Quine and Two Kinds of Ontological Pragmatism

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In the late 1940s, Quine influentially talked about "the ontological problem", claiming that it concerns the issue of what there is. Without any further qualifications to begin with, I shall adopt this Quinean notion as a basis for an initial characterization of ontological discourse as language use or thought involving existential assumptions or commitments. Furthermore, for heuristic purposes, I will assume that we engage in ontological discourse in at least three discernible types of contexts, namely those of (i) everyday experience, (ii) the special sciences, and (iii) categorial frameworks of being. In this paper, my main argument is that Quine's way of situating ontological discourse out of the first context of everyday experience and into the second context of the special sciences is somewhat problematic because he mostly doesn't seem to exhibit a developed enough a conception of the third context of categorial frameworks of being.2 I suggest that this problem is connected with Quine's narrow ontological pragmatism which has its eye too restrictively fixed on the context of the special sciences. In place of the narrow Quinean conception, I suggest a broader kind of ontological pragmatism which gives proper acknowledgement to the very general and fundamental nature of the categories of being.³ The suggestion makes it possible to see that due to its generality, the third context of categorial frameworks of being both transcends and unites the other two. This structural recognition is important in itself, but it also provides an effective metaphilosophical ground for answering many of the much debated issues raised by the naturalistic, reductionistic and scientistic tendencies often seen in Quine's thought and influence.4

¹ See Quine (1981, p. 1). Cf. e.g. Föllesdal (2001).

² Cf. e.g. Varzi (2002); Lowe (2006) 195-8; Schaffer (2009); Koskinen (2012).

³ Cf. e.g. Westerhoff (2005); Haaparanta & Koskinen (2012).

⁴ Cf. Koskinen (2004). I have previously discussed Quine's relationship with general metaphysics or ontology and the tradition of pragmatism in Koskinen & Pihlström (2006).

1. The Context of Everyday Experience

It should not be a matter of too much debate that we do in fact engage in forms of ontological discourse as characterized above in the context of everyday experience. We rely on language use or thought involving existential assumptions or commitments in a very ordinary fashion when we are, for example, arranging a removal, and assume that there are two bookshelves in the relevant apartment to be emptied. In discussing these arrangements with others, we may also express our commitment to the existence of a specific removal firm which is supposed to be able to bear the responsibility of the various practicalities involved. Indeed, it would seem that lack of such existential assumptions or commitments would make most of our everyday intentional plans and actions utterly impossible. In other words, ontological discourse seems like a necessary condition for our very lives as intentional agents in the context of everyday experience.

Supposing that our agency in the world of everyday experience thus necessarily presupposes that we engage in ontological discourse concerning tables and chairs, bookshelves and removal firms, and so on, it should also be noted that this type of discourse often has a very limited range, not exceeding the boundaries of our most immediate practical aims and interests. Our spotlight of attention is commonly directed by what we want to achieve and which events or states of affairs we wish to bring about in the spheres of our concrete everyday lives. However, such a simple pragmatic determination of ontological discourse seems like a relatively idiosyncratic and random affair, lacking systematicity in various dimensions. We may for example be interested in whether the removal firm has in its possession vans of appropriate size for the task at hand, but not give a hoot about whether there ever was a banana that the driver's grandmother held in one of her hands. We do not typically want or need complete lists of entities that exist now, existed once, or will someday exist in the future. Our ontological discourse in the context of everyday experience does not aim at full coverage in this sense, not even when strictly limited to present existence.

Supposing that we did for some unlikely reason try to include all the objects or entities in the world on our complete list of existents, it could be argued that such ontological pursuit would already in itself constitute an unnatural stretching of the boundaries of everyday experience. Even if we gave up the project of listing individual entities and focused on purported *types* of entities instead, we would soon come up against

various kinds of epistemic, methodological and conceptual problems. Are there institutions? Do works of art or persons depicted in literary fiction exist? What about properties, shadows, holes, or suspicions? A more persistent ontological concern with respect to such creatures leads to abrupt trouble in the context of everyday experience because the context simply does not contain theoretical instruments, epistemic guidelines or semantic criteria for tackling such issues. This is duly noted by Quine,⁵ when he writes in his essay "Things and Their Place in Theories" that

The common man's ontology is vague and untidy [...] a fenced ontology is just not implicit in ordinary language. The idea of a boundary between being and nonbeing is a philosophical idea, an idea of technical science in a broad sense. [...] Ontological concern is not a correction of a lay thought and practice; it is foreign to the lay culture, though an outgrowth of it.

