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## ARTICLES

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Original Scientific Paper  
UDK 1(091)“19/20”  
165.6/.8”19”

### HOW DID WE GET HERE FROM THERE? THE TRANSFORMATION OF ANALYTIC PHILOSOPHY<sup>1</sup>

Opponents of analytic philosophy often associate it with logical positivism. From a historical point of view, it is clear that one main strand in the development of the broad tradition known as ‘analytic philosophy’ was indeed the logical positivism of the Vienna Circle, with its austere verificationist principle of significance and its exclusion of metaphysics as cognitively meaningless. Another main strand in the development of the analytic tradition, ordinary language philosophy, tended to be almost equally suspicious of the ways in which metaphysicians made free with ordinary words, far from the everyday contexts of use on which their meaning was supposed to depend. Despite that history, however, recent decades have seen the growth and flourishing of boldly speculative metaphysics within the analytic tradition. Far from being inhibited by logical positivist or ordinary language scruples, such analytic metaphysics might be described by those unsympathetic to it as *pre-critical*, ranging far outside the domain of our experience, closer in spirit to Leibniz than to Kant.

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1 This paper derives from a talk given at the Faculty of Philosophy of Belgrade University in September 2014. I thank Professor Miroslava Trajkovski for the suggestion that I might depart from my usual practice and give a talk on an historical theme, based in part on my own experience. Thanks to the audience for constructive discussion, and to Peter Vallentyne for spotting some bad typos. Additional thanks go to Professor Slobodan Perović for inviting me to write up the paper for publication in this journal. He also pointed out the thematic connection with Peter Strawson’s 1977 lecture at Belgrade University on the nature of analytic philosophy, subsequently translated into Serbo-Croat (as it then was) and published in *Theoria* (Strawson 1977). On that visit to Yugoslavia, Strawson lectured in Belgrade, Zagreb, and Sarajevo. He later commented: ‘I registered a certain difference in atmosphere in the three places. At least in academic circles the intellectual style seemed relatively untrammelled in Belgrade and Zagreb, though the political tone was different. In Sarajevo, where I was only allowed to give one of my two scheduled lectures and had minimal contact with fellow academics, one perhaps time-serving young man in my audience suggested that my lecture revealed an essentially bourgeois outlook. I replied “But I *am* bourgeois—an elitist liberal bourgeois”. My interpreter commented, *sotto voce*, “They envy you” (Strawson 1998, p. 14). The contrast between Strawson’s account of analytic philosophy and the present one, almost forty years later, may be instructive.

How did a species of philosophy with so much anti-metaphysics in its gene pool evolve so quickly to the opposite extreme? Enough time has passed for us now to start achieving the historical perspective necessary to answer the question in a systematic way. That project is too extensive to be properly carried out in less than a book. In this paper, I attempt no more than to make some informal and unsystematic remarks on the transformation of analytic philosophy. Especially in section II, I write as someone who lived through the latter stages of the process, and concentrate on the parts of which I have the closest knowledge. That will at least provide some sense of what it was like to experience the transformation at the time, from a broadly sympathetic point of view. I close with a few sketchy remarks on the historiography of recent analytic philosophy, in section III.

## I

The central, most influential figure in the development of analytic metaphysics over the final quarter of the twentieth century, and the contemporary philosopher most cited within recent analytic philosophy, is undoubtedly David Lewis, also known as 'the machine in the ghost' for his eerie computational power, mechanical diction, faint air of detachment from ordinary life, and beard from another era (by contrast with 'the ghost in the machine', Gilbert Ryle's summary description of the immaterial Cartesian ego in the clockwork Cartesian body). The prize specimen of Lewis's speculative metaphysics is in turn his notorious doctrine of *modal realism*, according to which there are infinitely many possible worlds, mutually disconnected spatiotemporal systems each as real and concrete as our own actual world (Lewis 1986). For Lewis, strictly and literally there are talking donkeys, because there *could have been* talking donkeys (as we may all agree), so some possible world contains talking donkeys, which are just as real, alive, and made of flesh and blood as any donkey you have ever seen. Of course, those other worlds are not open to our observation; there are no trans-world telescopes. Lewis postulates them because they follow from his modal realism, which he regards as the best theory of possibility, necessity, and related phenomena, in respect of simplicity, strength, elegance, and explanatory power: to use C.S. Peirce's term broadly, Lewis's argument for modal realism is *abductive*. In a way, Lewis takes non-actual possible worlds even more seriously than did Leibniz, for whom they are merely unrealized ideas in the mind of God. Leibniz's God realized only the best of all possible worlds, whereas *all* of Lewis's possible worlds are equally realized. We can take Lewis's modal realism as a case study for the resurgence of speculative metaphysics in contemporary analytic philosophy.

Some philosophers treat any appeal to possible worlds at all as a metaphysical extravagance. But that is a mistake, for some theories treat possible worlds as merely abstract objects or representations, harmlessly built from this-worldly materials. Indeed, Rudolf Carnap, the logical positivist anti-metaphysician *par excellence*, explicitly compared to Leibniz's possible worlds his state-descriptions, maximal consistent classes of sentences used in his semantics for languages with

modal operators such as ‘possibly’ and ‘necessarily’. He also compared them with the possible states of affairs in Wittgenstein’s *Tractatus Logico-Philosophicus* (Carnap 1947, p. 9). For Carnap, necessity is a purely intra-linguistic matter of truth guaranteed by meaning, and possibility is a correspondingly semantic form of consistency. Lewis’s modal realism has always been a minority view, even amongst those analytic metaphysicians who work with possible worlds of some sort. It is an example of extreme metaphysics.

Where did Lewis’s modal realism come from? It already appears in one of his earliest published papers (Lewis 1968). Exciting developments in modal logic, culminating in the work of Saul Kripke, had already made the idea of possible worlds central to the understanding of languages with modal operators (Kripke 1963). ‘Necessarily’ is understood as ‘in every possible world’ and ‘possibly’ as ‘in some possible world’. For technical mathematical reasons, it turned out to be more fruitful not to equate possible worlds with Carnap’s state-descriptions, or other such representational entities, but instead to leave their nature unconstrained when characterizing models for the modal language (Williamson 2013, pp. 81–4). That did not enforce a more metaphysically speculative conception of possible worlds, but it made space for one.

Another significant factor was the development of tense logic, above all by Arthur Prior. He was acutely aware of the strong structural analogies between modal logic and tense logic, with possible worlds playing the same role in the modal case as moments of time play in the temporal case (Prior 1957). An orthographically identical operator could be read as ‘necessarily’ in modal logic and as ‘always’ (or ‘always in the past’ or ‘always in the future’) in tense logic. When one read formulas of the logic in temporal terms, they expressed blatantly metaphysical principles about the structure of time and of existence in time. Those readings provided templates for more metaphysical readings of the same formulas in modal terms, on which they expressed analogous metaphysical principles about the structure of possibility and of possible or necessary existence. Carnap’s intra-linguistic modalities could then be replaced by Kripke’s metaphysical modalities, which concern how things really could have been.

But developments within modal logic alone cannot fully explain Lewis’s modal realism. For Kripke and other leading modal logicians did not go down the modal realist road. Indeed, Lewis’s modal realist semantics for modal languages introduces messy complications that from a purely technical point of view are quite unmotivated, even by Prior’s analogy between time and modality. In particular, Lewis postulates that no individual exists in more than one world, the analogue of the highly implausible postulate that no individual exists for more than one moment. In order to make sense of the common sense idea that one could have acted differently, Lewis then has to introduce an elaborate theory of counterparthood relations between distinct but similar individuals in different possible worlds. Those complications were motivated by Lewis’s prior commitments.

At this point, one must note that Lewis’s doctoral supervisor at Harvard in the mid-1960s was Willard van Orman Quine, the leading critic of modal

logic. Quine was especially critical of quantified modal logic, as developed by Carnap and Ruth Barcan Marcus, which allows one in effect to reason about the properties and relations that particular individuals could have, as opposed to just the general states of affairs that could obtain. Originally, Quine had tried to prove that quantified modal logic is technically flawed to the point of incoherence, that it collapses the modal distinctions between possibility, necessity, and actuality. As it became clear that his purely formal arguments were technically flawed, Quine gradually switched his line of attack to the informal intelligibility of quantified modal formulas. His standard of intelligibility in logic was austere: first-order non-modal logic, roughly, that of the logical constants 'not', 'and', 'or', 'everything', 'something', and 'is'. For Quine, logic is first-order non-modal logic. Lewis assumed modal realism because it permits the reduction by translation of a quantified modal language to a first-order non-modal language in which one talks about worlds and individuals in those worlds. Crucially, Lewis's modal realism gave him a way of informally explaining what a possible world is in non-modal terms: roughly, a spatiotemporal system; the individuals in such a system are spatiotemporally connected to each other and to nothing outside the system. Lewis thereby aimed to make quantified modal logic intelligible by his teacher's standards. Since much ordinary discourse in natural language involves expressive resources at least as great as those of quantified modal logic – 'can' and 'must' are common words, to say the least – Lewis's procedure is also motivated by a principle of charity (Lewis 1974), which Quine explicitly endorsed: prefer an interpretation of a natural language on which speakers are being sensible to one on which they are being silly (Quine 1960, p. 59). Possible worlds other than our own and their inhabitants are needed to make true ordinary statements about what could have been but isn't. Lewis gave an ingenious solution to the Quinean problem of charitably interpreting quantified modal discourse, on its own Quinean terms, even though Quine rejected the gift.

