Passing by the Naturalistic Turn: On Quine's Cul-De-Sac*

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1. NATURALISM

Contemporary American naturalism originates in the writings of Quine, the metaphysician of twentieth-century science. Like so many of Quine's doctrines, it was propounded in response to Carnap. As Quine understood matters, Carnap had been persuaded by Russell's *Our Knowledge of the External World* that it is the task of philosophy to demonstrate that such knowledge is a logical construction out of, and can be reduced to, elementary experiences. Quine rejected the reductionism of Carnap's *Logischer Aufbau*, and found the idealist basis uncongenial to his own dogmatic realist behaviourism, inspired by Watson and later reinforced by Skinner. The rejection of reductionism and an "unregenerate realism", Quine averred, were the sources of his naturalism (FME 72).

We can distinguish in Quine between three different but inter-related naturalist programmes: epistemological, ontological and philosophical.
Naturalized epistemology is to displace traditional epistemology, transforming the investigation into "an enterprise within natural science" (NNK 68) – a psychological enterprise of investigating how the "input" of radiation, etc., impinging on nerve endings can "ultimately" result in an "output" of theoretical descriptions of the external world. I shall argue that the failure of the Russell-Carnap programme in no way implies that epistemology should be naturalized; that the project of naturalized epistemology contributes nothing to the solution of the problems

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traditional epistemology struggled with; and that Quine's few forays into genuinely epistemological questions are failures.

Ontological naturalism is the doctrine that

> it is within science itself, and not in some prior philosophy, that reality is to be identified and described. (TTPT 21)

It is up to science to tell us what there is, and it offers the best theory of what exists and of how we come to know what exists. The only difference between the ontological philosopher and the scientist, according to Quine, lies in the breadth of concern: the former being concerned, for example, with the existence of material objects or classes and the latter with wombats or unicorns.

It should be noted that it is far from clear what it is to "identify and describe reality". If I identify a dandelion on the lawn, Beethoven's Opus 132 on the radio, a smell of onions in the kitchen, am I identifying "reality"? And have I done so "within science"?

In no ordinary sense of "science" is science the sole and final arbiter on what exists (e.g. Russell's childhood diaries, the pain in my leg, the Romantic movement, Mannerist style, international law, a plot to depose the king). There is no specific science that offers us the best theory of what exists, nor do the sciences collectively do so, for there is no such thing as a theory of everything that exists.

Philosophical ontology is not concerned with determining what exists in the sense in which biological taxonomy is concerned with determining and classifying what living things exist. Nor is it differentiated from a science by generality of categories. It is not as if physics is concerned to establish that mesons or quarks exist, whereas philosophy is concerned to establish that material objects or events exist. The task of ontology is to clarify, from one domain to another, what it means to say that such-and-such exists (e.g. a substance, a property, a possibility, a number, a concept, the meaning of a word, a law or legal system).

Philosophical naturalism is the view that philosophy is

> not ... an a priori propaedeutic or groundwork for science, but [is] ... continuous with science. (NNK 126)

In the USA it is widely held that with Quine's rejection of "the" analytic/synthetic distinction, the possibility of philosophical or conceptual analysis collapses, the possibility of resolving philosophical questions by a priori argument and elucidation is foreclosed, and all *good* philosophers turn out to be closet scientists. Attacks on the idea of analyticity could show that philosophy is continuous with science only if

(i) they were successful
(ii) philosophy consists of statements
(iii) these contrast with scientific statements by virtue of their analyticity.

It is questionable whether Quine did successfully show that Carnap's distinction is untenable. Carnap did not think so, and explained why he did not. Grice and Strawson did not either. Quine never gave a satisfactory reply to these objections. Even in "Two Dogmas" he did not deny synonymy, and hence analyticity, in cases of stipulation, but only in the cases of ordinary terms not thus introduced. In *Roots of Reference*, he himself offered an account of analytic truths. They are those truths everyone learns merely by learning to understand them (RR 79).

Even if Quine had successfully demolished Carnap's distinction between empirical truths and truths in virtue of meaning, it would not be true that he had shown *the* analytic/synthetic distinction to be untenable, for there is not one such distinction. There is Locke's distinction between "trifling" or "barely verbal" propositions, on the one hand, and non-trifling ones, on the other, as well as Kant's, Bolzano's, Frege's and Carnap's different distinctions between analytic and synthetic truths. Their extensions are not equivalent (Kant, for example, held truths of arithmetic to be synthetic a priori, whereas Frege held them to be analytic). Some of these are epistemological distinctions, others are purely logical.

