Naturalistic metaphysics at sea[1]

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Abstract: In this paper I return to the mid-20th-century debate between Quine and Carnap on the status of metaphysical questions with an eye toward advancing contemporary debates about whether naturalists can coherently undertake substantive metaphysical inquiry. Following Huw Price, I take the debate between Quine and Carnap to hinge, in part, on whether human inquiry is functionally unified. However, unlike Price, I suggest that this question is not best understood as a question about the function(s) of descriptive discourse. This goes along with rejecting a "linguistic conception" of the starting point of metaphysical inquiry, which, although shared by Quine and Carnap, Price gives us no good reason to think is mandatory for naturalists. I sketch two reasons naturalists have to reject a particular manifestation of this linguistic conception in Quine's work – his criterion of ontological commitment. Finally, I show how these reasons can help us identify the grains of truth in some recent critiques of "mainstream metaphysics of mind".

Keywords: naturalism; meta-ontology; ontological commitment; W.V.O. Quine; Huw Price.

1. Introduction

Two of the most significant trends in late analytic philosophy have been the widespread adoption of methodological naturalism and the resurgence of metaphysics as a substantive area of inquiry. Arguably, no single philosopher is more responsible for these trends than W.V.O. Quine. Both naturalism and the legitimacy of metaphysics are expressed by one of Quine's favorite images: Otto Neurath's boat, which Quine takes (in the original German) as one of the

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epigraphs for his 1960 book *Word and Object*:

> We [philosophers and scientists] are like sailors who have to rebuild their ship on the open sea, without ever being able to dismantle it in dry-dock and reconstruct it from the best components. (Neurath 1932/3: 92)

For Quine, this expresses naturalism by denying the possibility of an "external vantage point" or a "first philosophy" (the solid ground of a "dry-dock") that would provide a foundation for scientific inquiry as a whole (Quine 1969: 127). At the core of Quine's naturalism is the rejection of any second order or transcendental philosophical activity that is independent of, or prior to, scientific inquiry (see Maddy 2007; Verhaegh 2017c). As he puts it, naturalism is "the recognition that it is within science itself, and not in some prior philosophy, that reality is to be identified and described" (1981: 21).

Although this statement of naturalism rejects philosophical inquiry that is supposedly prior to scientific inquiry, it does not express the idea that, according to the naturalist, philosophy should be part of, or continuous with, science. Naturalistic philosophers take their place along with scientists as busy sailors on Neurath's boat, and, as a result: "All scientific findings, all scientific conjectures that are at present plausible, are therefore … as welcome for use in philosophy as elsewhere" (Quine 1969: 127). Philosophers use the same methods as scientists, which, in the naturalist's view, are the only legitimate methods of investigating the world that there are. So, developing a metaphysical theory of the general structure of reality is not a different kind of enterprise than developing a theory in a particular science. As Quine puts it in two, oft-quoted passages:

> Our acceptance of an ontology is, I think, similar in principle to our acceptance of a scientific theory, say a system of physics: we adopt, at least insofar as we are reasonable, the simplest conceptual scheme into which the disordered fragments of raw experience can be fitted and arranged. Our ontology is determined once we have fixed the over-all conceptual scheme which is to accommodate science in the broadest sense. (Quine 1948: 16-17)

> Ontological questions, under this view, are on a par with questions of natural science[2]. (Quine 1951b: 45)

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[2]   In a footnote appended to this sentence Quine quotes the following passage (in French) from Émile Meyerson: "Ontology is a part of science itself and cannot be separated from it". Although Quine claims not to have been significantly influenced by Neurath's writings (see Uebel (1991: 629n15, 639n33); Verhaegh (2017b: 337n71)), it seems that Meyerson may have had a bigger impact on Quine's thought. Sandra Laugier claims that Quine took the idea of "positing" from Meyerson (2009: 100) and that he "owes to Meyerson even his conception of naturalism" (*Ibid*.: 104). M. Anthony Mills,

This approach to ontology, in which questions about the existence of (say) numbers, composite material objects, possible worlds, fictional characters, or moral values are substantive, difficult, but tractable questions that are no different in kind than scientific questions, was elaborated by Quine's student, David Lewis, and has been called "mainstream metaphysics" (Manley 2009: 4)[3]. On this approach, ontological methodology is "quasi-scientific" with competing positions about the existence of the entities in question assessed "with a loose battery of criteria for theory choice," including theoretical insight, simplicity, integration with other domains, and consilience with our pre-theoretical beliefs and "intuitive" verdicts about thought experiments (Sider 2009: 385; see also Sider 2011: 166ff.)

Many practitioners of mainstream metaphysics think that a proper subset of the entities that exist in the actual world are fundamental and thus seem to face the task of finding a place for other purportedly existing things within a description of the world that uses only terms for the fundamental entities. If descriptions of the non-basic things cannot be found implicitly within the fundamental description, then we must admit that those non-basic things do not in fact exist. We must locate the putative non-basic features of the world on pain of eliminating them. This project of "serious metaphysics" thus inevitably involves "location problems" (Jackson 1998). According to one of the progenitors of serious metaphysics, Frank Jackson, the only way to solve a location problem is to show that (a description involving) the non-basic feature is entailed by a description of the world in basic terms. This approach to metaphysics, the so-called Canberra Plan, thus claims that conceptual analysis will play an essential role in metaphysical inquiry (*Ibid.*: Ch. 2). Such conceptual analysis will involve identifying common sense platitudes about the alleged non-basic feature and consulting intuitions about the application of a term for that feature in different possible cases. The Canberra Plan has been called "the most influential self-proclaimed naturalistic approach in the contemporary philosophical literature in metaphysics" (Ismael 2014: 86).

However, since Quine's debates with Carnap in the 1950s on analyticity, internal and external existence questions, and the theoretical/practical contrast (Carnap 1950; Quine 1951a; 1951b), there have been philosophers in the analytic tradition who are (if we accept Manley's characterization) outside the

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however, argues that the latter claim is an overstatement and that, for Meyerson, some areas of ontology are irreducible to science (2015: 324n20, 343).

[3] Manley introduces this label "with the caveat that [the view] has only come to ascendency lately, and is still widely challenged" (ibid.). He also notes that mainstream metaphysics "repudiates the more pragmatist [in the sense at issue at the end of Quine (1951b)] elements of Quine's approach to ontology" (*Ibid.*: 5).

mainstream. These philosophers claim that mainstream metaphysicians' approach to ontological questions is mistaken and that these questions are somehow merely verbal, or trivial, or entirely practical (instead of theoretical). In doing so, they advocate what I'll call *meta-ontological deflationism.* Debates between meta-ontological deflationists and their opponents have attracted increasing attention in recent years (see, e.g., Chalmers, Manley, and Wasserman 2009; Hirsch 2011; Thomasson 2014; Blatti and Lapointe 2016; Hofweber 2016). These debates often lie at the intersection of contemporary metaphysics and the history of late analytic philosophy, since what is as issue is not only how we should approach apparent metaphysical questions but which approach should be seen as emerging victorious from the debate between Quine and Carnap in the middle of the last century.