Quine's lack of interest in modal realism was no anti-metaphysical stance. He did as much as anyone to put ontology as a branch of metaphysics on the map of analytic philosophy, and his conception of philosophy as continuous with natural science overtly involved a naturalistic approach to metaphysical theorizing. One might rather be tempted to suggest that he rejected modal realism because it lacked support from natural science. However, Quine did not require each point of a metaphysical theory to receive its own specific support from natural science. For instance, although he took mathematics – with its ontological commitment to abstract objects such as sets or numbers – to be holistically justified by its applications in natural science, he was well aware that the power of the standard axioms of set theory goes far beyond the needs of natural science, but still regarded them as a legitimate rounding out of the fragment actually used in scientific applications, justified by its simplicity, elegance, and other such virtues. Thus Quine's justification of mathematics is abductive, in a similar spirit to Lewis's justification of modal realism. No doubt, if Quine had felt some tension between modal realism and current natural scientific theory, he would have treated that as a good reason to reject modal realism, but so might Lewis himself.

However, neither of them seems to have felt such a tension. In my view, there *is* in fact such a tension, or inconsistency, but the argument for it must be made with some delicacy and was not generally recognized at the time (Williamson 2013, pp. xii, 17 and 2014, pp. 744–6). Perhaps Quine simply gave modal realism the same ‘incredulous stare’ that so many other analytic metaphysicians have given it (Lewis 1986: 133–5). Moreover, Quine encountered modal realism at a stage of his career when he was not disposed to accept radical revisions of his views from outside; publicly retracting his well-entrenched signature scepticism about quantified modal logic would have been a bitter pill to swallow. He showed a similar lack of interest even in the purely technical development of the model theory of modal logic, and in particular of quantified modal logic, by Kripke and others, which is a piece of regular mathematics, no more vulnerable to Quine’s concerns about intelligibility than any other piece of mathematics.

The example of Quine is a salutary reminder that the analytic tradition, as normally understood, has never been a metaphysics-free zone. Before Quine, Bertrand Russell was a major figure in the analytic tradition blatantly engaged in metaphysical theorizing. Indeed, F.H. Bradley may well be right that critiques of metaphysics themselves depend on contentious metaphysical assumptions (Bradley 1893, pp. 1–2). Nevertheless, the role and status of metaphysics have changed in significant ways over the history of the analytic tradition, and our concern is with those ways.

Lewis’s case for his modal realism itself evolved over time. In the original 1968 paper, the emphasis is on the relation between modal and non-modal languages, and the clarity to be achieved in modal logic by translating the modal language into the non-modal language of Lewis’s counterpart theory (the precursor of his modal realism). His postulates for counterpart theory are used to validate elementary principles of modal logic, but they also clarify the metaphysical picture. For instance, the postulate that nothing is in two worlds has the advantage, according to Lewis, that it answers the question of the identity of individuals across possible worlds at a stroke, with a uniform negative. That is his answer to Quine’s complaints about the obscurity of trans-world individuation (he cites Quine 1960, p. 245). By the time he wrote what became the canonical case for modal realism, his book *On the Plurality of Worlds* (Lewis 1986), based largely on his 1984 John Locke lectures at Oxford, Lewis’s perspective had changed. He talks much less about linguistic matters, and much more about the abductive advantages of modal realism as a theoretical framework for explaining a variety of phenomena, many of them non-linguistic. Faced with some objections to specific translation schemes between the language of quantified modal logic (in effect, a formalization of ordinary modal language) and the language of counterpart theory, he tells us not to worry about the details, but instead to abandon the language of quantified modal logic and do our metaphysical theorizing directly in the more perspicuous language of counterpart theory (Lewis 1986, pp. 12–13). Clearly, from 1968 to 1986 the balance of power in Lewis’s work swung towards metaphysics and away from the philosophy of language.

Writing in 1981, Lewis described 'a reasonable goal for a philosopher' as bringing one's opinions into stable equilibrium. The trouble with losing 'our moorings in everyday common sense', according to him, is not that common sense is infallible but that we do not achieve stable equilibrium, since we keep reverting to something like our everyday opinions (Lewis 1983a, p. x). He requires the equilibrium to be stable under theoretical reflection. In principle, this is not radically different from a Quinean methodology for philosophy and science together of adjustments to ease tensions in one's web of beliefs (Quine 1951). For Lewis, modal realism does better than other theories of modal metaphysics with respect to stability under reflection, given our other beliefs. Of course, many philosophers would insist that to adopt modal realism *is* to lose one's moorings in everyday common sense, but Lewis was adept at interpreting the putative deliverances of everyday common sense in ways that made them consistent with modal realism, often by postulating large measures of tacit contextual restriction in the utterances that gave them voice. Although he admitted some disagreements between modal realism and common sense, for instance on whether (speaking unrestrictedly) there are talking donkeys, he managed to steer the disagreements into abstruse areas that might plausibly be regarded as of low priority for common sense. Whereas critics condemned Lewis for his extravagant departures from common sense, he saw his modal realism as part of his defence of common sense – just the way Berkeley saw his subjective idealism.

In practice, the process of bringing one's opinions into stable equilibrium will involve extensive reflection on what one's opinions actually are. Since one's general beliefs are typically presented to one as expressed by sentences, whose underlying semantic structure is not perfectly transparent, in reflecting on what it is one believes one is drawn into semantic reflection on one's own language – or, as some would have it, reflection on one's own conceptual system.

A natural comparison is between Lewis's Quinean or at least post-Quinean methodology and the methodology of Peter Strawson, Quine's leading opponent from the tradition of ordinary language philosophy. By the late 1950s, however, 'ordinary language philosophy' was no longer an apt phrase for what Strawson was doing. He was working in a far more abstract and systematic way than that phrase suggests. His concern was with very general structural features of ordinary thought and talk, such as the distinction between subject and predicate, rather than with the fine detail of ordinary usage. In 1959 he published *Individuals*, subtitled *An Essay in Descriptive Metaphysics*, a major monograph widely felt at the time to mark a turning-point in the rehabilitation of metaphysics within analytic philosophy. Strawson contrasted descriptive metaphysics with the wilder *revisionary metaphysics*, which despite its 'partial vision' is nevertheless useful when 'at the service of descriptive metaphysics' (Strawson 1959, p. 9). Revisionary metaphysics can help at the periphery of our thinking, but goes astray when it tries to revise 'a massive central core of human thinking which has no history' because 'there are categories and concepts which, in their most fundamental character, change not at all' (ibid., p. 10). What descriptive metaphysics is supposed to describe are the conceptual connexions that constitute the structure of that



central core. In Strawson's view, that structure is not hierarchical, as envisaged by programmes of conceptual analysis with their non-circular definitions by necessary and sufficient conditions. Rather, the descriptive metaphysician traces conceptual interconnexions on the same level, going round in complex closed curves: the exploration is horizontal rather than vertical.

How different in kind is Strawsonian metaphysics, which may revise the margins but must only describe the core of ordinary thinking, from Lewisian metaphysics, which must not lose its moorings in everyday common sense in its attempt to steer one's opinions into equilibrium? At this point, it may be worth recalling that Lewis attended lectures by Strawson, amongst others, when he spent the academic year 1959–60 as a visiting student from Swarthmore College at Oxford, tutored by Iris Murdoch, a year that resulted in his momentous decision to major in Philosophy rather than, as he had previously intended, Chemistry. Of course, Strawson's characterization of descriptive metaphysics as the tracing of conceptual connexions relies on some form of the analytic-synthetic distinction, which he had defended with his old teacher Paul Grice against Quine's massively influential critique (Quine 1951, Grice and Strawson 1956). Indeed, the complex closed curve of definitions that Quine traced from 'analytic' round to other semantic terms and back again in his attempt to show that none of them could be satisfactorily explained was just the sort of explanation the descriptive metaphysician sought. But on this issue Lewis sided with his earlier teacher against his later one. Lewis's first book concluded with an attempt to rehabilitate analyticity as truth in all possible worlds (Lewis 1969, p. 208), to Quine's regret in the book's Foreword (Quine 1969, p. xii). Although both Strawson and Lewis accepted an analytic-synthetic distinction, in their philosophical practice neither of them had much tendency to use it as the sort of glib conversation-stopper it so often becomes in less resourceful hands. Admittedly, Strawson was more prone than Lewis to characterize philosophical questions as questions about words or concepts, or as questions about *how we must think about* a subject matter, rather than about the subject matter itself. But Lewis himself frequently went metalinguistic, as we have already seen, and Strawson was quite willing to speak in a ground-level metaphysical idiom, as with remarks such as 'A person is not an embodied ego, but an ego might be a disembodied person' (Strawson 1959, p. 103). They both moved easily between object-language and meta-language, as it were, depending on the argumentative needs of the moment. Quine insisted on continuity between philosophy and natural science in a way that Strawson did not. In this respect, Lewis was closer to Quine than to Strawson. In practice, however, natural science played only a very minor role in the metaphysics of all three philosophers. A good test is their treatment of the dispute between the three-dimensionalist Aristotelian metaphysics of enduring continuants and the four-dimensionalist metaphysics of occurrents composed of successive time-slices, often associated with Einstein's theory of special relativity. Predictably, Strawson is a three-dimensionalist while Quine and Lewis are four-dimensionalists. But what is striking is how little Quine and Lewis made of special relativity in their cases for four-dimensionalism. In

