Colouring and Composition

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1.

The idea that an utterance of a basic (nondeviant) declarative sentence expresses a single true-or-false proposition has dominated philosophical discussions of meaning in this century. Refinements aside, this idea is less of a substantive theses than it is a background assumption against which particular theories of meaning are evaluated. But there are phenomena (noted by Frege, Strawson, and Grice) that threaten at least the completeness of classical theories of meaning, which associate with an utterance of a simple sentence a truth-condition, a Russellian proposition, or a Fregean thought. And it may well be the case that a framework within which utterances express *sequences* of propositions provides much of what is needed to account for the relevant phenomena, a better overall picture of the way language works, and an enticingly uniform perspective on a variety of semantic problems.

I do not myself take to theories that multiply propositions by appealing to propositions "presupposed" or to pairs of Fregean and Russellian propositions, or theories that show no respect for a distinction between *semantics* and *pragmatics*—where the former is the study of propositions whose *general form and character* is determined by word meaning and syntax—or for theories that blithely abandon general principles of composition and semantic innocence. I would like to sketch a package based on four interconnected ideas: (i) the meaning of an individual word is a *sequence of instructions* for generating a *sequence of propositions* (in conjunction with compositional instructions (syntax) and elements of context); (ii) utterances themselves are not bearers of truth or falsity; (iii) judgements of truth, falsity, commitment, and conflict are shaped, in part, by the weights attached to individual

propositions that occur in sequences expressed by utterances, weights that may be set (and reset) by contextual considerations; (iv) Fregean senses are superfluous; propositions might as well be Russellian (Mont Blanc and all its snow fields will do as well as any mode of presentation). A rigorous semantics for the expressions used to motivate the multiple proposition framework will have to await another occasion.

I shall do some scene-setting and motivational spadework for this package with examples of what Frege calls *colouring* and Grice calls *conventional implicature*. My primary interest is not in the history of such examples but in how we might piece together elements of the work of Frege, Grice, and others, and thereby extricate ourselves from what appears to me to be a semantic strait-jacket.

2.

Frege (1892) distinguishes between the reference (Bedeutung) and sense (Sinn) of an expression; but in some intuitive sense of our word 'meaning', it appears to be Frege's view that sameness of meaning is guaranteed by neither sameness of reference nor sameness of sense. The referent of a singular term is its bearer, its sense a "mode of presentation" of the bearer. The referent of a sentence (a type of singular term) is its truth-value, its sense a thought/proposition (Gedanke). The names 'Hesperus' and 'Phosphorus' have the same reference but differ in sense; by contrast, the sentence connectives 'and' and 'but' not only have the same reference—a particular truth-function—they also have the same sense: they differ only in colouring (Färbung). Unfortunately, Frege does not say very much about colouring; but what he does say suggests that it is a general property: every word has it, and such things as word order and intonation patterns may also contribute to the colouring of a phrase or sentence. Consider the following:

- (1) Alfred has still not arrived
- (2) Alfred has not arrived yet
- (3) Alfred has not arrived.

According to Frege, someone who utters (1) or (2) "actually says" that Alfred has not arrived "and at the same time hints—but only hints—that Alfred's arrival is expected" (1914, p. 23). The hints supplied by 'still' or 'yet', as used in (1) and (2),

make no difference to reference: if Alfred is not expected (1) and (2) are still true as long as Alfred has not arrived. Furthermore, 'still' and 'yet' make no difference to sense: (1)-(3) express the same thought. Indeed, Frege's view may well be that although 'still' and 'yet' have colouring, they have no sense:

'although'... has no sense and does not change the sense of the clause [to which it is attached] but only illuminates it in a peculiar fashion. (*Footnote*: Similarly in the case of 'but' and 'yet') (1892, p. 73).

The point Frege is making in the footnote is taken up in his later paper "Thoughts":

[t]he way that 'but' differs from 'and' is that we use it to intimate that what follows it contrasts with what was to be expected from what preceded it. Such conversational suggestions make no difference to the thought. . . . Thus the content of a sentence often goes beyond the thought expressed by it (1914, pp. 39-40).

