

Kant on the Logical Origin of Concepts

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Abstract: In his lectures on general logic Kant maintains that the generality of a representation (the form of a concept) arises from the logical acts of comparison, reflection and abstraction. These acts are commonly understood to be identical with the acts that generate reflected schemata. I argue that this is mistaken, and that the generality of concepts, as products of the understanding, should be distinguished from the classificatory generality of schemata, which are products of the imagination. A Kantian concept does not provide mere criteria for noting sameness and difference in things, but instead reflects the inner nature of things. Its form consists in the self-consciousness of a capacity to judge (i.e. the Concept is the 'I think').

In the transcripts of his lectures on general logic, Kant maintains that the 'form' of a concept consists in the *generality* of representation, and that representations acquire this form through the 'logical *actus* of comparison, reflection, and abstraction' (JL 9:94).¹ These acts enable the intellect to bring to consciousness general features of things, such as that which is common to a spruce, willow and linden:

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

In comparison I note the ways in which various representations *differ*. In reflection, I become conscious of what these different representations 'have in common' (having leaves, branches and a trunk). And finally, I distinguish this from that which belongs to each of them individually (*these* leaves, *these* branches, or *this* trunk) by abstracting from the ways they differ. Since concepts are general because they represent that which is common to a manifold of representations, the most fundamental of these logical acts must be 'reflection': that act through which I become conscious of *identity* [Einerleiheit].² But a discursive intellect can only become aware of identity in an environment of multiplicity, i.e. only if it is also aware of *difference*. Comparison and reflection together produce consciousness of *identity in difference*, i.e. a general representation or concept.

Kant is careful to point out that abstraction does not belong at all to the 'positive' acts of concept-formation:

Abstraction is only the negative condition under which universal representations can be generated, the positive condition is comparison and reflection. For no concept comes to be through abstraction; abstraction only perfects it and encloses it in its determinate limits. (JL 9:95)

By a 'negative' condition of concept-formation, Kant means that abstraction is a merely negative act, since it consists in *not* attending to representations that do not belong to the concept. Those who think of abstraction as a positive act of abstracting common features out of given representations misuse the concept of abstraction: 'We must not speak of abstracting something (*abstrahere aliquid*), but rather of abstracting from something (*abstrahere ab aliquo*)' (JL 9:95; see also VL 24:907). To borrow a phrase from Wilfrid Sellars, common features cannot be culled from given representations as Jack Horner plucked the plum.³ The positive acts of concept-formation are merely comparison and reflection; by reflecting on 'how diverse [representations] can be grasped [*begriffen*] in one consciousness', we thereby come to appreciate that they share something in common (R2876, 16:555). Once concepts are formed, they may be perfected through their use *in abstracto*. My understanding of the tree, for instance, is more perfect if I am able to isolate what belongs to trees *as such* as opposed to the size or shape of this or that tree.⁴

This seemingly simple account of concept-formation has been a source of vexation for even the most sympathetic of Kant's readers. **The difficulty of the account is that it seems to presuppose that we can already recognize things as having common features even prior to the formation of the concept. For how should I know to group the spruce, the linden and the willow together to begin with, if I am not already conscious of features they share in common?** This gives rise to a dilemma. Either the concept 'tree' is formed from the simpler concepts of 'branches' and 'leaves', which in turn are formed from more simple ones, all the way down to representations of common features that are simply given in sensibility (such as the 'simple ideas' of colours in empiricist accounts). Or the concept 'tree' is presupposed prior to its formation, and is somehow already involved in my perceptions of the spruce, willow and linden. As interpreters have acknowledged, the former position is incompatible with Kant's claim that the 'logical actus' of comparison, reflection and abstraction generate the form of *any* concept, regardless of whether the concept is, with regard to its content, 'empirical or arbitrary or intellectual' (JL 9:94). Thus, contrary to empiricist, compositionalist views of the formation of complex concepts from simple ones, even the simplest concepts (such as 'green') must be formed from the logical acts exhibited in the formation of the concept 'tree' (see Ginsborg 2006: 39).

A dilemma for Kant's account

This leaves us with the only remaining option of taking Kant's logical account of concept-formation to be circular. Hannah Ginsborg concludes that we must regard Kant's logical account of concept-formation not as 'constituting Kant's answer to the question of how empirical concepts are possible, but only as

explaining how concepts we already possess can be clarified or made explicit'.⁵ The concept 'tree', for instance, already functions as a rule for grouping the spruce, willow and linden in a class, and for distinguishing this group from other kinds of thing, prior to comparison and reflection. What the logical acts do is merely to make explicit the criteria in accordance with which the rule is applied. Along similar lines, Béatrice Longuenesse has argued that we should view Kant as operating with two senses of 'concept': according to one sense, concepts are 'schemata' or 'rules' for the imaginative syntheses through which we are aware of a given spruce in perception as a tree. In another, 'discursive' sense of concept, concepts bring to consciousness these rules by reflecting on those 'marks' or features that are criterial for the spruce's being a tree. The 'discursive' concept, which is the result of the logical acts of concept-formation, thus reflects rules of classification that were already operative in the 'prediscursive', figurative syntheses of the imagination (Longuenesse 1998: 46–7).

Longuenesse's
two senses of
'concept'

In this paper I shall argue that Kant's logical account of concept-formation does not confront the above dilemma, because he is not committed to its assumption that concepts reflect criteria for identifying and distinguishing things in one's environment. Kantian concepts are not mere tools for classification, but reflect the inner nature (or logical essence) of things. The above interpretations do not sufficiently distinguish between the imagination and the understanding, or between the generality of schemata, as 'products of the imagination' (KrV A140/B179) and the generality of concepts, as products of the understanding (KrV A19/B33). In the first section of the paper, I argue that empirical schemata may be formed prior to the possession of concepts through a *kind* of comparison and reflection, and that these schemata already enable a subject to classify things on the basis of criteria. However, we must distinguish this comparison and reflection from the 'logical' comparison and reflection that generate a concept. Kant is most clear about a distinction in two species of reflection in the following passage from the third *Critique*:

two species of
reflection

to reflect (to consider), however, is to compare and to hold together given representations either with others *or* with one's faculty of cognition, in relation to a concept thereby made possible. (my italics; KU 20:211)

Reflection may consist in the comparison of given representations with *others* in order to determine whether they differ or share something in common. I will argue that this kind of reflection generates the merely classificatory generality proper to empirical schemata or habits of association. Reflection may also consist in the comparison of representations with one's faculty of cognition for the formation of concepts. In the second section of the paper, I argue that a concept reflects this faculty of cognition—or capacity to judge—as common to, and contained in, any representations to which it applies in judgement. That is, the generality of concepts is a product of the understanding's self-reflection or self-consciousness as a capacity to judge, and not of comparisons that rest on something *other* than it, something given to it in sensibility. The formation of a

concept thus consists in an act of self-consciousness (i.e. the form of the concept is the 'I think'). In the third section, I argue that on this reading Kant's account of concept-formation is not viciously circular, since concepts do not reflect conceptual contents that are somehow already given to the understanding prior to reflection, but rather bring to consciousness a capacity that is first awakened into activity *through* reflection.

I.

To fully understand Kant's logical account of concept-formation we should begin with his anti-empiricist claim that common features of things—which he calls 'marks' of them—cannot be given to us in sensibility. This claim is immediately compelling if we restrict sensibility to sensation, or to the effect on the subject produced by an object of intuition.⁶ For **what could it mean to say that the object, which is singular, produces an effect in me that is not singular, but general?** Nothing in the way a tree is given or affects me through sensation would seem to 'reach ahead' to other possible trees. It will not do to respond by saying that sameness of features is not given by a single tree, but by a collection of them, for if we wish to avoid thinking that the trees in our purview do not share anything in common with those we do not see, we must explain how this collection of trees points forward to any other collection. Since we are finite, not all trees can be perceived, but only those that happen to be given to our senses. So if we are to understand what is general in various perceptions, **the sense of generality here must be compatible with the mere possibility of perceptual instances, absent their actuality. This suggests that identity or sameness in discursive representations is inseparable from the representation of a rule that can be applied on indefinitely many occasions. The sameness of my representations of trees, for instance, has its source in some rule for identifying trees that is indefinite in its scope.**⁷

generality as
rule following

But invoking rules will not illuminate the concept of identity [*Einerleiheit*] until we have achieved clarity about **the concept of a rule**. Let us assume, for the sake of argument, that rules are regularities in the subject's responses to the trees in her environment that rest in some way on sensibility. When we say that trees share something in common, what we mean is that we have acquired a disposition to sort trees into a class, or that we reliably respond differentially to trees and non-trees. These dispositions, unlike mere sensations, do point forward or anticipate future exercises—and thus constitute a pattern of projection with respect to the objects of both actual and possible perceptions. Now, on one reading of the dependence of dispositions on sensibility, the repeated effects on the subject's senses by the objects in its environment (and perhaps by its teachers in a linguistic community) eventually converge, by some **mechanical process**, to produce the disposition in the subject to respond differentially to trees (for instance, in its use of the word 'tree'). Certain counterfactual truths will then hold for the subject: if she were confronted with a tree in a suitable context, she

would respond in a certain way. The acquisition of this disposition is no more puzzling than the making of a thermometer, which through its construction acquires the disposition to respond differentially to changes in temperature. From this point onwards, whether temperatures are the same or different will depend on the responses of the thermometer. But **here the argument takes a dubious turn. Surely the rule determining correct or incorrect responses to the temperature is independent of the dispositions in the thermometer.** The disposition, on this understanding of it, merely joins together the same stimuli from the subject's environment with the same responses in the subject; it cannot be invoked to explain *why* these stimuli are the same, since it merely explains why the subject responds in the same way to them.