This paper falls squarely in this intersection. I aim to show that contemporary meta-metaphysics and the history of late analytic philosophy can be mutually illuminating. On one hand, I claim that contemporary naturalists who want to defend substantive metaphysical inquiry can get clearer about exactly what that inquiry is like, and how best to defend it, by reflecting on the elements of Quine's philosophy that made it difficult for him to avoid meta-ontological deflationism. On the other hand, I hope that outlining a naturalistic approach to substantive metaphysical inquiry will help us better understand some aspects of the history of late analytic philosophy, such as the core issues at stake in the debate between Quine and Carnap.

My entry point into these issues is Huw Price's claim that naturalism itself is in tension with substantive metaphysical inquiry and that contemporary mainstream metaphysicians are mistaken to think that Quine provides support for their approach. On this view, meta-ontological deflationism simply follows from the right kind of naturalistic methodology. Indeed, the idea that metaphysics should not be part of naturalistic inquiry can be traced to the rhetorical origins of Quine's naturalism: the sentence from Neurath that immediately follows those that appear as Quine's epigraph to *Word and Object* is: "Only metaphysics can disappear without a trace" (Neurath 1932/3: 92).

If this view is correct, then proponents of substantive metaphysical inquiry should be cast off the boat and left truly "at sea," with grave doubts about the legitimacy of their project and at risk of slipping beneath the waves "without a trace". This paper is offered as a lifeline to those metaphysicians who want to find a place on Neurath's naturalistic boat. I claim, contra Price, that naturalistic methodology is consistent with substantive metaphysical inquiry and that naturalistic metaphysicians still have important work to do that is not simply investigation of our linguistic practices. However, I think that this work will differ in significant ways from the projects pursued by (much of) mainstream metaphys-

ics. In particular, I argue that naturalistic metaphysicians should (i) not adopt a linguistic conception of metaphysical issues (as both Quine and followers of the Canberra Plan do), (ii) reject Quine's criterion of ontological commitment, (iii) not take agreement with our pre-theoretic beliefs to be a constraint on metaphysical theorizing, and (iv) adopt a more piecemeal approach to existence questions, instead of trying to develop universal, science-wide arguments for, say, realism.

Thus, in this paper I advocate an intermediate position about how best to keep the boat of inquiry afloat. Unlike mainstream metaphysicians, I think that the boat bequeathed to us by Quine, Lewis, and Jackson needs a significant overhaul. Some of the planks that keep mainstream metaphysics afloat are rotten and need to be jettisoned. However, unlike meta-ontological deflationists, I do not think that this calls for abandoning metaphysics completely. Rather, I think that naturalistic metaphysicians deserve to be at sea with every other inquirer, venturing into unknown waters on a common voyage of discovery.

In Section 2, I outline Price's argument that Quine is best interpreted as a meta-ontological deflationist and how, according to Price, whether Quine has an argument against deflationism turns largely on whether he can consistently defend the idea that descriptive discourse serves a single function. In Price's view, whether this kind of "functional monism" is true will ultimately be settled by studying human language use and is intimately connected to the question of whether truth and other semantic notions are substantive, causal-explanatory properties. In Sections 3 and 4, I argue that Price is mistaken on both counts. In Section 3, I suggest that Quine's "functional monism" is best interpreted as a strong version of the *seamlessness* of inquiry, which implies a kind of *disciplinary holism* that is not best thought of in linguistic terms, arguably itself poses a challenge to Price's naturalism, and can be used to show how a "unified, all-purpose ontology" is consistent with naturalism. In Section 4, I suggest that naturalists are well advised to reject (contra both Quine and Price) a "linguistic conception" of metaphysical inquiry (and of location problems, in particular), according to which metaphysical issues arise via reflection on human language and thought and how they relate to the world (see Price 2004: 188)[4]. By rejecting a linguistic conception, naturalists can argue that me-

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[4] Adopting a linguistic conception of metaphysical inquiry need not involve thinking that there is a distinction between choosing a linguistic framework and choosing a theory within a framework. Thus, one can adopt a linguistic conception without weighing in on debates about analyticity, the relation between questions that are internal to a linguistic framework and those that are external to a framework, and related issues. As I discuss below, I think that endorsing Quine's doctrine of ontological commitment reflects a linguistic conception of ontological issues since, on this view, (a) ontological commitment is revealed by making "verbal reference" to objects, and (b) figuring out "what there really is in the world" hinges on regimenting one's total theory into first-order logic (see note 9 and Section 4).

ta-ontological claims are independent of semantic issues (such as whether or not semantic minimalism is true). Further, I sketch two reasons that naturalists have for rejecting a particular manifestation of Quine's linguistic conception: his criterion of ontological commitment. Finally, in Section 5, I bring this discussion to bear on some other, largely independent, critiques of metaphysics of mind, identifying what is right about these critiques and outlining some differences between mainstream metaphysics and my proposed approach.

2. *Quine, Carnap, and meta-ontological deflationism*

In a series of papers, Huw Price (1992; 2007; 2009) has argued that it is a mistake to think, as mainstream metaphysicians do, that Quine successfully defends robust metaphysical inquiry from Carnap's meta-ontological deflationism. He claims that the ontology that Quine has revived is a "pale zombie" of traditional metaphysics and that Quine's attack on Carnap's argument in "Empiricism, Semantics, and Ontology" misses its mark and leaves Carnap's argument "if anything, stronger than before" (2009: 282)[5]. Thus, according to Price, the attempted union of methodological naturalism and substantive metaphysical inquiry was broken-backed from the start[6].

Carnap's argument for meta-ontological deflationism hinges on the distinction between questions that are internal to a linguistic framework and questions that are external to any framework[7]. He claims that external ontological

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[5] As far as I know, Marc Alspector-Kelly (2001) was the first to offer a detailed argument that Quine's views on ontology are closer to Carnap's than the received view has taken them to be and that "contemporary ontologists … underestimate the deflationary impact of Quine's (and Carnap's) ontological naturalism" (*Ibid.*: 94-95). I focus on Price's discussion since he offers a more fully fleshed out positive view of meta-ontological deflationism and the arguments for it.

[6] How best to interpret Quine on metaphysical issues has received some attention in very recent work in the history of late analytic philosophy. For instance, Sander Verhaegh has argued that "both the received view that Quine saved metaphysics *and* the opposite view that Carnap and Quine are on the same anti-metaphysical team" are too one-sided (2017a: 873, italics in original). In his view, Quine, like Carnap, does reject the idea of trying to "ask what reality is really like in a distinctively philosophical way," but he rejects this project for different reasons than Carnap does (ibid.). Similarly, Frederique Janssen-Lauret claims that "both heavy-duty metaphysicians and neopragmatist anti-metaphysicians are wrong" about the role Quine played in the development of current metaphysics (2017: 249). However, she seems to think that Quine provides more comfort to "heavy-duty metaphysics" than Verhaegh's interpretation does. For instance, she calls the antimetaphysical reading of Quine "ahistorical" and "historically ill-informed" (*Ibid.*: 251). And she claims that Quine "was not an antimetaphysician or flat-footed deflationist, but an interesting, empiricist metaphysician, striving to fit metaphysics around scientific discovery" (*Ibid.*: 250).

