McDowell's Kantianism *

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Abstract

In recent work, John McDowell has urged that we resurrect the Kantian thesis that concepts without intuitions are empty. I distinguish two forms of the thesis: a strong form that applies to all concepts and a weak form that is limited to empirical concepts. Because McDowell rejects Kant's philosophy of mathematics, he can accept only the weaker form of the thesis. But this position is unstable. The reasoning behind McDowell's insistence that empirical concepts can have content only if they are actualizable in passive experience makes it mysterious how the concepts of pure mathematics can have content. In fact, historically, it was anxiety about the possibility of mathematical content, and not worries about the "Myth of the Given," that spurred the retreat from Kantian views of empirical content. McDowell owes us some more therapy on this score.

1 The Kantian thesis about content

A guiding thought in Kant's critical philosophy is that content requires the cooperation of both understanding and sensibility, both concepts and intuitions. That is, it is only through relation to intuition that conceptual thought manages to acquire real (as opposed to "merely logical") meaning, to be *about* objects, and hence to be true or false:

> . . . all thought must, directly or indirectly, by way of certain characters, relate ultimately to intuitions, and therefore, with us, to

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> sensibility, because in no other way can an object be given to us. (*Critique of Pure Reason,*[1] A19/B33)
>
> Without sensibility no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind. It is, therefore, just as necessary to make our concepts sensible, that is, to add the object to them in intuition, as to make our intuitions intelligible, that is, to bring them under concepts. (A51/B75)

Without relation to intuition—that is, to actual or possible sensory experience—concept use would be nothing but a meaningless game:

> ...we have seen that concepts are altogether impossible, and can have no meaning, if no object is given for them, or at least for the elements of which they are composed. (A139/B178; cf. A147/B186)
>
> If knowledge is to have objective reality, that is, to relate to an object, and is to acquire meaning and significance in respect to it, the object must be capable of being in some manner given. Otherwise the concepts are empty; through them we have indeed thought, but in this thinking we have really known nothing; we have merely played with representations. That an object be given (if this expression be taken, not as referring to some merely mediate process, but as signifying immediate presentations in intuition), means simply that the representation through which the object is thought relates to actual or possible experience. (A155–6/B194–5)

A chief task of John McDowell's *Mind and World*[2] is the resurrection of this Kantian insight as the key to a satisfactory picture of empirical thought. One of McDowell's "main aims," he writes, is "to suggest that Kant should still have a central place in our discussion of the way thought bears on reality" (3). He glosses the Kantian doctrine that content requires the cooperation of the understanding and sensibility as follows:

> ...the very idea of representational content, not just the idea of judgements that are adequately justified, requires an interplay between concepts and intuitions, bits of experiential intake. Otherwise

[1] Trans. Norman Kemp Smith (New York: St. Martin's, 1965).
[2] Cambridge: Harvard University Press, 1994.

> what was meant to be a picture of the exercise of concepts can depict only a play of empty forms. (6)

McDowell argues that this Kantian idea is sound, provided one does not distort it into a hopeless dualism of conceptual scheme and extra-conceptual Given. Properly understood, Kant's insight amounts to this: in order for our most basic conceptual capacities to be usable in taking a stand on how things are, they must also be capable of *passive* actualization in sensory experience.[3] This does not mean that only concepts with an observational use can have content. Although purely theoretical concepts (like *quark*) are not themselves capable of passive actualization in experience, they are defined by their roles in theories in which observational concepts also figure. Their inferential connections with these more basic concepts—concepts that *can* structure sensory experience—are partly constitutive of their meanings. Hence theoretical concepts, too, depend for their content on their (indirect and inferentially mediated) "relation to intuition."[4]

All of this talk of Kant may give the impression that McDowell is defending the very same thesis about conceptual content as Kant did, the

> **Strong Kantian Thesis:** In order to have content, concepts must have some relation to intuition, that is, to actual or possible sensory experience. More precisely: they must be either (i) capable of passive actualization in sensory receptivity or (ii) defined by their roles in a theory in which concepts that are so capable also figure.

