

Conceptual Connections: Kant and the Twentieth Century Analytic Tradition

James R. O'Shea
University College Dublin

A pre-publication Word version of an article published in
Bird, Graham, ed., *The Blackwell Companion to Kant* (Oxford: Blackwell, 2007)

Abstract: During the first half of the 20th century analytic philosophers tended to argue that while Kant had indeed raised important questions concerning the nature of our knowledge, subsequent developments in logic, mathematics, natural science and philosophy entailed either the partial or complete rejection of Kant's transcendental philosophy. Later, however, there was a strong revitalization of interest in Kant's 'transcendental' approach to epistemological issues. This article presents a brief, non-technical overview of these developments by focusing on a representative sampling of certain key conceptual episodes in that history and relating them to four central themes from Kant's *Critique of Pure Reason*.

The founding figures and main movements of analytic philosophy, from Frege and the Cambridge analysts Russell, Moore, and Wittgenstein to the logical positivists and including the American pragmatist tradition, all frequently defined their own philosophical views in critical engagement with Kant's 'Copernican revolution' in philosophy (see for example Coffa 1991, Friedman 2001, and Hanna 2001). Over the first half of the twentieth century the predominant tendency among analytic philosophers was to argue that while Kant had indeed raised important questions concerning the nature and possibility of our knowledge, subsequent developments in logic, mathematics, natural science and philosophy entailed either the partial or complete rejection of Kant's transcendental philosophy. During the second half of the century, however, there was a revitalization of interest among analytic and neo-pragmatist philosophers not only in Kant's general approach to epistemological issues but in many of his substantive conclusions as well. This chapter presents a brief, non-technical overview of some of these historical developments, by focusing on a representative sampling of certain key conceptual episodes in that history and relating them to the following well-known themes from Kant's *Critique of Pure Reason*.

Central themes in Kant's conceptual revolution

In the second edition Preface to the first *Critique* Kant formulated his proposed conceptual revolution in metaphysics by analogy with Copernicus's famous heliocentric hypothesis in astronomy:

Up to now it has been assumed that all our cognition must conform to the objects; but all attempts to find out something about them *a priori* through concepts that would extend our cognition have, on this presupposition, come to nothing. Hence let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition, which would agree better with the requested possibility of an *a priori* cognition of them, which is to establish something about objects before they are given to us. This would be just like the first thoughts of Copernicus, who ... tried to see if he might not have greater success if he made the observer revolve and left the stars at rest. (Bxvi)

Objects are given to us *a posteriori*, in Kant's familiar terminology, as a result of our having particular sensory encounters with them or 'empirical intuitions' of them in experience. The disputed *a priori* cognitions in mathematics, natural science, and metaphysics are supposed to tell us something informative that is true of the objects themselves, thus "extending our cognition" in *synthetic* rather than merely *analytic* judgments (the latter merely unpack what is already contained in a given concept). And yet such synthetic cognitions also provide information that is in some sense known *a priori*, independently of any particular experiential encounters with those objects. They thus "establish something about objects before they are given to us," something which consequently holds *necessarily* of any object we may encounter in experience.

Since analytic philosophers throughout the twentieth century rejected or endorsed several closely related yet distinguishable aspects of Kant's basic revolutionary outlook, it will prove helpful to isolate the following four themes:

- (1) The problem of synthetic *a priori* judgements
- (2) The basic Copernican turn ('objects must conform to our cognition')
- (3) *A priori* conditions of the *possibility of experience*
- (4) Transcendental idealism (appearances vs. things in themselves), on both (a) traditional and (b) non-traditional interpretations

First some brief comment on these Kantian themes, particularly the last one:

(1) Kant indicates that in posing the problem of the *Critique of Pure Reason* as above he has sought to "bring a multitude of investigations under the formula of a single problem," for the "real problem of pure reason is now contained in the question: **How are synthetic judgments *a priori* possible?**" (B19).

(2) The basic revolutionary suggestion or Copernican turn is the idea that, in complex ways carefully worked out in the *Critique* itself, “the objects must conform to our cognition” (Bxvi), in particular, to the *a priori* forms of sensibility (space and time) and of understanding (the categories).

(3) Kant argues that the epistemic legitimacy of our applying these *a priori* forms and principles to the experienced world as we do stems from their being necessary conditions of the *possibility of experience* itself: “all *a priori* concepts ... must be recognized as *a priori* conditions of the possibility of experiences.... Concepts that supply the objective ground of the possibility of experience are necessary just for that reason” (A94/B126; cp. Bxvii).

Finally, (4) Kant presents his Copernican turn as inseparable from his *transcendental idealism*, which early on (Bxviii-xx) receives two formulations that may be taken to illustrate two radically opposed scholarly interpretations in the analytic tradition of what Kant’s ‘formal’ or ‘critical’ idealism, as he also calls it, amounts to (*Prolog.* 293, 375; B518). (See KANT’S TRANSCENDENTAL IDEALISM AND THINGS IN THEMSELVES AND NOUMENA IN THE CRITICAL PHILOSOPHY.) On the one hand (a) Kant states that “our rational cognition *a priori* ... reaches appearances only, leaving the thing [*Sache*] in itself as something actual for itself but uncognized by us” (Bxx). This formulation might encourage the traditional interpretation according to which the *ultimately real* underlying realities that are responsible for the appearances are what Kant calls the ‘things in themselves’, which we can think about and must postulate but which we cannot know or cognize as objects. On this reading, what we know are only the *appearances* of this unknown thing or things, whatever it or they may be, which affect us through sensation and to which we respond by constructing the phenomenal world of objects in space and time. On the other hand (b) just two pages earlier Kant had introduced the same contrast between appearances and things in themselves in these terms:

