intuitive representations by relating them to one another, we must grasp this unity as the unity of a manifold. For the order is a way of relating different

representations, and so to grasp it we must grasp its relation to some kind of manifold. But the understanding is not creative or productive of the manifold that it orders (cf. A51-2/B75-6, B135, B138-9). So the manifold to which the order applies must come from elsewhere, from another capacity. Consequently, for this ordering relation to actually be the order of a manifold, for it to be contentful, we have to understand it as determining a capacity to be given a manifold. Since we represent this capacity as common to the different representations of the manifold, we represent this capacity as the source of the character common to the manifold, or as the analytic unity. Thus our representation of the synthetic unity of a form of intuition is inseparable from our grasp of some analytic unity that must be supplied by sensibility.²¹

§5

With that, I conclude my efforts to clarify the nature of the synthetic unity that the understanding provides for forms of intuition, space and time. If my account is correct, the understanding provides the synthetic unity to our forms of intuition while relying on sensibility to provide their analytic unity. Whether one accepts the account offered here or not, I believe that it explains what it means to say that the understanding shapes not only determinate intuitions but our very forms of intuition.

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¹ The literature on this topic is, by this point, vast. Some of the more prominent defenders of the conceptualist side include: Engstrom 2006, Ginsborg 2007, Gomes 2010, McDowell 2009, Pippin 2013, Land 2015. Some of the more prominent defenders of the non-conceptualist side include: Allais 2009 and 20015, Tolley 2013, Allison 2015. The terminology, and the attempt to relate issues in Kant to contemporary philosophy of perception, is not without its dangers. For one thing, as is often noted, there is no agreed upon sense of 'conceptual' (and its opposite) in the philosophy of perception, and the attempt to bring Kant into the conversation obviously complicates matters (cf. Allais 2009 for a discussion of some of the complexities). Because my focus is on the forms of intuition and not perception or determinate intuitions, and because the terminology was initially introduced because of its use in the philosophy of perception, I will eschew employing the terms 'conceptual' and 'non-conceptual' to characterize positions on whether the forms of intuition depend on the activity of the understanding.

² Authors who argue to this effect include: Aquila 1994, Gardner 1999: 84, Messina 2014, McLearn 2015, Onuf and Schulting 2015, and (drawing on these last three) Allais 2015 and Allison 2015.

³ Authors who argue that the unity of our forms of intuition comes from the understanding include: Waxman 1991, Longuenesse 1998, Friedman 2000: 197-9 and 2012: note 33, Land 2014, and Williams 2017. Of these five, the first two do not say much to describe the unity the understanding gives to space and time; the last two say more, but I disagree with substantial components of what they say (as I explain below). Friedman gives the most thorough account of our pure intuitions (especially space) as dependent on the understanding: on his account, the aspect due to the understanding is the possibility of accessing any point of space from any other point of space *via* a continuous motion of one subject (through a series of point-of-view rotations and translations). The unity of the subject – the fact that it is one subject who can move in this way – stems from the understanding, but the relation between the spaces such that the subject can move through them is due to sensibility (cf. Friedman 2000: 198). Friedman's account is fascinating, and I have learned much from it. My difference from his is, I believe, primarily one of focus: his focus is on pure space as explaining the possibility of geometry in Kant's works (cf., for instance, Friedman 2000: 191-3) whereas mine is more abstract, employing the more discursive (as in, from the understanding) concepts of analytic and synthetic unities over the more geometrical concepts of translation and rotation.

⁴ For (to my mind compelling) arguments against delinking space and time from the activity of the understanding, cf. Gomes 2010 and Land 2015. For a response to Gomes, cf. Watt 2018.

⁵ My account of analytic and synthetic unity is in many respects similar to that developed in Engstrom 2013. I am indebted especially to his focus on analytic and synthetic unity as capacities to unify other representations. My account differs from his, however, in my attempt to apply these notions to the forms of intuition. Further, Engstrom makes the important point that, as Kant understands them, analytic and synthetic unity express *possible* relations between representations: an analytic unity is ‘a one that essentially *can* be contained in many’ and a synthetic unity is ‘a one that essentially *can* contain many’ (Engstrom 2013: 41). I agree with him, but introducing this subtlety would needlessly complicate my argument.