Even if someone were to demonstrate that all distinctions between analytic and synthetic propositions are untenable, it does not follow that there is no distinction between a priori and empirical propositions. Even if mathematics is not analytic, it does not follow that it is not a priori.

According to Quine,

> mathematics and logic are supported by observation only in the indirect way that those aspects [the most general and systematic] of natural science are supported by observation; namely as participating in an organized whole which, way up at its empirical edges, squares with observation. (PL 100)

But this is misconceived. Propositions of mathematics and logic are not "supported by observation". They are demonstrated by deductive proofs. It is not as if confirmation of Newtonian mechanics by celestial observations made the theorems of the calculus better supported than before. And in respect of a priority, what goes for mathematics and logic goes too for such propositions as "red is more like orange than like yellow" or "red is darker than pink". As long as we can distinguish between a tautology and a non-tautologous proposition, *and* between the specification of a measure and the statement of a measurement—the statement of a rule and the application of a rule, we can readily distinguish between what is a priori and what is empirical.

The thought that if there is no distinction between analytic and synthetic propositions, then philosophy must be "continuous" with science rests on the false supposition that what was thought to distinguish philosophical propositions from scientific ones was their analyticity. That supposition can be challenged in two ways. First, by showing that characteristic propositions that philosophers have advanced are neither analytic nor empirical (the claim of the older Wittgenstein as well as of the young Quine that there are no propositions that are true in virtue of their meanings may serve here as an example). Secondly, by denying that there are any philosophical propositions at all.

The Manifesto of the Vienna Circle, of which Carnap was both an author and signatory, pronounced that "the *essence of the new scientific world-conception* in contrast with traditional philosophy [is that] no special 'philosophic assertions' are established, assertions are merely clarified". Accordingly, the result of good philosophizing is not the production of analytic propositions peculiar to philosophy, but clarification of conceptually problematic propositions and the elimination of pseudo-propositions.

The later Wittgenstein too held that there are no philosophical propositions. The task of philosophy is to dissolve philosophical problems. These are a priori conceptual problems. They are to be tackled by the elucidation of propositions, not by their analysis into more basic ones. This requires a perspicuous representation of the problematic concepts that illuminates the problems at hand. The resultant overview does not consist of analytic propositions. This conception of conceptual analysis informed Ryle's "logical geography" of concepts and Strawson's "connective analysis", both of which were less therapeutically oriented than Wittgenstein's philosophy. None of the many philosophers who pursued conceptual analysis in this vein produced (or purported to produce) sets of analytic propositions that belong to philosophy, any more than Quine produced sets of propositions that belong to science.

Whether or not Quine's criticism of Carnap's distinction hits its target, the possibility of conceptual analysis thus understood is in no way impaired. Philosophy has not lost its proper vocation—which is not armchair science. It is categorially distinct from science, both in its methods and its results. The a priori methods of respectable philosophy are wholly distinct from the experimental and hypothetico-deductive methods of the natural sciences, and the results of philosophy logically antecede the empirical discoveries of science. They cannot licitly conflict with the truth of scientific theories—but they may, and sometimes should, demonstrate their lack of sense. *One* task of philosophy is to set straight the conceptual confusions and incoherences of scientific theories. For philosophy is neither the Queen of the sciences nor their conceptual scullery-maid, but rather a tribunal before which scientific theory may be arraigned when it trespasses beyond the bounds of sense.

2. EPISTEMOLOGY NATURALIZED

Quine ascribed to Carnap an enterprise of constructing a "first-philosophy", i.e. a form of Cartesian foundationalism, that purported to provide extra-scientific foundations for science. *Foundationalism* is the epistemological doctrine that all empirical knowledge rests ultimately on our knowledge of how things sensibly appear to us to be. Such knowledge does not itself stand in need of evidential support, but it is held to provide

the evidence for all other judgements. Carnapian foundationalism was *reductive*, i.e. it alleged that statements concerning material things are translatable into statements concerning bare experiences. The failure of the Carnapian enterprise seemed to Quine to warrant the naturalization of epistemology.