Indeed, as a systematic intellectual discipline, it seems that ontology has to be developed independently of the pragmatic needs of everyday experience, for its theoretical interests and the conceptual tools required clearly go beyond these.

One of the noteworthy implications of this is that making a Strawsonian distinction between descriptive and revisionary metaphysics⁶ becomes a tricky business, because even to describe "the actual structure of our thought about the world" in any seriously ontological manner, we already need to go beyond the context of everyday experience itself. And after having done that, there is no straightforward way of telling whether we are *describing* or *revising* things as we go along. Another point to be noted is that although the context of everyday experience as such does not contain the intellectual tools for serious ontology, it can still include entities, elements or aspects that need to be systematically considered when constructing our ontological theories. Despite the fact that Quine himself does not make much of it, the notion of a *person*, for example, could seem like a case in point.⁷ Without taking any specific stand on the ontological status of persons, though, the case may simply remind us that the context of everyday experience cannot unproblematically or without argument be left behind, for it can still provide relevant empirical input and pertinent commonsensical considerations for ontological theorizing.

⁵ Quine (1981), p. 9.

⁶ See Strawson (1959), pp. 9-11; Cf. Lowe (1998), p. 6, n4.

⁷ Cf. e.g. Olson (2007).

2. The Context of the Special Sciences

In developing the methodology and content of his own fenced ontology together with its associated boundary between being and nonbeing, Quine has been unquestionably influential. His powerful effect on the twentieth-century rediscovery of ontology is widely acknowledged and well-documented in research literature. Quine himself recognized the departure from Carnap's logical empiricism that his rehabilitation of the "fine old word ontology" constituted, and his basic approach has also been applied by his students in further ontological directions involving entities like events and possible worlds.

Although ontology has traditionally been taken to refer to a central part of metaphysics, Quine is quick to point out that despite his rehabilitation of the word, and the discipline as he conceives it, he is no champion of traditional metaphysics. This is a rather telling remark connected with the main argument of this paper, and Quine's conception of ontology as a technical enterprise. In fact, as e.g. Lieven Decock has importantly pointed out, Quine's interest in ontology did not stem from traditional metaphysical problems at all, but rather from logic, set theory, and pondering over existential axioms in set theory. This relatively narrow special-scientific origin of Quine's ontological interest shows in and characterizes his whole conception of the discipline. Quine is, indeed, no champion of traditional metaphysics, precisely because ontology or general metaphysics as traditionally conceived constitutes a much broader and more general discipline with its own distinct interests and conceptual apparatus. Jonathan Schaffer even goes so far as to say that Quine is better understood as an anti-metaphysical ally of his mentor, and that the whole Quine-Carnap debate is an internecine debate between two anti-metaphysical pragmatists. As a central part of the word of the wo

The contextual boundaries may be historically, sociologically and psychologically evolving, but in overall accordance with the heuristic assumption of discernible types of contexts, it can plausibly be stated that the various special sciences engage in forms of ontological discourse which introduce entities that are, at least initially,

⁸ Quine (1976), p. 203. Cf. also Quine (1969), pp. 97-98.

⁹ See Donald Davidson's (1980) Essays on Actions and Events.

¹⁰ Cf. David Lewis's (1986) On the Plurality of Worlds.

¹¹ Quine (1976), p. 204.

¹² Decock (2002), pp. xiii, 2; (2004), p. 114.

¹³ Cf. my depiction of Quine as the Moses of metaphysics in Koskinen (2012), p. 354.

¹⁴ Schaffer (2009), p. 349.

truly novel or foreign to the context of everyday experience. Examples from natural sciences would be introduced entities like quarks, gravitational fields, and mitochondria. Utilizing Sellarsian terminology, ¹⁵ we might speak of the spheres of the *manifest* and the *scientific* image. The manifest image would then be associated with the context of everyday experience, and the scientific image with the context of the special sciences. Various types of entities and their functional relations are introduced in the context of the special sciences to explain, account for, or predict phenomena observed in the context of everyday experience. Thus we also enter a different context of ontological discourse.