But in fact, the thesis McDowell defends is weaker than Kant's. The difference is never made explicit in *Mind and World*; indeed, it is obscured by McDowell's subsequent restatements of Kant's point:

> Kant makes his remark about intuitions and concepts in the course of representing *empirical* knowledge as the result of a co-operation

[3]McDowell also holds, conversely, that in order to understand the deliverances of sensory experience, we must see them as structured by the very same conceptual capacities that are exercised in judgment. Neither the spontaneity of thought nor the receptivity of sensibility is intelligible apart from the other: they form a package.

[4] On theoretical concepts, see McDowell's Woodbridge Lectures, "Having the World in View: Sellars, Kant, and Intentionality," *Journal of Philosophy* 95 (1998), Lecture II, 464: "Not, of course, that we cannot direct thought at objects that we are unable to bring into view, perhaps because they are too small or too far away. But thought so directed is carried to its object, so to speak, by theory." See also McDowell's response to Crispin Wright in "Reply to Commentators," *Philosophy and Phenomenological Research* 58 (1998), 427–428.

> between receptivity and spontaneity, between sensibility and understanding. (4, my emphasis)
>
> The original Kantian thought was that *empirical* knowledge results from a co-operation between receptivity and spontaneity. (9, my emphasis)

But this *wasn't* the original Kantian thought. Kant's claim was that *all* conceptual content—not just empirical content, but mathematical content, as well—requires relation to intuition.[5] McDowell is careful to endorse only a weaker claim, the

> **Weak Kantian Thesis:** In order to have content, *empirical* concepts must have some relation to intuition, that is, to actual or possible sensory experience. More precisely: they must be either (i) capable of passive actualization in sensory receptivity or (ii) defined by their roles in a theory in which concepts that are so capable also figure.

What stands between the Weak and Strong versions of the Kantian Thesis is, of course, Kant's philosophy of mathematics—and with it all the baggage of transcendental idealism. On Kant's view, although we can come to have geometrical knowledge *a priori*—its justification does not rest on any actual sensory experience—our geometrical concepts have content only in so far as they can be actualized in possible experience. What ensures that they *can* be so actualized is Kant's doctrine that (Euclidean) space is the form of outer intuition:

> Although we know *a priori* in synthetic judgments a great deal regarding space in general and the figures which productive imagination describes in it, and can obtain such judgments without actually requiring any experience, yet even this knowledge would be nothing but a playing with a mere figment of the brain, were it not that space has to be regarded as a condition of the appearances which constitute the material for outer experience. (A157/B196; cf. B147)

[5] Although he takes mathematics to yield knowledge about ordinary empirical objects, Kant uses "empirical" in a way that excludes the concepts and judgements of mathematics: empirical intuitions relate to *sensation,* not merely the form of intuition (A20/B34); empirical judgements are *a posteriori*, not *a priori* (A47/B64), and contingent, not necessary (B142).

What is said here of geometry applies, *mutatis mutandis*, to all of the mathematics recognized by Kant (including arithmetic and the calculus). By adding the qualification "empirical," McDowell declines to endorse this Kantian story about the relation between mathematical concepts and sensory experience.

And for good reason. McDowell does not want to be saddled with Kant's view that our grasp of geometrical concepts depends on our ability to construct geometrical figures *a priori* in pure intuition. As Michael Friedman has shown,[6] that view made sense for Kant—who had no *logical* resources for representing infinite mathematical structures—but it does not make sense for *us*. Major transformations in the fields of mathematics and logic have deprived Kant's philosophy of mathematics of much of its motivation.[7] Moreover, *defending* a Kantian philosophy of mathematics would surely require something like transcendental idealism, without which construction in pure intuition would have only a subjective and psychological significance.[8]

But can McDowell coherently retain Kant's insight about empirical content while rejecting his view of mathematical content? Does the Kantian package come apart so neatly into independent modules? Given the close relation between Kant's view of empirical content and his philosophy of mathematics, it is not obvious that the one can survive apart from the other. If McDowell is to make the Weak Kantian Thesis attractive, he must convince us that it can be motivated and defended without endorsing the Strong Kantian Thesis as well.

2 Three ways out

McDowell could escape this demand by affirming the Strong Kantian Thesis and denying that mathematical concepts can have content without relation to intuition. There are three ways one might do this:

- **Kantian Approach:** The content of mathematical concepts is grounded in the *a priori* form of our sensory intuition.

- **Empiricist Approach:** Mathematical concepts acquire content in es-

[6] *Kant and the Exact Sciences* (Cambridge: Harvard University Press, 1992), chapter 1.

