

MADDY'S CARNAP AND THE 'RESERVED READING'

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I. Introduction

The recent resurgence of scholarly interest in Viennese positivism's legacy, in particular the intense focus on a thorough and nuanced re-assessment of the work of Rudolf Carnap, has led to multiple, competing interpretations of just what it is exactly that Carnap was up to in the late 1920s and early 1930s. The standard 'Quinean' reading of Carnap depicts him as an empiricist in the tradition of Hume—only armed with better logic. Another more recent approach is the 'neo-Kantian' interpretation, put forward in various guises by Friedman, Richardson and Coffa, which stresses both the constitutive nature of frameworks in Carnap and his early flirtations with Kant.¹ Coffa places particular emphasis on a burgeoning 'semanticism' he claims is already implicit in the *Logical Syntax of Language* though obscured by sundry prior biases.

This new reading has not met with universal assent, however. Goldfarb and Pincock offer sustained critiques of these interpretations, arguing Carnap was heir neither to British empiricism nor Marburg neo-Kantianism, but rather engaged in a deflationary 'scientific' project that sought to avoid the interminable internecine warring of traditional philosophical schools.² Ironically, in her recent work, Penelope Maddy seizes upon the so-called 'neo-Kantian' reading of Carnap in her attempt to articulate a post-Quinean naturalism close to the Pincock reading.³ In what follows I will suggest that, while Maddy's project is commendable, it misconstrues Carnap's thought during this period, falsely setting up a philosophical antagonism between her 'second philosophy' and Carnap's own attempts at a scientific philosophy. I will begin by discussing the literature that has sprung up around these issues before turning to

¹ Coffa [1991], Richardson [1998] and Friedman [2007]. In addition, much is made of Carnap's *Der Raum*, where he attempts to reconcile relativity with a basically Kantian approach to space. More on this in the next section.

² Goldfarb [1997], Pincock [2005].

³ Maddy [2007].

Maddy more specifically, in an attempt to assess her own use of the Carnap-Quine dialogue.

II. An Exiguous Exegesis

(a) *The 'Standard' Picture*

If any enterprise is fraught with peril, it is the task of providing an exegetical account of the thought of a subtle philosopher who has changed his mind more than once on fundamental questions. The danger is multiplied when said thinker has been associated with a movement or school, a distorting lens which inclines readers both sympathetic and not to Procrustean machinations aimed at the fulfillment of prior expectations. In the particular case of Carnap, one must also adduce the peculiar resistance posed by the extensive use of formalisms, whose narrow, bright clarity in one type of application has a counterpoint ambiguity in the difficulty of using any other language than the formalism itself to explain or discuss it.⁴ All this to say that it should come as little surprise to find with minimal effort no less than three very different approaches to Carnap's thought in *Der Logische Aufbau der Welt* (henceforth *Aufbau*) and *Logical Syntax of Language* (henceforth *LSL*)—two works that are arguably themselves at odds with each other.

The first of these approaches is commonly attributed to Quine, whose attacks on Carnap set much of the tone for analytic philosophy in the latter half of the twentieth century.⁵ Here we must be somewhat—but not *too*—careful to distinguish Quine's treatment of the *Aufbau* from that of *LSL*. Of the former, Quine says the goal was to

⁴ Pincock is not alone in calling Carnap “at the same time very clear and quite murky.” Pincock [2005]: 519.

⁵ The need for extensive “revisionary efforts” aimed at an “extraction” of Carnap from “Quine’s long shadow,” as one commentator described Friedman’s work, is indicative of just how deeply entrenched Quinean prejudices were. Rockmore [2004]: 468.

account for the external world as a logical construct of sense-data ... Carnap's constructions, if carried successfully to completion, would have enabled us to translate all sentences about the world in terms of sense-data, or observation, plus logic and set theory.⁶

Such a goal is broadly continuous with the traditional, foundational aims of British empiricism, and indeed one is hard-pressed to find even trace amounts of 'neo-Kantianism' present here. Similarly, in his famous article *Two Dogmas Of Empiricism*, Quine characterizes the *Aufbau* project as a "radical reductionism" of "significant discourse" via a formal sense-datum language which, while 'prodigal' in its mathematical ontology, was relatively "parsimonious ... in its extra-logical or sensory part."⁷ But the ontological promiscuity of the mathematical larder was at this point still inoffensive, safely ensconced in a pseudo-*Tractarian* prison of tautological emptiness.⁸ The slender usage of sense-data, in combination with the elaborate logic-mathematical machinery, would then ineluctably grant us the apodicticism long sought-after by philosophers—even if it is a somewhat solipsistic one, by Carnap's own candid admission.