*Word and Object*, Quine emphasized the advantages in logical smoothness of treating space and time on a par (Quine 1960, pp. 170–2). He adds only as a convenient afterthought that Einstein's discovery of special relativity 'leaves no reasonable alternative to treating time as spacelike', but then immediately points out that the logical benefits of doing so 'are independent of Einstein's principle' and adds, with references, 'the idea of paraphrasing tensed sentences into terms of eternal relations of things to times was clear enough before Einstein' (ibid., p. 172). In *On the Plurality of Worlds*, Lewis's case for four-dimensionalism does not mention Einstein or depend on modern science at all; it just relies on rather shaky old-fashioned purely metaphysical reasoning about temporary intrinsic properties, such as shapes (Lewis 1986, pp. 202–5). Presumably, Lewis was not convinced that special relativity really did leave no reasonable alternative to treating time as spacelike, otherwise he would have mentioned such impressive support for his conclusion. Since the specifics of Lewis's argumentation fail to take seriously an approach that treats temporal operators as explanatorily basic, it is hard to avoid the impression that what was really decisive with him was a somewhat Quinean preconception about the proper sort of language for doing metaphysics in, something close to the language of mathematics. Of course, glancing through the pages of *On the Plurality of Worlds*, one sees them filled with formula-free English prose, just like the pages of *Individuals*. Nevertheless, the systematicity at which Lewis aims is modelled on that of a scientific theory articulated in a mathematical language. The systematicity at which Strawson aims is different; it is that of a satisfying general account in English itself, or some other natural language. The sort of formal logical smoothness that Quine and Lewis valued so highly, Strawson regarded as a trap. In this less standard sense, despite the similarities, and even in their metaphysics, Strawson remained at heart an ordinary language philosopher, and Lewis at heart an ideal language philosopher. Each of them was reluctant to disagree extensively with common sense (or natural science, for that matter), but left some room for manoeuvre by acknowledging a belt of revisable opinions on the periphery of common sense. As a result of quite a subtle difference in intellectual values, they ended up with radically different theories.

What if Strawson is right, in that Lewis's views conflict with the unchanging core of ordinary thought? Then those views fail by Lewis's own criterion, since no totality of his opinions that includes them will be stable under theoretical reflection, for it will also include the unchanging core of ordinary thought. We cannot expect to keep questions about the general methodological position in a philosophical debate clinically isolated from questions about who is right and who is wrong on the specific matters at issue within the debate (Williamson 2007, pp. 210–14).

We can refine our sense of the intellectual options by comparing both Strawson and Lewis with Kripke. In the 1970s, Kripke and Lewis were often paired as leaders of the 'possible worlds revolution'. Kripke's essentialism and his defence of quantified modal logic were radical in relation to Quinean orthodoxy. It took time for them to be understood as articulations of quite ordinary



ways of thinking, so *not* radical in relation to common sense. Of course, the connection between essentialism and Aristotle already noted by Quine was a clue, since Aristotle always had a strong claim to be the founder of common sense philosophy. Strawson names Aristotle and Kant as the great descriptive metaphysicians (1959, p. 9). Kripke's arguments in *Naming and Necessity* tend to be based on common sense examples, and he explicitly rejects Lewis's modal realism, in favour of a more deflationary conception of possible worlds as possible states of affairs (Kripke 1972). His metaphysics is arguably not revisionary in Strawson's sense. This feature of it may have been obscured by his technical achievements in quantified modal logic, based on the mathematical apparatus of 'possible worlds semantics', even though it is in itself no more metaphysically problematic than any other piece of mathematics (Williamson 2013, pp. 81–4).

Although Kripke's metaphysics initially could seem more revisionary than it really was, his methodology could initially seem more linguistic than it really was. His titles yoked together semantic and metaphysical terms: *Naming and Necessity* (1972) and *Reference and Existence* (2013, but the book of his John Locke Lectures given at Oxford in 1973 under the same title). Of course, it was Kripke who played the central role in distinguishing metaphysical from epistemic or semantic modalities, through his famous examples of contingent truths knowable *a priori* and of necessary truths knowable only *a posteriori*, which made trouble for the then-popular Humean slogan 'All necessity is verbal necessity'. Even so, there was a diffuse but influential impression in the 1970s that Kripke had somehow managed to derive apparently substantial metaphysical conclusions about the specific essential properties of individuals and kinds, from his semantic analysis of modal language, in particular his insight that names are rigid designators (their designation remains constant while different possible worlds are considered). Nathan Salmon published a detailed monograph *Reference and Essence* (1982) to refute that impression. The title uses 'and' to separate the semantic term from the metaphysical one, rather than to join them together. The front cover showed a rabbit being pulled from a hat. Salmon demonstrated that Kripke had relied on metaphysical premises to derive his metaphysical conclusion (Kripke himself had not claimed otherwise). That did not make Kripke's argument merely question-begging, for the plausibility of the premises could still be more immediate than the plausibility of the conclusion. Salmon's point was widely accepted. That contributed to an increasingly popular conception of metaphysics as separate from the philosophy of language.

Just as it was a mistake to regard Kripke's metaphysics as derived from his semantics, it would be a mistake to regard them as simply orthogonal to each other. For misconceptions in semantics often induce misconceptions in metaphysics, by causing fallacious metaphysical arguments to be treated as valid, so that coherent metaphysical views are incorrectly dismissed as confused or inconsistent. Quine's early critique of quantified modal logic is an example. It was crucial to get straight about the semantics of modal language in order to see one's way through to defending metaphysical theses of essentialism. Thus Kripke's semantic theory of rigid designators was after all relevant to his

essentialist metaphysics, but its role was negative, in driving off arguments *against* essentialism, not positive, in driving forward arguments *for* essentialism.

There is a more general moral here about the famous ‘linguistic turn’, a phrase which has looked less and less appropriate as a description of mainstream analytic philosophy over recent decades. Nevertheless, although analytic philosophers are ceasing to regard their central questions as linguistic or even conceptual in any sense that would distinguish them from questions asked in other disciplines, the traces of the linguistic turn are not simply being erased. For it has left a rich legacy of methodological sophistication. In testing the soundness of arguments about non-linguistic matters, analytic philosophers regularly draw on work in both semantics and pragmatics (Williamson 2007, pp. 46–7). Kripke’s work on quantified modal logic is a good example with respect to semantics.

With respect to pragmatics, the prime exhibit is the work of Strawson’s teacher, Paul Grice, on conversational implicature (1961, 1975). If you comment after my lecture ‘Williamson was sober this afternoon’, you *imply* that I am often drunk in the afternoon, even though that is not a precondition for the *truth* of what you said: it is even true if I am a scrupulous teetotaller. Grice developed a powerful theoretical apparatus for analysing such effects. Although this work emerged from within the Oxford of ordinary language philosophy, it made an important contribution to undermining the methodology of such philosophy. For ordinary language philosophy involved a focus on ‘what we would say’ in various conversational contexts. By analysing the diversity of reasons for which an utterance might be conversationally inappropriate, Grice demonstrated the limitations to what can be concluded from such data. But his theory of conversation was not just a factor in the implosion of ordinary language philosophy; it has a far more lasting and positive value. It is massively cited by linguists, because it is the starting-point for much contemporary work in pragmatics. But it also continues to play a vital negative role in contemporary analytic philosophy.

Analytic epistemology provides a good case study of the philosophical application of Gricean pragmatics outside the philosophy of language. Analytic epistemologists today typically regard the object of their study as knowing (or justified believing) itself, as opposed to the corresponding words or concepts. In reflecting on knowledge or justified belief, they work through example after example of epistemologically suggestive situations, often of quite everyday sorts. In determining how to describe such situations, they frequently have to ask themselves whether a proposed description is false or, by contrast, true but conversationally misleading because it has a false conversational implicature. They use Grice’s theory of conversation to filter out contaminated data. They also have to engage with semantics as well as pragmatics, since some of the leading contender theories are contextualist, in the sense that they postulate shifts in the reference of epistemic terms according to the context in which they are used. Despite all that, the epistemologists’ underlying object of study is knowing itself, not the verb ‘to know’ or the concept of knowing. They sound like ordinary language philosophers, and in a loose enough sense they *are*

ordinary language philosophers, even when ordinary language plays no special role in their epistemological aims (Hawthorne 2004 and Stanley 2005 are good examples). In that respect, ordinary language has returned to its origins. For the classic manifesto for ordinary language philosophy, at least in its Oxford form, appeared in J.L. Austin's paper 'A plea for excuses' (1956–7). But much of Austin's discussion of philosophical method there appears strongly influenced by similar comments in the work of John Cook Wilson, Wykeham Professor of Logic at Oxford from 1889 until his death in 1915, founder of an Oxford tradition of realist metaphysics and knowledge-centred epistemology, and by no means a linguistic philosopher as the term is usually understood. For instance, Cook Wilson's remark 'Distinctions current in language can never be safely neglected' (1926, p. 46) is echoed in Austin's emphasis on the value of starting with distinctions robust enough to have survived in ordinary language. Cook Wilson's ideas and writings still loomed large in the Oxford philosophy of Austin's student days, not least through the influence of his star pupil H. A. Prichard, the White's Professor of Moral Philosophy from 1927 to 1937, whose lectures Austin attended as an undergraduate – despite Prichard's attempt to ban him for asking too many questions. Thus many contemporary analytic philosophers pay close attention to linguistic subtleties, without treating their primary subject matter as in any way linguistic.