[7] I should note that although Kant's appeal to pure intuition in geometry has fared badly, his appeal to intuition in arithmetic and algebra still has some appeal. For a useful, though somewhat dated overview, see Charles Parsons, *Mathematics in Philosophy* (Ithaca, NY: Cornell University Press, 1983), 22–6.

[8] See the passage from A157/B196 quoted above.

sentially the same way as theoretical concepts of natural science: through their place in an inferentially articulated web of concepts, some of which can be actualized immediately in experience.[9]

- **Formalist Approach:** Mathematics has no content, either because it is just a game with symbols[10] or because it is somehow a "by-product" of our understanding of language.[11]

I have already explained why the Kantian approach is unattractive. I do not think that McDowell would (or should) be tempted by the other two approaches, either, for two main reasons.

First, neither the empiricist nor the formalist approach coheres with McDowell's general philosophical views. McDowell explicitly rejects the generalized Duhemian argument that leads Quine to mathematical empiricism.[12] So he has no reason to deny the epistemic autonomy of mathematics from empirical science: the fact that (as Parsons puts it) "...what confronts the tribunal of experience is not the pure theory of [some kind of mathematical structure] but its being supposed represented by a definite aspect of the physical world."[13] As for the formalist approach, McDowell is generally averse to revisionist, nonrealist reconstruals of discourse that, on its face, appears to be making objective claims.[14] It is hard to imagine him denying that mathematics has content.

Second, if defending the attractive Kantian thought about content should turn out to require adopting an empiricist or formalist philosophy of mathematics, that would be a severe blow to McDowell's quietist conception of his project. Either of these approaches would require him to make good on substantial technical promissory notes, and quite possibly to repudiate a good part

[9]See, e.g., W. V. O. Quine, *From a Logical Point of View* (Cambridge: Harvard University Press, 1953), 42–46, *Pursuit of Truth*, revised ed. (Cambridge: Harvard University Press, 1992), 94–5.

[10]As Thomae argued: see Gottlob Frege, *Grundgesetze der Arithmetik*, Vol. I (Jena: H. Pohle, 1893), sections 86–103. Note that more sophisticated varieties of formalism (such as Hilbert's or Curry's) would not be sufficient for present purposes, because they allow that *meta*mathematics has content.

[11]See Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. C. K. Ogden (London: Routledge, 1922), 6.2's; A. J. Ayer, *Language, Truth and Logic*, 2nd ed., (London: Victor Gollancz, 1946), chapter 4. Note that other kinds of logicism (such as Frege's or Russell's) would not be sufficient for present purposes, because they allow that the logic to which mathematics is reduced has content.

[12]*Mind and World*, 156–161.

[13]*Mathematics in Philosophy*, 196.

[14]See the essays reprinted in Part II of *Mind, Value, and Reality* (Cambridge: Harvard University Press, 1998).

of ordinary mathematical practice on strictly philosophical grounds.[15] Accordingly, I will assume that McDowell is committed to endorsing the Weak Kantian Thesis while rejecting (or at least refraining from endorsing) the Strong.

3 Keeping quiet about mathematics

If McDowell's project were to give a general account of the objective purport of thought, then this retrenched position would be unsatisfactory. But McDowell's aim in *Mind and World* is a more limited one, therapeutic rather than constructive: to show us how we can retain a natural picture of the relation between experience and empirical thought without lapsing into the Myth of the Given. On McDowell's view, the Weak Kantian Thesis is prephilosophically "innocent" and thus need not be argued for. McDowell's aim is simply to show us how to avoid the "philosophical duress" that leads people to deny it, thereby "liberating" it from "the appearance of generating a philosophical mystery."[16] Can't he do this without saying *anything* about mathematics?