Unfortunately, Quine tells us, absent any Rosetta stone telling us how to actually translate sentences about the physical world to "Carnap's initial language of sense data and logic," the project cannot get off the ground.⁹ Particularly problematic for Quine was the lack of a reductive account of the relation 'is at' used in statements about phenomenal experience. Realizing these difficulties, we are made to understand, Carnap soon abandoned the dream of radical reduction in favour of a more liberalized approach, weakening reduction from

⁶ Quine [1969]: 74.

⁷ Quine [1961], §V.

⁸ Which is *not* to say that Carnap adopted an orthodox *Tractarian* stance; the *Aufbau* had been written before Carnap's coming to Vienna in 1926. It is still undeniable that, as Awodey and Carus put it, that the *Aufbau* was constructed through a 'logician procedure' that adopted a very narrow conception of 'structure' that was largely, but not completely, non-epistemological. See Awodey & Carus [2007]fn. 9.

⁹ Quine [1961], §V.

definition to mere implication.¹⁰ And so things stood regarding the *Aufbau* for a quarter-century—with Carnap languishing in philosophical neglect, with nary even an encyclopedia entry to his name to chronicle his alleged failures.¹¹

As to Carnap's position in *LSL*, Quine continues to read it as a product of late-stage empiricism, mired in related difficulties surrounding both the creation of a syntactical notion of logical truth and the unfounded usage of 'category words' ('*Allwörter*') ostensibly designed to demarcate meaningless metaphysical questions from proper ones.¹² While the goal of *LSL* is not that of the *Aufbau*—the latter offering alleged reduction, the latter proffering an account of mathematical truth, consequence and the logic of science—Quine offers a familiar critical thread. A central impetus to the writing of *LSL* was Carnap's acquiescence to the importance of a metalanguage; another was the necessity of responding to Gödel's incompleteness proofs.¹³ Carnap hoped to be able to use the one to defuse the other: that is, offer an account of mathematical knowledge that was still broadly syntactical in the wake of Gödel's historical results. Quine's criticisms, to take but two examples, are recognizable: first, that the relevant notion of logical truth for his Language II was syntactical in name only:

...it was couched in a vocabulary consisting (in effect) of (a) names of signs, (b) an operator expressing concatenation of expressions and (c), by way of auxiliary machinery, the whole logical (and mathematical) vocabulary itself. So construed, however, the thesis that logico-mathematical truth is syntactically specifiable becomes uninteresting.¹⁴

Why uninteresting? Because, Quine explains, if we included *in* (c) far more than logic and mathematics, but other, factual, fields of

¹⁰ Quine refers here to Carnap's *Testability and Meaning*. Quine [1969]: 77.

¹¹ The on-line Stanford Encyclopedia of Philosophy still has no entry on Carnap.

¹² On the former problem, the reference is to Quine [1983]: 368-370. On the latter, Quine [1969]: 91-92.

¹³ As discussed in Coffa [1991], 285.

¹⁴ Quine [1983], 370.

knowledge (say, economics or physics) Carnap's 'Tarskian' specification of truth would *still* hold; but clearly nothing special about logic or mathematics would have been thus 'singled out'.¹⁵ Otherwise the incorporation of these other, non-logical, domains would have invalidated the definition straight away. This suggests a fundamental problem with the avowed goal of the *LSL*, the replacement of philosophy with the logical analysis of the language of science.¹⁶

The second difficulty Quine outlines has to do with Carnap's use of *Allwörter* to distinguish metaphysical cases in the material mode. Once again the problem is the lack, in Quine's eyes, of a principled way to determine what counts *as* a category word.¹⁷ According to Carnap,

A word is called a universal word if it expresses a property (or relation) which belongs analytically to all the objects of a genus, any two objects being assigned to the same genus if their designations belong to the same syntactical genus.¹⁸

The point of introducing the 'universal word' was to clarify the typically philosophical confusions brought upon by an unchecked use of the material, rather than the formal, mode of speech. The material mode leads speakers to forget the linguistic relativity of their assertions—it is, in Carnap's words, "responsible for an *erroneous conception of philosophical sentences as absolute*."¹⁹ The use of universal words in the material mode of speech, Carnap explains, is responsible for the creation of a wide-variety of pseudo-problems, with one particularly egregious example being the ontological status of numbers. The replacement of universal words in the material mode with their corresponding syntactical version in the formal mode

¹⁵ What Quine says exactly is "Tarski's routine of truth definition would still carry through just as well." *Ibid.*

¹⁶ A different and justly critical reading of Quine's comments here is Demopoulos [2007]: 258.