On Frege's account, then, (4)-(6) have the same sense and differ only in colouring:

- (4) Alfred is poor and he is honest
- (5) Alfred is poor but he is honest
- (6) Although he is poor, Alfred is honest.

Active-passive pairs are also said to share a sense; similarly certain pairs of common nouns, for example 'horse' and 'steed'.

Two expressions that differ in colouring serve only to conjure up different ideas or mental images (*Vorstellungen*), which on Frege's account are subjective entities. Dummett (1980, pp. 85-6) shows decisively that Frege's positive position on colouring is untenable, so I will spend no time on it. For Frege's *logical* purposes, the phenomenon was merely a nuisance that could be ignored; but anyone interested in providing a semantic theory for a natural language will, at some point, be forced to say something about the contributions made by the sorts of words Frege pushed aside to the meanings of sentences that contain them.

Thanks largely to the work of Grice, it is now common to distinguish between what a sentence (type) means and what a particular dated utterance of that sentence means (or expresses). This distinction is most obvious in connection with context-sensitive expressions such as T, 'this', 'present', 'now', and so on. I take it we would not be much moved by the claim that the existence of such expressions

undermines principles of semantic innocence and composition. As far as the former is concerned, the claim would involve confusing *context* and *environment*, i.e. the context of an utterance of an expression ϕ and the linguistic, structural environment in which ϕ occurs. With regard to the latter, it is hard to see how the claim might be defended without the presentation of a set of rather odd strictures on compositional semantic theories. The linguistic meaning of T am here now' is determined by, and only by, the meanings of the lexical items of which it is composed and the syntactic structure that here holds them together. In theory, what a particular dated utterance of the sentence expresses can be determined by following a set of instructions associated with the individual lexical items and projecting the results in accordance with instructions associated with the syntax (the notion of sentence meaning will thus drop out as epiphenomenal).

What makes T, here', and 'now' relatively easy is that straightforward linguistic rules can be assigned to them (e.g. an utterance of T refers to the person producing it). But words like 'next', 'previous', and 'contemporary' seem to require instructions with broader possibilities, as do third person pronouns, which may or not be anaphoric on other noun phrases. Matters become more complex when we turn to, for example, the possessive marker. When I use the description 'Tom's horse' the precise relation I have in mind between Tom and a particular horse—the horse he owns, the horse he is riding, the horse he has backed in the Cheltenham Gold Cup ...—does not appear to be fixed by a linguistic rule associated with the possessive, but rather by contextual factors. Examples due to Searle (1975), Sperber and Wilson (1986), Carston (1988), force more or less the same issue. Searle asks us to compare I have cut the cake', I have cut my fingernails', and I have cut the grass', (with a knife, nail clippers, or a lawnmower?); Sperber and Wilson ask us to compare I have had breakfast' and 'I have been to Tibet' (different temporal domains are needed for proper understanding); Carston asks us to compare cases in which 'and' delivers logical conjunction and something stronger (e.g. temporal or causal connection). The morals that are very rightly drawn from such examples are (i) that linguistic meaning radically underdetermines the proposition expressed ("what is said" in Grice's sense), and (ii) that the same sorts of principles that play a role in theories of pragmatic implications (such as Grice's conversational implicatures or Sperber and Wilson's contextual implications) and nonliteral meaning ought to have an equally important role in theories that purport to characterise the proposition, or propositions straightforwardly expressed by an utterance.

3.

For Frege's logical purposes, unlike the distinction between sense and reference, the distinction between sense and colouring could be ignored. But a number of facts conspire to make colouring, whatever it is, more semantically interesting than one might initially suppose.