The disposition that is acquired mechanically, through the effects of external objects on the subject, thus amounts to a tendency in the subject to respond in ways that 'fit' independently determined 'correct' ways of responding. This way of viewing dispositions appears to do justice to the natural assumption that things are the same or different regardless of our abilities to identify or differentiate them. But it leaves us powerless to explain how we become aware of what is identical or different. For **how should I know what the correct way of sorting things is independently of acquiring the disposition to sort them in that way?** Even if there is some way of grasping a rule in advance of the acquisition of a disposition, how will I ever be certain that the disposition I acquire fits a rule that is entirely external to it? Because there is a gap here, a further rule is required to ensure that our disposition conforms to the initial rule. And this, in turn, would also presuppose a rule, and so on ad infinitum.

Perhaps our mistake was to think of the acquisition of a disposition as a merely mechanical process, as something that simply happens to the subject, rather than resulting from something she herself *does*. Kant suggests that the acquisition of a habit or ability used in identifying and distinguishing things presupposes not only the passive ability to be affected by objects, but also an active power in the subject thus affected. This is because the subject that acquires a habit must not only be affected over time by repeated perceptions of the same kind of thing, but must also be somehow *conscious* of the ways in which she is affected. For one '*become[s] accustomed (consuetudo)*', as Kant says in the *Anthropology*, when **'sensations of exactly the same kind persist for a long time without change'** (*Anthr.* 7:148). Consider the abilities of a perceiver once she has repeatedly perceived 'branches', 'leaves' and 'trunk' together. Eventually she will become accustomed to finding these marks together, and will come to associate them, or expect them together at different times and on different occasions. This expectation is an expression of her reproductive imagination, in this case her tendency to reproduce the image of leaves and a trunk, and thus of a whole tree, even when shown only its branches. The reproductive imagination does not merely reproduce the same image, as it were mechanically, but does so from the subject's anticipation that this image will affect it in the *same* way in which it affected her in the past. Thus, habits must be formed from comparisons of various representations with respect to the sensations they cause in the subject.

By *retaining* sensations in memory and *comparing* present ones with past ones, the subject may eventually bring about *unity* in its patterns of reproducing representations through association.

What in this account enables a subject to become conscious of, and thus to compare, its sensations? Kant does not deny that non-rational animals may acquire habits, and he argues (by analogy with our own case) that the non-rational animals must have sensible desires, or representations that bring their objects into existence.⁸ Since receptivity alone cannot account for their consciousness of sensations, we may assume that non-rational animals compare sensations with respect to the ways in which they affect the active power of desire. The animal is conscious of agreement of its sensations with this faculty through pleasure, and of disagreement with it through displeasure, and thus may *compare* sensations with regard to the ways in which they afford pleasure or displeasure:

The dog differentiates the roast from the loaf, and it does so because the way in which it is affected by the roast is different from the way in which it is affected by the loaf (for different things cause different sensations); and the sensations caused by the roast are a ground of desire in the dog which differs from the desire caused by the loaf, according to the natural connection which exists between its drives and its representations. (FS 2:60)

The source of the dog's ability to eventually discriminate between things in its environment thus is not merely its ability to be affected by the objects in sensation (receptivity), but its *active* power of desire, since it is able to identify and differentiate representations on the basis of its awareness of how they affect desire: they may either be suitable for its exercise (since they may induce desire for the object) or unsuitable (causing it to flee). Unlike the habit, which is acquired from the effects of already given representations, sensible desire in this example is presupposed by the dog's representations. That is, the dog *has* representations only insofar as they relate to, or affect, its faculty of desire—its representations are its own only insofar as they can be *felt*. Habits of association thus presuppose the animal's ability to be conscious of its sensations through their relation to this active faculty.

With regard to *rational* beings, Kant argues that the data of the senses are associable because they can be compared with respect to their effects on the subject in inner sense (a faculty that Kant says '*can only belong to rational beings*' (*ibid.*)). In inner sense I am conscious not of the ways in which sensations agree or disagree with sensible desire, but of how they agree with the *understanding*: 'all appearances whatever must come into the mind or be apprehended in such a way that they are in agreement with the unity of apperception' (KrV A122). Kant has a complex story to tell about how deliverances of sensibility may agree with the unity of apperception through their ordering by the imagination in one space and one time. But *what I wish to emphasize here is that associations of representations in rational beings involves both receptivity and an active power, namely the unity of apperception* that Kant identifies with the

understanding (a faculty of spontaneity; B133n.). It is through relation to this active power that sensations are mine at all, and hence available to consciousness through comparison. Thus, if we wish to know the ground for the associability of objects, we must look not to the objects themselves, but to our capacity to represent them (cf. KrV A120–3).⁹

In both rational and non-rational animals, a subject's capacity to note how things affect it (i.e. to notice its sensations) is not sufficient for producing an ability to identify and distinguish between things in its environment. By noticing the sensations that a single tree causes in me, I will not notice anything shared in common by trees. I must also acquire consciousness of a rule for identifying things as trees. And this happens only once I have been repeatedly affected by trees and have compared these effects with one another, since these effects then produce an expectation or subjective necessity to reproduce certain representations together.¹⁰ For instance, over time I may notice that the same representations, such as those of 'branches', 'leaves' and 'trunk', always 'recur together' in inner sense, and on the basis of this will acquire a tendency to reproduce the image of a trunk in the presence of branches and leaves, and even when the trunk itself is not present (i.e. to associate these representations). This tendency may now function as a schema or rule for identifying trees and for distinguishing them from other kinds of things. What it means to pick out trees in accordance with this schema is to classify trees on the basis of my expectation of the co-presence of representations of branches, trunk and leaves in one (empirical) consciousness. That is, I notice that my representations of trees agree with my expectation of finding these marks together (or with the subjective necessity of reproducing these marks in one consciousness), and on the basis of this awareness distinguish trees from other kinds of things.

The acquisition of these rules or 'empirical schemata' rests on the imagination, which Kant defines as 'the faculty for representing an object even *without* its presence in intuition' (B151).¹¹ As I have described its exercise in reproducing representations even in the absence of their objects (reproductive imagination), there is no reason to deny that it is operative even in non-rational animals. For instance, after repeatedly enjoying pleasure in the sensations of meatiness caused by a roast, and the displeasure in the sensations caused by a loaf, a dog may acquire an ability to discern between roasts and loaves *from* consciousness of an urge or 'subjective necessity' to reproduce the representation of meatiness when it sees the roast, and even when the taste or smell of meatiness is not (yet) present.¹² This rule is manifest in its surprise when it discovers that the roast is made of dough. It could not be surprised if it did not *expect* it to be different, i.e. if it were not conscious of a subjective necessity to represent the roast together with the characteristic feature of being meaty. In short, the dog will be able to distinguish and identify things on the basis of their external marks [*Merkmale*] or 'characteristic features' (FS 2:59). The dog does not merely respond differentially to things that *we* are conscious of as the same or different, but itself notices [*merken*] that things are the same or different, because it can notice how its representations affect its desire.¹³

Our brief foray into the psychology of the non-rational beasts and empirical rational subjects has put us in a position to understand Kant's claim, from the *Amphiboly* chapter of the first *Critique*, that the concepts of 'identity' [*Einerleiheit*] and 'difference' [*Verschiedenheit*] are concepts of reflection or comparison. In the *Amphiboly*, reflection is narrowly defined as 'the consciousness of the relation of given representations to our various sources of cognition' (A260/B316). But in other contexts Kant also uses the concepts of 'identity' and 'difference' in relation to the representations of animals lacking a power of cognition. For instance, in the *Jäsche Logic* the brutes are said to be acquainted with [*kennen*] things, which involves their ability to 'represent [things] in comparison with other things, both as to sameness and as to difference' (JL 9:65). We may, therefore, assume that a broader conception of reflection would consist in the consciousness of the relation of given representations to active powers of representation, including sensible efficacious representations (desires or inclinations).¹⁴ As I have suggested above, reflection may consist simply in pleasure (which we might call *aesthetic* reflection), i.e., consciousness of the ways in which sensations affect desire, or it may consist in empirical reflection of representations in inner sense (self-observation).¹⁵ In the following we will add to this list a third kind of reflection (logical reflection or self-consciousness), which will be relevant for the formation of concepts. Kant's point in calling 'identity' and 'difference' concepts of reflection or comparison is not only that an ability to *note* identities and differences in things rests on the comparison of representations in relation to an active, self-sustaining capacity of representation that underlies them, but also that identity and difference are themselves unintelligible apart from the possibility of this reflection. Apart from its capacity to reflect on the relation its representations bear to desire, for instance, there would be nothing identical or different in the objects of the animal's representations. The loaf and the roast are different only in relation to its inclinations.