I want to argue that he cannot. The same "prephilosophically natural" line of thought that supports the Weak Kantian Thesis severely constrains our options for an account of *mathematical* content. It forces us either to take one of the three "ways out" canvassed in section 2 or to posit a special, nonsensory faculty of mathematical receptivity, such as Gödel's "mathematical intuition." Accordingly, those for whom none of these options is satisfactory—and there are many in this camp—have a reason for rejecting the line of thought McDowell offers in support of the Weak Kantian Thesis, prephilosophically attractive though it may be. And McDowell cannot block this source of dissatisfaction

[15]Quine bites this bullet and rejects as contentless all higher mathematics not implicated in physical theory: "So much of mathematics as is wanted for use in empirical science is for me on a par with the rest of science. Transfinite ramifications are on the same footing insofar as they come of a simplificatory rounding out, but anything further is on a par rather with uninterpreted systems" ("Review of Parsons' *Mathematics in Philosophy*," *Journal of Philosophy* 81 [1984], 788). Similarly, Wittgenstein's "by-product" theory seems to justify only a limited part of arithmetic: see Michael Friedman, "Logical Truth and Analyticity in Carnap's 'Logical Syntax of Language'," in *History and Philosophy of Modern Mathematics*, ed. William Aspray and Philip Kitcher (Minnesota Studies in the Philosophy of Science, Minneapolis: University of Minnesota Press, 1988), 92; Michael Potter, *Reason's Nearest Kin: Philosophies of Arithmetic from Kant to Carnap* (Cambridge: Cambridge University Press, 2000), chapter 6.

[16]"Reply to Commentators," 405.

without saying something about mathematical content and its relation to empirical content.

To see why, we must rehearse a bit of the dialectic in Lecture I of *Mind and World*. How, McDowell asks, can empirical thought come to be rationally constrained by how things are with the objects and relations it is about? If we assume that perception is a nonconceptual capacity, McDowell argues, then the gap between empirical thought and its objects looks unbridgeable. Since we cannot suppose that nonconceptual perceptual impressions stand in justificatory relations to thoughts—that is just the Myth of the Given—there is no way for the objects of our (putative) thoughts to be incorporated into the "space of reasons," so that our thoughts can answer rationally to them. Hence we have two options. We can learn to see perception as a conceptual capacity, as McDowell recommends. Or we can give up the demand that thought be *rationally* constrained by its objects.[17] On Davidson's view, for example, thoughts can be rationally constrained only by other thoughts: ". . . nothing can count as a reason for holding a belief except another belief."[18] Though beliefs can be *causally* influenced by what goes on with their objects, there is no direct justificatory relation between the world and one's beliefs; thought is not rationally constrained by its objects.[19]

McDowell rejects the Davidsonian option on the grounds that content is unintelligible unless thoughts can be *rationally constrained* (and not just causally influenced) by the objects they are about.[20] What gives the concept *dog* its content is the fact that the actual doings of dogs can have a rational bearing on thoughts involving it: the fact that Fido's barking—not a representation of Fido's barking, not a belief that Fido is barking, but the barking itself, made manifest in experience—can serve as a *reason* for thinking that a dog is barking. If the doings of dogs could have no rational bearing on my thoughts, McDow-

[17]Strictly speaking, by *how things are with* its objects. I'll continue to use the shorter form, for brevity.

[18]"A Coherence Theory of Truth and Knowledge," reprinted in *Truth and Interpretation: Perspectives in the Philosophy of Donald Davidson* (Oxford: Basil Blackwell, 1986), 310.

[19]No doubt there is a weak or indirect sense of "rational constraint" in which Davidson could agree that our thoughts are rationally constrained by their objects (see Brandom, "Perception and Rational Constraint," *Philosophy and Phenomenological Research* 58 [1998], 369–74). But McDowell's claim is that thoughts must be rationally constrained by their objects in the strong sense that how things are with their objects can be a *reason* (from the thinker's own first-personal point of view) for holding them. Neither Davidson nor Brandom can accept this.

[20]*Mind and World*, 14–18, 68.

ell urges, then my thoughts could not plausibly be said to be *about* dogs at all. McDowell is willing to acknowledge that some concepts (theoretical concepts like *quark* or *electromagnetic field*) get their content indirectly, through their inferential relations to other concepts in a *theory*.[21] But he insists that the theory acquires content at the ground level through its use of concepts on which the world can have a direct rational bearing. A network of "thoughts" that stood in rational relations *only* to each other—as in Davidson's coherentist picture—would not be *about* anything; it would be empty, "frictionless spinning in a void."[22] Indeed, it would not be a network of *thoughts* at all, but something more like a game with tokens, standing in relations that mimic inferential ones.