... the same objects can be considered from two different sides, **on the one side** as objects of the senses and the understanding for experience, and **on the other side** as objects that are merely thought at most for isolated reason striving beyond the bounds of experience. (*fn.* Bxviii-xix)

Highlighting the two standpoints or perspectives taken on “the same objects” in this passage, many non-traditional (b)-interpretations of Kant’s references to ‘things in themselves’ over the last four decades have contended that the heart of Kant’s transcendental idealism is the idea that on his view “things are considered from this twofold standpoint” (*fn.* Bxix), one of which gives us genuine cognition of the objects as phenomena in experience, the other of which gives us only Ideas of pure reason to which nothing corresponds apart from either the errors of traditional metaphysics or the Idea of our own freedom as a constitutive practical (moral) principle for our rational will (along with various other *regulative* principles of reason that govern our own rational conducts and inquiries).

These two opposed interpretations are often (arguably misleadingly) contrasted as the (a) ‘two-world’ vs. (b) ‘double-aspect’ interpretations of Kant’s transcendental idealism. Traditional (a)-interpretations in the analytic tradition have generally found

Kant's transcendental idealism to be implausible, but perhaps detachable from his more insightful contentions surrounding theme (3). Non-traditional (b)-interpretations have generally been articulated in defense of Kant's transcendental idealism as an essentially sound epistemological thesis that concerns the proper limits of our knowledge and is inseparable from themes (2) and (3) (e.g., Bird 1962 and Allison 1983). We shall return to this issue later, as we now examine the ways in which analytic philosophers have taken different stances toward these four fundamental themes in Kant's critical philosophy.

Frege, Russell, and the synthetic *a priori*

The turn from the 19th to the 20th century witnessed logical and conceptual analysts such as G. E. Moore and Bertrand Russell in Britain as well as pragmatists and realists in America all making an emphatic break from the influential neo-Hegelian idealist systems of J. M. E. McTaggart and F. H. Bradley in Britain, and Josiah Royce in America. Accounts of what was called 'transcendental' philosophy during this period often viewed Kant's own critical idealism through the transforming lens of post-Hegelian absolute idealist systems. In these accounts the Kantian Transcendental Ego tended to make its transitional appearance on the stage of history as an objectionably abstract and individualist spiritual ancestor of Hegel's Absolute Spirit. However, amid the distortions represented by the break away from the Hegelian Kant were some notable realist criticisms of Kant's own views by logical analysts such as Russell. We may take Russell's influential introductory book *The Problems of Philosophy* (1912) as a clear and representative example of an early analytic realist response to Kant's epistemology and metaphysics. (On Hegel's own important criticisms of Kant, see HEGEL'S CRITIQUE OF KANT: AN OVERVIEW.)

Although Frege and Russell are of course famous for their *logician* project – roughly, the attempt to derive the truths of arithmetic from deductive logic as the latter had been revolutionized by mathematical logicians such as Frege and Russell themselves – neither thinker was opposed in principle to Kant's idea that we possess synthetic *a priori* knowledge in certain domains, as in theme (1). In fact they both endorsed it. It is well known, for example, that Frege in his *Foundations of Arithmetic* of 1884 wrote of Kant:

I consider Kant did great service in drawing the distinction between synthetic and analytic judgements. In calling the truths of geometry synthetic and *a priori*, he revealed their true nature. And this is still worth repeating, since even today it is often not recognized. If Kant was wrong about arithmetic, that does not seriously detract, in my opinion, from the value of his work. His point was that there are such things as synthetic judgements *a priori*; whether they are to be found in geometry only, or in arithmetic as well is of less importance. (Frege 1884: 101-2)

Similarly, in his defence of the synthetic *a priori* in *The Problems of Philosophy* Russell remarked that

Kant undoubtedly deserves credit for two things: first, for having perceived that we have *a priori* knowledge which is not purely 'analytic', i.e. such that the

opposite would be self-contradictory; and secondly, for having made evident the philosophical importance of the theory of knowledge (Russell 1912: 46).

However, Russell proceeded to firmly reject Kant's own theory of knowledge (as did Frege in important respects, though his relationship to Kant is a complex one). In particular Russell rejected Kant's transcendental account of the sources and justification of our synthetic *a priori* knowledge in terms of the above themes (2), (3), and (4), on Russell's very traditional (a)-interpretation of Kant's transcendental idealism.

Russell raised several objections to what he took to be Kant's view of our *a priori* knowledge in general. He protests, for example, that

no fact about the constitution of our minds could make it *true* that two and two are four. Thus our *a priori* knowledge ... is not merely knowledge about the constitution of our minds, but is applicable to whatever the world may contain.... (Russell 1912: 50)

The Kantian synthetic *a priori*, according to Russell, would merely tell us *what we must believe* about things, given the particular mental make-up we happen to have. It would not give us genuine *a priori* principles that hold true of reality or the entities themselves. Furthermore, Russell objects, whatever is *a priori* necessary is supposed to be "constant" and "certain," whereas to "say that logic and arithmetic are contributed by us does not account for this. Our nature is as much a fact of the existing world as anything, and there can be no certainty that it will remain constant" (ibid. 49).