The fact that non-rational animals are capable of generating habits or schemata of the imagination already suggests that the reflection on which schemata rest must be distinct from the logical reflection presupposed by concept-formation. The former, as we have seen, generates patterns of classification that are 'valid' or 'necessary' only for the subject. For these patterns express a necessity of reproducing the same combination of marks that arises not from reflection of features internal to the objects themselves, but from reflection on the ways in which the subject happens to be affected by these objects (see KrV B140). Likewise, the identity or generality of the marks through which things are habitually associated with one another does not reflect anything originally shared in common by the objects themselves. It is only when things are compared with one another with regard to the ways in which they affect the subject that they gradually acquire something in common with one another. Both necessity and sameness thus belong to the things I associate only externally. This suggests that the formation of a habit occurs through external comparison of different representations of things with one another, and that the marks or representations of common features acquired in this manner are what Kant calls

'external marks': 'The marks that I have of a thing are external if I compare the thing with other things, and such marks are called *characteres*, distinguishing marks, characteristics in the proper sense' (BL 107; see also VL 836).¹⁶ External marks can only be used 'externally', or in 'compar[ing] one thing with others', since they merely serve as *criteria* for distinguishing or noting sameness in different things (JL 9:58).

Our discussion of these kinds of marks should not blind us to the possibility that representations of rational beings also exhibit something in common (marks) even prior to the ways in which the subject is affected. As I will argue in the following, my representations do not (merely) relate to one another accidentally, or because they happen to be co-present in one empirical consciousness (i.e., because they are in inner sense), but rather because they each contain within themselves the possibility of their spontaneous combination with one another through intellectual acts of the *understanding*. The possession of a concept does not consist merely in an ability to classify things in accordance with rules that result from the effects of these objects on the subject, but rather in the capacity to represent inner relations that representations bear to one another merely through a faculty of spontaneity.



II.

I suggested above that the sameness of features reflected by concepts rests only on a faculty of spontaneity, and not on the ways in which objects affect us in sensibility. Support for this reading can be found in the connection Kant draws between the 'identity' or sameness of these features (marks) and the 'analytical unity of consciousness':

The analytical unity of consciousness pertains to all common concepts as such, e.g., if I think of red in general, I thereby represent to myself a feature [*Beschaffenheit*] that (as a mark [*Merkmal*]) can be encountered in anything, or that can be combined with other representations; therefore only by means of an antecedently conceived possible synthetic unity can I represent to myself the analytical unity [. . .]. (KrV B133n.)

At the start of this passage analytic unity refers to the sameness of consciousness (the identity of the 'I') in various representations. But why does Kant seem content to slide from speaking of the 'analytic unity of consciousness' in different representations to the analytic unity or identity of a feature (red) in different things? That this is not a mere slip of the pen is suggested by a similar slide that occurs in Kant's definition of marks [*Merkmale*] or general features in the *Jäsche Logic*: on the one hand, the mark is said to be a common feature 'in a thing', and on the other hand a 'part of the cognition of it', i.e. as part of our *representation* of the thing (JL 9:58). What I wish to suggest in the following is that we must read Kant as saying that the identity of features in things that is reflected by concepts *just is* the identity of consciousness in our representations of them.

Notice that Kant does not say in the above quote that the identity of the mark 'red' in different things presupposes complex (synthetic) unities of marks in those things, or in our perceptions of them, e.g., the togetherness (in one empirical unity of consciousness) of the features 'red' and 'flat' in my perception of the red carpet, and of 'red' and 'round' in my perception of the red ball. Instead, he suggests that it presupposes a capacity to *combine* the feature (mark) with others: 'I thereby represent to myself a feature that [...] *can* be combined with other representations'. And since the capacity to combine representations is the understanding (Section 15), he suggests in the same footnote that the synthetic unity of which he speaks is the 'synthetic unity of apperception', which he identifies with the faculty of 'understanding'. In an earlier passage from Section 12 Kant refers to this synthetic unity of apperception simply as the 'unity of the concept' that functions as a 'logical requirement' of all cognition. It is further characterized as a '*qualitative unity* insofar as by that only the unity of the comprehension [*Zusammenfassung*] of the manifold of cognition is thought, as, say, the unity of the theme in a play, a speech, or a fable' (KrV B114).¹⁷ Cognitions are not compiled together in one consciousness in the manner of an aggregate or 'unruly heap', but have an underlying theme or principle of unity, as in a speech or play. **In a speech or play, the representation of an underlying theme gives unity to the parts of the speech, rather than being a unity that results from putting the parts of the speech together.** Similarly, the synthetic unity of apperception is the *source* of the unity of cognitions, or the *faculty* that brings about their combination through consciousness of their unity in a whole of interrelated cognitions. It thereby secures that its acts are in agreement with one another and form a logically ordered system under principles.¹⁸ The synthetic unity of apperception thus is not like the complex unity of an intuition, which contains a manifold of parts within it. It is a *discursive* unity, or the representation of a *simple* unity that *precedes* its parts by giving each of them a position in the whole.¹⁹

Analytic unity—or identity in features of things—thus presupposes a synthetic unity that contains *no* manifold (the synthetic unity of apperception), rather than the complex unity of properties in a thing or perception of a thing. Unlike the intuiting intellect, 'through whose self-consciousness the manifold of intuition would at the same time be given' (KrV B139), the discursive understanding, which constitutes the 'I' of which I am conscious in apperception, is a 'simple representation' that must receive a manifold *from elsewhere* (KrV B135). That is, I am not a unity that already *contains* a manifold of representations, but merely a unity that can become conscious of itself as *contained in* the manifold of my representations through their combination (under conditions of sensibility). The understanding is thus not only a faculty for combining representations (synthetic unity of apperception) but is also called an '*analytic* unity of apperception', which expresses that it is an *identity* (quantitative or numerical unity) of consciousness in the manifold of my representations.²⁰

These passages from the first *Critique* suggest that on Kant's view, the marks reflected by concepts are common features in a manifold of representations not

because they are contained in a multitude of complex things or perceptions of things, but because they contain within themselves the possibility of their combination with other representations through the understanding. That is, they are marks, or common features, simply in virtue of being mine, or because they can be combined together in one consciousness. And they are partial representations (or 'part' of my cognition of the thing), not because they belong as parts to already complex wholes, but because I can become conscious of them as mine by combining them with others in one consciousness, and hence as parts of possible combinations (which, as we shall see, are judgements).

We are now in a position to appreciate the sense in which the 'identity' of features reflected by concepts may be understood as a concept of reflection. Since the act of reflection in concept-formation is a 'logical *actus*', the identity reflected by concepts must be a concept of logical reflection. In the *Amphiboly* chapter, Kant says that in 'logical reflection', 'there is complete abstraction from the cognitive power to which the given representations belong, and they are thus to be treated as the same [*als gleichartig*] as far as their seat in the mind [*im Gemüte*] is concerned' (KrV A262/B318). This is contrasted with 'transcendental reflection', through 'which I make the comparison of representations in general with the cognitive power in which they are situated' (KrV A261/B317).²¹ Whereas transcendental reflection compares the origin of representations either in the receptive faculty of sensibility or in the understanding, as a faculty of spontaneity, logical reflection treats all representations as homogeneous and as sharing a common seat in the mind, regardless of their 'origin [*Ursprung*]' or 'content [*Inhalt*]' (KrV A55–6/B80).²² This common seat of all my representations must be the understanding or faculty of spontaneity, since it is in virtue of the possibility of their spontaneous combination in one consciousness that they are mine at all. Hence, the understanding alone (synthetic unity of apperception) is the 'logical origin' of the identity of representations (analytic unity of consciousness). Since logical reflection brings this identity (i.e., the identity of the understanding) to consciousness, it must consist in self-consciousness.