¹⁷ The problem is similar to the lack of a way to determine the logical from the non-logical in determining truth formally.

¹⁸ Carnap [1937] §76.

¹⁹ *ibid.*, §78.

dissolves these problems.²⁰ Should there be no readily available translation at hand, the sentence is dismissed as ‘ambiguous’ and ‘obscure’ if not outright impossible to discuss.²¹

Quine’s criticism of this idea is again that we are not in a position to draw the distinction Carnap hopes to draw, that is, to distinguish the categories and category words unequivocally:

Typically, in terms of quantification theory, each category comprises the range of some distinctive style of variable. But the style of variable is an arbitrary matter, and surely of no help in distinguishing between meaningful questions of existence and metaphysical questions of existence.²²

The theme here once more is that the type of ground Carnap is after—one that could be found entirely in syntax—is not available.²³ More charitably one could say that Carnap’s project accomplishes rather less than it set out originally, to the point where it may be philosophically trivial. Quine points to the apparent result that existence just is what is expressed by cases of existential quantification—which is how we explain the quantifiers in the first place.²⁴ Whatever evidence there may be for the legitimacy of a given quantification is a matter of degree, not kind, Quine argues, and it is futile to search for criteria that would demarcate the improper kind of existence-query from the proper. Even the most abstruse philosophical questions can have legitimate *reasons* or arguments for one answer over another. Just as there is no neat analytic/synthetic divide, there will be no clear boundary with which to exclude an existence claim for a number as opposed to the correct syntactical

²⁰ *ibid.*, §80: “All pseudo-problems of this kind disappear if the formal instead of the material mode of speech is used.”

²¹ *ibid.*, §81.

²² Quine [1969], 91-92.

²³ “It was largely because of his increasing concern over his self-stultifying situation that Carnap relaxed his stress on syntax ... in favor of semantics.” Quine [1983], 370.

²⁴ E.g., “There are kinds of things *F* if and only if $(\exists x)Fx$.” Quine [1969], 97.

version (that x is a number-word, not a thing-word).²⁵ Quine’s remarkably consistency in his criticisms of Carnap is no doubt linked to his conception of Carnap’s work as a foundational enterprise with essentially empiricist roots—an contested interpretation, as we shall now see.

(b) The Kantian Carnap: Friedman, Maddy and Coffa

As we’ve just seen, Quine depicted the Carnap of the late 1920s and early 1930s as a philosopher firmly entrenched within the empiricist tradition, who turned to semantics only after realizing the hopelessness of the project he had embarked upon—only to cast his lot yet again with a slight emendation to the same lost cause.²⁶ In contrast to this pessimistic assessment are the revisionary readings of Friedman, Richardson, and Coffa. Maddy discusses this interpretation in her recent work as well. In what follows I will focus mainly on Friedman, Maddy and Coffa, in a dual effort to both provide an exposition of the ‘neo-Kantian’ Carnap and outline where Quine might’ve gone wrong in his analysis. While Coffa preceded Friedman, it is the latter who gives us a more perspicuous overview of the re-reading. Terming the standard picture of Carnap as a radical empiricist “much too crude,” Friedman focuses not on the controversies surrounding the foundation of mathematics but rather on the attempts made by the positivists to accommodate the revolution in physics brought on by general relativity.²⁷

Indeed, the historical development of Carnap’s philosophy begins not where the ‘standard’ picture has it—that is, with logic and mathematics—but instead with “problems in the *empirical* sciences (physical geometry and mathematical physics.”²⁸ What Carnap and

²⁵ Carnap [1937], §77.

²⁶ Quine [1983] 374 critiques “Carnap’s present position,” e.g. the use of ‘meaning postulates’ to secure analyticity, which once again assumes a distinction that can’t be drawn between analytic and synthetic truths.

²⁷ Friedman [2007], 92.

²⁸ *Ibid.*, 93.

indeed the logical empiricists in general wanted to do was to “revise and reconfigure the Kantian conception of the *a priori*” so as to solve an emerging problem, that of “coordinating abstract mathematical structures with the concrete objects of sensory experience characteristic of modern mathematical physics.”²⁹ The dilemma is genuine: space, motion and time no longer have a ‘natural’ link to sensory experience as they did in pre-modern times.³⁰ Kant’s solution to the dilemma, too familiar by now to be worth recounting here, was understood as deeply undermined by the elaboration of the theory of general relativity. Carnap’s first stab at a solution, in his dissertation *Der Raum*, keeps the notion of a Kantian ‘intuitive space’ but one with only topological structure, not full metrical structure (which is understood to be conventional).³¹ Carnap’s later work in the *Aufbau* and the *LSL* was less strictly Kantian but still aimed, according to Friedman, at “exhibit[ing] the complementary strengths of both ‘positivism’ and more Kantian approaches to epistemology.”³² This ‘Kantianism’ has nothing to do with inner forms of sensible intuition or some other obscure apparatus, but rather with built-in implicit definitions that determine the very boundaries Quine saw as impossible to draw, chosen on pragmatic grounds as the best way to reconstruct science on a physicalist basis.

