

STATEMENTS AND MODALITY

Strawson, Quine and Wolfram

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Over a period of more than twenty years, Sybil Wolfram gave lectures at Oxford University on Philosophical Logic, a major component of most of the undergraduate degree programmes. She herself had been introduced to the subject by Peter Strawson, and saw herself as working very much within the Strawsonian tradition. Central to this tradition, which began with Strawson's seminal attack on Russell's theory of descriptions in 'On Referring' (1950), is the distinction between a *sentence* and *what is said* by a sentence - Strawson initially called the latter a *use* of a sentence, and sometimes a *proposition*, but his most frequent term for *what is said*, which Wolfram consistently adopts, is the *statement* expressed.¹ The force of the distinction is clearly illustrated in 'On Referring', which uses it to undermine the common assumption that any sentence must be either true, or false, or meaningless. Russell had argued on this basis that a sentence such as 'The King of France is bald' (which is clearly neither true nor meaningless) must be false, but Strawson points out that if we distinguish between the *sentence itself* and the *statement that it expresses* (on some occasion of use), we can quite easily combine the admission that the sentence is meaningful - for it can in appropriate circumstances be used to express true and false statements - with the claim that nevertheless if the circumstances are 'inappropriate' (in particular, when there is no current King of France), the *sentence* can fail to express a *statement* that is either true or false. On this picture, therefore, it is sentences that are meaningful, but statements that are the primary bearers of truth.

The sentence-statement distinction was much employed during the 1950's and 1960's by Strawson and other Oxford philosophers (such as Austin and Warnock) to tackle in a non-formal manner a variety of important logical problems, including not only the analysis of definite descriptions but also the nature of truth and of necessity. But the distinction fell out of fashion soon afterwards, largely through the increasing influence of first Quine, then Davidson and his followers, and finally the 'direct reference' school which was strongly inspired by the publication of Saul Kripke's *Naming and Necessity* in 1972. Quine, Davidson and Kripke, in different ways, fostered an emphasis within philosophical logic on the formal analysis of sentences themselves, and the apparent successes of their sophisticated formal approach discouraged the recognition of any need for a two-level treatment which distinguished, as Strawson had done, between a sentence and what the sentence says.

¹Judging from the articles reprinted in Strawson (1971), it would seem that soon after writing 'On Referring' Strawson adopted the term 'statement' from Austin (p.190), and generally continued to use it over the next two decades (e.g. pp.75-95, 234-49) although by 1957 he had already seen reason to prefer 'proposition' (pp.118, 122). In 1964 he toyed with the compromise 'Statement (proposition)' (p.217), but in 1970 finally moved to 'proposition' (pp.96-115).

Given this context, Sybil Wolfram's book *Philosophical Logic: an Introduction* (henceforward '*PLI*') published by Routledge in 1989, can be seen as more than just a neutral textbook for undergraduates - it also aims to revive the Strawsonian tradition by applying the sentence-statement distinction to a wider range of topics and in a more systematic manner than Strawson himself ever attempted. Immediately after her introductory chapter the crucial distinction is elucidated, followed appropriately by its Strawsonian application to Russell's 'problem of the King of France'. This second chapter ends with a section asking 'should we admit statements?', while in the third, which is devoted to necessary truth and the analytic-synthetic distinction, Wolfram addresses what she sees as the most serious objection to the admission of statements, Quine's 'Necessity Argument' based on his observations about referential opacity in modal contexts. This dealt with, the remainder of the book is free to proceed on the assumption that statements are unexceptionable, and Wolfram frequently invokes them in the analysis of such concepts as truth, negation, existence and identity. When 'pulling threads together' in the final section of the book, Wolfram summarises her perception of the role of philosophical logic as being 'not so much to chart territories or build systems as to resolve difficulties, or, more generally, to create a kit of tools which can be used as need arises' (p.254). Amongst such tools, she here gives clear pride of place to the sentence-statement distinction,² which 'assists in resolving some confusing and relatively intractable problems such as those discovered by Quine in the area of necessary truth'.