The position I am ascribing to Kant is a bold one. It maintains that the understanding, or faculty of spontaneity, is not one among many things that I may reflect on in forming a concept, and become conscious of as identical in the manifold of my representations, but is that which constitutes the inner identity or sameness in any of my representations. Of course, my representations may also differ from one another, and thus will be identical only in certain respects, e.g., with respect to the redness of things that are represented. However, this does not mean that the identity in these representations is no longer the identity of the understanding, which has now been replaced by the identity of redness. Rather, the sameness of the feature 'red' reflects both that all representations of red things belong to the same 'I', or same capacity to judge that they are red, and that the sphere of the understanding is divided, i.e., that there are distinct 'I's or capacities to judge of things that they are 'red' and that they are 'blue'.²³ The identity of my representations of red things, therefore, is a formal feature of them, since it consists in the identity of the understanding in these representations, even though

the understanding in this case is *also* different from itself, i.e., different from other representations that are mine (e.g., from representations of blue or yellow). Regardless of the extent to which the sphere of the understanding—the sphere of those representations I call ‘mine’—is divided into sub-spheres, the identity of my representations at any level must consist in the identity of the understanding, i.e., must be an analytic unity of consciousness.²⁴

If we are conscious of the internal identity of marks through self-consciousness or logical reflection, as Kant maintains, then this identity may only belong to representations that contain consciousness, and thus fall within the sphere of that which I can accompany by the ‘I think’. To believe that it can belong to the objects of representations independently of apperception is to fall into the (empiricist) myth that identity is an independently given feature that may be abstracted out of these objects (*abstrahere aliquid*). Kant’s logic avoids the myth because it does not maintain that conceptual capacities are brought into conformity with sameness and differences in the objects of representations, but instead assumes that objects (or the contents of representations) must share common features to conform to the conditions of their *conceivability* (i.e., to conditions of apperception).²⁵ This may seem to throw Kant into the camp of ‘nominalists’ who take identity in the features of objects of perceptions to be imposed onto them through the powers of the mind. But this is not entailed by the above account. Unlike the identity that arises from external comparison, there is no perspective from which I may consider my representations absent their internal identity or *mineness*. We may say that commonality is there, in the features of objects of perception, in virtue of the possibility of bringing these perceptions to self-consciousness or to the concept without staking any claim about whether the objects of our perception would not share anything in common with one another independently of the faculty of concepts. Kant nowhere suggests that we could entirely ‘step outside’ of the understanding and assess the lack of sameness among features of things that reigns in the dark absence of the understanding.²⁶ In this respect, concepts of logical reflection (e.g., identity) are also different from the categories (e.g., cause). **The categories determine given appearances to be as they would not be without the categories, since they are responsible for the transition from indeterminate objects of empirical intuition (appearances) to determinate phenomena (objects of cognition). The concepts of logical reflection, by contrast, merely articulate what is involved in consciousness of appearances even prior to these concepts.**²⁷ The concepts of reflection:

are distinguished from the categories by the fact that what is exhibited through them is not the object in accordance with what constitutes its concept (magnitude, reality), but rather only the comparison of representations, in all their manifoldness, which precedes the concepts of things. (KrV A269/B325)

Identity and difference are not concepts that determine intuitions, thereby making objective cognitions (and the object of cognition) possible, but rather are

concepts that express the comparisons of intuitions even prior to concepts. The concept of identity (which belongs to general logic) thus does not require a transcendental deduction: no question arises as to whether or not we are justified in saying that appearances share something in common or are identical in certain respects, because in saying this we are merely articulating what is already contained in consciousness of appearances as such. This allows us to see how the identity in the contents of various representations may belong to general logic as a *formal* feature of these representations.²⁸ For identity (even in the contents of representations) has its origin in the understanding alone, or in the entirely formal and empty representation 'I', and not in the relations to objects of cognition that are made possible through the acts whereby the understanding *determines* sensibility.²⁹

Since logical reflection in the formation of a concept is an act of self-consciousness, the difference between marks and reflected marks (concepts) cannot be understood in general logic as a difference in *kinds* of representation, but must instead be construed as a difference in *degree* of consciousness in the same representation (or as Kant says, it is a 'difference in reflection'; JL 9:94). For self-consciousness is a consciousness that is the same as that of which it is conscious (*itself*). Even when internal marks initially belong to conscious intuition (perception), they do not differ in kind from the self-conscious or 'reflected representation' (the concept; JL 9:91).³⁰ The difference between the intuition of a house in a savage who does not possess the concept 'house' and this concept in a civilized man, for instance, is described as the difference between an 'obscure' (or, we might say, blind) representation and a 'clear' one (JL 9:33). In other places, Kant maintains that clarity and obscurity express degrees of consciousness on a continuum, all the way 'down to its vanishing' (KrV B415n.). The (obscurely) conscious intuition is thus like a drowsy monad that is yet to be awakened to explicit self-consciousness in a concept.

My interpretation thus fits well with Kant's claim from the *Amphiboly* (mentioned above) that 'logical reflection' treats all representations as homogeneous, or as sharing a common 'seat in the mind'. Although Kant criticizes his rationalist predecessors for failing to recognize the heterogeneity of concepts and intuitions (or perceptions), he emphasizes that the distinction in *kind* (in origin and content) **belongs to transcendental, not general logic**:

The Leibnizian-Wolffian philosophy has therefore directed all investigations of the nature and origin of our cognitions to an entirely unjust point of view in considering the distinction between sensibility and the intellectual as merely logical, since it is obviously transcendental, and does not concern merely the form of distinctness or indistinctness, but its origin and its content . . . (KrV B161–2)

The mistake of the rationalists is not that they recognize a logical or comparative difference between concepts and intuition, but that they treat the distinction as *merely* logical, and not also metaphysical or transcendental.

marks vs
reflected marks

We are now in a position to appreciate how concept-formation can belong to a logic that *does not have to investigate the source of concepts, not how concepts arise as representations, but merely how given representations become concepts in thought* (JL 9:94). This claim about the scope of general logic would be mysterious if we assumed that concepts and intuitions are heterogeneous representations. For then the formation of the concept 'tree' from perceptions (conscious intuitions) of trees would require the latter to undergo an alteration or change, whereby they are replaced by (previously non-existing) conceptual representations. That is, the account of concept-formation would have to show 'how concepts arise as representations'. But if the perceptions and the concept are not treated as heterogeneous representations, then concept-formation need not be treated as a coming to be of a concept that was not there previously. It generates merely the *form* of a representation, i.e., its 'generality', and not the representation itself, because it consists in the unfolding of a given representation through an inner act of reflection (an act whereby it becomes self-conscious).

III.

In the above sections my main concern has been to argue against the latent empiricism in interpretations that do not distinguish between the (empirical) concept and the capacity to classify objects into kinds on the basis of (reflected) schemata of the imagination. *The concept 'tree', I argued, arises not from a comparison of different representations with regard to the ways they affect me (which requires no rational capacities at all), but from a reflection of the capacity to spontaneously use a representation in combination with different (possible) ones through a rational capacity for cognition (the understanding)*. Reflection on this capacity involves an appreciation of the rational relations between the representation and different ones in a 'whole of cognitions', since it involves an appreciation of the possibility of using the representation in combination with others in thought or cognition.³¹

Now, it may be objected that I have neglected an important role that the imagination plays in the logical acts of concept-formation. For Kant views the imagination not only as a power to reproduce representations of things that have been previously encountered (the 'reproductive imagination'), but also as a productive power to produce sensible representations of relations that were not previously encountered, since they have their origin in the understanding ('productive imagination'). These are the normative or rational relations among different representations that are reflected by the categories (pure concepts of the understanding). According to this objection, the imagination must already be 'at work' in configuring the layout of logical space in accordance with the categories prior to concept-formation, since the products of its work are essential for the formation of any concept. For instance, in order to form the concept 'tree', I must already be dimly aware that the properties of having branches, leaves and a trunk inhere in the spruce, willow and linden (in accordance with the category

of inherence), since it is on the basis of these features that I recognize they share something in common. The logical 'positions' of these marks as belonging to temporally enduring objects would seem to be already fixed, even if I do not *judge* that these trees have branches, leaves and a trunk. What distinguishes the 'togetherness' of these marks in my perceptions and their 'togetherness', once reflected, in a judgement, is simply that the judgement makes explicit, through the categories, normative and rational relations among marks that were already implicit in the perceptions. **Concept-formation merely brings to consciousness intellectual capacities that are already operative in carving nature at its joints even prior to reflection.**³²

But if this is Kant's view, his logical account of concept-formation will appear to be viciously circular. For this view maintains that the rules reflected by concepts are already operative in imaginative syntheses prior to reflection. What could be logically significant about bringing these rules to the 'I think' through logical acts of concept-formation? It would seem surprising that Kant discusses these acts in general logic, rather than relegating their discussion to empirical psychology. The generality of concepts surely is a respectable logical notion, but Kant glosses the 'generality' of concepts by saying that the concept is a '*reflected representation (representatio discursiva)*' (JL 9:91). Why should the logical generality of concepts have anything to do with reflection or self-consciousness, if the sphere of a concept's application is already determined prior to reflection?

circularity
worry again

In this section **I wish to suggest that marks do not have determinate positions in 'logical space' prior to logical reflection. Contrary to the above interpretation, there is indeed something logically significant about self-consciousness, since marks acquire logical positions in relation to other marks only through reflection, and not prior to it.** The schemata of the categories (as products of transcendental syntheses of the imagination) thus cannot be operative in logically 'structuring' intuitions prior to our acquisition of concepts (and in particular, of the categories themselves).