[7] Verhaegh argues that there are actually two different kinds of external questions (2017a: 879). I am eliding this distinction, but I think what I say about Quine's view of metaphysics is in the same general vicinity as Verhaegh's interpretation.

questions are merely pseudo-questions if they are intended as theoretical questions with answers that are true or false. Rather, external ontological questions about a class of entities are only intelligible as practical questions about whether it is advisable to adopt the linguistic framework in which discourse about these entities is carried out. Only ontological questions internal to a framework are intelligible as theoretical questions with true or false answers.

Quine rejects any philosophically important distinction between choosing a linguistic framework versus choosing a theory within that framework. So, he rejects a hard-and-fast distinction between the theoretical and the practical. In his view, settling the question of whether numbers exist is subject to the same kinds of consideration as settling the question of whether there is a general "reward system" in the human brain (as opposed to particular reward systems devoted to sex, food, social contact, etc.). In this way, ontological questions are "on a par" with scientific questions. But, as Price notes, this, by itself, should provide cold comfort to traditional metaphysicians: "Quine himself has sunk the metaphysicians' traditional boat, and left all of us, scientists and ontologists, clinging to Neurath's Raft" (2009: 286). "[T]he force of Quine's remarks is not that metaphysics is like science as traditionally (i.e., non-pragmatically) conceived, but that science (at least potentially, and at least in extremis) is like metaphysics as pragmatically conceived" (*Ibid.*: 287). Up to this point, it looks like there is little difference between Quine and Carnap. They seem to agree about which kinds of questions are legitimate and to disagree merely about whether those questions should be labeled with traditional terms like 'ontology' (see Quine 1951a: 203-204; Hylton 2007: 236; Verhaegh 2017a: 883)[8].

However, as Price notes, room for a more substantive difference between Quine and Carnap opens up when we consider the possibility of there being a "single grand framework" in which to treat all ontological questions (2009: 287)[9]. Sure, Quine would still reject the traditional metaphysical ques-

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[8]   "Quine's philosophy allows for a revival of what may well look like metaphysics: it makes sense of the question whether there really are numbers, for example, or modal facts. But there is nothing transcendent, or even transcendental, in Quinean metaphysics. … It is, we might say, metaphysics naturalized; in some contexts, indeed, it may seem odd to call it 'metaphysics' at all" (Hylton 2007: 367). This passage occurs in a context in which Hylton draws a contrast between Quine's views and those of Carnap, but this contrast hinges on the idea that, for Carnap, but not for Quine, the concepts of truth and justification are language-relative (*Ibid.*: 69ff., 234-236). Contemporary meta-ontological deflationists tend to deny at least *this* kind of language-relativity.

[9]   According to Quine: "Various languages are suitable for various purposes; but one language, his fully regimented canonical notation, is appropriate when we are concerned with 'the true and ultimate structure of reality'. That notation is the one to use when our concern is to maximize objectivity, to get at the world as it really is. […] [I]f we have succeeded in choosing the best canonical notation, then our theory as phrased in that notation tells us what there really is in the world" (Hylton 2007: 242).

tion of whether this framework *really* matches up with reality, at least if answering such a question requires us to adopt some supposed perspective outside of science (broadly conceived), the single "grand" framework itself (see Quine 1950: 79; 1992: 405; 1981: 22; Verhaegh 2017a: 884)[10]. But this is simply to make the general naturalistic move; it does not entail meta-ontological deflationism. If there is a "single grand framework" and a unique best theory of the world within that framework, then there is nothing to stop us from reinterpreting traditional ontological questions as questions about whether our best theory of the world is committed to a certain kind of entities. If it is so committed, then we could say that those entities *really* exist in the only sense of "really" that makes any sense (see Quine 1954: 229; 1996: 348; Verhaegh 2017a: 884).

So now it looks like Carnap's meta-ontological deflationism depends on whether there is a "principled plurality in language" – on whether the different linguistic frameworks we use to talk about (at least what seem to be) different kinds of entities (especially, mathematical, moral, meaning and mental entities – what Price (1997) calls the "M-worlds") serve importantly different kinds of function while, at the same time, all sharing the core features of descriptive discourse (2009: 289; see also Price 1997: 136-140). That is, it now looks like Carnap's deflationism depends on whether or not what Price calls "functional pluralism" is true, and whether Quine has an argument against deflationism depends on whether he has an argument against functionalism pluralism.

Price suggests that Quine has no such argument. As a naturalist, he "seems poorly placed to reject the suggestion that there might be important functional differences of this kind in language. The issue is one for science" (2009: 294). Anthropologists or biologists will investigate the function of different kinds of human discourse, and "Quine can hardly argue that the results of such investigations may be known a priori" (ibid.). Quine does often seem to assume that there is a single, core function of descriptive discourse: playing some role in predicting observations sentences, i.e., sentences that are directly correlated with sensory stimulations. And he assumes that this function can be used to demarcate the realm of the genuinely cognitive or theoretical from the non-cognitive (merely expressive or instrumental) (see Hylton 2007: 22-23). However, Price suggests (drawing here on a passage from Hookway 1988: 68-69), that it is doubtful whether this assumption is consistent with Quine's minimalism or deflationism about truth (if in fact he

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[10]   It is interesting to note that what is, according to Verhaegh (2017b: 337), the first published instance of Quine using Neurath's boat metaphor occurs in (Quine 1950), and he uses it there to support the idea that "we cannot detach ourselves from [our conceptual scheme] and compare it objectively with an unconceptualized reality. Hence it is meaningless, I suggest, to inquire into the absolute correctness of a conceptual scheme as a mirror of reality" (*Ibid.*: 79).

is a minimalist or deflationist about truth) (Price 2009: 294)[11].

According to Price, then, the viability of meta-ontological deflationism depends, in large part, on whether functional pluralism is true, and this, in turn, is a question that (a) hinges on the nature and function of human *language* and (b) is closely connected to the question of whether truth (and related semantic notions like reference) is a substantive, causal-explanatory property. In the next two sections, I'll argue that Price is mistaken about both (a) and (b).

3. *The seamlessness of knowledge, being "in the same boat", and disciplinary holism*

Quine's main philosophical goal is to reconceive the traditional fundamental problems in epistemology and metaphysics and to solve those problems once they have been so reconceived (Hylton 2007). He adopts a naturalistic "doctrine" that fundamentally informs his pursuit of that goal: the *seamlessness* of knowledge, "the idea that there are no fundamental differences of kind within our body of knowledge" (*Ibid.*: 8, 11). This doctrine has a number of important corollaries, including the continuity of common sense and science, the continuity of science and philosophy, and the idea that there is no philosophically important distinction between a priori and a posteriori knowledge.