It is not surprising that in defending and promoting the sentence-statement distinction, Wolfram should give such prominence to Quine's Necessity Argument. For although not explicitly aimed against the distinction, this argument strongly suggests either that the statement cannot be the primary bearer of truth (as its proponents intend), or else that the concept of necessary truth is incoherent. The damaging implications of Quine's argument were recognised by Wolfram long ago, and she initially presented her reply to it in a much earlier publication, 'Quine, Statements and "Necessarily True"' (*Philosophical Quarterly* **25** 1975 - henceforward '*QSNT*'). My aim in this paper is to examine this reply to Quine, and to argue that although it is ultimately unsatisfactory in detail, it nevertheless provides a signpost to a successful treatment of the issues which is very much in the same spirit.

1. Statements and the Problem of Modal Opacity

On the Strawson/Wolfram account, two sentence utterances (or inscriptions etc.) make the same statement if they 'say the same of the same object(s)' (*PLI* p.36). No doubt many subtle ambiguities and problems lurk beneath the surface of this apparently straightforward definition, but at least in many simple cases it seems fairly easy to apply. Thus for example the two sentences:

(1) The Earth is inhabited

and (2) This planet is inhabited

²Strictly, Wolfram draws a threefold distinction (*PLI* pp.26-39) between *sentences*, *statements*, and *propositions*, where a proposition is what is common to two sentences which have the same *meaning* (e.g. 'it is raining' and 'il pleut'). For simplicity of exposition I here ignore the relatively straightforward distinction between sentences and propositions thus defined, and take care to avoid sentences which are propositionally ambiguous (e.g. 'This bank receives a lot of interest.').

will express one and the same statement, despite their verbal differences, provided only that the two are uttered simultaneously and that the latter is uttered by someone who is either on the Earth, or who is otherwise identifying the Earth as the planet to which reference is intended. As long as both sentences are used to talk about the same object, namely the Earth, and as long as both are used to say the same about that object, namely that it is inhabited at the same particular time, then both express the same Strawsonian statement.

Central to this account is the notion of a *referring expression*, since it is definitive of a genuine referring expression that it serves only to pick out an object, and does not contribute in any other way to the statement expressed by a sentence in which it occurs.³ It is precisely for this reason that two referring expressions which designate the same object may be freely substituted for each other without altering the statement expressed. Thus a theory of statements will not be complete until a ruling is made as to which kinds of expression may perform the function of genuine reference: names and demonstratives are obviously plausible candidates, but doubts may arise in the case of definite descriptions. A Russellian analysis, for example, would view definite descriptions as disguised quantifiers, and would therefore refuse to count them as genuine referring expressions. Strawson and Wolfram, on the other hand, reject the Russellian theory of descriptions, and both are happy to accept that a definite description can be used for the function of ‘uniquely referring’, though it does not follow that this is their only possible use (Strawson 1971 p.1; *QSNT* pp.235-6; *PLI* pp.55-60). In considering the Strawson/Wolfram theory of statements, I shall accordingly take for granted this view of definite descriptions.⁴

We are now in a position to examine the Quinean objection based on referential opacity in modal contexts. This starts from the assumption that a sentence expresses a necessary truth if and only if it is analytic (Quine 1953 p.143; 1960 pp.195-6). Of course Quine has well-known reservations about analyticity, but in this context he is prepared for the sake of the argument to go along with the judgements of analyticity which he assumes would be acceptable to those who are happy with the notion. On this basis he observes that of the following two sentences, the first would generally be judged to be analytic, whereas the second would not:

- (3) Nine is greater than seven.
- (4) The number of the planets is greater than seven.

Now if we take the statement expressed by a sentence to be the primary bearer of truth and hence of necessary truth (since to be necessarily true is simply to be true of necessity), and if we take analyticity of expression to be the criterion of necessary truth, then it seems to follow that the statement expressed by (3) is necessary, whereas the statement expressed by (4) is contingent. But since on the Strawsonian account (3) and (4) express the very same statement, we are apparently left with an intolerable paradox.

³It is worth noting that the original target of Quine’s Necessity Argument is the notion of a ‘purely referential’ expression (‘Reference and Modality’, in Quine 1953, p.140), though because of this intimate connection Wolfram is right to see the argument as equally threatening to the Strawsonian statement.

⁴For detailed argument against Russell’s theory of descriptions, see Millican (1990) pp.169-80. Later in that paper, however, I indicate reasons for doubting whether a clear line can be drawn between a definite description’s referring and describing roles.