To begin, let us return to our example in which I perceive a spruce, a willow and a linden. Why do I group these together? Since these are representations of sensibility, we may assume that I group them together because I have formed a habit of associating things of this kind together. Thus, I may notice, in perceiving the spruce, willow and linden, that my expectation of finding leaves, branches and trunk together in each of these cases is satisfied (i.e. that the objects 'agree' with my tendency to reproduce these representations together), and in this sense am aware that each of them conform to the 'empirical schema' or 'rule' for classifying things as trees. But this does not mean that I possess any *understanding* of the features that belong to this individual tree (that is, what belongs to it individually, and not only in comparison with other things). For **even a non-rational animal may expect the features of having branches or a trunk to occur together without any understanding of what it is for a tree to have branches or a trunk.**

grounds of
cognition

What I still lack is consciousness of an ability to use these features or 'marks' as rational *grounds of cognition* in judgement. The mark 'having branches', for

instance, functions as a ground of cognition of various trees when it enables me to understand (through judgement) *what each of these things are*, rather than serving merely as a criterion for identifying different things as things with branches, and for distinguishing them from things without branches. Kant refers to the use of a mark as a ground of cognition as its 'internal use', which he says 'helps us to see the manifold in the object' (VL 24:836):

The internal use consists in derivation, in order to cognize the thing itself through marks as its grounds of cognition. (JL 9:58)

When the mark is used internally, it is used as 'a *partial representation*' that grounds cognition 'of the whole representation' (ibid.). That is, it is used as a higher representation (such as 'branches') that grounds representations subordinated under it (such as 'tree') in judgement.³³ This may seem counter-intuitive, since it is more natural to say that things have branches because they are trees (i.e. the application of the whole representation grounds application of the partial representation), but we must be careful to distinguish between two different senses of 'because'. When we say that things have branches 'because' they are trees, we may mean that we can identify various things as having branches if we know they are trees. The mark 'tree' thus serves here in its *external use* as a criterion for picking out things with branches. But when we understand that this particular thing is a tree, our understanding of it as such is grounded in cognition of it as something that has branches; the mark 'branches' serves here in its *internal use* as a ground for cognizing the tree itself. This capacity to understand the 'internal' nature of the tree (as something that has branches, etc.) does not rest on any special faculty of intellectual intuition, but is characteristic of our discursive capacity to judge.³⁴ Unlike the brutes, we are capable of appreciating marks as belonging to things themselves, or as constitutive of their inner nature, simply because we can use them as partial representations in complex judgements: we can combine them with other marks from a consciousness of their belonging together in a whole representation of the thing.³⁵

two different senses of 'because'

Concepts are thus distinct from the merely classificatory consciousness of empirical schemata because they reflect the possible *internal* use of a feature or mark. But the possibility of its internal use consists in the capacity to use it in judgement, or in grounding other representations through their subordination under it. This 'grounding' relation among different representations is not one that can belong to them *prior* to reflection, since it obtains only through consciousness of their belonging together in one consciousness. Appreciating this point is important for understanding the categories. The category of substance, for instance, expresses that it is necessary to think of certain things (e.g., trees) as the enduring subjects of changing properties, not because of the ways these things have affected me over time, but because I am conscious that this is how I must (or ought to) spontaneously combine the concept 'tree' with other representations in judgement (which may serve only as predicates in relation to it). It is from a recognition of the way this representation belongs together with others in one consciousness (or in a 'whole of cognitions') that the necessity of

combining them in this way arises. Thus, we should not view the logical relations expressed by the categories as 'real' relations that belong to things independently of our reflection of them on pain of losing the peculiar sense of the 'logical must' or 'necessity' that these relations express. This is Kant's point when he notes that the categories cannot be taken from appearances but instead express a necessary unity of self-consciousness (KrV B144).

Logical comparison and reflection thus do not bring to consciousness mere rules that already guide syntheses of the imagination (whether empirical or transcendental) prior to concept-formation. Logical comparison first begins when I become conscious of differences among representations 'in relation to the unity of consciousness' (JL 9:94). As I have interpreted this claim, it should not be understood as saying that I become conscious of differences among representations in relation to an *empirical* unity of consciousness, or in relation to a habit of associating various representations together. Instead, we should read it as saying that representations are compared in relation to a synthetic unity of consciousness, which Kant identifies with the understanding (a capacity to judge or faculty of knowledge). I become conscious, for instance, that the trees are different 'in regard to' the 'branches themselves', e.g., that their branches are different in colour or shape (JL 9:95). This means that I am conscious of different possible positions of the mark 'having branches' in logical space or within possible judgements (even when I am not yet conscious of the ways in which they differ).³⁶ And logical reflection consists not in appreciating already given logical relations, but in becoming conscious of the (analytic) unity of a capacity to generate these logical relations among representations through the spontaneous exercise of the understanding in thought and judgement.

Kant famously proclaims that concepts rest 'on functions', and he defines a function as the 'unity of an act of ordering different [*verschiedene*] representations under a communal [*gemeinschaftliche*] one' (KrV A68/B93). Interpreters frequently take this to mean that a function is the unity of an act of *subordinating* lower representations under higher ones (i.e., under common representations) through analysis of what is contained in the lower representations (see, e.g., Longuenesse 2006: 139ff). This is a close cousin of the standard interpretation of concept-formation hinted at above, according to which concepts emerge from acts of analysing lower, already logically complex representations of sensibility. But this reading is based, in part, on a false rendering of the German '*gemeinschaftlich*' into English: in the Kemp Smith, Guyer/Wood, and Pluhar translations, it appears as the English 'common', which in German would be '*gemeinsam*'. A more literal translation of the German here is 'communal'. The difference is significant. A *community* [*Gemeinschaft*] is a whole consisting of distinct members that bear relations to one another. So to order representations under a communal one is to relate them to one another—or to *combine* them with one another—under the idea of a whole of representations. The point of saying that concepts rest on functions is that there can be no consciousness of what is common [*gemeinsam*] in a manifold (through a concept) without consciousness of functions, i.e., without consciousness of the unity of acts not of analysis, but of

combining distinct cognitions in a communal whole [*Gemeinschaft*]. One might summarize Kant's position by saying that the representation of identity in a manifold presupposes that of communal unity. And since the understanding is conscious of its functions of unity only in judgement (not in intuition), concepts must arise from a reflection on the possibility of the use of marks in judgement (i.e., of its use in making possible lower representations). Consciousness of 'identity in difference' through concepts is thus possible only for a being that has a capacity to judge.

Notice that the mark acquires a sphere of representations contained under itself only through reflection on the possibility of its combination with other marks *not contained in it* (i.e., with what Kant calls *coordinate*, rather than *subordinate* marks).³⁷ If the understanding were merely a faculty of analysis, it could only become conscious of what is contained *in* marks; in order to explain how marks have a sphere or extension of representations contained *under* themselves it must also be a faculty of synthesis or synthetic judgement. The understanding presupposed by concept-formation therefore must be a *discursive* capacity, or one that can *enlarge* its cognitions under sensible conditions given from elsewhere. Since the understanding is first awakened into its activity of synthetic judging through the formation of concepts, logical space—i.e., the sphere of the understanding—only gets carved through logical reflection: its complexity is not laid out for the understanding to behold prior to reflection. Kant's account of concept-formation is thus incompatible both with the empiricist view that the logical positions of marks are given in sensible representations and with the rationalist, innatist view that they are pre-determined in an order of reason.

But the discussion of the ways in which the understanding introduces complexity into logical space would take us beyond the first section of general logic to Kant's views on the judgement and the syllogism. And if our question is how the particular carvings or contents [*Inhalt*] of concepts are possible, we will be led even further afield to transcendental logic. The general logical account of concept-formation concerns only the conditions that make possible the sphere or extension [*Umfang*] of a concept (i.e., its form). The issue here is not the determination of the *limits* of the concept's sphere, but merely the (positive) conditions under which it has a sphere at all—or is a general representation. In order for a concept to have a sphere, it is not necessary that it contain anything (i.e., any marks) within it, nor that there be limits to its extension. As we have seen, the 'I' is a simple and empty representation, yet **it contains under itself the limitless sphere of all representations I call 'mine'**. It has a sphere, or is conscious of itself as an identical representation in the manifold of my representations, through consciousness of the possibility of its exercise or use in synthetic judgements under conditions of a manifold given from elsewhere.³⁸ And since, as I have argued, the sphere of the 'I think' constitutes the sphere of *any* concept, the reflected 'I' is the form of all concepts (i.e., it is the Concept).³⁹

Hegel worried that Kant's 'I' 'is as it were the crucible and the fire which consumes the loose plurality of sense and reduces it to unity' (Hegel 1975,

Section 42, 69). Kantian concepts emerge from the ashes as a new beginning only by way of destroying the original plurality of intuitions. But has the plurality of singular representations (intuitions) really been *lost* in the formation of concepts from intuitions?⁴⁰ Nothing in the account I have provided suggests that it is. A representation may be understood as *both* singular and general, *both* an intuition and a concept, since, as we have seen, logic does not treat these representations as opposed.⁴¹ Singularity may be logically represented as the simple *unity* of an internal mark (in isolation), whereas generality is logically expressed by its *identity*, i.e., the same unity *in the environment of a manifold*. Thus, we may come to appreciate that the singular representation belongs, as a moment of reflection, to the general concept. But questions surrounding the place of singular representation in general logic are difficult, and cannot be answered adequately within the confines of this paper.⁴²

IV.