The foregoing sketch suggests no easy moral, except that the closer one looks at the history of anything, the less it lends itself to easy morals. But I can add some colour to the picture, and another perspective on the transition, by going back to my own experience of it at Oxford.

## II

I arrived as an undergraduate at Oxford in 1973, to study Mathematics and Philosophy. Logic played a central role in the course, to my lasting benefit; its centrality is relevant to the point of view from which I observed the scene. I received my undergraduate degree in 1976 and began to study for a doctorate. Originally I hoped to formalize Leibniz's principle of sufficient reason, but I soon switched to Karl Popper's idea of verisimilitude, on which science can progress through a succession of theories that get closer and closer to the truth without ever quite reaching it. I left Oxford in 1980, to start my first proper job, as a lecturer in philosophy at Trinity College Dublin, and received my doctorate in 1981.

In 1973, the two senior professors of theoretical philosophy at Oxford were A. J. (Freddie) Ayer, Wykeham Professor of Logic from 1959 to 1978, and P. F. (Peter) Strawson, Waynflete Professor of Metaphysics from 1968 to 1987. Austin had died in 1960 and Prior in 1969, both prematurely; Grice had left for Berkeley in 1967. One could schematically associate Ayer and Strawson with the two main strands of mid-century analytic philosophy: logical positivism and ordinary language philosophy respectively. Ayer had studied with the Vienna Circle and his first book, *Language, Truth and Logic* (1936) contained much logical positivist doctrine, including a critique of metaphysics based on the verification

principle, although he traced his genealogy further back: 'The views which are put forward in this treatise derive from the doctrines of Bertrand Russell and Wittgenstein, which are themselves the logical outcome of the empiricism of Berkeley and David Hume' (1936, p. 31). The book had been notorious for its advocacy of expressivism about morality and religion. Its cheeky, provocative style is conveyed by the title of the last chapter, 'Solutions of outstanding philosophical problems.' Whereas Ayer was a follower of Russell, Strawson's most famous article (1950) was a critique of Russell's prize contribution to philosophy, his theory of descriptions, and Strawson's first book argued more generally that such applications of modern logic did no justice to the subtleties of ordinary language (1952). In live discussion, Ayer used rapid fire, Strawson elegant rapier play. Ayer was better known to the general public, as a radio personality; Strawson was more highly rated by professional philosophers, as more original. Strawson had been a candidate for the Wykeham Chair of Logic; when Ayer was elected, through the votes of the non-philosophers on the committee, Austin and Ryle resigned in protest. Asked that evening by a colleague whether he felt very disappointed not to have been elected, Strawson replied 'Not disappointed, just unappointed'.

By 1973, it was no longer strictly appropriate to classify Ayer as a logical positivist, or Strawson as an ordinary language philosopher. It was closer to the mark to describe Ayer as a Humean, and Strawson as a Kantian: the contrast between them was no less marked for that. Strawson's development into a systematic metaphysician has already been noted. Ayer had retreated from his early radicalism, including the verificationist critique of metaphysics. He commented that the trouble with *Language, Truth and Logic* was that all its main doctrines were false. In 1976, on the fortieth anniversary of its first publication, he gave a series of lectures about what remained of his original view. In the book, he had quoted as an example of an unverifiable pseudo-proposition of metaphysics 'the Absolute enters into, but is itself incapable of, evolution and progress', which he describes as 'A remark taken at random from *Appearance and Reality*, by F. H. Bradley' (1936, p. 36). In his lecture, he admitted that, far from having taken the remark at random, he had searched through *Appearance and Reality* for hours to find something suitably nonsensical-sounding. It is a salutary reminder of the intelligibility by ordinary standards of much metaphysical discourse –especially when not torn out of context in the way he presented the passage from Bradley.

To younger philosophers in 1973, Ayer appeared quite old-fashioned philosophically. So too, though to a lesser extent, did Strawson. The underlying reason was in large part their relation to modern formal logic in philosophy. Officially, Ayer was for it and Strawson against it, but neither of them knew much about it. They had received their philosophical education at a time when such logic did not loom large in Oxford. Philosophers of that generation sometimes referred to formal logic as 'sums', the primary school word for elementary arithmetic. The effect of Ayer and Strawson's lack of facility with modern formal logic was that they were poorly placed to deal with the new wave of philosophy of language sweeping across the Atlantic, led by Kripke and Lewis (who was at

least as much a philosopher of language as a metaphysician in the 1970s), and other philosophers and linguists such as Donald Davidson, Hilary Putnam, David Kaplan, Robert Stalnaker, Keith Donnellan, Richard Montague, and Barbara Hall Partee. New wave philosophy of language involved the application of formal semantics, based on modern logic, to natural languages.

Ayer had never had a detailed interest in the philosophy of language. His resentment of the new wave focussed on Kripke's case for the necessary *a posteriori* and the contingent *a priori*, in effect because those categories violated Hume's supposedly exhaustive distinction between matters of fact (contingent and *a posteriori*) and relations of ideas (necessary and *a priori*). An annual ritual took place in Ayer's 'Informal Instruction', his class open to all comers, where a short presentation of some recently published work would kick off the discussion. Many of the brightest graduate students attended, even though they had joined the new wave, for Ayer was good at creating an atmosphere conducive to discussion. But every year he would read a short paper purporting to refute Kripke on the necessary *a posteriori* and the contingent *a priori*, in fact based on exactly the confusions Kripke had done so much to clear up. When he had finished, the graduate students would by implication plead with Ayer not to misunderstand Kripke – in vain. Strawson was much more of a philosopher of language than Ayer, but even his perception of new wave philosophy of language was distorted by the old-fashioned lens of an exaggerated contrast between, in effect, ordinary language philosophy attentive to speakers' actual use of natural language in all its complexity and ideal language philosophy trying to project the simple logical structure of a formal language onto natural language, in abstraction from its speakers, with Procrustean effect (Strawson 1971). What he never properly appreciated was the new wave conception of the two projects as mutually complementary rather than in competition, so that interpreting a natural language in terms of a comparatively simple formal truth-conditional semantics would make the best sense of the complexities of speakers' actual use of the language (Lewis 1975). That Strawson's criticisms of new-wave philosophy of language were widely felt to miss the point contributed to his looking like a figure from the past too.

In effect, new wave philosophy of language achieved a surprising reconciliation between elements from the two main competing strands of mid-twentieth century analytic philosophy, logical positivism and ordinary language philosophy. From logical positivism it took the rigorous use of formal languages with precisely and systematically described syntax and semantics, as found in modern logic, to model meaning. From ordinary language philosophy it took most of its data about use to be explained, as well as ideas about the nature of the relation between meaning and use, in order to bring the formal models to bear on the data. An encouraging precedent was Noam Chomsky's success in explaining subtle, apparently messy complexities in the surface syntax of English in terms of formal models of a postulated underlying deep structure (Chomsky 1957). What new wave philosophers of language hoped to do for the semantics of natural languages seemed analogous to what Chomsky and others were already doing for syntax – despite Chomsky's own scepticism about the scientific



status of semantics. Indeed, it was natural to expect a tight relation between the semantic and syntactic structure of an expression, at least at the level of deep structure or logical form. For it was a fundamental tenet of new wave philosophy of language, coming through Carnap from Gottlob Frege, that the semantics must be *compositional*, in the sense that the meaning of a complex expression is determined by the meanings of its constituents; how else to explain our ability to understand sentences we have never previously encountered, if made up of familiar words in familiar types of combination? The initial hypothesis must surely be that the requisite semantic articulation of sentences into their semantic constituents matches their syntactic articulation into syntactic constituents at some deep enough level. The compositionality constraint exerted a powerful force in the direction of systematicity. In practice, the only semantic theories to exhibit (rather than merely claim) such a compositional structure were those for formally specified languages. Without such a formal semantics, a philosophy of language looked badly undeveloped to new wavers. It was partly for this reason that Austin was barely mentioned in Oxford philosophy of language by 1973, since he had no formal semantics to offer. The same went for his *protégé* and in some respects intellectual heir John Searle, whose major work *Speech Acts* looked out of date from an Oxford perspective almost as soon as it was published in 1969. Although Austin and Searle continued to exert a significant influence, it was mainly outside the new wave.

New wave semantics came in two main varieties, though methodologically the differences between them were minor compared to their shared differences from their predecessors. One variety was possible worlds semantics, which went back to Carnap and by 1973 was associated with philosophers of language such as Kripke, Lewis, Kaplan, Stalnaker, and Montague. In 'English as a formal language' (1970), 'The proper treatment of quantification in ordinary English' (1973), and other papers, Montague showed how it could provide a rigorously working compositional semantics for large fragments of a natural language. His work had a major influence on Barbara Hall Partee and has been seminal for a major tradition of intensional semantics as a branch of linguistics. The other main variety of new wave semantics was extensional, under the influence of Quine. Chastened by his scepticism about meanings, it approached the semantic realm less directly, through theorizing explicitly about reference and truth rather than meaning itself. Nevertheless, its emphasis on the constraint of compositionality was just as strong. Formally, it took inspiration from Tarski's theory of truth. Its main proponent was Donald Davidson (1967a). It too had a significant impact on linguistics, most notably through Davidson's semantics for verbs and adverbs in natural language, which postulated tacit quantifiers over events (Davidson 1967b). A leading Davidsonian linguist was James Higginbotham.