Maddy, for her part, finds between Carnap and Kant a similarity in their scientific-mindedness and desire to cleanse philosophy of its sterile metaphysical debates. Carnap’s main tool here, she explains, is the ‘linguistic framework’, such as the ‘thing language’ whose adoption is entirely pragmatic: we cannot sensibly ask, before adopting the thing-language, whether or not there are actual ‘things’ in the world existing ‘in themselves’ as grounds for accepting or rejecting the proposed usage. The linguistic framework is therefore

²⁹ Ibid., 92, 93.

³⁰ Ibid., 94.

³¹ Ibid., 102. Demopoulos [2007] sees the “central influence” on *Der Raum* as Hilbert, instead.

³² Ibid., 104.

constitutive in a manner roughly “analogous to Kant’s forms and categories.”³³ It must be in place *prior* to any investigation, just as sense can only be made of ‘confirmation’ or ‘truth’ from within the framework itself

Such a reading defuses several central Quinean criticisms, such as the ones we considered before, by interpreting the project of the *Aufbau* and *LSL* not as foundational enterprises with the goal of securing the chimera ‘certainty’, but rather the more modest objective of coordinating in a principled fashion sense-data to bodies of theoretical knowledge—or, in the Carnapian terminology, between the autopsychological and physical planes. This more limited aim makes Quine’s critiques rather less salient than they appear to be, as Carnap can accede to the lack of an ‘external’ boundary and, thus, grant Quine’s points in their entirety but deny their significance. There is some evidence this is indeed the attitude he took:

The main point of his criticism seems ... to be that the doctrine [that logic is analytic] is ‘empty’ and ‘without experimental meaning. With this remark I would certainly agree, and I am surprised that Quine deems it necessary to support this view by detailed arguments.³⁴

What this means in practice is that Carnap simply does not see Quine’s own positions as particularly at odds with his own, including the allegedly antagonistic Quinean doctrine of ‘holism’. This is simply because Carnap was not looking to provide incorrigibly valid criteria for analyticity—truths held so ‘come what may’. How could it be, if he himself holds that the choice of framework can be modified or discarded on pragmatic grounds? As has been pointed out, a case can be easily made that

Carnap also accepts holism, but denies the implication that it poses a challenge to the coherence or usefulness of the concept of analyticity. Carnap agrees with Quine that the rules of a language, and thereby the analytic truths in it, can be altered when it is

³³ Maddy [2007], 69.

³⁴ Carnap, quoted in Maddy [2007], 74.

expedient to do so. Yet Carnap does not see this point as telling against analyticity.³⁵

Given the consistency of Quine's criticisms of Carnap we've looked at so far—namely, that they consider certain distinctions are being ill-suited at performing the role expected of them—it seems reasonable to conclude that the 'conventionalist' reading of Carnap, with the concomitant neo-Kantian overtones, has much to be said in its favour.

This response to Quine however can only be made by Carnap post-'semantic turn,' if we choose follow the defence above. Yet one can easily read into the Carnap of *LSL* a nascent 'semanticism', which serves much the same purpose. This last reading of Carnap is due to Alberto Coffa, who shares much with the 'anti-foundationalist' reading but also places Carnap within what he terms the 'semantic tradition': philosophers who, since Kant, have looked to the senses and meanings of our concepts and propositions as a reaction to the use of 'intuition' and the synthetic *a priori*. Coffa notes how different Carnap's views on the foundations of mathematics is to the Frege-Russell picture, with whom he is often aligned: Carnap was carefully neutral in *LSL* between intuitionism, logicism or formalism, terming them different, equally acceptable proposals which can be freely chosen—a perfect example of what was meant by the 'principle of tolerance,' where outright prohibitions are replaced by "definitional differentiation" surrounding, for example, the law of excluded middle.³⁶ Meanwhile, analyticity is defined in a broadly 'semantic' fashion:

The second strategy for defining truth and consequence in *LSL* appears ... when analyticity is defined for language II. The essentially semantic nature of this new approach becomes clear when we notice that the centerpiece of the new notion of truth was

³⁵ Loomis [2006], 500. The discussion here is a further elaboration of a paper by George [2000], where the central claim is that "for Carnap, not only are analytic statements without empirical content, his doctrine *that there are analytic statements* is too." Loomis [2006], 501.