I have argued that the generality or extension of concepts is inseparable from their character as self-conscious capacities that can be exercised in various ways in judgements. That is, the consciousness of the generality of our capacity to judge—consciousness of its identity *in* a manifold of representations—is not a psychological appendage to the logical characterization of concepts as general representations, but rather an elaboration on the logical notion of generality itself. This claim may have an odd ring to contemporary ears, since the logic we take for granted today is predicated on the assumption that the generality or extension of a concept may be represented *independently* of any representation of the capacity of a thinking subject. The generality of the concept 'dog', for instance, is represented by the *set* of indefinitely many things that serve as inputs into a logical function ('dog') that yields truth as its output. But it is a wholly different matter whether anyone possesses the concept or has the capacity to *use* the concept 'dog' in judgements.⁴³ A proponent of the modern conception of extension may think that capacities of thinking subjects play a role in *determining* the extension of a concept. But this does not mean that the extension of the concept cannot be represented in logic simply through its set-theoretical properties, and independently of the way in which it is determined. It would introduce an objectionable element of *psychology* into logic, one assumes, if logic could not detach the concept from the thinking subject.

Kant's logic of concepts does not require a complete dismantling of the idea of extensions of concepts as sets of objects, but it does demand that we view it as derivative of a more fundamental logical notion.⁴⁴ If the logician starts with the idea that the extension of a concept is a set or collection of things, then it will not matter to the logic of concepts whether the objects in the extension contain anything in common with one another. For the idea of a set does not in principle rule out the possibility of a concept that contains a donkey, the moon and my left ear in its extension. That is, it leaves open the possibility that its members are

only externally related, but share no internal features. Kant's view is that it is an essential, logical feature of concepts that they pick out features that things share in *common* with one another. Kant thus thinks of the extension of a concept as a 'sphere', which suggests a *continuous* magnitude of what is identical in a manifold, rather than a set of discrete parts. It is this notion of an *identity internal to a manifold* that I have argued, on Kant's behalf, cannot be made intelligible apart from the possibility of self-consciousness in a capacity to judge. The conception of generality that is based on it thus cannot be treated in logic apart from apperception or reflection, or apart from the capacity of subjects to recognize the ground of identity of consciousness in their representations.⁴⁵

I have argued that the form of concepts (their generality) does not rest on the formation of schemata of the imagination through which we represent objects in intuition. Empirical schemata can be formed prior to the formation of empirical concepts, but these schemata rest on a kind of reflection that plays no role in the logical origin of concepts. The transcendental schemata of the categories, by contrast, cannot be generated prior to the logical reflection that issues in the categories. Thus, neither of these products of the imagination contribute to the logical acts of concept-formation. This is not to deny that they may contribute to an overall account of concept-formation, one that considers the sensible conditions under which the understanding operates in forming concepts. What I have shown here is merely that the form of concepts, as it is treated in general logic, rests on nothing other than the understanding as a capacity for (synthetic) judgement, since a concept's form (generality) consists in the self-consciousness of this capacity. It is only natural that questions should remain concerning the relation of a concept's form to its content. But these are not the questions of general logic.⁴⁶

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NOTES

¹ All references to Kant's works will cite volume and page numbers of the *Akademie* edition of Kant's collected writings (Berlin: De Gruyter, 1902–). The following abbreviations will be used: *Anthr.* = Anthropology from a Pragmatic Point of View, BL = Blomberg Logic, FS = The False Subtlety of the Four Syllogistic Figures, JL = Jäsche Logic, KpV = Critique of Practical Reason, KrV = Critique of Pure Reason, KU = Critique of the Power of Judgment, MM = Metaphysics of Morals, P = Prolegomena to any future metaphysics that will be able to come forward as a science, R = Reflexionen, VL = Vienna Logic.

² The term 'identity' [*Einerleiheit*] is not used here, in the *Jäsche Logic* account of concept formation. But in other passages it is used to characterize that which I am conscious of through a concept: 'Der Begriff ist das Bewußtsein, daß in einer Vorstellung desselben dasselbe enthalten ist als in einer anderen, oder daß in mannigfaltigen Vorstellungen

einerlei Merkmale enthalten sind' (my emphasis; MM 29: 888). It may seem that 'identity' is not a proper translation for '*Einerleiheit*', if one assumes that the term 'identity' implies that a thing is only identical with itself (this sense of 'identity' would not apply to features or properties, which presupposes a *multiplicity* of things, but applies to only *one* thing). However, it is important to note that the philosophical tradition prior to Kant uses the term 'identity' or its Latin cognate in the same way that Kant uses *einerlei*. Hume, in the *Treatise*, suggests that the term 'identity' only applies to a multiplicity of things; when referring to only one thing, we may only speak of 'unity': 'the view of any one object is not sufficient to convey the idea of identity. For in that proposition, *an object is the same with itself*, if the idea express'd by the word, *object*, were no ways distinguish'd from that meant by *itself*; we really shou'd mean nothing, nor wou'd the proposition contain a predicate and a subject, which however are imply'd in this affirmation. One single object conveys the idea of unity, not that of identity' (Hume 1978: 1.4.2).

³ Sellars 1968: 20 uses this phrase in the course of denying, on Kant's behalf, that the categories can be plucked from sense impressions.

⁴ 'One does not abstract a concept as a common mark, rather one abstracts in the use of a concept from the diversity of that which is contained under it' (P 8: 200n; see also VL 24:907–10).

⁵ Ginsborg 2006: 40. See also Ginsborg 1997: 53f. Pippin 1982:113 formulates a similar worry about Kant's logical account: 'a good deal of conceptual "work" seems to have already gone on here. For one thing, the sensory manifold seems already to have been experienced in some determinate way prior to this analysis; I am able already to recognize three associable objects, and to have sufficient conceptual clarity to recognize branches, stems, and leaves as such. Indeed, the process described here seems more like our making much clearer to ourselves a concept we already have than to be a genuine derivation. As such, this reflective procedure would be helpful in "arriving at" as general a concept of tree as we can isolate, but would not account for the origin of the concept itself.'

⁶ Kant defines sensation as 'a perception that refers to the subject as a modification of its state' (KrV A320). It is a modification of the subject's state brought about by the object's *affecting* the subject.

⁷ I have been helped here by Matthias Haase 2011.

⁸ Kant presents an argument by analogy with our own case to prove that animals have *representations* (KU 5:464). The analogy is based on the *actions* of animals (building a house), rather than on their apparent ability to *perceive* their environment. Kant would probably reject an analogy of the latter kind, since there is no basis for 'external comparison': we can externally compare the actions of beavers in building houses to our own actions, but we have no access to the inner workings of the power of representation in them that would allow us to compare their 'seeing' a house to our seeing one. Kant seems to assume here that 'action' analytically implies 'desire'. Thus, if the beavers act in building houses, they do so from desire. He defines desire as the capacity of an animal 'to be through its representations the cause of the actuality of the objects of those representations' (KpV 5:9n.). See Engstrom 2009: 27f. for an elaboration of this general conception of desire.

⁹ In the B-deduction Kant articulates basically the same position by saying that the 'empirical unity of consciousness', which is 'entirely contingent' because it arises from mere associations of representations, presupposes (or is 'derived' from) an 'original unity of apperception' (KrV B140). This may be understood as an advance over a certain reading of Hume, according to which habits of association arise without any relation of representations to a unity of apperception.

¹⁰ I do not mean to suggest that association cannot occur without any attendant expectation or sense of 'necessity'. I may associate lindens with Berlin without expecting to find myself in Berlin whenever I see a linden. The expectation I have described is an expectation of how objects will affect me, and thus of how I will encounter *existing* objects, not a mere urge to relate representations independently of sensation, or of the ways in which the objects of representation are given to me (cf. Ginsborg 2006: 48).

¹¹ Notice that on this interpretation, the imagination does not reproduce images without any consciousness of them at all, but reproduces them from a consciousness of the ways they affect the subject. For this reason its activity of reproducing images of things may be understood as a kind of synthesis in accordance with rules, and not merely as something that happens to (or in) me. For a contrary view see Kitcher 2011: 104.

¹² Of course, this way of sorting things is merely 'subjectively valid', since it is valid only for the dog thus affected (see P 4:300). According to Ginsborg, the consciousness of the appropriateness of one's sorting behaviour prior to concepts in *rational* animals consists in a consciousness of the *universal* subjective validity of its classifications: 'I take it not only that I myself have a tendency to associate the idea of the linden and the idea of the sycamore, but also that this association between ideas is appropriate, or conforms to an intersubjectively valid standard governing how these ideas ought to be associated. I take it that these ideas are not merely associated in my own mind, but that they belong together in the sense that everyone ought to feel the same tendency to associate them as I do' (Ginsborg 2006: 49). But on what grounds can subjective universality be ascribed to my associations, if these rest, as I have argued, on sensation? Ginsborg seems to support her claim to universality here by appealing to natural dispositions that we have to associate things in one way rather than another way. But this does not show why we ought to associate things in this way—it merely shows why we do. To prove that we ought to associate them in this way in a universal sense of 'ought', we would need to prove that these ways of being affected by the objects contain a claim to universality. Kant provides a proof of this kind for the feeling of pleasure in beautiful objects (since this is a sensation—an *Empfindung*—that is universally communicable). I do not see how a similar argument is in the offing for the universal communicability of the sensations that bring about associations of ordinary empirical representations in inner sense.