I first encountered new wave philosophy of language in my first term as an undergraduate, when my tutor encouraged me to attend the John Locke lectures,



to be given by the rising young star of American philosophy, Saul Kripke. I was hugely impressed by his clarity, informal rigour, pointed examples, common sense, and humour. The lectures were mostly non-technical, but one both sensed and independently knew of his easy technical mastery of the subject. Although I did not think of it this way at the time, Kripke combined and reconciled the virtues of ideal language philosophy with those of ordinary language philosophy. At that stage, of course, I knew very little of the background in the philosophy of language to what he was saying, and was in no position to follow everything that went on in the lectures and the discussion that followed them. Nevertheless, Kripke became the nearest I had to a model of how to do philosophy.

Although Kripke's work was widely discussed in Oxford at that time, especially by younger philosophers, the dominant variety in town of new wave semantics was extensional rather than intensional. Davidson had given the John Locke lectures in 1970. The two most admired young theoretical philosophers in Oxford, Gareth Evans and John McDowell, somehow combined Davidson with Frege as the packed audiences at their joint classes looked on. It was the moment of the 'Davidsonic boom' – although people tended to utter the Tarskian mantra 'The sentence „Snow is white” is true in English if and only if snow is white' in a rather slow and quiet voice. If you wanted to write on the philosophy of X, whatever X was, then you were supposed to start by writing a truth theory for a language for talking about X. I found the atmosphere of reverence for Davidson unhealthy, not to say sickening. It was fine for him to choose a speculative and controversial extensionalist starting point for his programme for the philosophy of language, and to take it as far as he could from there, but the project cried out to be undertaken in a scientific spirit, as a test of its assumptions. Instead, they were treated – especially by those lower in the hierarchy – as dogmas of mysterious but compelling power, an attitude encouraged by Davidson's elliptical and slightly evasive style. It was recognized that Davidson's programme had to meet the challenge of providing a compositional semantics for various apparently non-extensional constructions in natural language, for ascribing beliefs and desires or possibility and necessity, for example, but the discussion of alternative proposals muffled the issues with a lack of openness and clarity about the rules of the game. Philosophers, some with only a rather tenuous grasp of technical matters, would invoke obscurely motivated technical constraints – a ban on substitutional quantification, say, or a requirement of finite axiomatizability – to exclude rival hypotheses. Kripke's critique of Davidsonians' objections to substitutional quantification (1976) has been condemned as cruel, but to me it came as a breath of fresh air; I can attest to the presence at the time of the sort of atmosphere about which he complained.<sup>2</sup> By contrast, intensional semantics seemed to be conducted in a more open, scientific spirit, though Davidsonians objected, darkly, to its possible worlds as creatures of darkness.

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2 My first article to be accepted for publication, though not my first to be published, protested against the Davidsonian dogma that theories of truth *qua* theories of meaning had to be finitely axiomatizable (Williamson 1984).

Davidsonians did not expect the philosophy of language to be independent of metaphysics. Davidson (1977) explicitly motivated an ontology of events by a Quine-inspired principle of charity in interpretation, through the semantics of adverbs. This was not so different from Lewis's original motivation of his ontology of possible worlds, in effect by the principle of charity, through the semantics of modal operators. But Davidson gave his metaphysics a turn reminiscent of Strawson, with a transcendental argument to show that it was not really possible to think differently (Davidson 1973–74). As so often with transcendental arguments, it turns out to depend on concealed verificationist assumptions (see the remarks below on Wittgenstein's Private Language Argument). More recent metaphysics has been much less tempted by transcendental arguments.

Amongst the important features shared by the extensional and intensional varieties of new wave semantics was truth-conditionality: they both treated the meaning of a declarative sentence as in some sense the condition for it to be true. By contrast, the senior Oxford philosopher properly to engage new wave philosophy of language, Michael Dummett, opposed such truth-conditional semantics in favour of assertibility-conditional semantics, which treated the meaning of a declarative sentence as the condition for it to be assertible, or verifiable, rather than true. Assertibility-conditional semantics was inspired by the proof-conditional semantics for mathematical language developed by Heyting, Prawitz, and other intuitionists, which equated the meaning of a sentence in the language of mathematics with the condition for something to be a proof of it. The plan was to generalize this semantics to the whole of language by treating mathematical proof as a special case of verification. This may be seen as a descendant of a logical positivist conception of the meaning of a sentence as its method of verification, although Dummett did not present it as such.

Unlike the logical positivists, Dummett saw the subversive threat that verification-centred semantics posed to classical logic, given the compositionality constraint which he accepted, in line with new wave philosophy of language. For example, the natural compositional semantic clause for disjunctive sentences of the form 'A or B' says that 'A or B' is verified if and only if either 'A' is verified or 'B' is verified. But that makes immediate trouble for the classical law of excluded middle, 'A or not A'. For the special case of the semantic clause where 'B' = 'not A' says that 'A or not A' is verified if and only if either 'A' is verified or 'not A' is verified. But often we cannot verify a sentence and cannot verify its negation. For instance, we cannot verify 'Napoleon had an even number of hairs at his death', nor can we verify 'Napoleon had an odd number of hairs at his death'. Thus, by the semantic clause, we cannot verify 'Napoleon had an odd or even number of hairs at his death'.

In these ways, Dummett saw the philosophy of language as calling into question a realist metaphysical conception of reality as how it is quite independently of our capacity to find out how it is, and pointing towards an alternative anti-realist metaphysics. In his view, the role of the philosophy of language here is not merely evidential, to give us reasons to believe one metaphysical theory and not another. Rather, he saw alternative theories of meaning as giving something like

the cash-value of alternative metaphysical pictures. Methodologically, he proposed to replace futile quarrels between metaphysical pictures by comparisons between the corresponding theories of meaning as the only scientific way to resolve the issue. For him, metaphysical disputes are not senseless; nor are they what they seem, since they are implicitly disputes in the philosophy of language. One might compare Dummett's understanding of metaphysics with Strawson's. For both of them, metaphysical questions turn into questions about the structure and limits of coherent thought, to be answered by systematic inquiry. But Dummett was more open to revisionary metaphysics than Strawson was, because he took seriously the danger of fundamental incoherence in our current ways of thinking (as with our acceptance of the law of excluded middle), which Strawson did not. Dummett also differed from Strawson in regarding modern logic as a decisive advance over its predecessors, including its capacity to provide formal methods and model formal languages for use in the philosophy of language: he was adept himself in such methods. In that sense too, he was a new wave philosopher of language.

Dummett laid out his programme early on in his career (1959). The year Kripke gave the John Locke lectures, Dummett brought out his first *magnum opus*, *Frege: Philosophy of Language* (1973), in which he engaged creatively with Frege to develop his own views. Central to Oxford philosophy in my student days was the dispute between, on one side, realism and truth-conditional semantics, represented by the Davidsonians, and, on the other side, anti-realism and assertibility-conditional semantics, represented by Dummett. My sympathies were strongly with realism, though not with Davidsonianism. Dummett supervised me for the last year of my doctoral studies (1979–80), at the start of his period as Wykeham Professor of Logic (1979–92), the first holder of that chair with a deep knowledge of modern logic. He was remarkably tolerant of the strident realism of my thesis, which effectively presupposed the futility of his life's work and pursued other issues from that starting-point. I cannot resist a couple of memories from that period.

When I told other philosophers at Oxford that I was working on the idea of approximation to the truth as applied to scientific theories, their reaction was always to ask „Is that something to do with vagueness?“ For vagueness was a big issue in Oxford then, being conceived as a major challenge to realism, truth-conditional semantics, and other forms of orthodoxy (Dummett 1975, Fine 1975, Wright 1975). I always found that reaction annoying, because I thought it betrayed a myopic obsession with the philosophy of language. I would reply that my thesis had nothing at all to do with vagueness, pointing out that, of two perfectly precise but false scientific theories, one may be a better approximation to the truth than the other (I also enjoyed shocking people by saying that I found Popper more interesting than Davidson). On the narrow issue I was right, but my later trajectory suggests that my interlocutors were not completely wrong about the direction of my interests (Williamson 1994). Indeed, one of my main reasons for later working on vagueness was that it was generally regarded as a paradigm of a phenomenon in need of anti-realist treatment. I wanted to strike at what was supposed to be the safest fortress of anti-realism.