(i) As Strawson (1952) and Grice (1961, 1989) observe, there are many rather ordinary words—some of which are of philosophical utility—that give rise to the problems associated with colouring: 'therefore', 'consequently', 'so', 'since', 'still', 'yet', 'even', 'although', 'but', 'moreover', 'furthermore', 'besides', 'indeed', 'nevertheless', 'unfortunately', 'arguably', and one of philosophers' favourites: 'obviously'. Arguably, the purported two-place connectives in this list make the same contribution to truth conditions as 'and'; and the unary connectives make no contribution to truthconditional content at all (rather like multiplying a number by 1).1 It would seem, then, that an adequate semantic theory for English should include something to supplement a theory of (e.g.) truth conditions. Furthermore, even a theory of Fregean senses must be supplemented by this something. A semantic theory that fails to account for colouring fails to treat a host of common sentence connectives. It will not do to say that colouring is a "merely pragmatic" phenomenon: it concerns the meanings of individual words. Anyone who antecedently delimits semantics to individual specifications of truth-conditional content or even to individual specifications of Fregean senses is guilty of an ad hoc dismissal of a range of semantic data (perhaps on the grounds that his or her theory cannot accommodate it).

I use the term "two-place connective" loosely. As Frege realises, many expressions that are treated (formally or informally) as two-place sentence connectives—e.g. 'although', 'because', 'before', 'after', 'therefore', 'so' and also 'if' and 'only if'—are better viewed as devices that attach to a single sentence to form another expression. For present purposes, the fiction that they are two-place connectives is harmless and helpful.

- (ii) It has been argued by Strawson (1952) and others that there are grounds for doubting that the semantics assigned to the truth-functional connectives '&', 'v', and '⊃' can be used to characterise the semantics of the English connectives 'and', 'or', and 'if ... then' in an unadorned way. Grice has shown that the problems are not, perhaps, quite as severe as Strawson once supposed; but there are problems nonetheless. If we can better explicate the workings of 'but', although', 'so', 'therefore' and so on, we might find ourselves with a better perspective on the semantics of 'and', 'or', and 'if ... then'.
- (iii) The existence of colouring poses a problem for Griceans interested in providing an analysis of the philosophically important notion of what is said (i.e., an analysis of the form "by uttering x, U said that p iff ...") in terms of what is meant (i.e. by means of a locution of the form "by uttering x, U meant that p"). Grice himself was painfully aware of the difficulty this created for his own program, but gave only hints as to how he might be tempted to address it, hints that I shall take up later.
- (iv) Neo-Russellians about propositions have suggested individuating propositions in virtue of the objects and properties that are their components; and these entities are simply those that are supplied by a theory of *reference*. Since ' ϕ and ψ ' and ' ϕ but ψ ' do not differ in reference, neither do 'and' and 'but'. They refer to the same function from pairs of truth-values to truth-values.
- (v) Neo-Fregeans about propositions have suggested individuating propositions in virtue of the entities supplied by a theory of *sense*. Since ' ϕ and ψ ' and ' ϕ but ψ ' do not differ in sense (for Frege, at least), this puts further pressure on the Neo-Fregeans to say something about the relationship between lexical items and senses.
- (vi) As Frege observes, the case of the connectives 'and' and 'but' seems to have something interesting in common with cases involving pairs of general terms with the same sense (e.g., 'horse' and 'steed'; 'physician' and 'doctor'). Pairs of words one of whose members has pejorative connotations provide further examples (e.g. 'German' and 'Kraut').

By shifting the initial stage of our investigations from singular terms to sentence connectives, we might end up shedding new light on the substitution puzzles Frege brought to our attention and on other problems involving singular terms.

Let us return to the sentence connective 'but'. In some very ordinary and intuitive sense, the following sentences differ in meaning:

- (1) She is poor but she is honest
- (2) She is poor and she is honest.

As Frege would put it, (1) and (2) differ in colouring despite agreeing in sense (and reference). Since 'but' and 'and' are perfectly good words of English, the contributions they make to the meanings of sentences containing them ought to be characterised by a compositional semantics for English. We are concerned with the meanings of *individual words*, so it simply will not do to say that this is a matter for pragmatics and hence of no concern to semantics. Such a position is as irresponsible as the position that the problems raised by the substitution of coreferring singular terms in propositional attitude contexts are of concern only to the theory of sense, or only to pragmatics. Singular terms and sentence connectives are perfectly respectable citizens of the linguistic world; they have conventional meanings and contribute to the meanings of sentences containing them. So the question arises how, precisely, are we to characterise the difference between 'and' and 'but' within a semantic theory.