2. Wolfram's Reply to Quine

Since Wolfram accepts the Strawsonian doctrine that definite descriptions can function in a purely referential way, she is committed to allowing that (3) and (4) can indeed express the same statement. She also accepts that of these two sentences, only (3) is analytic ('with a meaning such that it must express a truth' *PLI* p.80), so the one way left open to her to defend the concept of a necessarily true statement is to challenge Quine's equation of necessity with analyticity. She does not, however, wish to deny that necessity and analyticity are intimately connected, since one of her principal concerns is to propose a 'conventionalist' account of necessity, according to which 'all necessary truths derive their truth from the "conventions of language"' (*PLI* p.83).⁵ She therefore puts forward the following definition (*QSNT* p.233; *PLI* p.100), preserving the notion of necessary truth without offending against her conventionalist scruples:

(D) A statement is necessarily true if and only if it *can* be expressed by an analytic sentence.

According to this the statement expressed by (3) is necessary, despite the fact that it can also be expressed by the non-analytic (4). Similarly, (D) can furnish a significant distinction between necessary and contingent (neither necessarily true nor necessarily false) statements even if, as Wolfram allows, *all* necessarily true statements can be expressed by a non-analytic sentence. The success of the definition depends only on the two principles:

(P1) No contingent statement can be expressed by an analytic sentence.

(P2) Any necessary statement can be expressed by at least one analytic sentence.

Nothing in Quine's argument casts the least doubt upon either of these. So his sceptical conclusion can be undermined simply by noticing that once a distinction is drawn between analyticity as applied to *sentences*, and necessity as applied to *statements*, then we are under no obligation whatever to define 'necessary' as 'analytic'. Quite the reverse: to take the sentence-statement distinction seriously, we must distinguish necessary truth and analyticity as different properties of different things, and we need not assume that the two will always coincide even if we share Wolfram's 'conventionalist' view that the one should be defined in terms of the other. Provided that (P1) and (P2) can be maintained, Wolfram's definition (D) can indeed supply a conventionalist answer to Quine.

3. Analyticity and Reference Failure

It might seem at first sight that a counterexample to (P1) is easy to construct: simply pick out an object by means of a definite description which it just happens to satisfy uniquely, and then attribute to it that very property by which it has been picked out. Thus if we assume that there is no life elsewhere in the universe, the sentence:

⁵Wolfram's approval of conventionalism manifests itself in her writings on Locke as well as on logic. Her (1978), for example, criticises the claim that his 'trifling-instructive' distinction is identical to Kant's analytic-synthetic distinction, an equivalence which would undermine Locke's conventionalism by implying that he makes room for mathematical knowledge that is supposedly synthetic *a priori* (cf. also her references to Locke on p.8 and in chapter 3 of *PLI*).

(5) The planet which is inhabited is inhabited.

says of the Earth that it is inhabited - precisely the same statement which is expressed by (1) and (2), and thus clearly contingent. Yet the sentence itself appears to be analytic, indeed to be a mere tautology, for how could it possibly fail to be true that the inhabited planet is inhabited?

Wolfram's principal defence against putative counterexamples to (P1) is an appeal to the possibility of reference-failure (*QSNT* p.242; *PLI* p.98). She points out that a sentence such as (5) is not analytic because it can fail to express a truth if there are no inhabited planets at all, or several, in which case the definite description fails to refer. To count as analytic, it is not sufficient merely that a sentence be incapable of expressing a falsehood: it must be guaranteed to express a truth.

The problem with relying on reference-failure to maintain (P1) is that this has unfortunate repercussions on the viability of (P2); for unless the question is to be begged against the popular Kripkean doctrines that statements about a person's origin, kind and identity are necessary (in the 'weak' sense of being 'true whenever the objects mentioned therein exist' - *PLI* p.116), it needs to be shown how (P2) can be consistent with them. There is an apparent conflict here, because any sentence describing the origin, kind or identity of a contingent existent must refer to that existent, and except in certain unusual cases (as we shall see later), reference to a contingent existent must carry the risk of reference-failure. So if this risk implies the sentence's non-analyticity, it will follow from (P2) that no statement about a contingent existent can be necessary.