What supposedly *justifies* this ontological introduction of new types of entities is their usefulness or indispensability for the pursuit of scientific explanations. For Quine, the paradigmatic case of ontological indispensability comes from the hardest scientific core: Modern physical theory is unimaginable without the constitutive help of mathematics and numbers. Since classes can be made, with the help of elementary logic, to do the work of numbers, functions and the rest, Quine, reluctantly at first, agrees to accept the existence of classes or sets. Logic, unlike set theory, has no objects it can call its own, for its variables admit all values indiscriminately. To build mathematics upon logical foundation we need to resort to the extra-logical device of the epsilon predicate of class membership as well as to the postulation of classes. In this way, the indispensable mathematics brings with it an abstract ontology of classes.¹⁶ They are, in effect, pragmatically forced upon us by physical science, which makes Quine, as Alex Orenstein¹⁷ puts it, "a reluctant Platonist".

In taking this philosophical conversion to constitute a turning from nominalism to realism with respect to universals, Quine further corroborates his own admission of not being a champion of traditional metaphysics. In traditional terminology, *universals* are understood as repeatable or instantiable non-particular entities. Nominalism then means the rejection of such entities, and realism the acceptance of them. In the conflicting and potentially misleading Quinean terminology, classes count as universals because of their abstractness or non-spatiotemporality, although they are non-repeatable or non-instantiable *particulars*. In Quine's hands, the meaning of the nominalism/realism distinction is consequently altered as well. Indeed, Quine could justifiably be counted as a

¹⁵ Cf. Sellars (1963), pp. 1-40.

¹⁶ See e.g. Quine (1969a); cf. Decock (2003); Koskinen (2004), pp. 183-197.

¹⁷ Orenstein (2002), p. 55.

¹⁸ Cf. Lewis (1999), n2, pp. 8-9, who sides with the traditional terminology against "the conflicting modern terminology of Harvard". See also Koskinen (2004), pp. 189-192.

class nominalist, but in his own confusing terminology, such characterization would be a senseless contradiction in terms.¹⁹

In Quine's methodology, the vagueness and untidiness of the common man's ontology is cleared away with the technical instrument of first-order predicate logic with identity, or "canonical notation", as Quine²⁰ affectionately calls his privileged formal language. The boundary between being and nonbeing is explicated by translating our best scientific theories into the canonical notation, whose variables bound by existential quantifiers then reveal our ontological commitments, answering the question of 'What is there?'. According to Quine's technical notion of existence, to be assumed as an entity is, purely and simply, to be reckoned as the value of a bound variable, and we are convicted of a particular ontological presupposition if, and only if, the alleged presuppositum has to be reckoned among the entities over which our existentially bound variables range in order to render one of our affirmations true.²¹ When applied in the context of the special sciences to physics and other empirical theories, this is an applicatory extrapolation from set theory, analogous to, and intellectually continuous with, the theoretical moves made by Russell in 1914 in his *Our Knowledge of the External World*, and by Carnap in 1928 in his *Der Logische Aufbau der Welt*.

Although Quine's approach has been tremendously influential on various accounts, there are, nevertheless, serious methodological problems involved in the Quinean take on ontology. Physics has already been mentioned, but we can (and as philosophers, should) ask what is it that makes a theory best, or worth coding into the canonical notation. We may also raise the issue of what makes a logic canonical. Even if the best theory or theories together with the canonical notation were already in place, we could still wonder about appropriate translations, for there are many ways of performing them. Furthermore, we may ask questions about domain restrictions, and the fate of the bookshelves and vans that we find or posit in our ontological discourse within the context of everyday experience. The most immediate problem for present purposes, however, is that the Quinean approach seems to suggest a very narrow type of ontological pragmatism, which has its eye too restrictively fixed on the theoretical needs of the special sciences.

¹⁹ Cf. however Quine (1960), pp. 34, 191, where he associates *universality* with *repeatability* in connection with stimuli and sentences.

²⁰ Cf. e.g. Quine (1960), p. 159.

²¹ Quine (1981), p. 13. Cf. this to more recent discussions of *truthmaking* e.g. in Lowe & Rami (2009). ²² See e.g. Cameron (2010); Koskinen (2010); (2012); Schaffer (2009); Varzi (2002).