On Russell's own view at this time, by contrast, our synthetic *a priori* knowledge of what he calls the "general principles" involved in induction, arithmetic, geometry, morality, and logic itself must be based upon our direct acquaintance with relations among mind-independent, timelessly 'subsisting' platonic universals – "entities which do not, properly speaking, *exist*, either in the mental or in the physical world" (Russell 1912: 50 and chapter ten). From the perspective of Russell's own platonic logical realism, Kant's critical idealist conception of our synthetic *a priori* knowledge is thus marred by *psychologism*, which in this case is the view that the laws of logic or mathematics are grounded in psychological laws concerning our mental processes.

Russell's platonic realist approach to the synthetic *a priori* is an instance of a venerable non-Kantian line of metaphysical and rationalist approaches to the problem of our knowledge of *a priori* necessary truths. Kantians can respond, of course, by shifting the burden of argument and exploiting the well-known epistemological difficulties that immediately arise from the platonist's positing of objects or properties that are (apparently) outside the spatio-temporal-causal fabric of nature. (See Kant's own criticism of Plato's account of mathematical cognition at A314/B371 *fn.*)

Important and familiar disputes concerning platonism aside, however, Russell's basic criticisms of Kant's view would frequently resurface in new forms in the criticisms of later analytic realists. With respect to these criticisms much (but not all) hinges on how one interprets Kant's transcendental idealist conception of appearances or phenomena, and in particular how one handles Kant's frequent characterization of the latter as 'mere representations' that are 'in us'. Many traditional (a)-interpretations of

transcendental idealism have assimilated Kant's appearances to the empirically subjective 'ideas' or 'perceptions in the mind' of Descartes, Locke, Berkeley, or Hume (see Bird and Allison for detailed criticisms of these interpretations). In that case it is easy to assume, as Russell apparently has, that on Kant's view one's synthetic *a priori* cognitions are merely *about* the contents of one's own mind. For Kant, however, our synthetic *a priori* cognitions in mathematics, natural science, and the metaphysics of experience are cognitions of laws pertaining to persisting spatio-temporal material objects 'outside us' in the empirically real world. The direct and necessary mathematizability of empirically mind-independent material reality is part of what Kant's non-traditional conception of idealism is meant to account for. The fact that the possibility of such cognitions depends upon certain *a priori* forms of sensibility and understanding 'in us', as capacities of the knower, does not entail, contrary to Russell's characterization above, that those cognitions provide "knowledge about the constitution of our minds" rather than being knowledge that "is applicable to whatever the world may contain." To the contrary, the latter is precisely what Kant's view is intended to support.

Russell and subsequent analytic philosophers defending non-Kantian realist epistemologies have tended to be unimpressed by this sort of response (cf. Russell 1912: 49). The reply of such realists has generally been that even on what Kant calls his 'empirical realism' the necessity of his synthetic *a priori* principles concerning the phenomenal realm nonetheless remains a necessity that would hold merely *relative to* the possibility of our exercising our human cognitive capacities for spatio-temporal sensible intuition and apperceptive conceptual synthesis in the ways Kant describes. The question is how exactly this elusive brand of relative necessity is different from the claim (as by Hume) that the relevant propositions are simply ones that human beings are by their contingent nature ineluctably compelled to believe. This objection has some force, and a later generation would find a related formulation in Stroud's well-known objections to Strawson on transcendental arguments (see below).

The important general dispute here arguably turns on questions concerning whether or not, and in what sense, the relevant *a priori* transcendental conditions succeed in being, in Russell's phrase, "applicable to whatever the world may contain." Russell and later like-minded realists hold that Kant has implausibly restricted the domain of the *a priori* to "the way we must think" (Russell 1912: 49) rather than to how things unrestrictedly are and must be in themselves. Kant, however, is contending, in accordance with theme (3) above, that there are certain extremely general (*a priori*) conditions concerning what *any world of possible experience* may contain, for any experiencing beings who are like us, not in our contingent and potentially variable psychological nature as Russell suggests, but rather in possessing a conceptual awareness of a sensorily encountered world of objects at all. Furthermore, Kant argues in the transcendental dialectic of the First *Critique* that the attempt by pure reason to grasp truths *outside* this carefully delimited domain of possible experience inevitably leads to the demonstrable systematic errors of traditional metaphysics. In Kant's eyes, then, the 'restriction' to possible experience is only a restriction to "the land of truth (a charming name), surrounded by a broad and stormy ocean, the true seat of illusion" (A235/B295).

This fundamental debate concerning epistemological realism and idealism in relation to Kant's views, which bears generally on themes (2), (3), and (4), is an enduring one that would return to the fore in the final three decades of the last century and remains a heated source of controversy today. In the decades between the two World Wars, however, the nature of the objections to Kant's views shifted instead to a focus on

theme (1) concerning the tenability of the entire notion of the synthetic *a priori*. Thanks in no small part to the systematic tools of logical analysis provided by Frege and Russell themselves, philosophers influenced by the logical positivists emigrating from Germany increasingly rejected the very idea of the synthetic *a priori*, and along with it whatever other Kantian doctrines were deemed to depend upon it.