⁶ References to the *Critique of Pure Reason* will use the standard A/B pagination. References to other works of Kant’s are by volume and page number of the Academy edition (Kant 1902–). Translations are taken from the Cambridge edition.

⁷ The passage from the Deduction might seem like it is focused on the relation between concepts and intuitions – after all, the analytic unity ‘can be encountered in anything’ (*irgendwo angetroffen*) and talk of ‘in’ seems like it suggests intuitions (not concepts). And surely the larger context of the Deduction is principally concerned with the synthetic unity of intuitions. Against the first point, Kant uses the language of ‘encountering in’ generically, and sometimes explicitly about what is contained in a concept: so, when he introduces the notion of an analytic judgment, he writes about the connection between the concept body and extension that ‘I need only to analyze that concept [body – ATW], i.e. become conscious of the manifold that I always think in it, in order to encounter (*anzutreffen*) this predicate [extension – ATW] therein’ (A7/B11; cf. also A281/B337, A406/B332). So, his use of ‘encountering in’ doesn’t indicate that he is focused on intuitions. Against the second point, Kant speaks in the footnote generically of representations, not specifically of intuitions (as he does, when it matters for his point, in the body of the text of §16). His argument in §16 is to move from a general requirement on all of my representations (that the I think must be able to accompany them) to a specific consequence of that for intuitions. The footnote, and the sentence to which it is appended, are at the general level, about all of my representations. (My thanks to a reviewer for pressing these objections.)

⁸ It is worth noting, however, that in the B-Deduction Kant does describe the intuition of space and of time as having an original synthetic unity (cf. B136 and B160-1). And in a Reflection he describes space and time as analytic totalities (‘*tota analytica*’) (cf. 17.294 *Reflection* 3789). So, while it is an extension of his dominant use of these terms, it is not entirely foreign to it.

⁹ For a helpful account of the general worry about ‘impositionism’ that Kant is trying to respond to in the Deduction, cf. Pippin 1989: 27ff and Pippin 2013.

¹⁰ Note that my talk of ‘applying’ the synthetic unity of apperception to any intuition is deliberately vague. I do not mean to say, yet, that the synthetic unity of apperception already characterizes the intuition (though that is one sense in which it could apply to them) – I mean to leave open the possibility that the synthetic unity is applied to the intuition only in taking the intuition up into thought. So, my talk of ‘application’ is not yet meant to settle anything about the presence of the synthetic unity of apperception within our intuitions themselves. (My thanks to two anonymous reviewers for pressing me to be clearer about this.)

¹¹ For a similar argument, cf. Sebastian Rödl’s reconstruction of the Deduction in §2 of Rödl 2007.

¹² I say typically, because Kant uses the expression ‘forms of intuition’ in §26 of the Deduction in a way that is not obviously consistent with my account of his use of it. In particular, Kant claims in a footnote there that ‘the **form of intuition** merely gives the manifold’ and not the (synthetic) unity of the manifold, so that it seems like the form of intuition in that sense is not space and time but rather that which *provides* the manifold that (when unified) is space and time (B160). This passage is extremely controversial; I offer my interpretation of it in §4. What matters for present purposes is that even here, in the sentence to which the footnote is appended, Kant claims that ‘space and time are represented not merely as **forms** of sensible intuition, but also as **intuitions** themselves’ (B160). That is, even here Kant claims that space and time *are* form of intuition (though not merely that). I take this to mean that ‘form of intuition’ in this context picks out space and time, but only one aspect of space and time (namely, their manifoldness). So, I do not take this passage to undercut my suggestion that the forms of intuition are space and time. (My thanks to an anonymous reviewer for pressing me to be clearer about this.)

¹³ Kant uses the example of an intuition of a body at A20-1/B35 to make the same point.

¹⁴ That we represent regions of space by delimiting the all-encompassing space is really the flipside of the fact that each region of space is what it is only in relation to the all-encompassing space. Bringing out this connection can be helpful in avoiding the accusation that Kant is ambiguous in his use of ‘form of intuition’ (and cognates) between a form of intuiting (our representing of space) and a form for what is intuited (space as represented): cf., e.g., Allison 2004: 82, 126-7 for the claim of ambiguity (he originally introduces also a third sense, mental content which, presumably, conforms or fails to conform with what is intuited); for an insightful criticism of Allison’s manner of disambiguating Kant, and a clear account of what it would be to avoid seeing Kant as ambiguous on this point (and related ones), cf. Conant 2016: esp. 93-7.