Not all our cognitive discourse is taken to be of equal importance. Quine seems to think that in tracing our serious ontological commitments, we should definitely prefer scientific theories over everyday discourse.²³ And to narrow the ontological pragmatism down even further, Quine exhibits a clear penchant for harder sciences like mathematics and physics. In emphasizing that ontological questions are on a par with questions of natural science, the narrow Quinean pragmatism easily leads to a detrimental conceptual egalitarianism which obscures the characteristically general and fundamental nature of ontology proper, or general metaphysics as traditionally understood, making it difficult to maintain important distinctions between the everyday, scientific, and properly ontological answers to the 'What is there?' question. The philosopher's role is then also easily conceived as a mere technically trained ontological bookkeeper in service of the special sciences. Moreover, Quine's apparently reductionistic and scientistic leanings tend to raise exactly the same type of metaphilosophical problems that are associated with his influential programme of naturalized epistemology²⁴ which seems to recommend handing problems of knowledge and cognition over to the relevant special sciences. On the narrow view of ontological pragmatism, then, ontological categories, judgements, and frameworks are not clearly distinguished from special-scientific ones, and the justification of ontological judgements is seen as coming more or less directly from the theoretical needs of the various special sciences, or rather, a privileged subset of them.

A very useful depiction of the resulting type of situation comes from Hilary Putnam, ²⁵ as he describes his own scientific materialism in the 1950s and 60s:

> I believed that *everything there is* can be explained and described by a single theory. Of course we shall never know that theory in detail, and even about the general principles we shall always be somewhat in error. But I believed that we can see in present-day science what the general outlines of such a theory must look like. In particular, I believed that the best metaphysics is physics, or, more precisely, that the best metaphysics is what the positivists called "unified science", science pictured as based on and unified by the application of the laws of fundamental physics.

²³ Cf. Bernard Linsky (1997), p. 15, when he writes that Quine replaces Strawson's 'ordinary' conceptual scheme with the metaphysics of science.

²⁴ Cf. e.g. Quine (1969b), pp. 69-90; (1960), pp. 1-25. ²⁵ Putnam (1992), p. 2, italics mine.

A bit later Putnam adds that many analytic philosophers today subscribe to such a view. On this development too, Quine has had his strong influence. If philosophers actually start thinking along the lines of the best metaphysics being physics, then it is no wonder that it also becomes extremely difficult to discern a relatively independent and sufficiently meaningful role for metaphysics or ontology to play in the context dominated by special sciences and their pragmatic needs.

3. The Context of Categorial Frameworks of Being

Quine's thought does contain the elements or seeds of a broader kind of ontological pragmatism, conspicuous especially when he criticizes the positivists as mistaken when they despaired of evidence in ontological cases, and speaks of existential quantifications of the philosophical sort as being situated way out at the end, *farthest from observable fact*. ²⁶ This talk is immediately reminiscent of Aristotle's characterization of wisdom, first philosophy, or metaphysics, when he states that the most general things are hardest for men to know because they are *furthest from the senses*. ²⁷ However, if we are not content with merely registering the pragmatic ontological commitments of the special sciences, or with rather slavishly receiving the justification of ontological statements from their theoretical interests, we would do well to look beyond Quine's narrow ontological pragmatism. ²⁸ This will enable us to have both historically and systematically a more adequate conception of the categories of being, the ontological judgements based on them, and the various considerations related with justifying wider ontological frameworks.

In his *Metaphysics*,²⁹ Aristotle states that there is a science which investigates being as being and the attributes which belong to this in virtue of its own nature. He also points out that this is not the same as any of the so-called special sciences, for none of these others deals generally with being as being. Instead, they cut off a part of being and investigate the attributes of this part, as e.g. the mathematical sciences do. From a traditional perspective, metaphysics or ontology is seen as the highest or most general science, while the special sciences approach being from more specialized and more

²⁹ IV.1, 1003a, 20-25.

²⁶ Quine (1969b), pp. 97-98. Here he also discusses *common sense* and *philosophical* existence statements.

²⁷ See Aristotle's *Metaphysics*, I.2, 982a, 25.

²⁸ Cf. my argued recommendation in Koskinen (2012), p. 354.

specifically categorized perspectives.³⁰ A useful contemporary description of the nature and role of ontological categories is provided by Jan Westerhoff:³¹

The concept of an ontological category is *philosophy's unique contribution* to the study of categorizing. Not all categories human beings come up with are ontological categories. Only *very general and fundamental categories* are accorded this title. These categories are assumed to be of central importance in metaphysics, since they represent a fundamental inventory of the world, a list of the most basic kinds of things, a veritable alphabet of being.

According to this conception, only very general and fundamental categories are ontological in nature, and moreover, they constitute something that is unique to philosophy. In view of the preceding discussion, it should be clear why both of these points are highly relevant.