Suppose we put the following question to those who would construe a theory of meaning for a language as a recursively structured truth theory for that language: What form should an appropriate truth-theoretic axiom for 'but' take? Suppose (3) is an appropriate truth-theoretic axiom for 'and':

(3) ' ϕ and ψ ' is true iff ϕ is true and ψ is true

where 's' ranges over sequences and ' ϕ ' and ' ψ ' range over formulae (initially placed quantifiers $(\forall s)(\forall \phi)(\forall \psi)$ will be assumed throughout).

How do we obtain an appropriate axiom for 'but'? Do we simply replace the object-language occurrence of 'and' on the left-hand side of this biconditional by 'but'? Or must we also replace the metalanguage occurrence on the right-hand side? (The same question can be asked about an axiom for 'although', assuming that 'although ϕ , ψ ' has the same truth conditions as ' ϕ and ψ '.)

An answer to this question is often suggested by those wish to view truth theories through Fregean eyes. McDowell (1977) distinguishes between the reference and the sense of an expression and suggests that the distinction can do some work in a truth theory capable of serving as a theory of meaning. According to McDowell, although (4) is an appropriate axiom for 'Hesperus', (5) is not:

- (4) Ref('Hesperus') = Hesperus
- (5) Ref('Hesperus') = Phosphorus.

Since 'Hesperus' and 'Phosphorus' are names of the same object, (4) and (5) are both true. But according to McDowell, there is an important difference.

The role played by [an axiom for a name], in the derivation of assignments of truth conditions to sentences in which the name occurs, would *display* [my italics, SN] the contribution made by that name to those truth conditions. . . . such a clause, considered as having what it says fixed by its location in a theory which yields acceptable content-specifications, gives—or more strictly, in that context as good as gives—the sense of the name. (p. 143)

The problem with (5), as McDowell sees it, is that although it gets the referent of 'Hesperus' right, unlike (4) it cannot find a place in a theory of truth that is to serve as a theory of sense, at least not if it is supposed to be a theory, knowledge of which would suffice for understanding the language. McDowell concludes that

[w]hat we have here is a glimpse of the way in which, by requiring the theory's consequences to help us to make sense of speakers of the language, we force ourselves to select among the multiplicity of true theories of truth.

(4) "displays" the sense of 'Hesperus'; (5) does not.

I think McDowell is onto *something* here; but as it stands his suggestion cannot be generalised beyond the case of coreferential names to (e.g.) coreferential predicates or coreferential sentence connectives. The suggestion that (6) is an appropriate axiom for 'but' because it displays the sense of the word in a way that (7) does not is of no value:

- (6) ' ϕ but ψ ' is true iff ϕ is true but ψ is true
- (7) ' ϕ but ψ ' is true iff ϕ is true and ψ is true.

Like the names 'Hesperus' and 'Phosphorus', the connectives 'and' and 'but' are coreferential (they refer to the same truth-function). Thus sentences ' ϕ and ψ ' and ' ϕ but ψ ' are coreferential. But according to Frege they also express the same thought, i.e. they have the same sense. So the right-hand sides of the axioms given in (6) and (7) share a sense (unlike the axioms given in (4) and (5)). And since the 'iff' of the truth-theoretic axioms McDowell is examining is truth-functional, neither (6) nor (7) displays the sense of 'but' any better than the other. (Moreover, on Frege's account, the difference in colouring between 'and' and 'but' serves only to conjure up different *Vorstellungen*, which on his account are subjective entities.) All of this suggests there is little to be gained by slimming down the range of acceptable truth theories by appealing to Fregean senses. However, I suspect that proper names have a semantic quality that justifies something very like McDowell's suggestion that (4) is a better axiom than (5), and I shall say something about this later.

4.