The rise and fall of the analytic *a priori* and the idea of a relativized *a priori*

Excellent work has recently been done on Kant's role in the historical development of logical empiricism or positivism, both by way of positive influence and as target of criticism (see e.g. Friedman 2001 and Coffa 1991). A deeply Kant-inspired conception of a 'relativized *a priori*' can be found in the logical positivists' conceptions of the epistemology of science that were developed in reaction to the Einsteinian revolution in both mathematics and physics. (A noteworthy early contribution along these lines was Hans Reichenbach's 1920 book, *The Theory of Relativity and A Priori Knowledge*.) However, with respect to Kant's thesis concerning specifically *synthetic*, rather than analytic, *a priori* cognition, the basic positivist criticism was characteristically expressed in this passage from Reichenbach's later book, *The Rise of Scientific Philosophy* in 1951:

[W]e have seen physics enter a stage in which the Kantian frame of knowledge does break down. The axioms of Euclidean geometry, the principles of causality and substance, are no longer recognized by the physics of our day. We know that mathematics is analytic and that all applications of mathematics to physical reality, including physical geometry, are of an empirical validity and subject to correction by further experience; in other words, that there is no synthetic *a priori*. (Reichenbach 1951: 48-9)

Put in Kant's terms, for Reichenbach and other logical empiricists all knowledge is either *analytic a priori* or *synthetic a posteriori*: the "program of empiricism," as Reichenbach puts it, is "the principle that all synthetic truth derives from observation and that all contributions of reason to knowledge are analytic" (Reichenbach 1951: 259). Analytic *a priori* truths for the logical empiricists in general are trivially necessary or 'true by definition' in the sense that they are either themselves logical tautologies or they are deductive logical consequences of stipulated axioms or conventional definitions laid down within a given axiomatized theory. However, such *a priori* 'coordinating definitions', to use Reichenbach's term, were far from trivial insofar as they functioned as meaning-constituting and application-enabling components of the new, conceptually revolutionary scientific theories (see Friedman for more on these issues). The various alternative non-Euclidean 'pure' geometries developed during the 19th century were put to use in Einstein's relativity physics in the early 20th century in a way which had involved (1) an *a priori* "*stipulation*," as Einstein put it, "which I can make of my own free-will in order to arrive at a definition of simultaneity" (quoted in C. I. Lewis's *Mind and the World Order*, 1929: 256); and this was followed (2) by the *a posteriori* experimental testing of the resulting theoretical framework against physical reality. Sense experience thus provides the data to be accounted for; logically constructed, formal systems of interpretation in mathematics and science 'implicitly define' (as Schlick had put it) the terms in whatever theoretical hypotheses are put forward to account for that data; and these and any other predictively fruitful conceptual-linguistic theoretical frameworks are to be 'logically

reconstructed' by philosophical analysis along lines that were laid out with particular ingenuity in the writings of Rudolf Carnap.

In a succession of major works Carnap attempted impressively rigorous logical reconstructions of various alternative logico-linguistic conceptual frameworks. Once a given linguistic framework or theory is adopted, what Carnap (1950) called *internal questions* concerning the truth or falsity of claims formulated in accordance with the meaning rules of that particular framework can be answered by appeal either to those *a priori* meaning rules themselves, or by appeal to sense experience in the form of observation sentences. In accordance with the positivist *verifiability criterion* of meaningfulness, any such questions must be so answerable if they are to have genuine cognitive content. For Carnap *external questions* that concern which among alternative linguistic frameworks ought to be adopted are to be settled on pragmatic grounds of predictive efficiency, fruitfulness, simplicity, clarity, communicability, and so on, depending on the purposes for which the particular framework is to be adopted. Roughly speaking, for the logical positivists any remaining questions that are neither logical nor empirical nor pragmatic are either cognitively meaningless pseudo-questions of the disreputable sort characteristic of traditional metaphysics (compare Kant on the 'logic of illusion' in the dialectic), or they are likely to be expressions of some non-cognitive practical attitude or feeling.

Significantly, the central dispute above concerning realism and idealism, which seemed so pressing in our discussion of Russell on Kant, is now neatly handled by Carnap as merely reflecting an *external* question: that is, it is viewed as either a genuine but disguised pragmatic dispute concerning which of various linguistic frameworks is most convenient to adopt for any given purpose (e.g., the alternative sense-datum, physical thing, or microphysical linguistic frameworks); or it is viewed as a mere metaphysical pseudo-dispute. That this deceptively neat solution ultimately rested on Carnap's strong verificationist restriction on meaningfulness would not bode well for its future prospects. However, other Kant-inspired analytic philosophers later in the century would similarly attempt to argue on different grounds that the persistent 'realism vs. anti-realism' debates of this kind can be laid to rest or given therapeutic treatment, utilizing insights from Kant, without one's having to be drawn into the perennial contest of attempting to resolve such traditional disputes directly on their own terms (perhaps Bird, Putnam, and McDowell are cases in point; and see Stroud for criticisms of such approaches in general).