Another memory comes from a supervision with Dummett. We were discussing an argument that I thought one of the best in my thesis, and he thought one of the worst; it later became the kernel of the only publication that emerged from my doctoral studies (Williamson 1988). After a while, Dummett reflected and said „The difference between us is that you think that inference to the best explanation is a legitimate method of argument in philosophy, and I don't”. I realized that his characterization of the difference was right, although I was a little shocked at his outright rejection of inference to the best explanation in philosophy. His view was something like this: the deep philosophical issue will be about which of the theories that yield the putative explanations is so much as meaningful; that issue must be settled first before we can judge the value of those putative explanations; but once it has been settled, nothing much is left for inference to the best explanation to do. I still favour inference to the best explanation and an abductive methodology in philosophy (Williamson 2013, pp. 423–9). Indeed, it is hard to see how the kind of positive, systematic, general theory that Dummett sought in the philosophy of language could be established by any other means. He was optimistic about the long-run prospects of settling philosophical issues in a decisive, systematic way, just as he took to happen in science (Dummett 1978). But if one tries to establish the meaningfulness of a theory by an argument more decisive than abduction, won't one have to first establish the meaningfulness of that argument by a further argument more decisive than abduction? There starts an infinite regress. Dummett's dislike of inference to the best explanation may help to explain why his discussion of assertibility-conditional semantics never really got beyond the programmatic stage to the nitty-gritty of properly developing models of such semantics for non-trivial fragments of non-mathematical language. Even if such models had worked well (a tall order), they would at best have provided him with some sort of abductive argument in favour of his programme, whereas he wanted something more decisive. In the long run, the failure of his programme to develop such working models has been a major reason for its marginalization, especially when combined with its radically revisionary and implausible consequences for logic and metaphysics.

Dummett presented his views on the relationship between the philosophy of language and metaphysics in his William James Lectures at Harvard in 1976, the same year that Hilary Putnam gave the John Locke Lectures at Oxford. A book soon grew out of Putnam's lectures, showing signs of Dummett's influence in some rather unfortunate arguments against something called 'metaphysical realism' (Putnam 1978). But it was not long before the anti-realist Dummett was replaced by the realist (if not metaphysical realist) J.L. Austin as the main Oxford presence in Putnam's work (Putnam 1994). Dummett's lectures took much longer to appear in print, as *The Logical Basis of Metaphysics* (Dummett 1991). For a key work of a major philosopher, it had comparatively little impact. One problem was that its discussion of proof theory as the foundation of semantics was informal, often elliptical, digressive, or vague, with philosophical and purely technical matters all mixed together, making it excessively and unnecessarily hard

for logicians to extract and perhaps answer the purely technical questions raised. Moreover, the generalization of the semantics to non-mathematical language still remained at a tentative, programmatic stage, not conducive to applications in linguistics. A more general problem for Dummett was that by 1991 the philosophical *zeitgeist* was even less receptive to anything like Dummett's programme than it had been earlier. He did not engage with the new paradigms of metaphysics, such as the work of David Lewis. There was no obvious way to interpret the new metaphysical theories as picturesque guises for views in the theory of meaning, nor did the new generation of metaphysicians wish to do so. Metaphysics itself had grown in self-confidence and felt no need to present itself as anything else. Incidentally, despite its title, my own book *Modal Logic as Metaphysics* (2013) is very far from a return to Dummett's understanding of the relationship between logic and metaphysics. As a first approximation, 'logic' in Dummett's title means something like 'philosophical reflection on the meaning of the logical constants', while in mine it means 'generalizing about the world in terms just of the logical constants'. For Dummett, logic is metalinguistic, for me it is not.

By the 1990s, few readers felt in danger of being compelled, against their wills, by Dummett's convoluted arguments, even when they understood them. One of several reasons was that he discussed the mind in ways that still carried behaviourist baggage from a philosophy of mind widely rejected by younger generations since the collapse of behaviourist psychology and its replacement by cognitive psychology in the 1960s. Such baggage is detectable in remarks like this about knowledge of meaning: 'we should [...] not be content with saying *what* is known, without saying what it is to have that knowledge, that is, how it is manifested by one who has it' (Dummett 1991, pp. 104–5), where the manifestation is in observable behaviour. In this respect, Dummett can be compared to Quine, who was influenced by his Harvard colleague Skinner's behaviourism in psychology. One might think that behaviourism about language had been outdated since the publication of Chomsky's famously destructive review of Skinner's *Linguistic Behavior* (1959), but digestion can be a slow process. I remember sophisticated young philosophers of language at Oxford in the late 1970s still talking of children learning their native language by being 'drilled' in it by adults. In Dummett's case, his behaviourist tendencies came from his reading of Wittgenstein rather than Skinner, and were correspondingly subtler and less eliminativist than Quine's. Nevertheless, the differences should not be exaggerated. An anecdote from late in Dummett's career: A group of younger Oxford philosophers were discussing what he meant, in the great man's silent presence. Suggestion after suggestion was rejected because it would attribute to him 'crude old-fashioned behaviourism'. Eventually, someone turned to him and asked 'So what *is* your view, Michael?'. Dummett replied 'I *think* it's the one you've been calling „crude old-fashioned behaviourism“'.

For Dummett, as for other British philosophers of his generation, Wittgenstein's central contribution to the philosophy of mind was his Private Language Argument. Its interpretation was disputed, but it was widely supposed to show *something* very deep about the need for talk about mental states to



involve observable criteria (in some sense) for attributing them to others. The putative insight had widespread repercussions for the philosophy of language, concerning not just the semantics of mental state ascriptions but the nature of the mental states in play for speakers and hearers of any speech act, and in particular the nature of understanding. Dummett's preference for assertibility-conditions over truth-conditions in the theory of meaning was rooted in the close linkage of assertibility-conditions to the observable use of the language, which realist truth-conditions lacked, since users of the language might have no idea whether they obtained. He combined this Wittgenstein-inspired focus on use with a Frege-inspired insistence on the need for a systematic, compositional theory of meaning, modelled on the semantics of a formal language. In thus uniting elements of the two previous traditions of analytic philosophy, ordinary language philosophy and ideal language philosophy, Dummett resembled the younger new wave philosophers of language, although his selection of elements to combine differed from theirs.

At this point something must be said more generally about the influence of Wittgenstein on British philosophy in the period under discussion – as has often been remarked, his influence in North America was never as great as in Europe, one reason being the greater sway of naturalism or scientism in North America, led by Quine and others. In the case of Dummett, since he was a student at Oxford in 1950 when Wittgenstein spent some time there living in Elizabeth Anscombe's house, future historians might wonder whether there was face-to-face influence. It is therefore worth recounting the story Dummett liked to tell about his only meeting with Wittgenstein. Dummett was going for a tutorial at Anscombe's house. She kept the door unlocked. As was the practice, Dummett went in, and sat down to await her summons. An elderly man in a dressing-gown came downstairs and asked 'Where's the milk?'; Dummett replied 'Don't ask me'. That was the extent of his conversation with Wittgenstein. What mattered instead was Anscombe's mediating role. She was probably the strongest transmitter of Wittgenstein's influence at Oxford until she left in 1970 to take up a chair at Cambridge, although of course she was always a fiercely independent-minded philosopher in her own right. Other Oxford ordinary language philosophers such as Ryle, Austin, and Grice were not moulded by Wittgenstein, and the number of card-carrying Wittgensteinians at Oxford was never very high. Nevertheless, his influence was still pervasive when I was a student in the 1970s. Gordon Baker and Peter Hacker, guardians of the flame, had a large following amongst graduate students. They were later to have an ill-tempered dispute about the value of Frege's philosophy with Dummett: when their disparaging book on Frege was published, Dummett organized an emergency series of graduate classes to denounce it (Baker and Hacker 1984, Dummett 1984). It is easy to list many Oxford philosophers of the time whose work showed significant Wittgensteinian influence to varying extents, even though it would be crass to classify them simply as Wittgensteinians: Dummett, Strawson, Philippa Foot, Iris Murdoch, David Pears, Anthony Kenny, of a younger generation John McDowell and Crispin Wright, and so on. What may be less obvious is how wary even



those who barely mentioned him were of plainly saying that he was wrong about something. One knew that doing so incurred the automatic charge of shallow misinterpretation. It was best to step quietly around, and let sleeping dogs lie.

Wittgenstein's main influence at that time was through his later work, although few of those under the influence imitated his style of philosophizing in that work. Most engaged in overt theorizing of a more or less systematic kind. The citadel was the Private Language Argument, from which he exerted his power over the philosophy of mind and the philosophy of language. The growing external threat to that power from cognitive psychology was surprisingly little felt in 1970s British philosophy. But there was also an internal threat. For how exactly was the Private Language Argument supposed to work? Wittgenstein's presentation was notoriously Delphic. The simplest and clearest reconstructions had the argument rest on a verificationist premise to the effect that one couldn't *be* in a mental state unless some independent *check* was possible on whether one was in that state. But it was generally agreed that *if* the argument rested on a verificationist premise *then* it was not compelling, because verificationism could not just be assumed without argument. Defenders of the argument insisted that it worked without such a premise, but could not satisfactorily explain how (a similarity with Davidson's transcendental argument mentioned above). Wittgenstein's citadel was in danger from within; his power was waning as a result. At this point an unlikely would-be rescuer arrived: Saul Kripke. In lectures from 1976 onwards, and in his book on the Private Language Argument and the associated considerations on rule-following (Kripke 1982), he offered a conjectural interpretation of the argument that was clearly non-verificationist and, if not compelling, at least powerful. The question was: did it fit what Wittgenstein meant? The consensus amongst Wittgensteinians was that it did not, and as a matter of historical scholarship they may well have been right. But they seemed not to realize that in taking the negative attitude they did, they were also rejecting their last chance to avoid marginalization from the philosophical mainstream. The power of Wittgenstein's name resumed its decline. As for Kripke's argument in its own right, it inadvertently gave the new metaphysics an opportunity to spread its influence. For Kripke's argument took the form of a sceptical paradox, to which Kripke offered a rather unclear and unattractive radically sceptical solution. By contrast, David Lewis offered a clearer and more attractive non-sceptical solution, by means of a highly metaphysical distinction between objectively natural and objectively non-natural properties (Lewis 1983b). It was something like Lewis's solution, not Kripke's, that was widely accepted.