Ontology or general metaphysics seeks to identify the most general categories of being, to define, describe or characterize the categorial features peculiar to each, to determine the relationships between different categories of being, and then to relate the less general categories to the most general ones.³² As typical examples of traditional ontological categories, we could mention entities like *individuals*, *properties*, *states of affairs*, and *modalities* (*de dicto* and *de re*). These form a kind of structural hierarchy on a very general level, and they are also partly reflected in the linguistic elements of singular terms, general terms, sentences, and modal operators.³³ In ontological theory-formation, we might, for example, start with this list, give definitions or characterizations of each, and then try to formulate the ways in which the categories are related with each other. Of special importance among the transcategorial ontological relationships are different types of *ontological dependence* relations.³⁴

It is not, however, in our present interest to start constructing any specific ontological frameworks,³⁵ but rather just to note that what was earlier referred to as "properly ontological" or "ontology proper" can now be seen as ontological discourse taking place on this highest level of generality. When we are talking, for example, about

³⁰ Cf. Lowe's (1998), pp. 174-189 attempt to distinguish between *ontological categories* and *natural kinds*, or the a priori categorial distinctions of ontology and the a posteriori deliverances of observation and scientific theory.

³¹ Westerhoff (2005, p. 1), italics mine.

³² Cf. e.g. Gracia (1999), pp. 131-158; Loux, 2006, pp. 1-16.

³³ Cf. Koskinen (2004), pp. 158-161; Loux (2006).

³⁴ Cf. e.g. Fine (1995); Correia (2005).

³⁵ For different examples of these, see e.g. Armstrong (1997) and Lowe (2006).

the relationship between individuals and their properties, or the nature of the latter, it does not matter whether the individuals are bookshelves, bananas or galaxies. The same goes for their properties. Because of its high-level generality, the context of categorial frameworks of being simultaneously *transcends* and *unites* the contexts of everyday experience and special sciences. This categorial abstraction is somewhat analogous to the one found in logic, whose structural forms are indifferent to subject matter. On the most general level of *being as being*, ontology can function as a relatively independent and intellectually significant discipline which is *not* devoured or eliminated by the special sciences.

The context of categorial frameworks of being effectively delineates a unique theoretical sphere for ontological discourse. This contributes to providing an interesting and workable metaphilosophical answer to problems raised by the naturalism, reductionism, and scientism perceptible in Quine's thought and further influence. Moreover, proper recognition of the special nature of the categories of being makes it possible to have and purposely develop richer conceptual tools better suited for the generality of the ontological job. This should also be perfectly in line with a sensible interpretation of a broad ontological pragmatism. When general metaphysics or ontology charts the nature and existence of entities, as a traditional characterization of its task goes, it should maintain a clear awareness of the special nature of its own field of inquiry too. This awareness enables less problematic interaction with the contexts of everyday experience and special sciences, which both can function as sources of empirical input as well as relevant testing grounds for various ontological categorizations.

I do realize that I've been painting with rather wide strokes throughout this paper, but I also think that the philosophical points made are genuinely important, and ones that really need to be clearly brought out in contemporary discussions where the traditional nature and role of philosophy all too often seems completely lost.

References

Aristotle, *Metaphysics*, Translated by W. D. Ross, in *The Complete Works of Aristotle: The Revised Oxford Translation*, Volume 2, Edited by Jonathan Barnes, Princeton University Press, Princeton, 1552-1728.

Armstrong, D. M., 1997, A World of States of Affairs, Cambridge University Press, Cambridge.

Cameron, Ross P., 2010, "Quantification, Naturalness, and Ontology", in Allan Hazlett (ed.), *New Waves in Metaphysics*, Palgrave Macmillan, Hampshire.

Chalmers, David J., Manley, David and Wasserman, Ryan (eds.), 2009, *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press, Oxford.

Correia, Fabrice, 2005, Existential Dependence and Cognate Notions, Philosophia, Munich.

Davidson, Donald, 1980, Essays on Actions and Events, Clarendon Press, Oxford.

Decock, Lieven, 2002, Trading Ontology for Ideology: The Interplay of Logic, Set Theory and Semantics in Quine's Philosophy, Kluwer, Dordrecht.

Decock, Lieven, 2003, "Quine's Weak and Strong Indispensability Argument", *Journal for General Philosophy of Science* 33, 231-250.

Decock, Lieven, 2004, "Inception of Quine's Ontology", History and Philosophy of Logic 25, 111-130.