Unlike Austin, Ryle and Wittgenstein, Quine did not think that the enterprise of "bridging the gap between sense-data and bodies" was a pseudo-problem (RR 2; cf. TTPT 22). The problem was real, but the purported solution hopeless, since verification is holistic. Strict reduction and consequent eliminability of material object statements failed, according to Quine, because a "typical statement about bodies has no fund of experiential implications it can call its own. A substantial mass of theory, taken together" is required (EN 79).

So there is no need to posit sense-data to account for illusions, etc., or to posit such intermediary sensory objects of apprehension in order to account for our knowledge of material objects. The "relevance of sensory stimulation to sentences about physical objects", he declared in good behaviourist fashion, can as well (and better) be explored and explained in terms directly of the conditioning of such sentences and their parts to physical irritations of the subject's surfaces (WO 235).

Carnap's subsequent compromise of non-eliminative reduction-sentences (Ramsey-sentences) seemed to Quine pointless, renouncing the last remaining advantage of rational reconstruction over straight psychology; namely translational reduction (EN 78). "Why all this creative reconstruction, all this make-believe", he remonstrated,

> The stimulation of his sensory receptors is all the evidence anyone has to go on, ultimately, in arriving at his picture of the world. Why not just see how this construction really proceeds? Why not settle for psychology? (EN 75)

What does "settling for psychology" amount to?

First, we abandon the goal of a first philosophy prior to natural science (FME 67). Our investigation, we are told, is itself part of and continuous with natural science.

Secondly, we are called on to recognize that the sceptical challenges that epistemology has always been concerned with spring from "rudimentary science". The argument from illusion, according to Quine,

owes its force to our knowledge that sticks do not bend by immersion, and examples of mirages, after-images, dreams and the rest are, he claimed, "simply parasitic upon positive science, however primitive" (NNK 68). Consequently, in coping with these scientific problems of scepticism, we are free to use data from science and scientific knowledge (RR 3). So scientific discoveries can, without circularity or question-begging, be invoked in resolving sceptical worries.

Thirdly, epistemology thus naturalized is a branch of psychology: it studies human beings and their acquisition of knowledge or, as he put it, of "theory", investigating the relation between neural input and cognitive output (EN 83).

Hence, fourthly, naturalized epistemology, like traditional epistemology, is concerned with the relation of evidence to theory. Science, Quine averred, "tells us that our information about the world is limited to irritations of our surfaces" and the task of the scientific epistemologist is to explain how we "can have managed to arrive at science from such limited information" (FME 72).

3. EPISTEMOLOGY DENATURALIZED

Quine held Carnap's Russellian attempt to reduce our knowledge of physical objects and of other people's states of mind to the "unowned data" of elementary experience to be the culmination of traditional epistemology (FSS 13). Its failure, in his view, invited the abandonment of traditional epistemology. But no such conclusion follows. There were more variants of foundationalism than Carnap's reductivism, and *contra* Quine, there was more to traditional epistemology than foundationalism.

First, one main reason Quine gave for the failure of Carnap's enterprise was that Carnap assumed propositional as opposed to holistic verification. But in fact Carnap quite explicitly cleaved to a holistic view of theory verification and falsification, and that in a manner far closer to Duhem's modest holism than Quine's.

Secondly, it is true that Descartes, who used the Aristotelian term "first philosophy", *was* proposing a metaphysical, extra-scientific, foundation for science. The foundation he proposed involved not only our knowledge of our own thoughts (*cogitationes*) regarding how things sensibly appear to us

to be, but also truths of reason known by the natural light, knowledge of simple natures and a proof of the existence of God. But Descartes's foundationalism was in no sense reductive, and the failure of Carnapian reductivism is irrelevant to Cartesian foundationalism. Lockean foundationalism is different again, and is akin to inference from the data of sense, i.e. ideas, to the best explanation for such data. This too was not reductive, and its latter-day heirs (e.g. J. L. Mackie's account) are untouched by the failure of Carnapian reductivism. So the failure of Carnapian reductivist foundationalism in itself does not even imply the bankruptcy of other foundationalist enterprises, let alone the abandonment of traditional epistemology.