In the American pragmatist tradition, the Harvard philosopher C. I. Lewis had developed an account of the nature of knowledge in his influential book *Mind and the World Order* (1929) that paralleled many of these important developments in Reichenbach and Carnap. For Lewis all empirical knowledge, given some particular analytic *a priori* scheme of interpretation relative to which conceptual meanings are determined, is predictive, contingent, fallible, and hence revisable. Our *a priori* concepts determine what kinds of objects and what sorts of lawfulness we may expect to meet with in experience, and in this respect Lewis's epistemology had a strongly Kantian flavor to it. For Lewis as for Reichenbach and Carnap, however, the sensory 'given' may prove resistant to any particular scheme of conceptual classification, in which case we must seek *alternative* analytic *a priori* conceptual frameworks for accommodating such experiences. Lewis, like Russell and the logical positivists, accordingly criticizes Kant for having held that his *a priori* forms of intuition and understanding are *compulsory* ways of sensing and thinking, and for having held that they constrain or legislate for all possible experience. What is a

priori, as Lewis tended to put it, is not what is ‘inescapable by the mind’, but what is ‘true no matter what’ experience may bring, although open to pragmatic abandonment in light of it.

It should be noted, however, that when Lewis says in relation to theme (3) that his *a priori* categories, unlike Kant’s, do not ‘legislate for possible experience’, he is here taking ‘experience’ in a very thin sense that pertains only to what he calls the *sensory given*. About the given, as Lewis sees it, nothing can be anticipated prior to experience, but also nothing can *known* about it without using concepts. And concepts for Lewis do indeed lawfully predict beyond the given and thus do legislate *a priori* for some real *object* of ‘experience’ in the *thick*, conceptualized sense with which Kant is in fact concerned. For Lewis as for Kant, then, it is *necessary for the possible cognition of any objects of experience at all* that such objects conform to categorial laws that have their source *a priori* in the cognitive subject, in accordance with the Kantian themes (2) and (3).

The various conceptions of framework-relative analytic *a priori* principles discussed in this section came under particularly severe pressure from mid-century rejections of the entire analytic/synthetic distinction itself, most famously in Quine’s “Two Dogmas of Empiricism” (1951). In a nutshell, Quine argued that the pragmatic considerations of predictive utility, simplicity, conservativeness, and so on, to which Carnap and Lewis had appealed in relation to the so-called ‘external’ choices between the various alternative (allegedly) meaning-constituting *a priori* conceptual frameworks, are the factors that are in fact decisive *in all of our knowledge claims whatsoever*, whether they concern framework ‘internal’ or framework ‘external’ questions (a distinction which consequently loses the significance it was supposed to have). Any particular belief or principle in what Quine famously calls our overall ‘web of belief’, whether it be in logic, mathematics, natural science, or in direct perceptual observation, may be subject to revision in the ongoing attempt (to use Quine’s other lead metaphor borrowed from the positivist Otto Neurath) to keep the ship of science afloat and accommodate the flux of sensory experience. The entire set of allied distinctions between analytic ‘truths of meaning’ vs. synthetic ‘truths of fact’, between *a priori* vs. *a posteriori* judgments or knowledge, and between internal vs. external framework questions, are themselves argued to be at best *pragmatic* distinctions of degree concerning how willing or unwilling we are at any given time to give up particular strands in the web of belief or planks in the ship of science. As a result of such mid-century critiques, analytic philosophers who wished to defend the idea that there are *a priori* conceptual truths or categorial meaning principles of the sort that had been defended by Carnap and Lewis would now have to reckon with the fact that the analytic *a priori* had become as controversial post-1950 as the synthetic *a priori* had been pre-1950.

Despite this, however, the estimation of Kant’s critical philosophy was soon to rise rather than fall in the eyes of many analytic philosophers.

Transcendental arguments and the resurgence of Kantian analytic philosophy

One major source of the increased influence of professedly Kantian views in analytic epistemology and metaphysics since the 1960s has been the works of Peter Strawson, in particular his two books *Individuals: An Essay in Descriptive Metaphysics* (1959)

and *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason* (1966). When considered together with Bird (1962) and Bennett (1966) in particular, major works on the first *Critique* were now appearing in which powerful arguments for substantively Kantian theses were expressed and evaluated using contemporary analytic insights and styles of argument.

In *Individuals* Strawson introduced his well-known conception of *descriptive metaphysics*, which in contrast to “revisionary metaphysics” is “content to describe the actual structure of our thought about the world” and aims “to lay bare the most general features of our conceptual structure,” “the indispensable core of the conceptual equipment” of human beings (Strawson 1959: 9). Strawson analyses the structure of our basic conception of the world as containing various particular things that are *objective* in the sense of persisting independently of our various encounters with them. For instance, we think that in general speakers and hearers are able to make successful identifying references to such objective particulars even when they are absent from the present scene. Strawson argues that within “the general structure of our thinking about identification” our concept of a single, unified “system of spatio-temporal relations has a peculiar comprehensiveness and pervasiveness, which qualify it uniquely to serve as the framework within which we can organize our individuating thought about particulars” (ibid. 21, 25). Furthermore, he argues, since as Kant correctly stressed space and time cannot themselves be perceived, our spatio-temporal concepts are able to play this uniquely comprehensive individuating role in our thought only because we conceive our world to be populated with *reidentifiable* and hence lawfully persisting material bodies:

There is no doubt that we have the idea of a single spatio-temporal system of material things Now I say that a *condition* of our having this conceptual scheme is the unquestioning acceptance of particular-identity in at least some cases of non-continuous observation. (Strawson 1959: 35)

Strawson in this way takes himself to have articulated a kind of Kantian *transcendental argument* (this phrase was not explicitly used by Kant) against the sceptic's contention that our beliefs in such independently persisting bodies cannot be epistemically justified (ibid. 32-40). For the possibility of even coherently raising the sceptical doubt about the existence of reidentifiable particulars presupposes, Strawson argues, the general idea that particulars are related within one spatio-temporal framework (as opposed to each stretch of experience constituting an isolated world, as it were); but we have just seen that this framework is itself impossible without “the condition that there should be satisfiable and commonly satisfied criteria for the identity of at least some items in one sub-system with some items in the other.” In effect, then, the sceptic “pretends to accept a conceptual scheme, but at the same time quietly rejects one of the conditions of its employment” (ibid. 35). The complex concept of a single spatio-temporal system of persisting material bodies, therefore, forms the indispensable core or structure of our most basic and permanent conceptual scheme.