³⁶ Carnap [1937], 51.

not a generalization of the notion of inference, but the radically new notion of *valuation*.³⁷

Valuation is indeed introduced here, but Carnap's own account of what we should understand by a 'possible valuation' is "a class (that is to say, a *syntactical* property) of accented expressions."³⁸ Carnap presents this idea as continuous with the work begun in the less expressive Language I; yet talk of 'meaning' comes in quickly, for the valuation **B** of '*F*' occurs within a sentence **G**₁ whose meaning *is* important—because we link expressions to their 'values', a notion, Coffa is quick to point, not very different from that of reference.³⁹ But the transformation Carnap painstakingly detailed—the reduction into a prenex form and finally into $0=0$ or $0\neq 0$ —is only an elaborate means of *not* saying the obvious:

A combination of philosophical prejudices led him to present the semantic ideas contained in that section in such a contorted fashion that even Carnap could not recognize them for what they were.⁴⁰

Well, what *were* they, exactly? Coffa claims that Carnap was essentially a Tarskian wolf in Hilbertian clothing, linking Carnap's valuation to Tarski's satisfaction function. Indeed,

nowhere was Carnap closer to the semantic conception of truth than at this point ... [he] was clearly making an enormous effort not to say what one would naturally say under these circumstances: that he had identified a process that determined the truth values of all the arithmetical claims of II in the domain of the natural numbers.⁴¹

And of course, to the extent that even the Carnap of *LSL* was a closet semanticist, a reading appears where a flat-footed response to Quine seems more than possible—if not precisely in the *LSL* then afterwards. What went wrong in the *LSL*, Coffa concludes, is

³⁷ Coffa [1991], 288.

³⁸ Carnap [1937], 107 (§34c).

³⁹ Coffa [1991], 291.

⁴⁰ *Ibid.*, 289.

⁴¹ *ibid.*, 293.

Carnap's conclusion that truth and falsehood cannot be syntactical properties. But what Carnap *called* syntax was indistinguishable from Tarski's "semantic metalanguages" except for the convoluted machinery of reduction.⁴² Coffa's semantic story does not end here, however. But to see where it goes a critical turn will be required.

III. Dissent and Deflationism

(a) *Face Valuations: Goldfarb on Coffa*

The revisionary approaches sketched out above are similar in that they offer a seemingly legitimate way out for Carnap faced with the criticisms of Quine. This is not to suggest that Coffa and Friedman's can or should be conflated: while they share both an anti-foundationalist bent, and furthermore stress the important differences Carnap had with the Frege-Russell program and with empiricism as narrowly conceived, there are important differences between the semantic and 'neo-Kantian' views. First and most obvious, while Coffa is mainly concerned with the *LSL*, Friedman focuses on the *Aufbau*. Second, while Coffa remains rather sympathetic to Carnap, Friedman concludes in the end that the *Aufbau* is a failure on a re-formulated version of the same basic Quinean objection.⁴³ But third and far more importantly, Friedman's Carnap posits a structuralist notion of objectivity, while Coffa's brushes up to Tarski, using semantics to secure his edifice. Neither of these approaches have entirely displaced the Quinean reading; but they have generated critical reactions that perhaps place us closest to Carnap's actual intentions. In what follows I will examine two of these, due to Goldfarb and Pincock, and conclude by linking them to Maddy's own appraisal of Carnap and project in *Second Philosophy*.

⁴² *Ibid.*, 304.

⁴³ Friedman [2007], 111.

Goldfarb takes up Coffa's interpretation of Carnap, arguing that Coffa has simply gotten it wrong.⁴⁴ The semantics Coffa proposes are present in *LSL* correspond to a 'second-level factualism', Goldfarb points out, concerning the status of what is conventional:

Coffa thinks Carnap's analyses are supported only if there are facts of the matter as to whether statements express factual claims or rather express only conventions ... Are ascriptions of conventionality themselves conventional? ... Coffa's response is an emphatic 'No'. To think otherwise, Coffa suggests, would be for Carnap to undercut his own views.⁴⁵