Fine, Kit, 1995, "Ontological Dependence", *Proceedings of the Aristotelian Society, New Series*, Vol. XCV Part 3, 269-290.

Föllesdal, Dagfinn, 2001 (ed.), Philosophy of Quine, Volume 4: Ontology, Garland, New York.

Gracia, Jorge J. E., 1999, *Metaphysics and Its Task: The Search for the Categorial Foundation of Knowledge*, State University of New York Press, Albany.

Haaparanta, Leila and Koskinen, Heikki J. (eds.), 2012, Categories of Being: Essays in Metaphysics and Logic, Oxford University Press, New York.

Koskinen, Heikki J., 2004, From a Metaphilosophical Point of View: A Study of W. V. Quine's Naturalism, Acta Philosophica Fennica 74, The Philosophical Society of Finland, Helsinki.

Koskinen, Heikki J., 2010, "Logical Analysis and Its Ontological Implications in Quine", in Leila Haaparanta (ed.), *Rearticulations of Reason: Recent Currents*, Acta Philosophica Fennica 88, The Philosophical Society of Finland, Helsinki, 39-71.

Koskinen, Heikki J., 2012, "Quine, Predication, and the Categories of Being", in Leila Haaparanta and Heikki J. Koskinen (eds.), *Categories of Being: Essays in Metaphysics and Logic*, Oxford University Press, New York, 338-357.

Koskinen, Heikki J. & Pihlström, Sami, 2006, "Quine and Pragmatism", *Transactions of the Charles S. Peirce Society* Vol. 42 No. 3, 309-346.

Lewis, David, 1986, On the Plurality of Worlds, Blackwell, Malden MA.

Lewis, David, 1999, Papers in Metaphysics and Epistemology, Cambridge University Press, Cambridge.

Linsky, Bernard, 1997, "Metaphysics II (1945 to the present)", in John V. Canfield (ed.), *Philosophy of Meaning, Knowledge and Value in the Twentieth Century*, Routledge History of Philosophy, Volume 10, Routledge, London, 108-133.

Loux, Michael J., 2006, Metaphysics: A Contemporary Introduction, Third Edition, Routledge, New York.

Lowe, E. J., 1998, *The Possibility of Metaphysics: Substance, Identity, and Time*, Oxford University Press, Oxford.

Lowe, E. J., 2006, *The Four-Category Ontology: A Metaphysical Foundation for Natural Science*, Oxford University Press, Oxford.

Lowe, E. J. and Rami, A. (eds.), 2009, *Truth and Truth-Making*, McGill-Queen's University Press, Montreal & Kingston.

Olson, Eric T., 2007, What Are We? A Study in Personal Ontology, Oxford University Press, New York.

Orenstein, Alex, 2002, W. V. Quine, Acumen, Bucks.

Putnam, Hilary, 1992, Renewing Philosophy, Harvard University Press, Cambridge MA.

Quine, W. V., 1960, Word and Object, MIT Press, Cambridge MA.

Quine, W. V., 1969a, Set Theory and Its Logic, Revised Edition, Harvard University Press, Cambridge MA.

Quine, W. V., 1969b, Ontological Relativity and Other Essays, Columbia University Press, New York.

Quine, W. V., 1976, *The Ways of Paradox and Other Essays*, Revised and Enlarged Edition, Harvard University Press, Cambridge MA.

Quine, W. V., 1981, From a Logical Point of View: Nine Logico-Philosophical Essays, Second Edition, Revised, Harvard University Press, Cambridge MA.

Quine, W. V., 1981, Theories and Things, Harvard University Press, Cambridge MA.

Schaffer, Jonathan, 2009, "On What Grounds What", in David J. Chalmers, David Manley and Ryan Wasserman (eds.), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press, Oxford, 347-383.

Sellars, Wilfrid, 1963, Science, Perception and Reality, Ridgeview, Atascadero CA.

Strawson, P. F., 1959, Individuals: An Essay in Descriptive Metaphysics, Routledge, London.

Varzi, Achille C., 2002, "Words and Objects", in Andrea Bottani, Massimiliano Carrara and Pierdaniele Giaretta (eds.), *Individuals, Essence and Identity: Themes of Analytic Metaphysics*, Kluwer, Dordrecht, 49-75.

Westerhoff, Jan, 2005, Ontological Categories: Their Nature and Significance, Oxford University Press, Oxford.