What *was* wrong with Cartesian and Lockean foundationalism was not reductivism (since they were not reductive), but the foundationalist base. This objection applies equally to Carnapian reductivism. The thought that the foundations of our knowledge of the external world lie in our knowledge of our own subjective experience, in how things subjectively seem to us to be or in the ideas with which the mind is furnished by experience, is misconceived. For the attempted philosophical justifications of "our knowledge of the external world" in the foundationalist tradition involved radical misuses of a wide range of verbs of sensation, perception and observation, and their manifold cognates. Foundationalism presupposes the intelligibility of a logically private language. Moreover, it misconstrues the actual role of sentences of the form "It seems to me just as if *p*" or "It appears to be an M" and of the sentence-forming operators "It seems that ...", "It appears to be ..." and "It looks as if ...". Finally, the reductive base presupposes objective spatio-temporal reference and simultaneously makes it impossible. Foundationalism (reductive and non-reductive alike) is not, as Quine asserted, an intelligible failure for holistic reasons, it is an unintelligible endeavour rooted in Cartesian misconceptions about knowledge, doubt and certainty, and in mistaken Cartesian strategies of combating scepticism on ground of its own choosing—namely the quest for certainty.

So, foundationalism *is* to be rejected. But why should the naturalization of epistemology follow? The only reasons Quine gave are inadequate.

(1) Admitting that naturalized epistemology is "a far cry from old epistemology", he held that it is an "enlightened persistence" in the

original problem (RR 3). The original problem was: how can we justify our claims to know anything extra-mental? The allegedly enlightened transform is: how does it come about that we know anything extra-somatic? That question, Quine held, is a question for psychology, which will explain how sundry irritations of our surfaces ultimately result in true statements of science. Naturalized epistemology will be concerned with elaborating *causal links* between the "input" of sensory stimuli and the output of statements describing the external world. The proper task of scientific epistemology must perforce be allocated to future neuropsychology.

It is mistaken to suppose that there is anything enlightened about substituting a causal question about the ontogeny of human knowledge for conceptual questions concerning the general categories of knowledge and the kind of warrant or justification that non-evident beliefs may require. The question of what *warrants* a claim to knowledge concerning objective particulars is not resolved by an explanation of what are the causal processes necessary for attaining any such knowledge. Indeed, the causal investigation *presupposes* that sceptical qualms can be laid to rest, but are no substitute for laying them to rest.

The sceptical qualms that, in Quine's view, are the source of traditional epistemology, arise, according to him, from "science" (empirical knowledge), and in answering them, he claims, we are free to appeal to scientifically established fact (agreed empirical knowledge) without circularity (RR 3). That is mistaken. What we have to do is to show that the sceptic's arguments and presuppositions are awry.

Quine rarely ventured into the territory of epistemological scepticism, but when he did, his forays lacked penetration. To scepticism about dreaming, he responded: "I am ruling the dream hypothesis out in the sense that I dismiss it as very unlikely". To the updated variant of dream-scepticism that one may be a brain in a vat, Quine responded:

> I would think in terms of naturalistic plausibility. What we know, or what we believe ... is that it would really be an implausible achievement, at this stage anyway, to rig up such a brain. And so I don't think I am one. (Fogelin 2004, 43f.)

I don't think that Quine quite understood the point. Scepticism is not a challenge to one of the planks in Neurath's boat. It is a challenge to the logical possibility of seafaring. And it cannot be answered by invoking "scientific" facts or common sense, or by pointing out that boats do actually go to sea. (One cannot resolve Zeno's paradox by observing that Achilles can overtake the tortoise by putting one foot down after another.) The problems it raises are purely conceptual ones, and they are to be answered by purely conceptual means—by clarification of the relevant elements of our conceptual scheme. This will show what is awry with the sceptical challenge itself.

(2) The second reason Quine gave for opting for naturalized epistemology is that

> If all we hope for is a reconstruction that links science to experience in explicit ways short of translation, then it would seem more sensible to settle for psychology. Better to discover how science is in fact developed and learned than to fabricate a fictitious structure to a similar effect. (EN 78)

But the failure of Carnapian reductive foundationalism has no such implication. If the reductive enterprise fails, the first thing called for is a *philosophical* investigation into the reasons for the foundationalist project in the first place. This may reveal that the questions were based on misconceptions. Quine held that the question of whether there is an external world is a bad question. But, like Hume, he claimed that the question that replaces it is "whence the strength of our notion that there is an external world?" (SLS 217). In his view, the existence of external objects in the physical world is an efficient posit. "In a contest for sheer systematic utility for science", he wrote, "the notion of physical object still leads the field" (WO 238). The epistemological enterprise of trying to justify our knowledge of the external world in the face of sceptical challenges is to be replaced by a scientific explanation of the causal processes that lead to our positing objects and acquiring our "theory of the world". That is mistaken: we do not "posit" objects, and we do not have a "theory of the world".