If this were not so, the problem would be stark: we would be free to choose conventions that allowed clearly metaphysical questions to be posed, undermining Carnap's avowed purpose of getting rid of such questions once and for all. And it certainly seems that under Coffa's reading Carnap would be committed to the factualist position, despite its not appearing anywhere in *LSL*, a conspicuous absence Coffa attributes to the 'self-deception' and 'contortions' we've already alluded to. More problematically such a semantic factualism, if it could be maintained, would not provide in fact provide a clear means of responding to Quine, because Quine's query is specifically to ask in virtue of *which* facts we can draw the analytic / synthetic distinction. The appeal to semantics, instead of securing the demarcation between metaphysics and the logic of science, goads one to ask after these meanings. As Goldfarb pointedly notes, "Quine's attack can be viewed as a challenge to specify what facts are involved in Carnap's semantic formulations."⁴⁶ But Carnap's reaction to this line of questioning seems to belie Coffa's semantic interpretation of his work. All that needs to be said *has* been said in the proposal itself for the usage of 'analytic'. Goldfarb suspects the error here has to do with Coffa's understanding of conventional—which, it should be said again, differs markedly from used in Friedman:

⁴⁴ Goldfarb [1997], 52.

⁴⁵ *Ibid.*, 53.

⁴⁶ *Ibid.*, 54.

To my ear, Coffa is relying on a global conventional / nonconventional distinction. But this would bring in just the framework-independent conception of fact that Carnap is at pains to avoid.⁴⁷

Indeed, the whole *point* of the Principle of Tolerance is the dismissal of such independence—if there is no morality to logic, there is no meta-morality either. Does this mean Friedman was correct all along?

(b) Pincock's Reserved Reading

A recent article by Pincock takes up the Friedman-Richardson 'neo-Kantian' reading of the *Aufbau* which, as we've seen, argues for a 'structuralist' notion of objectivity (or, rather, intersubjectivity). But while, under this interpretation, a certain response to Quine is possible it too is a failure in the end: this time because there is no way to explain the basic notion of 'recollected similarity', central to the *Aufbau*, in these structural terms.⁴⁸ Pincock finds it rather implausible that such a careful thinker as Carnap should have merely *overlooked*, somehow, the problem of defining that basic notion. But the empiricist reading is also clearly unsatisfactory. How *are* we to read Carnap, then? Pincock suggests that Carnap

Hoped to set aside these schools [empiricism and neo-Kantianism] and engage in a project that was more or less scientific: it would take as its objects the various scientific disciplines, allow cooperative efforts and hold out some prospects for progress.⁴⁹

The idea here is to replace philosophy with what would be a *scientific* enterprise instead of the system-building of metaphysicians past. Thus the salient features of the *Aufbau* Pincock points to, as does Friedman, is first the possibility of these alternative constructions systems of science and second the metaphysical neutrality Carnap

⁴⁷ *ibid.*, 58.

⁴⁸ Pincock [2005], 519.

⁴⁹ *ibid.*, 520.

tirelessly advocates (an important continuity with the *LSL* that has motivated our dual discussion of these texts).

There is an important tension here however: as Pincock points out, this supposed ‘neutrality’ in fact comes packaged with a controversial epistemological claim: that scientific statements must be translated into structural ones, since “whatever [that] does not belong to the structure ... is, in the final analysis, subjective.”⁵⁰ Pincock’s reading of Carnap aims to resolve this tension by “downgrading the role of this conception of objectivity” to a function of the autopsychological system. The idea here is that

The standards and assumptions of traditional science take the place of any substantial philosophical motivations or presuppositions. On the naturalist reading, then, neutrality is achieved by construction because it is one more scientific discipline.⁵¹

This is remarkably similar to Goldfarb’s final remarks concerning what Carnap’s was really after in the *LSL*, which I deliberately passed over in the last section:

In a word, I am suggesting that Carnap’s position in *LSL* is *deflationary*. It is not based on any substantial theoretical commitments of its own. Its stance towards alternative philosophical positions is not of opposition to their doctrines with its doctrines, but of invitation to clarification.⁵²

In neither Goldfarb’s or Pincock’s Carnap are there any hidden philosophical commitments, appeals to facts, or any other kind of traditional justification. All there is at bottom is a methodological proposal that will prove itself in application—or won’t.⁵³ And all the Quinean fuss over whether or not principled distinctions can be drawn or not quite misses the point, as myriad alternative

⁵⁰ Carnap, quoted *ibid.*, 522.

⁵¹ *ibid.*, 522-523.

⁵² Goldfarb [1997], 61.