¹³ The abilities belonging to the associative imagination in the acquisition of a habit will be manifested in the expectation that objects in one's environment will continue to exist even when they cannot be seen (since the subject can come to expect the same sensations on seeing the object again), surprise at a change in the properties belonging to objects, and the noticing of differences among different kinds of things (since representations of them affect the subject in different ways). As Okrent has argued, these abilities constitute the animal's ability to *represent* or *notice* [*merken*] things at all prior to the formation of concepts. (See Okrent 2006 for a more detailed description of the complex abilities that may belong to beings that can acquire habits.)

¹⁴ The manifold of effects on the subject must, that is, presuppose the unity of an active capacity that is sustained throughout these effects in order for there to be something *identical or different* in this manifold. For a similar thought in relation to Aristotle, see Sebastian Rödl's 'Threptikon and Aisthetikon'.

¹⁵ In the *Critique of Judgment* Kant explicitly states that 'reflecting [...] goes on even in animals, although only instinctively, namely not in relation to a concept which is thereby to be attained but rather in relation to some inclination which is thereby to be determined' (KU 20:211). My identification of this kind of reflection with pleasure is supported by Kant's definition of pleasure as a 'consciousness of the causality of a

representation with respect to the state of the subject, for maintaining it in that state' (KU 5:220). In the above example, it is a consciousness of the causality of a sensation (e.g., the taste of the roast) to maintain itself by affecting desire (i.e., by causing the animal to search for roasts).

¹⁶ Notice that Kant ascribes only 'characteristic marks' to the non-rational brutes in the above passage from the FS (2:60).

¹⁷ In the transition from Section 15 to Section 16, Kant refers back to the 'qualitative unity' mentioned in Section 12 and identifies it with the original-synthetic unity of apperception (KrV B131).

¹⁸ Kant later suggests that the unity of all cognitions is that of a system that 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' (KrV A645/B673).

¹⁹ One might compare this original unity of the understanding to a system of 'perfect justice', which places each action in its proper position (*Stellung*) in the whole community of actions, by punishing wrongdoings and rewarding good deeds (cf. KrV A73/B98). The original synthetic unity of cognition is a capacity that holds all acts of cognition together in their proper position, excluding inconsistent representations and retaining those that agree with one another, in order to ensure that the understanding is *in agreement with itself* (i.e., with its principle of synthetic unity).

²⁰ I have called analytic unity 'quantitative unity' to contrast it with synthetic or 'qualitative unity'. Kant himself calls analytic unity of apperception a 'numerical identity' at KrV A107.

²¹ Kant notes that according to the 'logical distinction between understanding and sensibility, [. . .] the latter provides nothing but intuitions, the former on the other hand nothing but concepts' (JL 9:36). This is distinguished from the 'metaphysical [mode of explanation]', which treats sensibility as 'a faculty of *receptivity*, the understanding as a faculty of *spontaneity*' (ibid.). The metaphysical distinction concerns a difference in the *source* of cognitions, i.e. whether they are brought about through affections (i.e., have their source in receptivity) or through functions of spontaneity.

²² Logical reflection thus should also be conceptually distinguished from the reflective use of the power of judgement [*Urteilskraft*] in the search for empirical concepts. The power of judgement operates here in accordance with the 'principle of a purposive arrangement of nature in a system, as it were for the benefit of our power of judgment' (KU 20:214). General logic 'teaches how one can compare a given representation with others' for the formation of concepts, but it does not consider 'whether for each object nature has many others to put forth as objects of comparison' (ibid.:211). The question whether the objects given to me in empirical intuition are suitable or *purposive* for comparison with others in forming empirically determinate concepts only arises when we consider that *different* objects could have been given in sensibility, as a distinctive source of cognitions. The reflective power of judgement operates under the supposition that the objects given in sensibility are suitable for their cognition (in a system of interrelated laws) through the understanding. Its principle of purposiveness is said to be 'transcendental', not logical (KU 20:213, 211–12n.), because it rests on the agreement of sensibility and understanding as *distinct* sources of cognition. Although Kant does not make this explicit, logical reflection presumably rests on merely logical principles, or those principles that govern 'the correct use of the understanding [*Verstand*], i.e., that in which it agrees [not with sensibility, but] with *itself*' (my emphasis; JL 9:14). It is not uncommon for interpreters of Kant to collapse these two kinds of reflection. For instance, both Allison

2001: 21–2, and Longuenesse 1998: 163–6, treat logical reflection as a special case of the reflective use of the power of judgement.

²³ If self-consciousness is a consciousness that is identical with that of which it is conscious, then different acts of consciousness must constitute different selves. See note 38 for more on divisions of the sphere of the 'I think'.

²⁴ In support of this reading, Kant sometimes uses the concepts 'sphere of apperception' and 'sphere of concepts' interchangeably, as in the following draft of a letter dated to 1792: 'Zuerst die Eintheilung des Vorstellungsvermögens in die der bloßen Auffassung der Vorstellungen *apprehensio bruta* ohne Bewusstseyn, ist lediglich für das Vieh und die *sphaere* der *apperception*, d.i. der Begriffe, die letztere macht die *sphaere* des Verstandes überhaupt' (11: 344).

²⁵ I do not think that this point depends on the framework of transcendental idealism. Even things in themselves must conform to the conditions of their conceivability. That is, it is not that the understanding must conform to them, but that they must conform to the understanding (they are, after all, objects of the intuiting understanding or noumena). As Engstrom 2006: 20 notes, the thing in itself is not *less* dependent on the intellect than appearances, but even more so: 'That Kant calls these objects "mere appearances" indicates, not that they lack independence from our cognitive power *in respect of form* (even a thing in itself must conform to the cognition of it), but that—in contrast to things known as they are in themselves by an intuiting intellect—they lack *dependence* on it *in respect of existence*'.

²⁶ When Kant imagines that 'among the appearances offering themselves to us there were such a great variety—I will not say of form (for they might be similar to one another in that) but of content, i.e., regarding the manifoldness of existing beings—that even the most human understanding, through comparison of one with another, could not detect the least similarity', he means that it is possible that we could not bring identical contents of appearances to the 'I think' (i.e., that we could not *discern* identity)—not that it is possible that there is no identity among appearances at all (KrV A653/B681).

²⁷ In several passages Kant suggests that perceptions of objects are possible without the categories (P 4:298ff.). But to my knowledge he nowhere suggests that representations of objects are possible that entirely lack identity, or that are such that there is no *possibility* of reflection through concepts.

²⁸ 'Logical reflection' in the formation of a concept could not belong to general logic if the logician were barred from reflecting on identity and difference in the contents of representations. Moreover, it would be odd to find the distinction between analytic and synthetic judgements, which rests on that between identity and difference of conceptual contents, in the *Jäsche Logic* if the employment of these concepts of reflection in logic were illegitimate (JL 9:111).

²⁹ This claim rests on an important assumption that would have to be worked out in a separate paper, namely that we can distinguish between the 'original-synthetic unity of apperception' as a logical requirement of all cognitions on the one hand (see KrV B114), and the 'objective synthetic unity of apperception' that serves as a first principle of *transcendental* logic on the other hand. If I am right, the generality of concepts rests on the understanding as a mere capacity for synthesis (synthetic unity of apperception), but in abstraction from the manifold of sensibility that enables the understanding to also function as an 'objective synthetic unity' (i.e., as the source of content). Indeed, I think it can be argued that the original-synthetic unity of apperception is *original* because it is the source of (i.e., is prior to) the determinate use of the understanding in relation to sensibility, which in turn is expressed by the 'objective synthetic unity of apperception'.

This suggests that generality (the sphere of the 'I') merely presupposes a *formal* synthetic unity (i.e., one that lacks all content, and all relation to an object), and that content is added 'downstream'. Logic itself is *general* not because it reflects what is common to all contents or objects of thought, but because it reflects original *forms* or functions that are common to, or contained in, *all my* acts of thinking. That is, the generality of logic rests on its formality. This contradicts MacFarlane's thesis that formality rests on generality in his 2002: 25–65.

³⁰ In the following passage from the A-deduction, one and the same 'unity of consciousness' that gives unity to a manifold of representations in intuition is also said to be reflected by concepts:

If, in counting, I forget that the units that now hover before my senses were successively added to each other by me, then I would not cognize the generation of the multitude through this successive addition of one to the other, and consequently I would not cognize the number; for this concept consists solely in the consciousness of this unity of the synthesis.

The word 'concept' itself could already lead us to this remark. For it is this one consciousness that unifies the manifold that has been successively intuited, and then also reproduced, into one representation. This consciousness may often only be weak, so that we connect it with the generation of the representation only in the effect, but not in the act itself, i.e., immediately; but regardless of these differences one consciousness must always be found, even if it lacks conspicuous clarity, and without that concepts, and with them cognition of objects, would be entirely impossible (A103–4).