It *is* correct that foundationalism in its various forms, is misconceived. But it is incorrect to suppose that once it is rejected, there is nothing left for epistemology to do than become scientifically naturalized. There is a great

deal more to epistemology than answering the sceptic. Contrary to what Quine asserted, what prompted epistemology was not to see how evidence relates to theory. It was, above all, to explain what knowledge is, what its characteristic marks are and what difference there is between knowledge and opinion. It was to investigate the scope and limits of knowledge; to determine whether humanity can achieve any absolute knowledge or whether all knowledge is relative; to discover whether pure reason alone can attain any knowledge of the world; to decide whether absolute certainty is obtainable in any of the forms of knowledge attainable by us; to show whether moral knowledge is attainable, whether mathematical knowledge is more certain than perceptual knowledge, whether we can know that God exists or whether the soul is immortal. And so on.

Early epistemology focused on the different sources of knowledge and on the different kinds of knowledge that we can attain. Despite Quine's avowals to the contrary, there are radical differences between mathematical knowledge and empirical knowledge, between self-knowledge and knowledge of others, between knowledge of objects and knowledge of scientific theory (e.g. of electricity, magnetism, ionic theory), between the natural and the social sciences, and so forth. It would be a mistake to suppose that one can glibly say, knowledge is knowledge —it merely has different objects. Knowledge that Jack is taller than Jill is *categorially* unlike knowledge that red is darker than pink. To know the difference between right and wrong is *radically* unlike knowing the difference between Coxes and Bramleys. To know what I want is *epistemologically* unlike knowing what you want, and to know what I think about a given question is not akin to knowing what you think. Could naturalized epistemology contribute to the clarification of such conceptual differences? I think not—any more than mathematics naturalized could explain the differences between natural numbers and signed integers, or between rationals and irrationals.

Traditional epistemologists want to know whether knowledge is true belief and a further condition (as was supposed in mid-twentieth century), or whether knowledge does not even imply belief (as was previously held). We want to know when knowledge does and when it does not require justification. We need to be clear what is ascribed to a person when it is said that he knows something. Is it a distinctive mental state, an

achievement, a performance, a disposition or an ability? Could knowing or believing that *p* be identical with a state of the brain? Why can one say "he believes that *p*, but it is not the case that *p*", whereas one cannot say "I believe that *p*, but it is not the case that *p*"? Why are there ways, methods and means of achieving, attaining or receiving knowledge, but not belief (as opposed to faith)? Why can one know, but not believe who, what, which, when, whether and how? Why can one believe, but not know, wholeheartedly, passionately, hesitantly, foolishly, thoughtlessly, fanatically, dogmatically or reasonably? Why can one know, but not believe, something perfectly well, thoroughly or in detail? And so on—through many hundreds of similar questions pertaining not only to knowledge and belief, but also to doubt, certainty, remembering, forgetting, observing, noticing, recognising, attending, being aware of, being conscious of, not to mention the numerous verbs of perception and their cognates. What needs to be clarified if these questions are to be answered is *the web of our epistemic concepts*, the ways in which the various concepts hang together, the various forms of their compatibilities and incompatibilities, their point and purpose, their presuppositions and different forms of context dependency. To this venerable exercise in connective analysis, scientific knowledge, psychology, neuroscience and self-styled cognitive science can contribute nothing whatsoever.

Quine rarely paid attention to such questions. But when he did his answers were *not* essays in naturalized epistemology, i.e. parts of empirically testable theories, but patently traditional philosophical claims. They were, equally patently, inadequate. I shall give three examples.

"Knowledge", Quine wrote, "connotes certainty" (Q 109), and rightly hesitated before limiting knowledge to the absolutely certain. But knowledge does not connote certainty at all. Rather, it is improper *to claim to know* something if one has *doubts*. A legitimate claim to knowledge presupposes absence of doubt (not presence of certainty), but knowledge as such does not (we do not fail doctoral students in their oral examinations because of their uncertainty).

