

## Kantian Schemata: A Critique Consistent with the *Critique*

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### Abstract

Kant posits the schema as a hybrid bridging the generality of pure concepts and the particularity of sensible intuitions. However, I argue that countenancing such schemata leads to a third-man regress. Siding with those who think that the mid-way posit of the *Critique of Pure Reason's* schematism section is untenable, my diagnosis is that Kant's transcendental inquiry goes awry because it attempts to analyse a form/matter union that is primitive. I therefore sketch a nonrepresentational stance aimed at respecting this primitivity.

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The early modern empiricist tradition had depicted the mind as a blank slate awaiting experience, but Kant added elements of rationalism to depict the mind as a chest of drawers awaiting experience. The broad strokes of this Kantian picture of the mind remain a starting point for many debates in analytic epistemology (e.g. Davidson 1973–74; McDowell 1996). One mainstay is Kant's distinction between the "receptivity of impressions" and the "spontaneity of concepts" (Kant 1998, B75; whenever possible, I will quote from the B edition of the *Critique*). Kant insisted that, although these two faculties "cannot exchange their functions," they must function together, since "[o]nly from their unification can cognition arise" (B75). So, despite the fact that lived experience is seamless, philosophical analysis can reveal how "[o]ur cognition arises from two fundamental sources in the mind" (B74), one innate, the other acquired. Yet, as influential as this account is, it seems to leave behind a problem: how do the two faculties unite, exactly?

Because the pure concepts that govern the understanding range over any conceivable experience, they are radically unlike the empirical concepts that we acquire through learning. Kant proposes to bridge this "heterogeneity" (B177) by adding the notion of schema. Schemata are meant to be hybrids that are both general and particular. There are supposedly 12 "transcendental schemata," one for each category (B182–184). History thus has a tendency to forget that "Kant's original division

of our representations into intuitions and concepts is not exhaustive, for there is a third class, about which we can say very little, other than that it is dependent on and somehow derivative from the others” (Gardner 1999, p. 170).

Although Kant was convinced that schemata are essential, these posits play a “disputed role” (Caygill 1995, p. 360) in Kantian scholarship and philosophy generally. It has even been said that “[t]he chapter on Schematism probably presents more difficulty to the uncommitted but sympathetic reader than any other part of the *Critique of Pure Reason*” (Walsh 1957, p. 95). Indeed, “it is the only chapter of the *Critique of Pure Reason* that is not treated separately in the *Cambridge Companion to the Critique of Pure Reason*” (De Boer 2016, p. 441fn2).

Arthur Schopenhauer, who was in the habit of praising Kant, considered the whole topic to be a non-starter. As Schopenhauer explained, “a *pure understanding* corresponded symmetrically to a *pure sensibility*. After this, there occurred to [Kant] yet another consideration that offered him a means of increasing the plausibility of the thing, by assuming the *schematism* of the pure concepts of the understanding. But precisely in this way is his method of procedure, to him unconscious, most clearly betrayed” (1966; p. 449; see Kelly 1909). Schopenhauer was not the last commentator to think that Kant’s schemata conflict with the rest of the *Critique*.

The conclusion Kant draws from his consideration of the requirements of schematism is not, as we might expect, that a schema is neither a concept nor an intuition but rather that it is both. This is an immediate consequence of his demand that a schema be both intellectual and sensuous. This inference is plainly suspect. [...] That theory is still embarrassed by both a philosophical and a textual difficulty. The philosophical difficulty, badly put, is that the view is self-contradictory. For Kant clearly regards “. . . is a particular” and “. . . is a universal” as mutually exclusive predicates. True, when he talks about a schema as a third thing, he does not say that it is both universal and particular but only that it is both intellectual and sensuous. This is not enough, however, to rescue the third-thing view of schema from contradiction (Gram 1968, pp. 93–94).

In the light of these difficulties, one must “decide whether, in this particular instance, Kant is making some genuine point in peculiar language, or whether his peculiar language has lured him into nonsense” (Warnock 1949, p. 77). I want to defend the latter option. However, as I shall explain later, I actually think that my criticism is in line with the bulk of what Kant urges in the *Critique*.