In *The Bounds of Sense* Strawson would subsequently embed many of the central arguments of *Individuals* within a deeper Kantian account of the connection between *objectivity* and the *unity of consciousness*. This account, which would further intensify interest among analytic philosophers in the possibility of transcendental arguments in epistemology, was based on Strawson's insightful analysis of “the role of the Transcendental Deduction as an argument” (Strawson 1966: 87). Put brusquely, from

the premise that one's experiences "must somehow be united in a single consciousness capable of judgment," this transcendental argument attempts to show that such a unity is possible only if our experiences are so conceptualized as to "have the character of experience of a unified objective world" and hence as "capable of being articulated in objective empirical judgements" (ibid.). Fairly close descendents of Kant's synthetic *a priori* principles of the permanence of substance and of the law of causality then turn out to be necessary for achieving the latter conception of an objective empirical world. (See THE METAPHYSICAL AND TRANSCENDENTAL DEDUCTIONS; KANT'S SECOND ANALOGY; and KANT'S REFUTATION OF IDEALISM.)

Strawson's conceptions of descriptive metaphysics and of transcendental arguments helped to revitalize not only Kant scholarship but also Kantian approaches to epistemology and metaphysics within the analytic tradition in general. However, much has remained elusive and controversial about the content and status of Strawson's arguments and conclusions themselves. This can be brought out by considering how Strawson's views stand in relation to the four fundamental Kantian themes distinguished at the outset.

With regard to transcendental idealism, theme (4), Strawson sought to preserve what he calls Kant's "analysis of experience" while rejecting what he regarded as "the chief obstacles to a sympathetic understanding of the *Critique*": namely, the "doctrines of transcendental idealism, and the associated picture of the receiving and ordering apparatus of the mind producing Nature as we know it out of the unknowable reality of things as they are in themselves" (Strawson 1966: 22). Given Strawson's strongly traditional (a)-interpretation of Kant's transcendental idealism, most analytic philosophers have agreed that philosophical progress will not be achieved by travelling down that muddy road (and few have found the phenomenalist interpretation of Kant's idealism offered in Bennett (1966) to be enticing either – although Bennett's Kantian modification of Wittgenstein's anti-private language was a vital contribution to the ensuing debates). The plausibility of the more sanguine (b)-interpretations of Kant's transcendental idealism offered by Bird and Allison, on the other hand, continues to remain a matter of heated dispute among interpreters of Kant.

Strawson's aversion to Kant's alleged model of the "mind producing Nature" not surprisingly also leads him to largely negative assessments of what he takes to be Kant's "doctrine of synthesis," which turns out to consist in a transcendental drama starring the "understanding, the active faculty, with the help of its no less active lieutenant, imagination..." as players in the misguided performance that Strawson (at least at this stage) dubbed "the imaginary subject of transcendental psychology" (1966: 97). (By contrast, see Kitcher (1990) for a recent defense of Kant's transcendental psychology with its multilayered account of our various cognitive syntheses, from the perspective of recent theories of cognition.) Similarly, to the extent that themes (2) and (3) are likewise taken to be infected by those same mistaken transcendental doctrines, Strawson's "austere" analytic Kant primarily leaves us with Strawson's own descriptive metaphysics and reconstructed transcendental arguments pertaining to theme (3).

Strawson's various attempts to reconstruct Kantian transcendental arguments stimulated lively subsequent debates (see e.g. Stern 1999). It has remained unclear, however, whether Strawson's central transcendental argument in chapter one of *Individuals*, for example, really succeeds in generating an anti-sceptical conclusion. For the sceptic of Hume's stripe can grant that we do indeed ineluctably believe ourselves to

possess ‘adequate criteria’ of various familiar kinds for reidentifying material bodies, and concede that such beliefs are basic to the conceptual framework in terms of which we do in fact think about things. But the sceptic’s question is whether we can know that it is *true* that the satisfaction of the criteria we take ourselves to possess is in fact an adequate indicator of the corresponding facts concerning existing material bodies. (See Stroud on ‘Transcendental Arguments’ in 1968, which in effect echoed Russell’s critique of Kant’s alleged psychologism with Stroud’s own critique of transcendental arguments as being plagued by anti-realist, verificationist meaning doctrines.) In general it is also not clear what the status is supposed to be of the various non-trivial *conceptual connections* that Strawson claims to unearth, which Kant would have characterized as synthetic *a priori* necessities. To suggest as he does in *The Bounds of Sense* that “the argument of the Deduction establishes the most general features of any conception of experience which we can make intelligible to ourselves” (1966: 108) does not appear to advance beyond the original appeal to the ordinary criteria of intelligibility we take ourselves to possess. If that is the case then it remains unclear for all that Strawson has said why non-Kantians, whether they be sceptics, naturalists, or common sense realists, must grant that our beliefs are structured by any such substantive conceptual necessities having genuine existential import at all, rather than simply being a web of contingent empirical hypotheses of varying degrees of entrenchment or explanatory plausibility. Debates of this kind concerning the nature and possibility of transcendental arguments constitute one of the most fascinating areas of contemporary analytic epistemology.