Here are two snapshots of the decline in Wittgenstein's standing. The first is of a meeting in about 1994 of the 'Tuesday group', originally founded by Ayer on his return to Oxford in 1959 as a counterweight to Austin's Saturday morning meetings. Susan Hurley read a carefully reasoned paper against the Private Language Argument to an audience that included many leading Oxford philosophers. The audience divided by age. Roughly, those over fifty did not take the possibility seriously that Wittgenstein's argument was fundamentally flawed, although they also did not explain how it worked or what it showed; those under

fifty were more sympathetic to Hurley's objections. The second snapshot is of a large graduate class on philosophical logic shortly after my return to Oxford in 2000. One student kept pressing the Wittgensteinian line that contradictions are meaningless rather than false. I kept giving the standard responses, that contradictions have true negations while the negation of what is meaningless is itself meaningless so not true, that the compositional semantics generates meanings even for contradictions, and so on, whose effect was merely to elicit variations on the same theme that did not meet the objection. Eventually I became exasperated and said 'Maybe Wittgenstein was just wrong; it wouldn't be the first time'. There was a collective gasp of shock. I have never again witnessed such a reaction when Wittgenstein's name was taken lightly.

Of course, the flame is kept alive by surviving groups of Old Believers. Some others, more willing to believe that there has been progress in philosophy since 1970, still find value in engaging with Wittgenstein's work. Nevertheless, his influence has declined drastically over the past forty years. No doubt that could be roughly measured by his proportion of citations in journals. But what strikes me most forcefully is that the fear factor has gone. As a test of authority, of intellectual or other kinds, admiration tells less than fear. In the 1970s, even non-Wittgensteinian philosophers were often *afraid* to speak out against Wittgenstein. They are so no longer. Another philosopher who has ceased to elicit the fear factor is Quine. Originally, he was frightening because few could match his skill with the weapons of formal logic in philosophical debate. By the 1970s that was no longer so, but philosophers were still very nervous of relying on ordinary semantic notions such as synonymy, because they were afraid of being caught out by Quine's argument for the indeterminacy of translation. That fear too gradually evaporated in the 1970s, as Quine's behaviourist assumptions fell into disrepute.

Having said so much about the Oxford philosophical scene in the 1970s, I should continue the story into the 1980s and 90s. It was not at all a linear extrapolation from the 1970s. Strikingly, new wave philosophy of language receded fast (though it proved temporarily) in Oxford, less so elsewhere. One reason was tragically extrinsic: Gareth Evans died at the age of 34 in 1980. With him, the new wave in Oxford lost much of its technical panache, and detailed work in semantics dropped off. Although James Higginbotham was Professor of General Linguistics from 1993 to 2000, not much else was going on at Oxford in Davidsonian semantics for him to engage with. The Davidsonic boom had come to an odd end, morphing into moral philosophy in the work of John McDowell, David Wiggins (Wykeham Professor of Logic from 1994 to 2000, in succession to Dummett), Mark Platts, and others. The transition was made through the Davidsonian emphasis on the legitimacy of homophonic truth theories, in which a word is used to state its own reference. Contrary to appearances, it is not trivial that 'round' in English applies to all and only round things, because one has that to learn in learning English. Semantic analysis cannot go on for ever; eventually we reach semantic atoms, and switching to a non-homophonic semantics achieves nothing to the purpose, because the aim of semantics is not to write a textbook that one might read in order to learn the object-

language from scratch, but rather to say explicitly what its expressions mean in a systematic, compositional way, to those who may already understand them implicitly. Those in the intensionalist strand of new wave philosophy of language had to resort to homophonic lexical semantics too. The Davidsonians realized that, in particular, they could just as well give a homophonic semantics for moral language too (Wiggins 1976). For instance, 'evil' in English applies to all and only evil things. Nothing in their philosophy of language made it problematic to give such an ostensibly out-and-out realist treatment of moral language. Nor did it require any further semantic analysis of moral terms; they could be treated as unanalysable. Thus Davidsonian philosophy of language found itself in the unaccustomed role of providing a protective environment for Aristotelian moral realism. By contrast, Dummett put much heavier explanatory demands on the theory of meaning, perhaps too heavy to be satisfiable.

From the late 1970s onwards, Dummett also found himself fighting a more global trend in analytic philosophy: a move away from the philosophy of language towards the philosophy of mind. On his picture of the history of philosophy, Descartes had made epistemology first philosophy, the engine for the rest of philosophy, and then Frege had replaced epistemology by the philosophy of language as first philosophy. Analytic philosophy was philosophy downstream from that linguistic turn. But many analytic or ex-analytic philosophers were starting, heretically, to treat the philosophy of mind as more fundamental than the philosophy of language. Cognitive psychology made a far more interesting and attractive conversation partner for philosophy than behaviourist psychology had done, and had a natural interface directly with the philosophy of mind, for instance in the theory of perception. Computer models of the internal workings of the mind were also increasingly influential. Once again, many of the innovations came from North America. As behaviourism lost its authority, Thomas Nagel (1974) led the way in talking directly about conscious experience. Although Daniel Dennett (1981) still showed some influence from his Oxford supervisor Ryle, he engaged with psychology through the philosophy of mind, not the philosophy of language. Jerry Fodor (1975) postulated a language of thought, on the model of a computer's machine code, but it was to be studied by the methods of psychology and computer science, not those of linguistics. Moreover, it was not a *public* language, whereas Dummett envisaged first philosophy as the philosophy of public language, in line with the Private Language Argument.

In Oxford, the move into the philosophy of mind took a very specific form, which Dummett had unintentionally facilitated. For him, much of Frege's achievement in the philosophy of language depended on his distinction between sense and reference. Sense is individuated cognitively: two senses may present the same reference in ways which count as different because they fail to render the sameness of reference transparent to the thinker. The cognitive nature of sense promised to make the connection Dummett wanted between the semantics of a language and speakers' *use* of that language. Thus 'Hesperus' and 'Phosphorus' differ in sense and use but not in reference. Dummett followed Frege in making sense a level of linguistic meaning distinct from the level of reference. Initially, this gave Fregean semantics a large head start over one-level referential

semantics, like that associated with Russell, in explaining linguistic phenomena such as the apparent difference in truth-conditions between 'Mary thinks that Hesperus is bright' and 'Mary thinks that Phosphorus is bright'. However, new wave philosophy of language in North America turned against Frege, especially at the level of public language. In particular, the semantic property of a name that speakers share is its reference; as Kripke and even Frege emphasized, the name's cognitive connections may vary wildly from one speaker to another. Something similar applies to terms whose reference depends on context: the linguistic meaning of the phrase 'that dog' does not encode the rich cognitive connections that it will have when used as a perceptual demonstrative by a particular speaker on a particular occasion. Most of the younger Oxford philosophers of language in the 1970s and 1980s followed Dummett in his Fregean sympathies. But, more impressed than Dummett by the work of Kripke and other North American new wave philosophers of language, they applied the sense-reference distinction only at the level of individual users of the language, not at the level of the language as a whole. If senses are cognitively individuated determinants of reference, a proper name expresses different senses for different speakers, and a perceptual demonstrative expresses different senses on different occasions even for the same speaker. If senses are structured, much of that structure will be at the level of thought and not at the level of language. 'Sense' was often glossed as 'a way of thinking of the referent'. This shift in focus from language to thought was already visible in the work of Evans (1982). By Dummett's standard, it meant that Evans and the others who took that turn no longer even counted as analytic philosophers.

Thus Dummett found himself fighting on the home front too, trying to reassert the primacy of language over thought in philosophical method. Although he was happy to regard philosophy as the study of thought – of *what* is thought, not the act of thinking it – he insisted that the proper way for philosophers to study thought was by studying it as expressed in public language, which the neo-Fregean philosophers of thought no longer did. Perhaps they were not in direct contravention of the Private Language Argument, because their senses could in principle be shared. Nevertheless, from Dummett's methodological perspective, they had taken a step backwards, because the study of public language gave philosophy the objective discipline it needed. To replace that discipline by the objective discipline of experimental psychology would be, from his perspective, to commit the disastrous error of psychologism, against which Frege had railed: it would involve confusing what is thought with the act of thinking.

Dummett seemed to be fighting a losing battle. Globally, the centre of gravity of analytic or post-analytic philosophy moved towards the philosophy of mind in the 1980s. Logic and semantics suffered a significant loss of prestige: graduate students became less convinced of the need, intellectual or professional, to put in the hard work of learning them. Locally, neo-Fregean philosophers of thought were taking over. For instance, Strawson was succeeded as Waynflete Professor of Metaphysics by Christopher Peacocke, who held the post from 1988 to 2000. Senses became concepts (Peacocke 1992).

Since the 1980s, the philosophy of mind worldwide has continued to enjoy a far more fruitful relationship with experimental philosophy than it did in the heyday of behaviourism. However, it did not become first philosophy in the way it had been expected to do. Nor did the philosophy of thought, which anyway never solidified as a recognized branch of the subject. For instance, developments in metaphysics have typically not been driven by anything in the philosophy of mind. After all, with regained confidence in metaphysics, its contemporary practitioners tend to see themselves as investigating the most general and fundamental nature of a world in which human minds play only a very minor role. Why should the philosophy of mind or the study of concepts drive metaphysics any more than it drives physics? In principle, even if it cannot contribute towards constructive metaphysical theory-building, it might help towards understanding the folk metaphysical beliefs that may obstruct our acceptance of the correct revisionary metaphysics. In practice, the philosophy of mind and the study of concepts have had little impact on recent mainstream metaphysics even in that modest negative way.