Importantly, for our purposes, the seamlessness of knowledge implies that all areas of inquiry – all domains that employ descriptive discourse – employ fundamentally the same methods to pursue a common goal[12]. How the functional pluralist responds to this alleged seamlessness depends on what goal the Quinean ascribes to inquiry. If the goal is fairly narrow – like Quine's proposal of predicting sensory stimulations – then the pluralist will argue directly against seamlessness, claiming that some kinds of descriptive discourse are used to achieve other goals. However, if the proposed goal is more general, such as figuring out what the world is like (see note 12), then the pluralist can claim that this superficial unity disguises a deeper kind of diversity. That is, the pluralist can claim that this general goal is tied to the core prop-

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[11]   Janssen-Lauret (2015: 153) claims that Price is wrong to interpret Quine as a minimalist about truth. See also Hylton (2007: 274-278). If the discussion in Sections 3 and 4 below is on the right track, then major questions in meta-ontology are independent of whether semantic minimalism is true.

[12]   As Price puts it, "for Quine, *the* significant task of the statement-making part of language is that of recording the conclusions of an activity that is ultimately continuous with natural science" (Price 2011a: 13, italics in original). Quine takes the goal of natural science to be, roughly, predicting sensory stimulations. I take it to be broader than this: roughly, discovering important truths about the world. (See Maddy (2007: 89-91) on the arguably other-than-naturalistic origins of Quine's taking the "sensory stimulations" as "data" or "evidence" for the construction of theories.)

erties of descriptive discourse (which can be accounted for by a minimalist semantic theory). Further, the pluralist can claim that these core properties are "multifunctional," useful not only for asserting what the world is like but also for expressing psychological states with importantly different functional profiles (differences that, nevertheless, according to the functional pluralist, do not entail that such states are not truth-apt or descriptive) (Price 1997: 138-141). Relatedly, it seems that functional pluralism need not entail that there are clear-cut joints between domains of descriptive discourse with different functions (although Price sometimes writes in a way that suggests that it does (2004: 199; 2009: 293)). Pluralism can allow that the boundary between functional domains is a "vague matter of degree" (Quine 1995: 257), as (this version of) seamlessness claims, while still insisting that there are cases in which two domains of descriptive discourse serve clearly different functions.

So, if the Quinean concedes that predicting experience is too narrow a goal for all of descriptive discourse, then she needs a stronger version of seamlessness if it is to serve as a kind of functional monism that contrasts with functional pluralism. I think that Quine does endorse such a strong version when embraces a "drive" for "the unity of science" or "a unified all-purpose ontology" (*Ibid.*: 260). As Hylton points out, this idea – that "[t]he various parts of knowledge … [form] a single integrated whole" – "functions for Quine as a regulative ideal; is not an established fact, and not a requirement of our having knowledge at all, but it is something towards which we should strive" (2007: 24).

One might think that, as a regulative ideal or methodological directive, this strong version of seamlessness is not something that could be true or false – that it is a non-cognitive stance that is distinct from, and independent of, cognitive, theoretical statements. However, Quinean naturalists will reject this, due to (something like) the "reciprocal containment" of epistemology (and methodology) and ontology (*Ibid.*: 21-22; Quine 1969: 83). The "description of the theory-building process" (and the theory-building process itself, with its methodological norms) is not independent of the "theory that is being built". On this view, there is no coherent second-order, purely philosophical or independent, project of investigating, systematizing, and regimenting the first-order, scientific project of finding out about the world; such investigation, systematization, and regimentation *is* just part of finding out about the world (Hylton 2007: 6; Maddy 2007)[13]. So, the Quinean naturalist will agree with Price that the question of

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[13]   See van Fraassen (2007) for an opposing view that imposes such a distinction. He draws a contrast between "objectifying epistemology," "an attempt to come up with a theory of cognition, whether naturalistic or metaphysical" and "inquiry into the explication and evaluation of various forms of the 'enterprise of knowledge', concentrating on norms and values that guide rational man-

whether this strong version of seamlessness should be accepted is "one for science". As Quine puts it, it is a question "within science itself" (1995: 260).

However, the Quinean should balk at Price's suggestion that whether monism or pluralism is true depends primarily on facts about the function(s) of human *language.* (*Quine* arguably in the end cannot reject this suggestion, given his language-based accounts of scientific theories and of how to go about answering metaphysical questions. However, as I discuss in Section 4 below, I think that the Quine-inspired naturalist has good reasons to reject these accounts.) That is, although seamlessness, if it is true, will be *reflected* in a kind of unity at the level of human language, this linguistic unity is derivative from either a broader, non-linguistic unity in the world or a (not-exclusively-linguistic) methodological unity among the disciplines that investigate that world. Quine himself suggests that the monism/pluralism question cannot be settled simply by turning to anthropological or biological investigations of the function(s) of human language when he writes that the "unity of science" question is "more remote from observational checkpoints than the most speculative questions of the hard and soft sciences ordinarily so called" (1995: 260).

Now, formulating monism as the claim that there is a single, all-purpose *ontology* begs the larger question that is at issue, i.e., whether meta-ontological deflationism is true[14]. However, I think that focusing on the not-exclusively-linguistic methods of inquiry offers monists a more promising avenue for defending their view. It does so in at least three ways. First, it gives the monist a way of avoiding the charge that monism is in tension with minimalism about truth. Second, it supports a kind of disciplinary holism, which, as an arguable implication of naturalism, may pose a challenge to any version of meta-ontological deflationism that is based on functional pluralism. Third, since disciplinary holism applies to philosophy itself, it allows the monist to respond to the worry that seeking a unified, all-purpose ontology is inconsistent with naturalism. I will elaborate on these three points in the remainder of this section.

First, recall that if Quine defends monism solely based on the idea that sciences are unified by the fact that they all seek the truth, then the pluralist has a ready reply: once one adopts minimalism about truth, seeking the truth is a "thin" goal that is common to the sciences *and* other domains that arguably

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agement of opinion," which issues in a fundamentally non-cognitive, typically tacit, *stance* regarding how inquiry should be conducted (*Ibid.*: 364).

[14]   Hylton (on behalf of Quine) supports the unity of knowledge as a plausible regulative ideal for inquiry by claiming that "[i]t is, after all, a single world that we attempt to know" (2007: 24). But whether this "world," taken broadly to include numbers and beliefs along with trees and bricks, is a *single* unified domain is precisely what the functional pluralist calls into question (although she would prefer to raise this issue with respect to language).

have radically different functions. Now, however, the monist is proposing that methodological unity will be revealed by a close study of the myriad methods that humans use to produce descriptive accounts of the world. (This proposal, I think, would be of a piece with arguing that armchair reflection is not importantly different from observational or experimental inquiry, for example.) Establishing that this kind of unity exists is a large and difficult project in the philosophy of science and philosophy of philosophy (naturalistically construed). Here I am making the fairly small point that the Quinean can avoid potential conflict between methodological monism and semantic minimalism by looking for common threads (precision, replicability, intersubjectivity, robustness or stability across methods, etc.) in all of the not-exclusively-linguistic ways—fieldwork, brain imaging, microscopy, and on and on—in which humans interact with the world.

Second, focusing on the methodological unity in disciplines that produce descriptive discourse opens up pluralists to empirical challenges that they seem to want to avoid. I think that the drive for a seamless field of knowledge implies (or is expressed by) what Jeffrey Roland calls "disciplinary holism" (2007: 430). According to disciplinary holism, no individual discipline is evidentially insulated from any another. There can be both conflicting and converging evidence – both legitimate critique and mutual support – between any pair of disciplines, and the presence of this evidence "significantly enhances the chances of getting things right" (*Ibid.*). Any given discipline can potentially contribute to any relatively large-scale question about the nature of the world. Given the way the world actually is, some of these potential contributions are unlikely. For instance, it is very unlikely that human epidemiology will make a significant contribution to resolving the inconsistencies between quantum theory and general relativity. However, any view that endorses disciplinary holism cannot put in principle restrictions on the contributions of any discipline.