Though she is rather non-committal about the significance of Kripke's 're-definition of "necessarily true"' to encompass 'weak' necessities (about contingent existents) as well as the traditional category of statements that are 'true no matter what' (*PLI* pp.116-7, 122), Wolfram seems to accept that such an extension of the concept is in some sense legitimate. So this indeed leaves her with a dilemma: either to drop (P2) and with it (D), or else to maintain, somewhat implausibly, that there are two senses of 'necessarily true' which though apparently closely related, cannot be defined in ways that are at all similar (since one is to be defined in terms of analyticity, whereas the other cannot). The only way between the horns of this dilemma seems to be to acknowledge not only a weakened sense of necessity but also a weakened sense of analyticity, applying to sentences which have a meaning such that they must be true *if there is no failure of reference* (examples might be thought to include 'David begat Solomon', 'Socrates is a man' and 'Kripke is Kripke'). This would then allow a 'weakly necessary' statement to be defined in a way that is exactly analogous to (D), as a statement which can be expressed by a weakly analytic sentence.⁶ This attractive analysis would rightly leave necessity of origin (etc.) as an open question, since anyone who denies the (weak) necessity of Solomon's ancestry will surely also deny that 'David begat Solomon' is weakly analytic. But unfortunately such an escape-route is not available to Wolfram, because (5) is certainly itself weakly analytic, although the statement which it expresses is not even necessary in a weak sense: if a large asteroid collides with it the Earth might cease to be inhabited, but it will not thereby cease to be.

⁶Though Wolfram does not herself make this suggestion, she seems in *PLI* to recognise what I have called the property of weak analyticity, for at p.119 she speaks explicitly of 'sentences like "Kripke is Kripke" (whose meaning obliges them to express truths not in *all* circumstances but only if "the objects mentioned therein exist")'.

4. The Contingent Analytic

We have seen that a plausible defence of (P2) casts doubt on (P1), by undermining Wolfram's rejection of such apparent counterexamples as (5) on the basis of the possibility of reference-failure. Where this possibility can be removed, however, the situation is even more serious, for then cases may be produced which unequivocally contradict (P1), and hence require the abandonment of (D). This can be seen quite clearly when once it is noticed that a definite description which guarantees reference need not necessarily guarantee reference *to any one particular object* (something that Wolfram appears to overlook at *QSNT* pp.240-1 and *PLI* p.98). If 'the F' is a description of this kind, then since the actual F might not have been the F (*ex hypothesi*), the sentence 'The F is F' will attribute to that object a property which it possesses contingently. Since, however, we are supposing 'the F' to be immune from reference-failure, the sentence is obviously analytic (it has 'a meaning such that it must express a truth'), and it therefore provides a counterexample to both (P1) and (D).⁷

The expression 'the number of the planets' is an expression which guarantees reference, since there cannot fail to be a number of the planets even if that number is zero (although problems might, I suppose, be raised by infinity). In fact, that number is nine, and so just as (3) and (4) can express the same statement, so also can (6) and (7):⁸

(6) The number of the planets numbers the planets.

(7) Nine numbers the planets.

This statement is manifestly contingent, and yet (6) is quite trivially analytic on Wolfram's account: given its meaning, it could not possibly fail to express a truth. It necessarily expresses a truth, then, even though the truth which it expresses is not a necessary truth.

Lest it be claimed that this example is just a 'problem case', awkward because numbers exist necessarily and thus penetrate Wolfram's defences, but insufficient to challenge (D) for 'the ordinary run of contingent identity

⁷It might be supposed that a counterexample can equally well be created using a definite description which does not guarantee reference, by the simple expedient of including the conditions for its successful reference as the antecedent to a conditional. For example: 'If there is one and only one King of France, then the King of France is King of France'. Such an example is not, however, entirely persuasive, since as Wolfram pointed out to me when I raised this in 1979 while attending her Oxford lectures, the Strawsonian can with some plausibility deny that a definite description which occurs within the consequent of such a conditional is ever genuinely referential. I should like to acknowledge a debt of gratitude to Sybil for discussions such as these, which greatly stimulated my own interest in philosophical logic as an undergraduate.

⁸Of course the number of planets is actually much larger than nine, since many stars other than the Sun also possess them. This makes no significant difference to the argument, but merely involves the epistemological inconvenience of not knowing *which* sentence of the form 'N numbers the planets' in fact expresses the same statement as that which is expressed by sentence (6). As with (4), we again presuppose the Strawsonian assumption that a definite description such as that in (6) can function as a 'genuine reference' to a particular number.

and subject-predicate statements' (*QSNT* p.243), we can now outline a method for constructing any number of counterexamples to (P1) and (D), analytic sentences that express statements which are logically equivalent to (i.e. have the same truth-value in all possible worlds as) such paradigm contingencies as those expressed by 'My house is white' or 'That cat is friendly'. To illustrate the method, we first take an example.