McDowell's rejection of Davidsonian coherentism commits him to explaining *how* thought can be rationally constrained by the things it is about: for that is precisely what Davidson denies is possible, on the ground that sensations, which "connect the world and our beliefs," are not propositional.[23] What carries empirical thought to its objects, on McDowell's view, is *experience*, conceived as the passive actualization of concepts in sensory receptivity. Much of *Mind and World* is devoted to diagnosing the "mental block" that keeps Davidson and others from thinking of experience in this way. On McDowell's view, rational constraint by the world amounts to rational constraint by experience, because in experience, properly conceived, *the world itself* is manifest to us: ". . . when we see that such-and-such is the case, we, and our seeing, do not stop anywhere short of the fact. What we see is: that such-and-such is the case."[24] My reason for thinking that there is a black dog in front of me can be the fact itself—*that there is a black dog in front of me*—as made manifest to me in perceptual experience.

If we combine McDowell's demand that thought be rationally constrained by its objects with his conception of experience as the medium through which *empirical* thought is rationally constrained by its objects, we get the Weak Kantian Thesis. What makes empirical thoughts rationally answerable to the world is that the very same concepts that make up these thoughts also structure the deliverances of sensory experience through which the world is made manifest. Thus, in order to have content, empirical concepts must either be capable of

[21]See note 4, above. He is even willing to accept a certain amount of indeterminacy in the meaning of theoretical concepts: *Mind and World*, 161.

[22]For the phrase, see *Mind and World*, 11.

[23]"A Coherence Theory of Truth and Knowledge," 311.

[24]*Mind and World*, 29.

passive actualization in experience themselves or have constitutive inferential relations (via theory) to concepts that are so capable.

But now let us apply this line of thought to the problem of *mathematical* content. If it is to have content, mathematical thought must be rationally constrained by how things are with its *objects*, and not just by more mathematical thought. But what is the mechanism by which mathematical objects are made manifest to us, so that facts about them can serve as *reasons* for our mathematical beliefs? Not sensory experience: in rejecting mathematical empiricism, we have denied that the contingent course of experience has any rational bearing on (pure) mathematical thought—even a theoretically mediated bearing—and in rejecting Kant's philosophy of mathematics we have denied that mathematics is concerned with the necessary *form* of sensory experience. So it looks as if we will need to posit a special *mathematical* form of receptivity distinct from sensory experience, like Gödel's "mathematical intuition."[25]

Perhaps McDowell will follow Gödel here and claim that when we are properly initiated into the mathematical form of life, we come into quasi-perceptual contact with sets, numbers, and the relations that hold between them. If he takes this route, he will have to do some work to overcome the "mental block" that most philosophers of mathematics have had against accepting such a faculty.[26] This will be at least as big a job as the one McDowell takes on in *Mind and World*: overcoming anxieties about the rational bearing of sensory experience on thought. On the other hand, if McDowell does *not* posit a faculty of mathematical receptivity, he owes us an explanation of how mathematical thought can be rationally constrained by its objects.

Even given McDowell's nonconstructive, "therapeutic" aims, then, he cannot afford to remain quiet about mathematics. As we have seen, the anxiety about the Myth of the Given he addresses in *Mind and World* is not the *only* source of resistance to the Weak Kantian Thesis. There is a parallel anxiety about the relation between *mathematical* thought and its objects. And this anxiety is

[25] "What is Cantor's Continuum Problem?," reprinted in *Philosophy of Mathematics: Selected Readings,* ed. Paul Benacerraf and Hilary Putnam, 2nd ed. (Cambridge: Cambridge University Press, 1983), 484. Note that accepting Gödel's proposal is not a way of defending the Strong Kantian Thesis, since Gödel's notion of intuition has nothing to do with sensory experience (Parsons conjectures that it derives from Husserl: *Mathematics in Philosophy,* 24).

[26] See, e.g., Paul Benacerraf's discussion of Gödel in section V of "Mathematical Truth," *Journal of Philosophy* 70 (1973), 661–80. The worry Benacerraf raises in that article about the possibility of mathematical *knowledge* can profitably be reconstrued as a worry about the possibility of mathematical *content.*

stoked, not soothed, by prephilosophically attractive line of thought that supports the Weak Kantian Thesis. If empirical thought must stand in rational relations to its objects in order to have content, then how does mathematical thought escape the same requirement? Nothing McDowell says about "the responsibility of thinking to its subject matter"[27] depends on features peculiar to *empirical* thought. The idea is simply that unless how things are with X's can be a *reason* for thinking that p, the thought that p cannot intelligibly be said to be *about* X's. It is hard to see what considerations could be given to justify restricting the argument to *empirical* substituends for X.