However, it seems that functional pluralists attempt to impose these restrictions when they posit deep functional divides within descriptive discourse as a whole. For instance, the pluralist will say that explaining what humans do with moral language should answer any supposedly "metaphysical" questions that we have about moral properties. Due to the fact that moral language performs different functions than scientific language, there is no need to try to locate moral properties in the scientific world. (To think otherwise is to rely on an inaccurate "matching game" or "mirroring" account of language, more on which in Section 4.) However, this seems like an attempt to isolate or insulate moral discourse from scientific discourse[15]. It seems to close off the real possibility

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[15]   Price claims that the meta-ontological deflationist "offers an olive branch to non-naturalists,"

that advances in our scientific knowledge will lead to radical changes in how we think about morality[16].

I do not want to put too much weight on this second point, as it primarily targets the "quietist" elements in some of Price's discussion of pluralism, which other proponents of meta-ontological deflationism have suggested that Price is better off abandoning (e.g., Ismael (2014: 100, 103n28)). So, I will now turn to the third point from above: using disciplinary holism to rebut a worry that the search for "a unified all-purpose ontology" (such as physicalism) is inconsistent with naturalism. Rather than being inconsistent, I think that Quine is right that such a search is consonant with naturalism, in that it is "typical of the scientific temper" and "of a piece with the drive for simplicity that shapes scientific hypotheses generally" (1995: 260).

The strong version of seamlessness – the unity of inquiry – applies to naturalistic philosophy itself; philosophy and science are "in the same boat". The idea of being "in the same boat" conveys not only the idea that both philosophy and science are in the same difficult, but thrilling, situation (at sea with no prospect of finding solid, dry ground on which to overhaul the boat of inquiry) but also, at least with respect to some important issues, epistemically on a par. This latter idea is not emphasized as often as the former. When Quine claims that "all scientific findings… are… as welcome for use in philosophy as elsewhere" (1969: 127), he is noting the importance of scientific *input* into philosophy, and, taken by itself, this may suggest that philosophy's role is solely to interpret and synthesize this input. However, if both scientists and naturalistic philosophers are "busy sailors" on the boat, then they each can play an active role in rebuilding it (see Quine 1975: 72). As busy sailors, neither has a higher rank than the other, and thus philosophy can also provide (first-order) *output* that influences the (other) sciences[17]. Less metaphorically, the strong version of seamlessness implies that philosophy *itself* is a discipline to which disciplinary holism applies.

So seamlessness, via disciplinary holism, implies that, at least with respect to some topics, there is a kind of epistemic *symmetry* between naturalistic phi-

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explaining "in the naturalists' own terms how topics such as morality and meaning might remain high and dry, untouched and unthreatened by the rise of the scientific tide" (1997: 133).

[16]   For instance, it might be that some of our moral thought has empirical presuppositions that our best science reveals to be false. For such an argument against deontological moral theory, see Greene (2008). I am not endorsing this particular argument but merely giving it as an example of the kind of naturalistic argument that seems to be in tension with functional pluralism.

[17]   This is to reject, at least as a blanket recommendation, Hilary Kornblith's suggestion that philosophers attempt to "construct … theories which are scientifically well informed, rather than attempt to inform the sciences" (1994: 50). I briefly discuss an example, concerning the alleged psychological trait of *self-control*, where it might be helpful for naturalistic metaphysics to "attempt to inform the sciences" below in Section 5.

losophy and the other sciences. That is, it allows for cases in which both naturalistic philosophy and the other sciences provide genuine insight into a shared topic of investigation, and neither philosophy nor science is in an epistemically better position than the other, with respect to that topic. In these cases, philosophy and other scientific disciplines should be mutually constraining, and the results from any discipline (including philosophy) should be relevant to the findings of any other.

These points can help dispel the worry that "naturalistic metaphysics" is an oxymoron. The claim that naturalistic philosophy inevitably leads to meta-ontological deflationism can be expressed by claiming that naturalists must "follow the course of science wherever it may lead" and that, according to naturalism, "science tells us what there is" (e.g., Montero 2001: 78; Keil 2003: 255; Gibson 2004: 181). These slogans seem to be in tension with any substantive role for naturalistic metaphysics[18]. For example, given that current physics is false and incomplete, endorsing a global, ontological doctrine like physicalism seems to close off avenues of future scientific inquiry. (For this worry, see Montero (2001) and Maddy (2007: 143).)

However, if we understand naturalistic metaphysics as *itself* part of the scientific enterprise, then "following science wherever it may lead" does not require naturalistic metaphysics to follow the *other* sciences wherever *they* may lead. If naturalistic metaphysics of mind is another science of the mind alongside other such sciences, and not logically posterior or secondary to those sciences, then physicalism (or any other empirically well-supported account of the mind-body relation, for that matter) will not represent an arbitrary or unjustified attempt to impose a priori constraints on the future course of science.

This means that "science tells us what there is" is true only if it means something different (and is less informative) than its most straightforward reading. That is, if we accept this slogan we are not claiming that the physics, psychology, chemistry, biology, etc., individually or collectively, tell us what there is. Rather, the *science of naturalistic metaphysics* typically tells us what there is. It is not that naturalistic metaphysicians have some exclusive ownership of ontological questions, nor do they have some special methods of determining what we do, or should, believe in. (More on this below.) Rather, they synthesize and reflect upon (and in some cases, correct[19]) the methods and results from a wide variety of scientific disciplines, using the skills that training in (naturalistic)

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[18]   Price claims that Quine's views on ontological commitment should be interpreted as a kind of "ontological quietism – the principle that there is no separate second-order science of ontology, but simply the mundane business of existential quantification carried out by first-order specialists in the course of their working lives" (1992: 50). I return to this issue below.

[19]   Maddy mentions feminist critiques of primatology in this regard (2007: 407).

philosophy is particularly well suited to provide (Maddy 2007: 115-117). Thus, it is perfectly open to the naturalist to argue that there is a family of inductive arguments for the "unified, all-purpose ontology" of physicalism that draws on ordinary, empirical evidence, and thus that physicalism is not an attempt to impose a priori constraints on the future course of science.

4. *The linguistic conception and Quine's criterion of ontological commitment*

One might worry that the discussion in Section 3 is off base. After all, Quine explicitly takes our general theory of the world to be embodied in language (Hylton 2007: 23-24), and he adopts explicitly linguistic/logical methods in his metaphysical project of attempting to discover "the true and ultimate structure of reality," i.e., regimentation and reformulation of our best theory of the world into the language of first-order logic (*Ibid.*: 4, 6, 26). In this way, Quine adopts what Price calls a "linguistic conception" of how to approach metaphysical matters. According to this conception, "the starting point [of metaphysical inquiry] lies in human linguistic practices, broadly construed. Roughly, we note that humans (ourselves or others) employ the term "X" in language, or the concept X, in thought" (Price 2004: 188).