Let us suppose that the Bible is right in its claim that Og, the Amorite king of Bashan (c. 1450 B.C.), reached the height of four metres, and let us also suppose that he is the only human ('featherless speaking biped', if names of biological species do not guarantee reference) who ever has done or ever will do so. Thus if 'lofty' is used as an abbreviation for 'at some time at least four metres tall', then the set of lofty humans will be the set containing Og alone. Now sets are extensional - the identity of a set is determined only by the identity of its members - so any set containing just Og will be *the very same set* as this set of lofty humans. And if 'oggish' is a (timeless) description of Og as a boy, applying to him uniquely and carrying no implications about his later height, then on the Strawson/Wolfram criterion the following two sentences express the same statement, since they 'say the same' about the same object:

(8) The set of things which are oggish contains only lofty humans.

(9) The set of lofty humans contains only lofty humans.

(9) is analytic, and so according to (D) this statement is necessarily true. Yet it is quite clear that (8) can only express a contingency: the description 'oggish' does not involve a specification of height, while the set of things which are oggish is entirely determined by its membership, the one man Og, who might not have been lofty had the Lord chosen to 'smite him with the edge of the sword' a little sooner. (8) and (9) both say that the set of which Og is the sole member contains only lofty humans: since the identity condition for sets is extensional, this is logically equivalent to the contingent statement that Og is a lofty human. (If we are permitted to assume that Og's eventual height is not one of his essential properties, then the example can be made more explicit by using instead of (8) the sentence 'The set containing only Og contains only lofty humans')

The point of this example is that a descriptive specification of a set cannot fail to refer, even when it is a contingent matter what objects, if any, satisfy the description concerned *and thereby define the set referred to*. If those objects exist contingently, then so will that set, and if those objects satisfy the description contingently, then it will also be a contingent matter that that set contains only objects which do satisfy the description. None of this, however, casts any doubt on the analyticity of the sentence which identifies the set *by means of a description* (rather than extensionally), and then attributes to its members the property described.

To apply the method to 'That cat is friendly', we need only find some description, say 'C', which the cat in question satisfies uniquely but contingently. Since there is no reason why 'external' descriptive properties should be prohibited, it is easy to see that this can in principle be done (e.g. C might start: 'cat which during the nth minute after its birth jumps onto the lap of a person who ... '). We then frame the following analytic sentence: 'Every member of *the set of cats which are C and friendly* is friendly'. Assuming that the cat is indeed friendly, this sentence expresses a contingent statement about the set containing only that cat, a statement logically equivalent to that which is expressed by the sentence 'That cat is friendly'. It therefore represents a conclusive refutation of (P1), and hence of (D).

5. An Alternative Reply to Quine

The possibility of the *contingent analytic* certainly appears initially paradoxical (in much the same way as Kripke's *contingent a priori*), but our surprise may be dispelled by a simple explanation of how it occurs. The point is that a definite description, *when used in a genuinely referring way to pick out rather than to describe an object*, does not itself contribute to the logical structure of the statement which it is used to express *except* as a means of identifying that object. Since the statement is determined only by what is said about which objects, it follows that any descriptions which are used purely to identify those objects are a part of the sentence but not of the statement which the sentence expresses.⁹ If these particular descriptions are essential to the sentence's analyticity, therefore, then the statement will be lacking within its structure one of the elements which contributes to the sentence's analyticity. Thus there is no reason why the statement should not be contingent. The *contingent analytic* indeed seems contradictory only so long as it is assumed that one and the same 'truth' is *both* contingent *and* analytic: those who refuse to recognise truth bearers other than sentences, therefore, will generally also refuse to draw any distinction between *necessarily expressing a truth* (Wolfram's notion of analyticity) and *expressing a necessary truth*. But a defender of Strawsonian statements need not be in the least distressed if the necessary truth of a statement turns out to be independent of the analyticity of the sentence which expresses that statement, since on the contrary, it is the central feature of the Strawson/Wolfram account that it distinguishes between the bearer of truth and the means by which truth is expressed.