McDowell needs to offer us some such considerations, or to dispel the anxiety about mathematical content in some other way. Otherwise there will be tremendous pressure to relieve the anxiety by rejecting the very idea that thoughts need stand in rational relations to the objects they are about. And once this prephilosophically attractive idea is rejected, it seems irrational to hang on to the Weak Kantian Thesis. Thus the anxiety about mathematical content, if left untreated, ultimately threatens to undermine McDowell's thinking about *empirical* content as well. That ought to be a sufficient reason for McDowell to say something to dispel it.

In fact, as I will argue in section 4, historically the project of accounting for mathematical content without appeal to "pure intuition" led directly to the banishment of intuition from accounts of *empirical* content as well. The combination of the Weak Kantian Thesis with the denial of the Strong proved to be unstable. It appears, then, that the desire to avoid the Myth of the Given was not the only reason for the widespread rejection of the Weak Kantian Thesis in twentieth-century philosophy. Pressures arising from attempts to make sense of *mathematical* content apart from receptivity also played an important role.

4 The revolt against the Kantian theses

Dissatisfaction with the Kantian theses has a long history. In *The Semantic Tradition from Kant to Carnap*,[28] J. Alberto Coffa traces a "semantic tradition" of resistance to Kant's dictum that concepts without intuitions are empty. Beginning with Bolzano, the heroes of this tradition sought to understand mathematical content without appeal to intuition or possible experience. One way

[27] "Précis of *Mind and World*," 366.

[28] Ed. Linda Wessels (Cambridge: Cambridge University Press, 1991).

of doing this (that of Frege and Russell) was to define mathematical concepts in purely logical terms. But there was a rival strand of the semantic tradition, passing from Helmholtz through Poincaré and (the early) Hilbert to Carnap. Its guiding idea was that a system of mathematical concepts could derive their contents through their inferential relations to *one another*, without needing to be connected either to logical objects (as in Frege's construction) or to objects of experience (as in Kant's). On this view, mathematical axioms were "definitions in disguise," which gave meaning to the primitive terms contained in them. Carnap gives a nice description of the approach in the Preface to *The Logical Syntax of Language*:[29]

> Up to now, in constructing a language, the procedure has usually been, first to assign a meaning to the fundamental mathematico-logical symbols, and then to consider what sentences and inferences are seen to be logically correct in accordance with this meaning.... The connection will only become clear when approached from the opposite direction: let any postulates and any rules of inference be chosen arbitrarily; then this choice, whatever it may be, will determine what meaning is to be assigned to the fundamental logical symbols. (xv)

This strand of the semantic tradition is often taken to be "formalistic," in a sense that *excludes* talk of meaning or content. But in fact, Coffa points out, its real concern was to give an account of nonempirical content free of Kantian talk of "intuition" and "forms of experience":

> If Kant was right, concepts without intuitions are empty, and no geometric derivation is possible that does not appeal to intuition. But by the end of the nineteenth century, Bolzano, Helmholtz, Frege, Dedekind, and many others had helped determine that Kant was not right, that concepts without intuition are not empty at all. The formalist project in geometry was therefore designed not to expel meaning from science but to realize Bolzano's old dream: the formulation of nonempirical scientific knowledge on a purely conceptual basis. Once the Kantian prejudice was removed, one could see the hidden message of formalism concerning the meaning of geometric primitives: It is not that meaning is given at the beginning, in order

[29] Trans. Amethe Smeaton (London: Routledge, 1937).