⁵³ I can’t help but be reminded of something the late Douglas Adams once wrote, though I don’t have the source: “Isn’t it enough to see that a garden is beautiful without having to believe there are fairies at the bottom of it too?” Much less fairies that are gardeners, too.

constructions are possible: not just in principle, but in practice. Carnap himself sketched out such an alternative, Pincock reports, as the goal of construction theory was comparative and clarificatory, not foundational, conventional or semantic.⁵⁴

IV. Conclusion: Maddy's Naturalism

This brings us very close to what Penelope Maddy terms 'second philosophy' in her book of the same name. The title is to be understood as a rebuke of sorts against the projects and pretensions of 'first philosophy', both in the strict Cartesian sense and the more general sense of any abstract metaphysics. Thus what Maddy proposes and means by 'second philosophy' is a "particularly austere form of naturalism," one without outright definition but with a basically scientific outlook.⁵⁵ The 'second philosopher' is introduced as some ideal paragon of the second-philosophical approach. The second philosopher is not terribly concerned with the Cartesian method of doubt, content to work within the Neurathian ship, untroubled by radical skepticism and puzzled by the alleged solutions of transcendentalism (as issues arise immediately as to their status as knowledge claims, e.g., the 'transcendental unity of apperception').⁵⁶

The second philosopher simply does not understand the appeal of the 'two-level' approach—and not on grounds that it is not 'scientific': "she responds by respectfully asking Kant to explain what it is that his transcendental psychology is studying, and how this study is to be conducted."⁵⁷ But the type of evidence the second philosopher asks of Kant to demonstrate, say, the discursive nature of cognition, Kant would view as inappropriate; meanwhile, the second philosopher is still confused as to what purpose the transcendental approach serves. Whether or we can have *a priori*

⁵⁴ Pincock [2005], 524-.

⁵⁵ Maddy, [2007], 1-2.

⁵⁶ *ibid.*, 58.

⁵⁷ *Ibid.*, 62-63.

knowledge of the world “can only be supported by serious investigation of the world and our cognitive access to it,” for example, a study of “infant cognition and of evolutionary pressures.”⁵⁸ Kant’s two-level view has little appeal—and we can see now how such an attitude can be generalized from the Cartesian and Kantian examples to other strands of philosophy. Maddy’s view towards Kant is essentially the same she has towards Carnap—she does not see the need for what she terms is the ‘second level’ of a two-level view:

The scientific realist might argue that the best explanation for the success of the scientific enterprise is the assumption that the entities it describes really do exist, while the instrumentalist denies that this is so ... this sort of debate flies over the head of the Second Philosopher. From her point of view, one either accepts her evidence or explains in her terms why it is inadequate, something neither the realist nor the instrumentalist purports to do. What they are squabbling about escapes her in the first place—and for that reason, she doesn’t feel the draw of Carnap’s cure.⁵⁹

This characterization of Carnap is probably at the very least uncharitable to the aims of the *Aufbau* and *LSL*, and definitely unfair to the mature Carnap of the 50s and 60s. It is easy to see why: the reconstructive proposal makes no substantive assumptions about the character of science, nor proffers any putatively philosophical normative recommendations concerning the practice of science. If the ‘philosophy’ of science is neither ‘foundational’ nor normative, one ought to be perplexed at Maddy’s criticism here. Science is perfectly aright where it stands, Carnap would say, just as Maddy does; and that she sees no appeal to the reconstructive proposal just means that she is in no need of the queer exorcism Carnap feels he must be able perform when required. There seems to be no actual *disagreement* present, despite Maddy’s pugnacious assertion that Carnap “applies ordinary scientific methods in the service of a

⁵⁸ *ibid.*, 63.

⁵⁹ *ibid.*, 80.

peculiarly philosophical project that from her perspective has no discernible point.”⁶⁰ Carnap would be entirely nonplussed here: this perspective is *precisely* the one to be adopted, with the reconstruction existing to show the vacuity of pseudo-questions that may arise in confused minds.

Despite this Maddy does present some objections to Carnap, which may explain her critical attitude. They seem however to rely on readings we’ve seen to be somewhat deficient already. In the closing pages of her chapter on Carnap in *Second Philosophy*, she uncovers a seeming paradox within the Principle of Tolerance: since the justification for the choice of principle is pragmatically determined, there must be room for various intolerant principles. But this, as she says, borders on incoherence: how could the choice of a dogmatic principle bring about the ‘existence’ of facts outside rational reconstruction?⁶¹ While a tolerant principle may be *advantageous*, mere advantage does not secure the impossibility of a dogmatic principle. This raises for Maddy an important issue, namely, the presence of a substantive claim in Carnap’s philosophy concerning the constitutive nature of logic:

Questions of confirmation and disconfirmation can’t even be raised until our language, and hence our logic, is in place; in other words, because logic is constitutive in some descendant of Kant’s sense.⁶²

Maddy see the distinction being drawn here are precisely the sort of thing Quine was trying to attack, namely, between what counts as constitutive and what does not. Certainly if the distinction could be always drawn and easily defended an ‘intolerant’ principle would not be able to maintain that there are pre-constitutive truths. And, as Maddy notes, her own position—namely, that nothing need be said about science, while reconstruction sees it as a practice over which various constitutive frameworks could be applied—means that “the

⁶⁰ *ibid.*, 82.