Because of this, Quine is vulnerable to Price's argument that the viability of Quine's drive for "a unified all-purpose ontology" – i.e., what Price calls "object naturalism," the claim that "all there *is* is the world studied by science" (*Ibid.*: 185, italics in original) – depends on a controversial account of the way language relates to the world. That is, if we begin with the linguistic conception of metaphysical issues, then substantive naturalistic metaphysics requires what Price calls "Representationalism," "roughly, the assumption that substantial 'word-world' semantic relations are a part of the best scientific account of our use of the relevant terms" (*Ibid.*: 190). For, if we see metaphysical issues initially as questions about linguistic usage "then it takes a genuine shift of theoretical focus to get us to an issue about the nature of non-linguistic objects," a shift that can be mediated only by *substantial* semantic properties, if it is mediated by semantic properties at all (*Ibid.*). Further, Price thinks that there is good reason to doubt that Representationalism will be validated by our best scientific account of human language use (*Ibid.*: 187). If all of this is right, then substantive naturalistic metaphysics rests on faulty semantic foundations.

I have argued that Price provides no good reason to think that naturalists cannot adopt an alternative "material conception" of metaphysical issues as a starting point, as least when those issues concern minds and their prop-

erties (Haug 2014a: 352-355). According to the material conception, we are confronted with some alleged phenomenon or entity – such as intentionality, consciousness, or moral goodness – and in light of a commitment to object naturalism, come to wonder how this phenomenon or entity could fit into the natural world. One of the main ideas motivating this approach is that "we know much more about the way the world is than we do about how we know about, or refer to, that world" (Devitt 2010: 2). That is, we are on a firmer epistemic footing concerning even some fairly recondite aspects of the way we humans (non-epistemically and non-referentially) interact with the world than we are concerning our epistemic and semantic relations to the world. And we should start from that solid epistemic footing when we go on to inquire how our minds, in general, fit into the natural world.

If naturalists can coherently adopt the material conception of metaphysical issues, then Price's worries about Representationalism are rendered otiose. Starting from the material conception, substantive naturalistic metaphysics does not presuppose Representationalism (or minimalism or any other semantic theory), so it is not undermined if Representationalism turns out to be false[20].

Not only should we naturalists avoid the linguistic conception in general, but we also have good reasons to reject a particular form that that linguistic conception takes in Quine's own philosophy: his criterion of ontological commitment (i.e., his procedure for how to go about engaging in ontological disputes, which is often summarized by the slogan "to be is to be value of a variable" (see van Inwagen 2009).) I'll briefly discuss two such reasons here. (For a little more detail, see Haug (2014a).)

First, when Quine introduces the problem of determining one's ontological commitments, he does so by talking about which entities we "assume" (Quine 1981: 2) or "believe in" (Quine 1951b: 44; 1981: 21)[21]. However, Quine argues for a reductive account of this psychological attitude, in which one's ontological commitments are ultimately determined by the existentially quantified sentences that are logically entailed by the theory that one believes. As Quine puts it, "what had been a question of assuming objects becomes a question of

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[20]   I think that Penelope Maddy's Second Philosopher is an example of someone who endorses semantic minimalism (2007: 164-165) (and thus would reject Representationalism) but rejects meta-ontological deflationism. "[W]hen the question is ontology, her focus is on what there is, not on what various people are inclined to think or say there is" (*Ibid.*: 399). Further, she does not rest content with the quantification of other "first-order specialists". "Second Metaphysics is emphatically not a purely descriptive enterprise: the Second Philosopher holds [definite views about when the existence of atoms was established], not merely that scientists thought this or that at various times" (*Ibid.*: 403).

[21]   He also writes of which entities we "accept", "acknowledge", "admit", "countenance", "hypostatize", "posit", "presuppose", "reify", or "reckon" (For this list and references see Szabó (2003: 585).)

verbal reference to objects" (Quine 1981: 2). Given that this reductive account is largely motivated by Quine's behaviorism and his accompanying suspicion of intentional mental states (both of which are now widely, and rightly in my view, rejected in the sciences of the mind), I think that contemporary naturalists should be suspicious of it.

Further, Szabó (2003; 2010) has given strong arguments for the idea that we cannot safely ignore the difference between believing in (or being ontologically committed to) things and referring to (or quantifying over) them – that it is not enough to quantify over a purported entity in order to evince an ontological commitment to it. Roughly, on Szabó's most recent published view, ontological commitment to Xs requires believing that Xs exist *and* being able to explain why Xs exist, which requires knowing what Xs *are*—knowing what their nature is (Szabó 2010, esp. 37-8)[22]. Importantly, as I discuss below, knowing what Xs are may require significant empirical investigation.

The second reason that naturalists have to reject Quine's criterion is that it does not accurately capture the way that rational debates about ontological commitment have actually been carried out in the sciences (Maddy 1997: 135-143; 2007: 95-97, 398-407). For instance, Maddy argues that work on atomic theory at the turn of the twentieth century shows that "Pace Quine, determining what our successful theories tell us about what there is cannot be a simple matter of reading off their existential claims" (2007: 107).

Maddy frames her critique of Quine as aimed primarily at his confirmational holism (e.g. 2007: 95). However, she apparently does not see much, if any, substantive difference between her way of putting things and one that takes aim directly at Quine's criterion of ontological commitment (1997: 143; 2007: 95n20).[23] I suggest that Maddy's argument is best interpreted as motivating a position similar to Szabó's, according to which scientists in 1900 were right to believe that there are atoms but also correct to withhold ontological commitment to atoms (in this case because detection of atoms, access to their behavior as individuals, awaited the work of Jean Perrin). But whether we

[22]   I agree with Szabó that being ontologically committed to Xs requires knowing what Xs are, but I am unsure if it also requires being able to explain why the claim that Xs exist is true. For, if Xs are fundamental, it is not clear to me that the claim that Xs exist has any explanation at all. (Perhaps one could say that adverting to Xs' fundamentality is itself an explanation for why Xs exist, but I am not sure whether this is an adequate explanation or not.) Szabó also claims that he has "grown dissatisfied that [the conclusions in his 2003 paper] are so tightly connected to semantic considerations" (2010: 39 n.13). He does not give a reason for this dissatisfaction, but the above suggestion that we should reject the linguistic conception of metaphysical issues would provide one.

[23]   Maddy (1996: 333; 1997: 143) also suggests that her critique might be taken to be aimed at the univocality of either "there is" or the existential quantifier (both of which are fundamental tenets of Quinean meta-ontology (van Inwagen 2009)).

deny that entire theories are confirmed as a unit or deny that we are committed to everything that our theories quantify over, the important point for my purposes is that either critique undermines the idea that we can simply read ontological commitments off of what a theory says there is[24].