I have argued that a Strawsonian theory can consistently accommodate the *contingent analytic*, but this still leaves the question of how the necessity of a Strawsonian statement should be characterised. It is now clear that necessity cannot after all be defined in terms of analyticity as Wolfram desires, since (3), (4), (6) and (7) between them show that either may be present or absent, independently of the presence or absence of the other. Once the link between necessity and analyticity is cut, however, and we are liberated from the Quinean dogma that necessity and contingency arise only from our means of reference, the definition of these notions becomes straightforward almost to the point of triviality. A Strawsonian statement is 'what is said' by a sentence about things: what is said about things is necessarily true if and only if those things are necessarily as they are said to be. (3) and (4), for instance, both say of the number nine that it is greater than seven, and if this is a property which nine could not fail to possess, then the statement that nine does in fact possess it is necessarily true.

Quine imagines that the concept of necessity is lent what plausibility it has by the concept of analyticity. It would perhaps be nearer the mark to say that the concept of necessity has been robbed by its cousin, and has been considered spurious by many philosophers precisely because they have failed to distinguish the two. Those who claim that modality depends upon analyticity, and hence that nine *qua* the successor of eight has different modal properties from those possessed by nine *qua* the number of the planets, naturally conclude that these 'properties'

⁹For the sake of simplicity I here draw no distinction between the description itself (which being purely verbal can only strictly be part of a sentence) and the property to which the description corresponds (which can presumably be part of a statement when the description is used non-referringly). The point is that on the Strawson/Wolfram account a 'purely referential' use of a definite description contributes to the statement expressed only in so far as it picks out an object: hence neither description nor property is a constituent of the statement.

are chimerical: *opaque reference* is a contradiction in terms, and if nine *qua* one thing is different from nine *qua* another, then it is not of *nine* that we are speaking.

How, then, can something have necessary properties independently of any particular means of specification? Simply if its identity depends upon its having those properties. And the recognition of this possibility need not require any abandonment of Wolfram's favoured conventionalism, for it is entirely consistent with the claim that all such necessities depend upon criteria of identity which are themselves conventional. It is true that the criteria of identity for most kinds of object are open-textured, and leave a serious indeterminacy in the modal properties of nearly all contingent existents (contingent sets are a notable exception, although the same indeterminacy will arise in the case of their members). All this, however, does nothing to impugn essentialism in cases where identity criteria are clear and well-defined. Nine, to return to Quine's favourite example, is defined by its place in the sequence of numerals, and a number which occupies a different place in that sequence cannot be the number nine. The statement expressed by (3) and (4) is thus indeed a necessary truth, and this fact in no way conflicts with the non-analyticity of (4). It is one thing for a sentence to have a meaning which determines that it cannot but express a truth: it is quite another for a sentence to ascribe to an object a property which that object could not possibly fail to have. The whole point of the Strawson/Wolfram theory is to distinguish sharply between what a sentence says about things, and how the sentence says it. It is therefore entirely within the spirit of this approach to distinguish equally sharply between the necessity of what the sentence says about things, and the analyticity of how it says it. The Strawson/Wolfram theory of statements can indeed be defended against the Quinean argument from modal opacity, but this defence must be rather more radical than Wolfram envisages, since it must sever entirely the traditional link between analyticity and necessary truth. Whether this modification is sufficient to make the theory compelling is, of course, a moot point, since there are other difficulties that stand in its way.¹⁰ But I hope at least it is clear that Wolfram is after all right to claim that Quine's Necessity Argument poses no insuperable threat to her account of statements.

¹⁰In Section IV of Millican (1990), I address some of these difficulties, and respond to them by arguing for a flexible approach to the analysis of 'what is said' by a sentence (its 'propositional content'), which can depend not only on the context of the sentence but also on the use for which the analysis is intended: thus one and the same sentence might be analysed as having a different 'propositional content' depending on the purpose of the analysis. Section V then explains why the account needs to be further extended to accommodate the recognition of a distinct 'notional content' in order to facilitate the analysis of beliefs and other 'propositional attitudes'. Though a significant departure from the straightforward Strawson/Wolfram approach, this recognition of a variety of 'levels of analysis' is very much in the same tradition, in contrast to the Davidsonian and direct reference traditions which have tended to focus on formal analyses at the single level of the sentence (or interpreted sentence). In footnote 24 of my paper, I observe with interest that one of the most prominent direct reference theorists, Kaplan, has recently appeared to hanker after a multi-level analysis.

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