In the second half of "On Sense and Reference" Frege examines a variety of complex sentences in connection with the Principle of Compositionality, which entails that "the truth-value of a sentence containing another sentence as a part must remain unchanged when the part is replaced by another sentence having the same truth-value" (1892, p. 65). We have seen already how Frege accounts for apparent exceptions involving sentences subordinate to sentential verbs like 'say', hear', and 'thinks': the subordinate sentence refers to a thought (its customary sense) rather than a truth-value (its customary reference). Thus Frege abandons semantic innocence.

Frege's analyses of other complex sentences have received less attention. This is regrettable as they contain deep insights, foreshadow a number of contributions of more recent vintage, and contain the germ of an idea that I think can be exploited to great effect, the idea that a simple sentence may express more than one thought. As a way of clarifying what is at stake and softening up the terrain, consider the following:

(1) Napoleon, who recognised the danger to his right flank, personally led his guards against the enemy position.

According to Frege, this sentence expresses two thoughts (in certain contexts):

- (2) Napoleon personally led his guards against the enemy position
- (3) Napoleon recognised the danger to his right flank.²

There are two points worthy of note here. First, on this account the subordinate clause, like the main clause, expresses a complete thought and refers to a truthvalue (its customary reference), making it quite different from a clause subordinate to a sentential verb. Second, Frege seems to think that if two thoughts are expressed they must stand to one another as conjuncts of a conjunction, witness his remark that someone asserting (1) says something false if either (2) or (3) is false. But this is not the only way one might proceed here; one might hold that (1) expresses a sequence (of two) thoughts, i.e. the one expressed by (2) as in some sense a "primary thought" with the one expressed by (3) piggy-backing via the injection of a subordinate clause into a pre-existing sentence. On such an account, the falsity of only one of (2) and (3) would render an utterance of (1) partly true and partly false: a sequence of thoughts is not the right sort of thing to be true or false *simpliciter*, but it is the sort of thing to contain things that are true or false. There might not seem to be any sort of serious issue here as far as (1) is concerned; but there are, I think, constructions in which the contrast between conjunctions and sequences is more significant.

At one point Frege briefly examines the idea that in some contexts the analysis of (1) just presented may be inadequate, that a *third* thought is in the air. Sometimes a subordinate clause does not have a "simple sense":

Almost always, it seems, we connect with the main thoughts expressed by us subsidiary thoughts which, although not expressed, are associated with our words, in accordance with psychological laws, by the hearer. And since the

Everything Frege says about the semantics of (1) carries over to examples like (i) and (ii):

⁽i) Napoleon, recognizing the danger to his right flank, personally led his guards against the enemy position

⁽ii) Recognizing the danger to his right flank, Napoleon personally led his guards against the enemy position.

subsidiary thought appears to be connected with our words on its own account, almost like the main thought itself, we want it also to be expressed. The sense of the sentence is thereby enriched and it may well happen that we have more simple thoughts than clauses. In many cases the sentence must be understood in this way, in others it may be doubtful whether the subsidiary thought belongs to the sense of the sentence or only accompanies it. (1892, p. 75)

There is much here that seems to presage important work by Grice (1961, 1989) on implicature and Sperber and Wilson (1986) on explicature. As far as example (1) is concerned, Frege's point is that it is at least arguable that in some contexts it expresses not only the thoughts expressed by (2) and (3), but also the thought that "the knowledge of the danger was the reason [Napoleon] led the guards against the enemy position" (1892, p. 75). Frege is inclined to think that the third thought is "just lightly suggested" rather than expressed. Suppose Napoleon's decision to lead the guards against the enemy position had been made before he recognised the danger to his right flank. Frege's intuition is that this would be insufficient to render (1) false and so he concludes that the third thought is not expressed by the sentence. "The alternative" he goes on, "would make for a complicated situation: We would have more simple thoughts than clauses." (1892, p. 75). It is just this sort of complication that forms the basis of the semantic framework I want to construct; however, I am inclined to agree with Frege that in this particular case the "complication" is unnecessary: the thoughts expressed by (2) and (3) exhaust the sense of (1).