⁶¹ *ibid.*, 81.

⁶² *ibid.*, 82 fn. 37.

second philosopher's 'dogmatic' position ... doesn't in fact conflict with Carnap's tolerance," as we've just seen.⁶³

What can be said in response here? One possibility would be that Carnap could simply 'bite the bullet', as it were, and accede to the criticism, but deny that it invalidates his project. Such a flat-footed response could proceed on the following lines: first, suggest that the claim concerning the constitutive nature of logic should *not* be read as primarily 'Kantian', but maintain instead that 'constitutiveness' is property defined internally to a given reconstruction—even if this means that there is no principled way to block the arising of so-called 'dogmatic' principles. But the lack of a *principled* way is not a show-stopper, and this is where Carnap can make his stand. The need for certainty here exhibited by Maddy, goaded by Quine, borders on the perversely philosophical. For Carnap, the grounds of analyticity being pragmatic is an asset, not a failing.⁶⁴ Asking for—as Quine might have done—an explication of the *concept* analytic rather than creating a mere 'formal surrogate' of it—would be a more promising line of attack.⁶⁵ Such a move would bring the debate further afield and possibly into a terrain where the later Carnap or a sympathetic commentator could regain the advantage, for the view that concepts are such things as admit of *this* kind of definition is on the wane. More the point, Carnap's take on the Maddy paradox would be to perhaps shrug it off with a knowing smile, confident that over time the 'dogmatic' principle—through which 'truths' are created outside of rational reconstruction—would prove to be less satisfactory for the purposes of science. Since, as Maddy herself notes, the 'dogmatic' position need not *conflict* openly or at all with the methods of reconstruction, it is solely a matter of iterative, pragmatic confirmation—which in the end means that Carnap left it as a possibility that he should be proven 'wrong' about his own preferred

⁶³ *ibid.*

⁶⁴ cf. "Carnap thinks that the concept of analyticity has proven its pragmatic value, and he considers it 'indispensible'." Loomis [2006], 505.

⁶⁵ Pointed out *ibid.*

assumptions using machinery wholly internal to his own system. Hardly a decisive refutation.

WORKS CITED

- Awodey, S. & Carus, A. W. [2007]. 'Carnap's Dream: Gödel, Wittgenstein and *Logical Syntax*' *Synthese* **159:1**, 23-45.
- Carnap, R. [1937]. *The Logical Syntax of Language*. London: Routledge & Kegan Paul Ltd.
- Coffa, A. [1991]. *The Semantic Tradition from Kant to Carnap*. Cambridge: Cambridge University Press.
- Demopoulos, W. [2007]. 'Carnap on the Rational Reconstruction of Scientific Theories', *forthcoming*.
- Friedman, M. [2007]. 'Coordination, Constitution, and Convention: The Evolution of the A Priori in Logical Empiricism', in Richardson, A., & Uebel, T., *The Cambridge Companion to Logical Empiricism*. New York: Cambridge University Press.
- George, A. [2000]. 'On Washing Fur Without Wetting It: Quine, Carnap and Analyticity', *Mind* **109:433** 1-24.
- Goldfarb, W. [1997]. 'Semantics in Carnap: A Rejoinder to Alberto Coffa', *Philosophical Topics* **25:2** 51-65
- Loomis, E. [2006]. 'Empirical Equivalence in the Quine-Carnap Debate', *Pacific Philosophical Quarterly* **87** 499-508.
- Maddy, P. [2007]. *Second Philosophy*. Oxford: Oxford University Press.
- Pincock, C. [2005]. 'A Reserved Reading of Carnap's *Aufbau*' *Pacific Philosophical Quarterly* **86** 518-543.
- Quine, W.V.O. [1961]. 'Two Dogmas of Empiricism', *From a Logical Point of View*, 2nd edition. Cambridge: Harvard University Press.
- Quine, W.V.O. [1969]. *Ontological Relativity and other Essays*. New York: Columbia University Press.
- Quine, W.V.O. [1983]. 'Carnap and Logical Truth', in Benacerraf, P. & Putnam, H. *Philosophy of Mathematics: Selected Readings*, 2nd edition.
- Richardson, A. [1998]. *Carnap's Construction of the World: The Aufbau and the Emergence of Logical Empiricism*. Cambridge: Cambridge University Press.
- Rockmore, T. [2004]. 'On the Structure of Twentieth-Century Philosophy', *Metaphilosophy* **35:4** 466-478.