One important upshot of rejecting Quine's criterion is that we can rest content with "the mundane business of existential quantification carried out by first-order specialists in the course of their working lives" (Price 1992: 50), but this does now *not* amount to meta-ontological deflationism. That is, we can accept that certain "cheap" arguments for the existence of various entities are sound without thereby taking the relevant ontological questions to be settled (cf. Szabó 2003: 591). This makes room for a non-deflationary conception of naturalistic metaphysics that avoids Price's (2007) false dilemma between a "thin" metaphysics that merely acquiesces in the ontological verdicts of the other sciences and a "thick" metaphysics that uses only logical methods of regimentation and supposedly stands outside of science altogether. In the next section, I will outline how these reasons to reject Quine's criterion of ontological commitment lead to other differences with the Canberra Plan and mainstream metaphysics of mind.

5. *The metaphysics of mind is dead. Long live the metaphysics of mind!*

Largely independently of meta-ontological deflationism, in the last couple of decades a number of philosophers have criticized the practices and debates that had become dominant in philosophy of mind beginning in the 1960s. These attacks are not on metaphysics *per se* but on the focus on certain kinds of metaphysical questions and the attempt to answer these questions without any significant input from the sciences.

For instance, in an amusing and provocative critical notice of Jaegwon Kim's 1998 book *Mind in a Physical World*, Clark Glymour criticizes what he calls "mainstream-metaphysical-philosophy-of-mind," of which he takes Kim's book to be an exemplary instance (1999: 458, 471). In Glymour's view, this kind of philosophy of mind is misguided because it is "walled off from any real use of (or for) mathematics or the sciences. Aside from a bit of formal logic, to be informally used, and the philosophical tradition itself, the philosopher

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[24] Verhaegh (2017b) claims that evidential holism is one of the three main commitments that provide support for Quine's naturalism. If this is right, it may provide some support for framing the critique in the latter way, since framing it in the former way (as a critique of holism) would undermine some of Quine's support for naturalism.

faces the dragons in the labyrinth of metaphysics armed only with words and a vivid imagination" (*Ibid.*: 458). He disparages Kim's project as merely "interior redecoration" of a house whose foundations are "adrift". To shore up these foundations, Glymour suggests, philosophers of mind need to take a more naturalistic approach and "build on science" (*Ibid.*: 471).

Similar attacks on mainstream-metaphysical-philosophy-of-mind have appeared in the intervening years. For instance, in a paper published in 2008, Antony Chemero and Michael Silberstein declare that "[t]he philosophy of mind is over," by which they mean that metaphysical debates about the mind-body problem and the nature of mental content have reached a standstill (1). They applaud the replacement of these "relatively armchair discussions" with "empirically oriented debates in philosophy of the cognitive and neural sciences" (ibid.). Indeed, there is some empirical evidence that there has been a "dramatic shift" in the methods philosophers of mind employ and the topics they investigate: away from supposedly "a priori reasoning" on "distinctively philosophical questions regarding the metaphysics of mind" toward engagement with "the results of empirical studies" on "questions about the workings of specific cognitive processes" (Knobe 2015: 36).

By drawing on my discussion above, I think that we can identify what is right in these critiques as well as a way in which they go wrong. Doing so will distinguish my approach to naturalistic metaphysics from the Canberra Plan and other prominent versions of mainstream metaphysics. In short, on my approach we still need "armchair" work in naturalistic metaphysics to make progress, even on some questions about the "workings of specific cognitive processes". However, this work is not a priori in any interesting sense: to do it well we need to pay close attention to the results of (usually a wide variety of) empirical studies.

First, I will illustrate how my approach to naturalistic metaphysics does not employ a priori conceptual analysis (and thus is armed with more than "words and a vivid imagination") by contrasting it with the Canberra Plan. When the Canberra Planner attempts to locate some apparently non-natural phenomenon within the natural world, she proceeds in two cleanly separable stages. She begins with the "platitudes" or the "folk theory" about that phenomenon. These platitudes are supposed to be in principle knowable to any competent user of a term for the phenomenon. Collecting these platitudes together delivers the functional or semantic role for that term. After this a priori conceptual analysis is complete, she turns to the empirical sciences in the second stage to tell us what natural phenomenon, if any, satisfies the platitudinous or folk-theoretic description. Importantly, the sciences are not in the business of substantively revising the deliverances of common sense (or, if they do provide

such revisions, they have, in effect, merely changed the subject).

This view about the evidential role of common sense in metaphysical inquiry stems, at least in part, from some of David Lewis's views[25]:

> One comes to philosophy already endowed with a stock of opinions. It is not the business of philosophy either to undermine or to justify these preexisting opinions, to any great extent, but only to try to discover ways of expanding them into an orderly system. A metaphysician's analysis of mind is an attempt at systematizing our opinions about mind. It succeeds to the extent that (1) it is systematic, and (2) it respects those of our pre-philosophical opinions to which we are firmly attached. (1973: 88)

Given Quine's claim that philosophy is continuous with common sense, it may seem that he also endorses this role for common sense. However, I think that this is a mistake. As Hylton puts the point: "Fundamental to Quine's view is the idea that our ordinary ways of thinking, just as we find them, should not be taken as telling us the way the world is" (2007: 367)[26].

Quine claims that folk psychology does not carry ontological commitments—that it is too vague and imprecise and must await revision and systematization "in light of the ideal of a systematic, overarching, and empirically based theory of the world" (Hylton 2007: 367). Usually this is portrayed as a broadly logical task for philosophy of science, as merely bringing formal rigor to the fixed content of a theory by regimenting the folk theory into first-order logic. However, if the discussion above in Section 4 is correct, naturalistic metaphysics has another way, aside from logical regimentation, to undermine an apparent ontological commitment of common sense or "folk theory" to a kind of entity. Namely, it can do so by showing that common sense is mistaken about the nature of that entity, that it is mistaken about what those entities are (or would be, if they were to exist).

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[25]   The historical origins of the idea that contemporary analytic philosophers (since sometime around the mid-1960s) rely on pre-philosophical "intuitions" as a source of evidence for philosophical theories have not been fully identified. Hintikka (1999) claims that Noam Chomsky's linguistic theory and its methodology are important sources for this idea, but I think that Herman Cappelen is right that this is merely an "interesting suggestion" that awaits support from "a more detailed historical investigation" than Hintikka provides (2012: 22-23). I suspect that Chomsky's influence on philosophy may have been at least partially mediated by John Rawls, especially his account of the role of "considered judgments" in reflective equilibrium (see Rawls (1999: 41)). See Hylton (2007: 380n4) for an interesting suggestion about why the use of the word 'intuition' may have caught on.

[26]   Elaborating on this point, Hylton writes that "By relying on unreconstructed common sense, or on 'intuition,' [some versions of mainstream metaphysics reinstate] metaphysics with no reliable [empirical] constraints… There is considerable historical irony here. … [By undermining] the idea that there was a basis on which attempts at metaphysics could be definitely ruled out as meaningless … Quine's work may well have had the effect of encouraging a revival of just the sort of metaphysics which he would most strongly oppose" (ibid.).