To see this, it might help to briefly retrace the reasoning that prompts Kant to posit schemata. The root tension is that sense impressions are particular, whereas the categories of the understanding are general. Were we to count experiential episodes with a clicker, witnessing two

instances of causation would result in two clicks, but a separate clicker tracking uses of the category “causality” would register only one click. It would register only one click because the relation of ground to consequent stays the same wherever it is found. Kant locates this uniformity in the mind: we come to the world expecting causal relations and then discover many of these, but we do not come to the world expecting nothing and then discover causality. Because this self-fulfilling expectation is hard-wired into any mind, it cannot lead to relativism. As Donald Davidson explains, “[t]he dominant metaphor of conceptual relativism, that of differing points of view, seems to betray an underlying paradox. Different points of view make sense, but only if there is a common coordinate system on which to plot them [...]” (1973–74, p. 6). Kant sets out to map that shared coordinate system. His conclusion is that, however foreign another human mind may be, its experience will include things like causes, possibilities, and so on.

Kant famously says that “[t]houghts without content are empty” and “intuitions without concepts are blind” (B75). The Aristotelian distinction between matter and form helps him articulate this mutual dependence. Kant writes that, “in respect to things in general, unbounded reality is regarded as the matter of all possibility, but its limitation (negation) as that form through which one thing is distinguished from another in accordance with transcendental concepts” (B322). So, even though Kant aims to debunk many scholastic pretensions, he employs their vocabulary to express some of his most important ideas. Indeed, “Kant inherited from Aristotle the fundamental distinction between the elements [i.e. matter and form],” but he reworks them so that “the material element is precisely the particular element being the given one in perception, while the formal element as conceptual is the general element” (Rotenstreich 1956, p. 28).

I think that Kant’s reworking of the Aristotelian distinction between matter and form is largely successful. Seen in this light, sensibility supplies a determinable inflow of raw materials which are instantly made determinate by the a priori categories of the understanding. However, one will run into trouble whenever one attempts to study those categories on their own, apart from matter. After all, “[i]f form means very little outside of its opposition to matter, then problems arise when the attempt is made to separate formal and material elements. [...] In the face of this Kant develops some extremely subtle analogues for Platonic participation, such as schematism [...]” (Caygill 1995, p. 205).

Like Aristotle, Plato used forms to account for the common denominator that runs across two or more similar things. Unlike Aristotle, however, Plato allowed for the independent existence of (upper-case) Forms, apart from any matter. This Platonic realist view, however, generates a

regress. For if the similarity between individuals like Socrates and Plotinus is explained by an appeal to the Form “Human” (which both men have in common), then we seemed forced to posit yet another Form to explain the similarity between Socrates and the Form “Human.” This is the “third man” objection to the theory of Forms (Cohen 1971). Curiously, by positing schemata, Kant does not wait for a critic but rather grafts a third-man outright. Even so, I believe that Kant’s notion of schema is vulnerable to a similar “third man” regress. If schemata are needed to bind concepts and intuitions, then further schemata will be needed to bind schemata and concepts and schemata and intuitions. To meet these ever-expanding demands, the posits will have to be multiplied exponentially.

Matter makes no sense apart from form, just as form makes no sense without matter, so given what Kant says about thoughts without content being “empty” and intuitions without concepts being “blind” (B75), it is easy to see why he was drawn to the Aristotelian form/matter distinction. Yet, an overlooked virtue of the form/matter distinction is that, properly handled, it is regress-proof. It makes no sense to ask what the matter of matter is, or to ask what the form of form is. Kant writes that his “aim is basically identical with [Aristotle’s] although very distant from it in execution” (B105). However, one can wish that Kant had upheld the Aristotelian matter/form distinction more consistently, with no hint of Platonism. As things stand, Kant’s notion of schema is vulnerable to a third-man regress.

Clearly, if cognition is to occur, the timeless universality of pure concepts must descend to a time-bound level. “Hence an application of the category to appearances becomes possible by means of the transcendental time-determination which, as the schema of the concept of the understanding, mediates the subsumption of the latter under the former” (Kant B178). Because there are limits to the schematic complexity that one can envision—one cannot picture a large number like 1000 by a series of dots (•••• . . .)—Kant stresses that schemata are not images, but rather the “representation of a general procedure of the imagination for providing a concept with its image” (B179). The idea is that, to apply a category, one must have recourse to some “rule” for constructing token images on demand, since no single image could capture all the particulars that can be encountered in experience. However, the difficulty with this proposal is that schemata must supply (i) pure concepts with a blueprint of what would satisfy them but (ii) must not be held as an image. It is hard to see what could meet these demands. As Warnock explains,

[I]f I can understand my rule, and so understand what my illustrative model is *for*, I have *already* ‘applied the concept’—namely to the model.