For the past several decades, *no* branch of philosophy has played the fully-fledged role of first philosophy within analytic philosophy. To some extent, that reflects the increasing specialization of academic research in general. But it also concerns a change more specific to analytic philosophy (in a sense broader than Dummett's), in what philosophers take their subject matter to be. As already noted, an increasingly prevalent, broadly realist attitude is that when you are doing the philosophy of X, you are primarily interested in X itself, in its most general and fundamental aspects, and only secondarily in the word 'X', or our concept of X, or our beliefs about X, or our knowledge of X. You are not surreptitiously doing the philosophy of language or thought or mind or knowledge. This reconception of the subject gives no branch of philosophy a head start over the others.

However, the situation is more complicated than those simple formulations suggest. For they might lead one to expect the philosophy of language to be just one more branch of philosophy alongside all the others, the philosophy of a phenomenon specific to humans and perhaps some other species scattered here and there over the universe. It looked like that to some in the 1980s, and taken in isolation it may still sometimes look like that. But, as already suggested, the philosophy of language also plays a more general role throughout analytic philosophy, in the evaluation of arguments. Of course, we do not need the philosophy of language to determine whether an argument is deductively valid in simple cases. But on almost any view of philosophy, it often involves arguments with a subtle illusion of validity, and other arguments that are really valid but need to be checked for such subtle illusions. The illusion may come from confusions between entailments and presuppositions or conversational or conventional implicatures, or from concealed shifts in context, or from lexical or syntactic ambiguities, or from other linguistic complexities. Any discipline that uses subtle, complex would-be deductive arguments in natural language about abstract issues is liable to such illusions, and philosophy characteristically uses arguments of that kind. That is of course not to say that it uses nothing



else, or that no other discipline uses them at all; nevertheless, philosophical methodology past and present may put more weight on such arguments than does the methodology of any other discipline. The shift from a deductive to an abductive methodology makes less difference here than one might have expected, because abduction involves the assessment of – amongst other factors – the strength, explanatory power and consistency with the evidence of a theory, which in turns depends on its deductive consequences. Thus simply using the methods of analytic philosophy critically, by contemporary standards, takes some sophistication in both semantics and pragmatics, irrespective of the subject matter under philosophical investigation. That is a robust legacy from analytic philosophy of language for all philosophy.

One day, perhaps, cognitive psychology will have developed to a point at which it can be usefully deployed to locate likely trouble spots for philosophical reasoning, for instance where framing effects may be exerting an undue influence. Some ‘experimental philosophers’ believe that we have already reached that point. However, perhaps with a few limited exceptions, it is doubtful that purely psychological methods have yet reached an adequate level of discrimination to be usefully applied in the way that linguistic methods already can be. Just to be told that the order in which material is presented can influence our judgment is of little help, since either we ignore the material or it is presented in some order or other. For the time being, linguistics and the philosophy of language offer more help than do psychology and the philosophy of mind when we check an alleged deduction. In this limited respect, Dummett was right about the methodological danger of assigning priority to thought over language, but not for the deep and permanent reasons he envisaged.

For the evaluation of deductive arguments, the relevance of logic is even more obvious than that of the philosophy of language. Of course, some would-be deductive arguments in philosophy are cast in such seamlessly discursive form that no extant logical theory is of much use in evaluating them. Nevertheless, in most branches of contemporary analytic philosophy complex would-be deductive arguments often *are* articulated with sufficient clarity for formal logical skills to make a significant difference to the reliability with which their validity is assessed. Thus logic makes an instrumental contribution to philosophy in general similar in kind to that made by the philosophy of language, and perhaps greater in degree.

The development of formal methods in recent philosophy has also extended the scope for logic to make a more direct contribution to branches of philosophy usually conceived as ‘other’ than logic. For instance, in epistemology, models of epistemic logic enable us to work through the consequences of epistemological claims in exactly described, appropriately simplified situations in a far more rigorous and systematic way than would otherwise be available. Something similar goes for decision theory too. The model-building methodology that has proved so successful in the natural sciences can thereby be applied in philosophy too, and provides new insights into old problems. In metaphysics, rival logics often supply powerful structural cores to rival metaphysical theories: for instance,



a quantified modal logic is the structural core of any properly developed theory of modal metaphysics. Although not all of modal metaphysics is usefully treated as logic, a vital part of it is. Logic, far from displacing metaphysics as the logical positivists hoped, is at its centre.

The history of philosophy makes a mockery of any limited vision of what philosophy is. It has not followed the path laid out for it by the logical positivists, nor that laid out by the ordinary language philosophy. Nor has it perhaps with a few limited exceptions become a branch of psychology, or of physics. Nevertheless, under all the surface turbulence, it somehow manages to extract the residue it needs from each changing fashion. Who knows where the cunning of reason will take it next?

### III

History is often said to be written by the winners. In the case of analytic philosophy, however, there is a danger that history will be written predominantly by the losers. One reason is that analytic philosophy is a somewhat anti-historical tradition, especially where it most resembles a science, in aspiration or achievement. For there it tends to be oriented towards the future rather than the past, in the manner of a science – hardly surprising when progress is expected. Those who do not like history cannot complain when their history is written by people who are not like them. A second reason is that recent analytic philosophy seems to subvert the global narratives it might otherwise be tempting to tell about the history of the subject – most notably, in the resurgence of realist metaphysics, often unashamedly concerned with things in themselves. For those sympathetic to Kant or Wittgenstein or Dewey, it must be tempting to see much recent analytic philosophy as an insignificant anomaly, a passing throwback, in the long march of philosophy.

A case in point is Richard Rorty, who was admirably willing to step back, identify bold patterns in the then-recent history of analytic philosophy, and list his heroes – Kant, Hegel, Wittgenstein, Dewey, Heidegger, Sellars, Brandom, ...; no wonder his racy, deliberately provocative stories have been so widely read. It is striking that the very large number of names of contemporary philosophers – villains as well as heroes – in the index to *Philosophy and the Mirror of Nature* (Rorty 1979) does not contain that of David Lewis, who had already published two highly much-discussed books and many articles, and been Rorty's colleague at Princeton since 1970. Rorty's radar had missed a serious threat, the central figure in analytic philosophy for the coming decades. Rorty was out of sympathy with most new wave philosophy of language, and the metaphysics that increasingly accompanied it, because its referential approach to semantics came too close for his comfort to making language a mirror of the world. For the future, he put his money instead on the inferential approach, particularly in the neo-pragmatist form offered by Robert Brandom (1994), focussed on the commitments and entitlements of speakers to make moves in the language

game. Brandom himself has his own grand narrative of the history of philosophy, in which – tongue partly but not wholly in cheek – he presents himself as the natural successor to Kant and Hegel (Brandom 2009). But his inferentialism has remained at an even more programmatic stage than Dummett's, lacking an equivalent of Dummett's connection with technical developments in proof theory by Dag Prawitz and others. As a result, inferentialism has been far less fruitful than referentialism for linguistics. In that crude sense, referentialism beats inferentialism by pragmatic standards.

Of course, we cannot expect a history of recent philosophy to remain neutral about the future. Even the driest chronicle of who published what when has implicit standards of historical significance in selecting whom and what to include. Good historical narratives discern patterns in their material more explicitly and reflectively. This paper – which manifestly does not aspire to the depth or rigour of serious history – has indicated a few of the messy complexities which any history of recent analytic philosophy must try to order. Nevertheless, it does at least gesture towards some larger patterns to be made explicit and reflected on. A chronicle is not enough.

The power of fashion in philosophy already ensures that its history will exhibit some patterns, if only of the mob rushing here and there. Some of those fashions look foolish in retrospect; most of them did at the time to non-sympathizers. But fashion is powerful in all academic disciplines, even in mathematics – for instance, concerning which branches of the subject or styles of work carry most prestige. Nor is that merely an inevitable defect in any collective human enterprise. Academic fashions arise because people trained in a discipline have some respect for the judgment of others trained in the discipline as to what is good or fruitful work, worth imitating or following up. When things go well, that mechanism enables the community to concentrate its energies quickly where progress is being and will be made, to avoid wasted effort, and to raise collective standards. It is a way of learning from others. The word 'fashion' is most appropriate when the level of deference to majority opinion becomes too high, stifling diversity and independence of mind, making it harder in the long run for the community to back up out of a wrong turning, since it loses its sense of the alternatives. But the rule of fashion is only an exaggerated form of something no community can do without. Even the time and energy spent on bad ideas and misconceived programmes has its value, since the effect of the investment is that their limitations are properly explored and tested, so lessons are properly learnt. The history of academic fashions is the history of how things once looked to highly intelligent and knowledgeable people.

The changes in philosophy discussed in this paper occurred in a period whose political, social, and cultural history is already being written. Its philosophical history needs to be properly written too, by historians of philosophy with at least enough sympathy for them to understand why what so many philosophers did seemed a good idea at the time. There are encouraging signs that such histories are just starting to be written. I look forward to reading them.

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