Many philosophers have argued that the Canberra Plan requires *too much* of solutions to location problems by claiming that they require the "base" or "preferred" facts to *a priori entail* the facts that are to be located. But the current point is that the Canberra Plan in another way requires *too little.* For, it holds that ontological commitments are easier to accrue than they in fact are. On the Canberra Plan, the ontological commitments of a theory, say, folk psychology, are already determined in the first stage, once we have formed the "Ramsey sentence" that states the functional/semantic role of the term to be located. If the above discussion of ontological commitment is on the right truck, this need not be true. For, one could think that folk psychology is by-and-large true but that it still does not accurately capture the nature of some of the mental entities it concerns. This is enough to warrant believing that those mental entities exist while withholding full-blown ontological commitment to them.

Thus, I think that empirical inquiry often plays a more extensive role in determining one's ontological commitments than even many critics of the Canberra Plan envisage. It is not just that empirical inquiry is needed to determine what, if anything, satisfies the functional role associated with a mental state. Empirical inquiry – drawn from the full range of the sciences of the mind and integrated by naturalistic metaphysicians – is also needed to determine if this functional role provides an accurate account of what the mental state is, and thus whether we are ontologically committed to it, in the first place[27].

Importantly, none of this implies that we should rely less on work done "from the armchair". It is just that we need to pay more attention to the results of the empirical sciences (and not rely on our pre-theoretic intuitions or on far-fetched thought experiments) in order to do this work well. For example, one may wonder if it is possible to locate the psychological trait of *being self-controlled* in the natural world. Plausibly, reflection on the common sense lore concerning this trait would reveal that self-controlled individuals are "strong willed" and good at resisting or inhibiting impulses (see Levy 2017: 203-204). However, recent empirical studies suggest that individuals who score high on scales that are supposed to measure trait self-control are actually relatively bad at resisting temptation (Imhoff, Schmidt, and Gerstenberg 2014). Instead of being good at employing "willpower" in their ordinary lives to achieve their long-term goals it seems that such individuals employ other, often implicit, strategies, like avoiding situations that involve temptation in the first place. Further, recent work on the structure of executive function and its relation to trait "self-control" (and related traits like conscientiousness) suggests that, per-

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[27]   This may seem to be merely arguing for psychofunctionalism over analytic functionalism, but it is not. For both of these views are consistent with Quine's criterion of ontological commitment.

haps contrary to common sense, highly self-controlled individuals are not particularly proficient at the *inhibition* component of executive function but rather show greater cognitive *flexibility* (are more proficient at set shifting) (Fleming, Heintzelman, and Bartholow 2016). (This paper draws on an influential "unity and diversity" model of executive function that comes from cognitive neuroscience (see, e.g., Friedman and Miyake 2017).)

Integrating all of this work from social/cognitive psychology and neuroscience is required to figure out what trait self-control *is*, if in fact it is a distinct character trait at all, and it will involve a lot of reflection from the "armchair," but it is no less empirical for that. Naturalistic metaphysicians contribute to the "first-order" study of the mind not by employing some distinctively philosophical methods (much less a priori "intuition") but by synthesizing results from disparate fields and, often, connecting up those results with relevant discussions from the history of philosophy.

So, with Carnap and against Quine, we should admit that ontological commitments cannot be read off the existential commitments of the total theory one accepts. But, with Quine and against Carnap, we should acknowledge that ontological inquiry is not conceptually prior to scientific inquiry. One's ontological commitments are still determined by the total theory one accepts. However, that determination proceeds differently than the procedure dictated by Quine's criterion of ontological commitment. It is not enough to simply look at the existentially quantified sentences that are implied by that total theory. We must also look at the *content* of the theory, at what the theory tells us the relevant entities *are.* When engaging in ontological disputes, we should approach our total theory primarily in the "material mode" – as telling us what the world is like – and not in the "formal mode" – as a linguistic object to investigate. Instead of beginning with how we *talk* about minds, as the Canberra Plan does (much less *ending* with such talk, as Price's approach does), my approach sees location problems from the start as questions about the relation between (putative) entities in the world.

Turning to the second reason to reject Quine's criterion of ontological commitment provides further support for the recent trend in the philosophy of mind of focusing on the "workings of specific cognitive processes". For, this reason goes along with the idea that my naturalistic metaphysician is "born native" to the contemporary scientific worldview rather than later electing "to enlist [in the naturalistic project], perhaps in reaction to some deep disappointment [or despair about traditional philosophy]" (Maddy 2007: 14, 85). As Maddy continues:

This may seem a fine point, but it's important to maintain the distinction between 'I believe in atoms because I believe in science and it supports their existence' (as the enlistee might say) and 'I believe in atoms because Einstein argued so-and-so, and Perrin did experiments such-and-such, with these results' (as the [naturalistic metaphysician] says). (Maddy 2007: 85-86)

Because of this, my naturalistic metaphysician will be suspicious of global or "explanationist" defenses of realism that are supposed to apply to science across the board. It is not that the methods (including, most notably, inference to the best explanation) that such defenses use are unacceptable or unreliable. Rather, it is that the question that such defenses seek to address is not one that a consistent naturalist should even deign to answer[28]. Note, however, that refusing to rise to the bait of a "second order" kind of existence question does not compel naturalistic metaphysicians to stop thinking about general metaphysical issues like the mind/body problem. Rather, it just reconfirms the idea that thinking about the mind/body problem should be informed by significant engagement with all of the relevant sciences.

6. *Conclusion*

Michael Friedman claims that Quine, "the great opponent of the analytic/synthetic distinction[,] unwittingly made room for essentially a priori philosophizing through the back door" (2010: 544n17). That is, according to Friedman, Quine's confirmational holism allows mainstream metaphysicians to claim that "[their] armchair philosophizing merely occupies an especially central and abstract level in our total empirical theory of the world – and, as such, it operates within the very same constraints, of overall 'simplicity' and 'explanatory power,' governing ordinary empirical theorizing" (*Ibid.*).

If Price's interpretation of Quine were right, this would not represent the vindication of metaphysical inquiry that it seems to be. I have suggested a way in which Quine himself, by defending a strong kind of unity of science, may be able to avoid the slide into meta-ontological deflationism. Whether or not this defense is successful on Quine's own terms, I think that contemporary

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[28]   As Maddy puts the point (in the context of debates about scientific realism between van Fraassen and Boyd), the problem is that global explanationist realism "grants van Fraassen too much at the outset, in particular, it buys into his 'stepping back' to the 'epistemic stance', and as a result, it implicitly grants that the Einstein/Perrin evidence isn't enough by itself, that it stands in need of supplementation. Once this move is made, the game is lost … Even if the Realist's effort to answer van Fraassen is couched in purely naturalistic terms, he has betrayed his naturalism the moment he allows that evidence like Einstein and Perrin's is inadequate" (2007: 310-311). For some recent discussion of "explanationism" in science and metaphysics, see Reutsche (2016) and Saatsi (2017).

naturalists are in a much better position to defend substantive metaphysical inquiry. However, if I am right, this defense will result in significant changes to (at least some versions of) "mainstream" metaphysical inquiry. My naturalistic metaphysician's attitude toward the practices of mainstream metaphysics that she finds suspect will be Quinean in spirit. She will not try to provide a clear-cut criterion by which to rule them out as meaningless or misguided but rather will investigate them on a case-by-case basis to see if they are likely to achieve the goals that they intend to. This is messier than many proponents of a broadly "scientific philosophy" would like, but it is, I think, the best that we can hope for.

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