More generally in relation to the Copernican theme (2), however, Strawson in a 1987 article entitled ‘Kant’s New Foundations of Metaphysics’ argued “that Kant’s *Copernican Revolution* can plausibly be seen as having substantially prevailed in the philosophical tradition to which I belong,” that is, in “modern analytical philosophy” (in Strawson 1997: 232). If we set aside the traditional (a)-aspects of Kant’s transcendental idealism, Strawson argues that Kant’s Copernican thesis that “there are highly general formal conditions which objects must satisfy in order to become possible objects of human knowledge,” so that any “attempt to establish how things really are in total abstraction from those conditions will be doomed to failure” (ibid. 232-3), is in different ways sustained in the views of Wittgenstein, Putnam, Quine, Davidson, and Dummett. Despite their differences, Strawson suggests, each of these thinkers in some sense embraces what Putnam (1981) has called *internal realism*, or pragmatic, commonsense, human realism. For Putnam himself, at any rate, his internal realism is comparable to Kant’s empirical realism in its defense of a kind of “*objectivity for us*” (Putnam 1981: 55) which is relative to the value-laden and pragmatically successful conceptual schemes in terms of which we apprehend the encountered world. This is in contrast to a traditional ‘God’s Eye point of view’ or *metaphysical realism* that is based, as Strawson puts it, on “the conviction that the nature of things as they are in themselves” may and probably does in fact go beyond “all that human beings can, or could, discover or even conceive of” (Strawson 1997: 236; see Moran 2000 for a detailed discussion of the Putnam/Kant comparison).

Putnam’s internal realism contends that once we see our way past the subtly misconstrued dichotomies that come in train with the traditional metaphysical realist picture (inner vs. outer, subjective vs. objective, fact vs. value, correspondence to reality vs. warranted assertibility, things in themselves vs. appearances-to-us), we can embrace Kant’s Copernican restriction to essentially *humanly knowable reality* without collapsing into either subjectivism or cultural relativism, and also without subscribing to transcendental idealism on its traditional (a)-interpretation. From this perspective, Russell’s and

Stroud's criticisms of the anthropocentric character of Kant's descriptive metaphysics can be diagnosed as gaining their seeming plausibility only from the illusory but tempting perspective of metaphysical (i.e., transcendental) realism.

In these ways both appeals to and criticisms of Kant's Copernican revolution continue to occupy center stage not only in current realism vs. anti-realism debates but more broadly in discussions concerning the fundamental nature of philosophical inquiry itself. There is, however, a further significant line of Kantian influence among recent analytic philosophers that was not mentioned above by Strawson but which has recently received much discussion and so merits at least a mention in closing.

Two highly influential books that appeared in 1994, John McDowell's *Mind and World* and Robert Brandom's *Making It Explicit*, were explicitly presented as developing certain related ideas from Kant's theory of conceptual cognition in light of Wilfrid Sellars' conception of the 'logical space of reasons' and his critique of the 'myth of the given', as indeed had Jay F. Rosenberg's (1980) earlier on. Perhaps less well known is that Sellars himself had regarded his own philosophical system as developing analytic versions of all four of the central Kantian themes discussed above.

In 'Is There a Synthetic *A Priori*?' published in 1953 Sellars defended a framework-relativized conception of the *synthetic a priori*, thus explicitly resurrecting theme (1). According to Sellars, "every conceptual frame involves propositions which, though synthetic, are true *ex vi terminorum*, [but] every conceptual frame is also but one among many which compete for adoption in the market-place of experience" (in Sellars 1963: 320). One crucial notion in this account is the idea, later developed in detail by Brandom and by Rosenberg, that our concepts have the content or meaning that they do entirely in virtue of their normatively rule-governed role in our inferences, actions, and responses, as implicitly governed by substantive (i.e., not merely formal-logical) *material inference* principles. Brandom and Rosenberg highlight in particular Kant's own conception of concepts as *rules*, which they enrich with insights from Wittgenstein and Sellars. Crucially, while empiricists such as Carnap have tended to hold that the meaning of such basic observational beliefs as 'this is red' is simply 'given' in experience, the Kantian upshot of Sellars' holistic critique of the myth of the given is that no one possesses the *concept* of red in the first place who has not already been initiated, in the spirit of Kant's themes (2) and (3), into a wider pattern or "logical space" of inferential reason-giving that reflects a communally inherited conception of the *causal law-governed nature of things* within a given linguistic framework (see also Bird 1962: 101-2). John McDowell in particular has emphasized the Kantian constitutive role of this conceptual 'space of reasons' in our grasp, without any appeal to 'the given', of the facts that directly manifest themselves to us in the empirically real world.