It is sometimes said that this passage contains two inconsistent claims about concepts. On the one hand, the concept is said to be the 'one consciousness that unifies the manifold' in intuition. But then this 'one consciousness' is said to *underlie* the concept (without it concepts 'would be entirely impossible'). Longuenesse concludes that we must distinguish between two senses of 'concept': a pre-discursive sense, according to which the concept is a consciousness of the unity of grasping a manifold together in one intuition, and a discursive sense, according to which the concept is a discursive or universal representation of the generic identity of this unity among different intuitions (Longuenesse 1998: 47). The first, pre-discursive 'concept' is presupposed by, and underlies, the concept as a discursive or reflected representation. However, the passage does not require two concepts of 'concept' if we recognize that the unity of consciousness in the intuition is itself an identity or analytic unity of consciousness (and hence a mark). The concept is *the same* as this unity, because it consists in the *self*-consciousness of this unity (and not in a separate act of consciousness). There are not two representations, one pre-discursive and another discursive, but a single representation (or discursive 'mark') that may be either obscure or clear; when it is clear, this is because it has been brought to the 'I think' through logical reflection.

³¹ Among interpreters, Michael Young has argued most persuasively for a distinction between consciousness of sameness and difference through the imagination and the possession of a concept. My account is very similar to his in emphasizing this distinction (Young 1988).

³² One proponent of this interpretation is Longuenesse, who argues that the schemata of the categories may already be operative in determining intuitions prior to the acquisition of concepts (and hence, to the application of categories in judgements) (see her

1998: 199). Her interpretation is very much in line with John McDowell's view that intuitions must already exhibit the 'logical' togetherness of features in order to be intuitions of objects at all in his 1998: 459ff.

³³ 'As one says of a *ground* in general that it contains the *consequence* under itself, so can one also say of the concept that as *ground of cognition* it contains all those things under itself from which it has been abstracted, e.g., the concept of metal contains under itself gold, silver, copper, etc.' (JL 9:96). The ground of cognition is sometimes (mistakenly, in my view) interpreted as a ground only of that which is contained not under, but within the concept (see Stuhlmann-Laeisz 1976: 89–91).

³⁴ I do not mean to speak here of the 'inner nature' of things in any metaphysically loaded sense. Unicorns and aliens may also have an inner nature—i.e., there is some feature that makes them be what they are, even though they are fictional. It is important to emphasize that even concepts that cannot be used in cognitions, but instead can be used only in mere thoughts (combinations of concepts that lack objective or necessary unity, and thus that lack any involvement of the categories), are nevertheless *concepts*. What is common to any concept is the consciousness of the possibility of its use in synthetic thought or judgement, since it is this that constitutes the sphere of a concept.

³⁵ Once we have formed a concept through reflection of the possible internal use of a mark, we will also be able to use the mark externally in comparisons of different things: 'For if I cognize the thing from within, then these marks will certainly suffice for external use, although this latter does not suffice for internal use' (VL 24:836). If I can understand that the mark belongs internally to representations, I will be able to identify and differentiate various representations from a consciousness of what is internal to each of them. But those animals that are only capable of the external use of a mark will not be capable of using it in judgement, and thus cannot become conscious of the inner nature of things.

³⁶ There is a caveat here: consciousness of differences among representations in the first stage of concept-formation should not be confused with consciousness of the ways in which representations differ. In the *Amphiboly*, where Kant is concerned with judgement-formation, reflection is treated as identical with, or at least as a kind of, comparison (KrV A262/B318). But they are treated as distinct acts in *concept-formation* (JL, see above). I think this difference is significant. The capacity to judge is a discriminating capacity, but judgements involve more than mere discrimination (which animals are also capable of). They also involve 'recogni[tion] [of] difference [*Verschiedenheit*]' (FS 2:59). Concepts, by way of contrast, merely involve consciousness of identity *in* difference. Through a concept I am not yet fully conscious of the differences among representations, i.e., I have not yet *reflected* on their differences (under a single unity of consciousness). In thinking through a mere concept of a tree, for instance, I do not form the negative judgement that spruces are not willows (this negative judgement would *determine* the concept of a tree, once it is formed). Comparison belongs to concept-formation only as an enabling condition of *reflection*. That is, through a concept I come to reflect on identity *in the hostile environment of difference*, whereas a judgement brings difference itself to consciousness through consciousness of identity (or analytic unity of consciousness).

³⁷ Marks are coordinate insofar as each of them is represented as an immediate mark of the thing and are subordinate insofar as one mark is represented in the thing only by means of the other. The combination of coordinate marks to form the whole of a concept is called an aggregate, the combination of subordinate concepts a series' (JL 9:59). For instance, the combination of the mark 'animal' with its coordinate mark 'rational' constitutes the whole concept of man, whereas the mark 'man' is not coordinate with, but

subordinate to the higher concept 'animal'. In general coordinate marks—those marks that are combined with others in synthetic judgements—cannot appear on the trees of conceptual hierarchies in the first section of Kant's logic, even though they are operative in generating these trees. For instance, Porphyrian trees cannot represent the (coordinate) concepts 'rational' and 'animal' as genera of the species 'human', since these putative genera are not opposed species of a common higher genus. Concept-hierarchies must have a cone-shaped form, with the top of the cone located in the highest genus, due to the universal principles Kant lays down for the subordination of concepts (JL 9:97ff.; see Anderson 2005 for a helpful discussion of this point).

³⁸ No concept, not even the 'I', is innate; all concepts in a discursive intellect are acquired through becoming conscious of the possibility of their use in synthetic thought or judgement (under conditions of sensibility). The 'I' does not have a sphere prior to its division into species through synthetic judgement. It is contained in each of the parts of the division because it divides *itself*, rather than being determined (or limited) by something external to it. One might express this (somewhat abstractly) by saying that the judgement is an original division (*Ur-teilen*) of the genus concept 'I'. However, we must be careful to respect Kant's dictum that the synthetic unity of apperception is a simple, and hence indivisible representation. When Kant speaks of the 'logical division' of a genus concept into species concepts, he clarifies that *what* is divided is 'not the concept itself', but rather 'the sphere of the concept': 'Thus it is a great mistake to suppose that division is the taking apart of the concept' (JL 9:146). The sphere of the concept reflects an *analytic* unity, or that which is shared in common by a manifold of representations contained under the concept. So it is the *sphere* of the 'I' (analytic unity of apperception), not the 'unity of the concept' itself (synthetic unity of apperception), that can be divided. The unity of the Concept is still contained, undivided, in all representations I call mine.

³⁹ This may seem like a strange claim to make about a concept that contains the first-personal pronoun. But we should not be too quick to assume, with the Cartesians, that self-consciousness is consciousness of myself as an individual or singular 'I', rather than a 'consciousness in general' [*Bewußtsein überhaupt*] that can be shared by any thinker (KrV B143). I have ignored this aspect of the Concept for the purposes of this paper.

⁴⁰ To be clear, I do not mean to imply that all concepts are formed from intuitions. However, the concept 'tree', which we have taken from Kant's example, certainly is formed from marks contained in prior conscious intuitions (i.e., in perceptions).

⁴¹ Kant suggests that a 'cognition' may be '*intuition* and *concept* at the same time' (JL 9:33).

⁴² Kant does say that 'in the use of judgments in syllogisms singular judgments can be treated like universal ones' (KrV A71/B96). This means that general logic can ignore singular judgements in the section on syllogisms (inferences of reason). But logic has three parts: concepts, judgements and syllogisms. Kant nowhere denies that singular representations and judgements may play a role in the first two parts of general logic, and we find an explicit mention of the former (intuitions) in the first part, and of the latter (singular judgements) in the second part of the *Jäsche Logic*.

⁴³ Peter Strawson, in his interpretation of Kant, carefully distinguishes between what a concept is and what the possession of a concept consists in Strawson 1966: 20. See Bennett 1966: 54, for a view closer to my own.

⁴⁴ Kant sometimes speaks of sets [*Mengen*] of objects as falling under concepts (e.g., B39f.). This is noted by proponents of the 'aggregative' or extensionalist understanding of the extension of Kantian concepts as a set of objects: see Schulthess 1981: 112–17, Bell 2001: 3–5 and Longuenesse 1998: 77n. However, if I am right, Kant does not have an

extensionalist conception of extensions in general logic, and where it is mentioned, we must understand it as presupposing the intensionalist conception of extension as a continuous sphere (what is identical *in* a manifold).

⁴⁵ The conception of the sphere of concepts that emerges from this account entails that intuitions and singular employments of concepts in judgement *have no sphere*, for they do not reflect a unity shared in common by a manifold through the mediation of another representation. They are more like extensionless points *on* a continuum. In a singular judgement, for instance, 'a concept that has no sphere at all is enclosed [. . .] under the sphere of another' (JL 9:102; see KrV A71/B97). Rather than thinking of intuitions or objects as constituting the extensions of concepts (from below, as it were), Kant instead thinks of the extension of a concept as the sphere of a capacity to judge. For this reason intuitions play a disappearing role in the logic of concepts.

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