¹⁵ The focus of this debate has been on what we know about nature as a result of the legitimate regulative use of ideas. Scholars have developed a great variety of different positions on this issue: according to some, we know that nature must be systematically unified (Wartenberg 1992); others claim that it is confused to ask whether nature is systematically unified and the unconfused fact is that systematic organizations of our body of empirical evidence have, because of their systematicity, explanatory power (Kitcher 1986: 204-215) or license warranted assertions about causal laws (Walker’s contribution in Guyer and Walker 1990: esp. 249-50 and 255-7); yet others have claimed that in the first *Critique* the demand for systematicity is merely logical and licenses no objective claims about nature (Horstmann 1989: 165-9; Guyer’s contribution in Guyer and Walker 1990 – but contrast Guyer 2017: 54-9 for an apparent change in view). Grier provides a nice statement of the philosophical and textual difficulties involved in the debate: cf. Grier 2001: 268ff. (for her solution, cf. 274-6). The authors who have worked on this issue have, for the most part, not attended to the non-compositional character of the whole in question (for an exception, cf. Watkins 2017: 28) – I believe a proper appreciation of this character, and the relation between it and the unity of the forms of intuition, would help make consistent the apparently contradictory things Kant says in the Appendix. I plan to explore the significance of this issue for Kant’s account of systematicity elsewhere.

¹⁶ Kant’s actual example about heavenly motion is more complicated (too complicated for my purposes), as it illustrates the use of three different principles of unity. My version of the example fits his claim that we think of the motion of each heavenly body as approximating the motion of that of every other heavenly body. This would play the same role of determining what parts are relevant for my judgments. For a helpful gloss of Kant’s example that brings out the presence of the systematicity characteristic of the genus/species tree in the example, cf. Guyer 2017: 56-7.

¹⁷ Though it also has a compositional dimension, namely: we possess the concept planet and circle prior to forming the judgment that planets orbit in circles. Space does not permit a more precise and worked out account of how this compositional dimension fits with the claim that it is intelligible only in light of a non-compositional whole. What I have said so far should make plain that there is such a non-compositional whole at work in determining the parts, and that fairly abstract claim is all that I need to respond to McLear.

¹⁸ Cf. also Kant’s claim that the ideas are just the categories ‘extended to the unconditioned’ (A409/B436).

¹⁹ This gets at where my account differs from that offered in Williams 2017. Williams argues that the original synthetic unity of apperception has a holistic presence within any particular act of synthesis that expresses ‘the subject’s consciousness of her own capacity to determine her sensible nature’ such that it is through that consciousness that ‘the pure manifolds of space and time are given to the subject as singular wholes’ (Williams 2017: 13). This consciousness is not a synthesis (‘there is no action of synthesis that encompasses infinite space and time’), Williams says, but rather the recognition of possible syntheses (Williams 2017: 14). Williams takes this view, it seems, because she is persuaded by the argument that acts of synthesis always proceed from part to whole. But I do not see how her appeal to possible syntheses of any space and time can really explain the unity of space and time. In being conscious of a determine space, say in drawing a line, I am conscious of the actual unity of the whole of space that I limit in determining this line. The actual unity of space as a whole must come from somewhere. On my account it comes from the understanding’s act of synthesis. But that cannot be so on Williams’s view, because she denies that there is a synthesis of the whole of space. So, the actual unity of space as a whole must come from a source other than the understanding. But that is incompatible with her (to my mind correct) thought that the unity of space must depend on the understanding (in her terms, the consciousness that we can determine our sensible nature).

²⁰ This objection was made by [NAME] in conversation.

²¹ We do not know, just from an account of the understanding, what the common character will be – that is, we know that the synthetic unity of the understanding is related to *some* analytic unity supplied by sensibility, but we do not know what that analytic unity is. For an exploration of this point and of its importance to Kant's two-stem doctrine, cf. Franks 2005: 51-61.