Finally, and more controversially, Sellars also defended a robust interpretation of theme (4), Kant's transcendental idealism. Similar in some ways to the non-traditional (b)-interpretations in Bird and Allison, Sellars offered a subtle account of Kant's 'appearances' according to which they are the ordinary denizens of the objective empirical world, yet they also have the essential status of being *possible intentional objects of our forms of representation*. In addition, however, Sellars also holds that Kant never doubted – and rightly so, Sellars thinks – that such appearances are due to our being affected by ultimately real *things in themselves*, about the nature of which Kant held that we must remain agnostic (as on the traditional (b)-interpretation [**@ = misprint: should be '(a)-interpretation'!**]). It is in his *scientific* reinterpretation of the role of 'things in

themselves' that Sellars famously diverges from Kant's own views. On his scientific realist construal of the revolutionary changes in fundamental conceptual frameworks involved in the advancing "scientific image" of the world, Sellars ultimately holds that Kant's quasi-theologically conceived domain of things in themselves is ultimately to be reconceived in terms of the projected regulative ideal of a fully comprehensive scientific categorization of the ultimate microphysical nature of things, which in the end provides the best explanation of the "manifest image" or Kantian-phenomenal world of appearances-to-us itself. On this systematic Sellarsian view, Aristotle, Kant, and Strawson turn out to be the heroes of the perceptually manifest image of persons and the world, the correct conceptual articulation of which is the primary task of the perennial philosophy as well as being the fundamental precondition of its successful synoptic integration with the scientific image of the world.

Although only briefly mentioned here, the recent works by Brandom and McDowell are in their very different ways explicitly indebted to these Sellarsian-Kantian views on conceptual cognition, the logical space of reasons, and the myth of the given. Like Strawson and Putnam however, Brandom and McDowell follow Kant's Copernican revolution primarily in relation to themes (2) and (3) alone. These they see as offering vital clues as to how to correctly reorient our understanding of our own cognitive relationship to the ordinary manifest world of experience, while seeing no bar to accepting the latter as in principle a revelation of how things are *in themselves*. Whether these last approaches really succeed in avoiding any idealist consequences is at present the subject of much lively debate.

References

- Allison, Henry E. (1983). *Kant's Transcendental Idealism*. New Haven: Yale University Press.
- Bennett, Jonathan (1966). *Kant's Analytic*. Cambridge: Cambridge University Press.
- Bird, Graham (1962). *Kant's Theory of Knowledge*. London: Routledge & Kegan Paul.
- Brandom, Robert (1994). *Making it Explicit*. Cambridge, MA: Harvard University Press.
- Carnap, Rudolf (1950). Empiricism, semantics, and ontology. *Revue internationale de philosophie* 4: 20–40.
- Coffa, J. Alberto (1991). *The Semantic Tradition from Kant to Carnap*, ed. L. Wessels. Cambridge: Cambridge University Press.
- Frege, Gottlob (1884). *The Foundations of Arithmetic*, trans. J. L. Austin (2nd ed.). Evanston, Ill.: Northwestern University Press, 1953.
- Friedman, Michael (2001). *The Dynamics of Reason*. Stanford, CA: CLSI Publications.
- Glock, Hans-Johann, ed. (2003). *Strawson and Kant*. Oxford: Clarendon.
- Hanna, Robert (2001). *Kant and the Foundations of Analytic Philosophy*. Oxford: Oxford University Press.
- Kitcher, Patricia (1990). *Kant's Transcendental Psychology*. Oxford: Oxford University Press.
- Lewis, Clarence Irving (1929). *Mind and the World Order*. New York: Dover.
- Moran, Dermot (2000). Hilary Putnam and Immanuel Kant: two 'internal realists'? *Synthese* 123: 65-104.
- McDowell, John (1994). *Mind and World*. Cambridge, MA: Harvard University Press.
- Quine, Willard Van Orman (1951). Two dogmas of empiricism. In Quine, *From a Logical Point of View*, 2nd ed. New York: Harper & Row, 1961.
- Putnam, Hilary (1981). *Realism, Truth and History*. Cambridge: Cambridge University Press.
- Reichenbach, Hans (1920). *Relativitätstheorie und Erkenntnis Apriori*. Berlin: Springer, 1920; translated as *The Theory of Relativity and A Priori Knowledge* in 1965 (Los Angeles: University of California Press).
- _____ (1951). *The Rise of Scientific Philosophy*. Los Angeles: University of California Press.
- Rosenberg, Jay F. (1980). *One World and Our Knowledge of It*. Dordrecht: D. Reidel.
- Russell, Bertrand (1912). *The Problems of Philosophy*. Oxford: Oxford University Press, 1998.
- Sellars, Wilfrid (1963). *Science, Perception and Reality*. Atascadero, CA: Ridgeview Publishing Company.
- _____ (2002). *Kant's Transcendental Metaphysics. Sellars' Cassirer Lectures Notes and Other Essays*, edited and introduced by Jeffrey F. Sicha. Atascadero, CA: Ridgeview Publishing Company.
- Stern, David, ed. (1999). *Transcendental Arguments: Problems and Prospects*. Oxford: Clarendon.
- Strawson, P. F. (1959). *Individuals*. London: Methuen.
- _____ (1966). *The Bounds of Sense*. London: Methuen.
- _____ (1997). *Entity and Identity and Other Essays*. Oxford University Press.
- Stroud, Barry (1968). Transcendental arguments. *Journal of Philosophy*, 65, 241-56; reprinted in Ralph C. S. Walker (ed.), *Kant on Pure Reason* (Oxford: Oxford University Press, 1982), 117-31.