But I must in this case have applied it *without* the rule and the model; if so, they are unnecessary; I may find a model helpful, e.g. as a simple specimen, or a reminder, but it cannot be used to *explain* how it is that I can apply the concept. I cannot understand how a model illustrates causality, unless I already know how 'cause' is [sic] used (Warnock 1949, p. 82).

What Warnock argues, in short, is that the possession or mastery of a rule automatically gives one some idea of what the resultant product would look like, if and when applied. To my mind, the whole point of saying that one has a "schematic" idea of a large number like 1000 is to account for this phenomenological vagueness. In any event, few transcendental schemata are that complex (the relation of ground to consequent, for instance, is actually quite easy to fathom). Yet, if some provisional depiction of what a rule will yield is available ahead of being put into practice, then the imagination has already supplied that rule with some image-like content.

Krausser (1976) suggested that Kant's discussion of schemata outlines the various desiderata that would have to be met by a successful theory of pattern recognition. Krausser's interpretation has merit, insofar as Kant does write about the means enlisted to correctly identify the particulars falling under that concept (B180). But, on reflection, pattern recognition is not a good fit for the categories of the understanding, which are defined as being pervasive and necessary. So, unless one wants to hold that subjects are born with concepts like "dog" (Laurence and Margolis 2002), one must grant that pattern recognition is an *a posteriori* activity that falls outside "the proper business of a transcendental philosophy" (B91).

Faced with an unworkable idea, one can redouble one's interpretive efforts (Allison 1980; Bennett 1966; Guyer 1987) or see this as evidence that the idea in question is mistaken (Gardner 1999; Prichard 1909; Warnock 1949). Siding with Schopenhauer and others who are pessimistic about the viability of schemata, I want to argue that the faculty of the understanding does not require any schemata to render the deliverances of sensibility intelligible. For independent philosophical reasons (coming mainly from C. S. Peirce), I am committed to the idea that many thought-processes are structured by some sort of diagrammatic reasoning (see Krämer and Ljungberg 2016). My main claim, however, is that so long as the various Kantian categories impose *constitutive* conditions, such structuring should not require any application. I have poor vision, so I am reminded of how my glasses filter my apprehension of the world whenever I take them off. However, the kind of filter that interests Kant is not the kind that one can ever take off. So, while I take

issue with Kant, I actually think my proposal squares better with what he says in the *Critique*.

In that work, Kant takes cognition as a whole and wonders, in effect, how this activity is even possible. Clearly, an answer to this ambitious query cannot be as straightforward as, say, explaining how an external machine works, insofar as we have to utilize cognition in the very act of investigating cognition. As Kant argues, the unity of one's experiences shows that "the simple and in content for itself wholly empty representation I [...] accompanies every concept" (B404; boldface in original; see Westphal 2005). The goal of philosophy, then, is to make this inescapability explicit. Knowledge can be known, so epistemology—the folding of cognition onto itself—becomes a legitimate field of inquiry. There is a crucial error, though, that such an epistemological inquiry must never commit, and that consists in trying to analyse something that was previously deemed primitive. As I read it, schemata are a product of that error.

Kant repeatedly insists that his categories are the very forms of cognition. I take this to mean that the pure concepts which condition all mental activity are not amenable to further analysis. They can be catalogued and taxonomized into a table, but that is about it. Yet, in spite of this primitive status, Kant felt the need to ask how the conditions for the possibility of knowledge are themselves possible. This effectively undermines the *Critique's* central rationale. However, "the Deduction argues in an abstract and general way *that* the categories *must* apply in experience, the Schematism attempts to show *how* it is *possible* to apply them to objects of experience" (Pendlebury 1995, pp. 778–779). It seems to me that, if the contribution of the categories is truly pervasive (whether one looks outward or inward), then the realization *that* they are operative is as good an explanation as one shall ever get. Asking for more is asking too much. This may explain why Kant was forced to concede that "the schematism of our understanding is a hidden art in the depths of the human soul, whose true operations we can divine from nature and lay unveiled before our eyes only with difficulty" (B180–181).

Matherne (2014) suggested that we can dispel this apparent obscurity if we take Kant's reference to "art" (*Kunst*) seriously. She uses the notion of art to connect the topic of schematism to tacit know-how. I am sympathetic to this move. That said, an important consequence of Matherne's proposal is that the contribution of schemata becomes something we cannot talk about—on pain of transforming that skilful contribution into a theoretical object or knowledge-that. We cope and orient ourselves in the world in a mainly unspoken way (Legg 2003). If the contribution of schemata to that coping and orienting is indeed a kind of know-how, then beyond a certain point, discursive explication must give way to an

acknowledgement that “[w]hat we cannot speak about we must pass over in silence” (Wittgenstein 2001, §7). I am hesitant to label this stance and theorize about it too vigorously, because the first rule of quietism is that you do not speak of quietism.