> to be immediately taken away so that geometers can do their work properly; rather, as Poincaré and Hilbert argued, meaning is first given by the very axioms that constitute the discipline. (140)

The idea that one could make sense of mathematical content without invoking experience or intuition proved to be corrosive of the whole Kantian framework. If holistic inferential articulation is sufficient for mathematical content, why not for empirical content as well? Taking this question seriously, the neo-Kantians of the Marburg school "... severely circumscribed the role of intuition in knowledge":

> A small movement, constituted mainly by philosopher-scientists (Helmholtz, Planck; but also Zeller, Schlick, and others), reexamined the Kantian conception of knowledge, especially in regard to the role played by sensibility (intuition) in *empirical* knowledge. They concluded that if we remove the inappropriate restrictions Kant had imposed on legitimate knowledge, if we realize that *concepts without intuitions can yield empirical knowledge* [my emphasis], the way is opened for knowledge of things-in-themselves; such knowledge derives not from sensibility but from the understanding, acting under the guidance of science... (181)

Ultimately this move to marginalize the transcendental role of sensibility led to Neurath's dismissal of the idea of comparing claims with experience or reality as senseless. Claims, Neurath argued, can be compared only with other claims (364).

What is important for present purposes is not the tenability of such a view, but the way the rejection of the Strong Kantian Thesis led to the rejection of the Weak. As Michael Friedman explains:

> ... the very factors that moved early positivism towards traditional empiricism and away from Kant—the rejection of pure intuition and the synthetic a priori—also made a genuine empiricist position impossible. Without pure intuition, the 'formal' or 'structural' basis for objective judgement—the infinitely rich set of logical forms of Frege's new logic—now has no particular connection with experience or the empirical world: objective judgement has no need for 'content' in the Kantian sense. In this respect, it became much more

difficult for the positivists to maintain a commitment to empiricism and empirical science than it was for Kant.[30]

That is, Kant's "transcendentally motivated empiricism" (as McDowell likes to call it[31]) depends on his transcendentally motivated philosophy of mathematics. Once intuition is banished from mathematics as subjective and superfluous, its presence in the increasingly mathematized empirical sciences begins to look like an intrusion. It becomes tempting to extend the holistic, inferentialist account of the content of mathematical concepts to an account of content in general.

McDowell needs to dispel this temptation if he is to protect the Weak Kantian Thesis from "philosophical duress." It is not enough merely to assuage worries about the rational bearing of experience on *empirical* thought. He must also show how *mathematical* thought can be rationally constrained by the objects *it* is about—or at least say enough to calm our worries. Otherwise, it will remain a selling point of views that reject the Weak Kantian Thesis that they can explain mathematical content in precisely the same way that they explain empirical content.

Consider, for instance, what McDowell acknowledges as "...the most worked-out attempt I know to take this non-Kantian path [i.e., deny a transcendental role to sensibility] and still purport to accommodate intentionality":[32] Robert Brandom's *Making It Explicit.*[33] Brandom offers a sophisticated inferentialist account of conceptual content in the tradition of Carnap and Neurath (in fact, there is a direct link, via Sellars).[34] To have content, according to Brandom, is to be caught up in a web of inferential norms: "...there is nothing more to con-

[30] "Form and Content," in *Demonstratives,* ed. Palle Yourgrau (Oxford: Oxford University Press, 1990), 230. For a detailed account of the history of the dialectical opposition between coherentism and the Myth of the Given, from the Marburg neo-Kantians through Davidson, see Friedman's "Exorcising the Philosophical Tradition: Comments on John McDowell's *Mind and World*" (*Philosophical Review* 105 [1996], 427–67).

[31] "Reply to Commentators," 405. Note that McDowell uses "transcendental" to mean "concerned with the objective purport of subjective occurrences" (Woodbridge Lectures, Lecture I, 445–6).

[32] Lecture III, 491 n. 22.

[33] Cambridge: Harvard University Press, 1994.

[34] Brandom takes his semantic inferentialism largely from the early Sellars, who argues that what Carnap says about logico-mathematical concepts applies to *all* concepts: "In traditional language, the 'content' of concepts as well as their logical 'form' is determined by rules of the Understanding. The familiar notion (Kantian in its origin, but present in various disguises in many contemporary systems) that the form of a concept is determined by 'logical rules', while the content is 'derived from experience' embodies a radical misinterpretation of the manner in which the 'manifold of sense'

ceptual content than its broadly inferential articulation" (131).[35] This account (and the associated account of intentional directedness) is perfectly general: it applies to empirical and mathematical content alike. Even the norms governing the use of observational concepts are inferential: although observation claims are elicited *causally* in response to features of the environment, and are not *inferences* from these features, their significance as moves in the language game derives from the goodness of the *reliability inference* from the perceiver's *commitment* to a claim (in appropriate circumstances) to her *entitlement* to that commitment (188-9).[36] In the absence of such an inferential norm, the fact that a concept is reliably elicited by a feature of the environment would have no significance at all for its content. Hence, for Brandom, *all* of the rational relations that determine the content of a concept (even an empirical one) are ultimately *inferential* relations. Empirical content does not require "relation to intuition": rather, it is "…recognizable as conceptual content in virtue of its inferential articulation and as empirical in virtue of its dependence on the non-inferential acquisition of commitments to those contents (and of entitlements to those commitments)" (225).