Faced with the Gettier counter-examples to the definition of "knowledge" as justified true belief, Quine did not even try to show how they can be accommodated within an alternative account of knowledge, but rather concluded:

> I think that for scientific or philosophical purposes the best we can do is give up the notion of knowledge as a bad job and make do with its separate ingredients. We can still speak of belief as being true, and of one belief as firmer or more certain, to the believer's mind, than another. (Q 109)

One wonders what philosophical or scientific purposes Quine had in mind. In truth the concept of knowledge is not an isolated dangler in our epistemic conceptual scheme that can be excised without collateral damage. Did Quine also want to give up the notion of memory (knowledge retained) as a bad job? Are neuroscientists investigating clinical aphasic syndromes following lesions to Wernicke's and Broca's areas in the cortex not investigating the neural foundations of memory? Did Quine also wish to give up the notions of perceiving that *p* (in its various forms), being aware, being conscious, recognizing, noticing that *p*—all of which imply knowing that *p*? These cognitive concepts too are integral to cognitive neuroscience and experimental psychology.

If we are to give up the notion of knowing, at least we retain that of believing. What, according to Quine, is that? "Belief", he claimed, "is a disposition" (Q 18). The dispositions of which he holds the mind to consist "are dispositions to behave, and those are physiological states". Hence he ended up, he said, "with the so-called identity theory of the mind: mental states are states of the body" (MVD 94). But this too is mistaken. Beliefs (i.e. believings) are not dispositions to behave. Dispositions are essentially characterized by what they are dispositions to do, beliefs are essentially characterized by reference to what is believed to be so. To explain human voluntary behaviour by reference to a person's dispositions is to explain it by reference to his nature, temperament or personal traits. To explain A's voluntary V-ing by reference to his belief that *p* is not to explain it by reference to his traits of character; but nor is it to explain it by reference to his behavioural habits, tendencies or pronenesses (which is what Quine meant by "disposition"). It is to explain it in terms of what A took as his reason for V-ing. To know that A has a certain disposition (in Quine's sense) is to know that he is prone or liable to act or react in certain ways in response to certain circumstances. But one can know that A believes that *p* without knowing what, if anything, A is prone or liable to do. The utterance "I believe that *p* but it is not the case that *p*" is a kind of

contradiction. But "I have a disposition (I tend, am inclined or prone) to V, but it is not the case that *p*" is not a contradiction of any kind. If A believes that *p*, then it follows that A is right if *p* and wrong if not-*p*, but no such thing follows from A's having a behavioural disposition, tendency or proneness.

Quine compounds his errors by identifying a disposition with its vehicle, claiming that the human dispositions are physiological states of the body or brain. But a disposition, no matter whether an inanimate one or a human one, is never identical with its vehicle, any more than an ability is identical with the structures that make it possible (Kenny 1975, 10f. and Kenny 1989, 72f.). The horsepower of the car is not beneath its bonnet, and the intoxicative power of whisky is neither lighter nor heavier than the constituent alcohol that is its vehicle. So even if it were true that believing that *p* is a disposition, proneness or tendency, it would not follow that it is identical with a neural state. For were believing that *p* identical with a neural state, one would be able to say "I believe that *p* (referring thus to one's neural state), but it is not the case that *p*".

In short, the alternative to Carnapian reductionism is not naturalized epistemology. Naturalized epistemology does not answer the great questions of epistemology and is no substitute for their answers.

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EN – 'Epistemology Naturalized', in *Ontological Relativity and Other Essays*.
NNK – 'The Nature of Natural Knowledge.' In S. Guttenplan (ed.) *Mind and Language*.
MVD – 'Mind and Verbal Dispositions.' In S. Guttenplan (ed.) *Mind and Language*.
FME – 'Five Milestones of Empiricism.' Repr. in *Theories and Things*.
FSS – *From Stimulus to Science*.
PL – *Philosophy of Logic*.
Q – *Quiddities: An Intermittently Philosophical Dictionary*.
RR – *Roots of Reference*.
SLS – 'Mr Strawson on Logical Theory.' In *The Ways of Paradox and Other Essays*.
TTPT – 'Things and their Place in Theories' In *Theories and Things*.
WO – *Word and Object*.