Far from being spooky, such mandatory moments of silence are central to the philosophical project of the *Critique*. Indeed, Kant repeatedly warns against making positive statements about the noumenal world, because “the categories can by no means reach beyond the boundaries of the objects of experience” (B308). However, the fact that forms of the understanding govern the proximate side of this phenomenal/noumenal divide can encourage a certain temerity that we would do well to keep in check. Even in the realm of appearances, when one asks a transcendental “how is this possible?” question and arrives at an answer, it becomes a fallacy of sorts to take that answer and ask, in turn, “and how is *this* possible?” In natural science, questions about how things are possible can be asked recursively. In philosophy, however, we reach rock bottom much faster. A parallel error in ethics, for example, would consist in holding that P has intrinsic value while trying to justify P’s value by appealing to its consequences. I think that this is essentially what is happening with schemata.

Cognition involves subsuming intuitions under concepts. The notion of schemata is no doubt relevant to an explanation of how empirical concepts like “dog” work. Surely I have stored some schematic outline of a dog, even when I am not before one (see Eco 1997, pp. 85–87). The situation is vastly different, however, in the case of pure concepts. “One can call something a dog because of what it looks like—it presents a doggish appearance—but one cannot call something a cause because it presents a cause-ish appearance” (Chipman 1972, p. 40; a similar point is made by Woods 1983, p. 203). Kant’s master argument is that, although categories like causality cannot be encountered in regular experience, they should nevertheless be countenanced, because without them regular experience would fail to be intelligible. Yet, if this is so, then what are we to make of talk of “the *application* of the category to appearances” (B176; boldface in original)? A concept like “dog” is applied by picking out dogs and refraining from picking out non-dogs. But, given that pure concepts colour every thought, there is literally nothing to contrast them with (see Newton 2015). A pure concept, whatever else it may be, is not the sort of thing that requires application. It *just* works, in the same direct way that matter *just* has a form.

John McDowell remarks, quite rightly, that “[t]he original Kantian thought was that empirical knowledge results from a co-operation between receptivity and spontaneity” (1996, p. 9). Hanna (2005, p. 255) calls this the “togetherness principle.” Yet, since our use of two labels is clearly meaningful, it is probably too much to claim, as McDowell does, that

“receptivity does not make an even notionally separable contribution to the co-operation” (1996, p. 9). Surely we can prescind the togetherness principle. We should therefore aim for a conception that acknowledges *two* faculties but no “third thing” (B177) connecting them.

Such a conception can be achieved if we follow Wittgenstein’s (1953, §115) advice and disabuse ourselves of a mistaken picture. So long as we envision the Kantian faculties as residing on different storeys—one above, the other below, say—we will feel a need to posit a “ladder” or “missing link” between the two. We should thus supplant this with a better analogy, say, that of a sponge in water. This analogy is better because it clearly makes no sense to ask what might “connect” the water and the sponge. The lack of connector makes the situation regress-proof. I therefore suggest that sensibility soaks in understanding in just this way.

Although Kant defines a schema as a “representation of a general procedure of the imagination for providing a concept with its image” (B179), there is a growing realization among today’s philosophers that procedures can be possessed and utilized without being represented (see Gross *et al.* 2015; Locatelli and Wilson 2017). On my proposed reading, we represent the world, but we cannot fully represent how exactly we do this. Whatever its shortcoming, this nonrepresentational gloss captures Kant’s claim that “[t]he understanding is [...] not merely a faculty for making rules through the comparison of the appearances; it is itself the legislation for nature [...]” (A126).

The foregoing considerations lead me to conclude that the Kantian faculties of intuition and understanding require no schemata whatsoever to co-operate. It is a good methodology to be charitable in one’s interpretations, so it is normal that we should try to make Kant’s proposed glue stick. However, on my reading, even the most charitable efforts will fail whenever they ask a “How possible” question about a transcendental “How possible” answer. The only possible answer to such a question is: that is just the way things are. Most of the time, Kant stays true to this, as evidenced by the fact that the section on schemata can be excised from the *Critique* without much loss (see De Boer 2016, p. 441fn2). Yet, given that the urge to analyse primitives can be catered to only at the cost of engendering a regress, schemata might have a place in that book, albeit in the section on paralogisms.

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