McDowell does not think that Brandom can get intentional directedness out of these ingredients.[37] He does not think that Brandom has a plausible story about either empirical *or* mathematical content. But Brandom's alternative to the Weak Kantian Thesis will have a strong appeal as long as the transcendental anxiety about mathematical thought goes untreated.

5 McDowell's Kantianism

In *Mind and World*, McDowell claims that "the *only* apparent reason to deny that thought without a rational connection with intuition would be empty" is the conviction that there is no way to make sense of a rational connection between thought and intuition while avoiding the Myth of the Given (25, my

contributes to the shaping of the conceptual apparatus 'applied' to the manifold in the process of cognition." ("Inference and Meaning," *Mind* 62 [1953], 336)

[35] *Broadly* inferential articulation includes norms for the *noninferential* use of concepts in observation and action, in addition to (narrowly inferential) norms for transitions from claims to claims. This is not just relabelling: as I explain below, even the language-entry norms are ultimately inferential.

[36] See also "Perception and Rational Constraint," 371.

[37] See "Reply to Commentators," 405–6, and "Brandom on Representation and Inference," *Philosophy and Phenomenological Research* 57 (1997), 157–162.

emphasis). By showing that this conviction is mistaken, McDowell takes himself to have defended the Weak Kantian Thesis against the *only* reasonable ground for rejecting it. But his exclusive focus on *empirical* thought blinds him to another historically important source of philosophical anxiety about the Weak Thesis: the worry that the assumptions underlying it make *mathematical* content unintelligible. This blind spot is particularly evident in McDowell's reply to Brandom in the 1998 *PPR* book symposium on *Mind and World*:

> Judgment is free action, but for it to be recognizably judgment the freedom in question needs to be responsible to a subject matter, and we can make sense of that *only* by managing to see experience itself as directly disclosing bits of the world. [my emphasis] ... I doubt if anyone would dream of denying that sort of thing except under philosophical duress.[38]

But no philosophical duress is required to make us worry about McDowell's "only": a little reflection on mathematics will suffice.

McDowell has urged that contemporary philosophy can learn much from Kant's distinctive approach to empirical content. But Kant certainly did not think that the problem of empirical content could be solved independently of the problem of mathematical content. It was neglect of the latter problem, he thought, that kept Hume from adequately addressing the former.[39]

Perhaps McDowell's excuse for neglecting Kant's concern with mathematics is a conviction that it belongs to the *narrowly* epistemological part of Kant's thinking—his theory of knowledge, as opposed to his theory of objective purport. By focussing on the epistemological problem of *a priori* knowledge, McDowell suggests, the neo-Kantians missed what was most important in Kant. As a corrective, McDowell recommends Heidegger's opposing (but equally hyperbolic) view that "The *Critique of Pure Reason* has nothing to do with a 'theory of knowledge'."[40] The *Critique's* most important insights, McDowell thinks, are its transcendental ones, not the epistemological ones taken up by the neo-Kantians. So if Kant's thinking about mathematics falls into the latter category, it is irrelevant to an investigation of the insights in the former.

[38] "Reply to Commentators," 405.

[39] *Prolegomena to Any Future Metaphysics,* trans. Lewis White Beck (New York: Macmillan, 1950), Ak. 272.

[40] Quoted from *Kant and the Problem of Metaphysics,* trans. Richard Taft (Bloomington: Indiana University Press, 1990), 11, in the Woodbridge Lectures, Lecture I, 437.

If this is McDowell's excuse for neglecting mathematics, I hope to have shown that it is a bad one. Transcendental questions about empirical content are not separable from transcendental questions about mathematical content. It is no accident that Kant tried to answer both.