Among the devices of subordination that Frege discusses are those used to introduce talk about causes or explanations ('because', 'since', 'as'), those used to talk about temporal order ('after', 'before'), and those used to talk counterfactually. It will suffice to mention just one of these:

(4) Because ice is less dense than water, it floats on water.

Frege begins by saying that (4) appears to express three thoughts, those expressed by the following:

- (5) Ice is less dense than water
- (6) If anything is less dense than water, it floats on water

(7) Ice floats on water.

He then says that "[t]he third thought, however, need not be explicitly introduced, since it is contained in the remaining two" (1892, p. 76). The idea here seems to be that since (7) is *derivable* from (5) and (6) using logical laws alone, it is enough to say that (4) expresses the thoughts expressed by (5) and (6). He concludes that the subordinate clause 'because ice is less dense than water' expresses the thought expressed by (5) "as well as part of" the thought expressed by (6). And this is meant to explain the non-truth-functional nature of (4):

This is how it comes to pass that our subsidiary clause cannot be simply replaced by another of equal truth-value; for this would alter our second thought and thereby might well alter its truth-value. (1892, p. 77)

There is potential and actual confusion here. The occurrence of the pronoun 'it' in (4) does not seem to be essential to Frege's point; so let us replace 'it' by 'ice' and avoid distracting issues about cross-clausal anaphora. One component of Frege's proposal seems to be the idea that the main clause 'ice floats on water' does not in this construction express a complete thought, the argument for this being that the thought one might be tempted to see it expressing—the one expressed by (7)—is already contained in two other thoughts the entire sentence expresses, viz. those expressed by (5) and (6). A second component is the idea that the subordinate clause expresses a simple thought—the one expressed by (5). The final component is the idea that the subordinate clause and the main clause together express a second thought—the one expressed by (6). So we see Frege hanging onto his principle of composition by giving up semantic innocence again. In this linguistic environment the clause subordinated is not restricted to expressing a single thought (its customary sense) for "the sense of a part of the subordinate clause may likewise be a component of another thought" (1892, p. 78). Thus Frege concludes that

It follows with sufficient probability from the foregoing that the cases where a subordinate clause is not replaceable by another of the same truth-value cannot be brought in disproof of our view that a truth-value is the meaning of a sentence that has a thought as its sense. (1892, p. 78)

It appears to be Frege's view, then, that whenever there is a threat to the claim that the reference of a sentence is a truth-value it will come from a sentence involving subordination and that in such cases either (i) the subordinate sentence refers to its customary sense (as in the case of a sentence subordinated to a sentential verb), or (ii) the subordinate sentence refers to its customary reference (i.e. a truth-value) "but is not restricted to so doing, in as much as its sense includes one thought and part of another" (1892, p. 77).

There is much more that could be said about Frege's discussion of subordination, which has not attracted as much attention as it deserves. It is the idea of sentences expressing more than one thought that I find appealing, and I want to use it (i) to provide an account of colouring, (ii) to undercut the need for Fregean senses, (iii) to deal with some residual puzzles about sentence connectives, and (iv) to approach problems about substitution, identity, and the contingent *a priori*. Moreover, I wish to accomplish this while holding on to both Semantic Innocence and the Principle of Composition. The remainder of this paper is a series of steps in the direction I take to be most fruitful. As I move away from Frege, I shall switch from talk about *thoughts* to talk about *propositions*, leaving it open, for the time being, whether such entities should be viewed as Fregean thoughts or as Russellian complexes (of objects and properties).

5.

The idea that expressions of natural language have an exact semantics that can be captured using the devices of classical logic was attacked comprehensively by Strawson (1950, 1952), whose first target was Russell's (1905) Theory of Descriptions. It is a part of the meaning of 'the F, Strawson originally claimed, that such an expression is used correctly only if there is an F. If this condition is not satisfied—if the "presupposition" that there is an F is false, as he later put it—a use of e.g. 'the F is G' cannot be considered to express a proposition that is either true or false. (My wording here is supposed to be neutral between (a) a proposition is expressed but it is neither true nor false, and (b) no proposition is expressed at all. Strawson is not consistent on this matter.) So we must reject the view, perhaps borrowed from classical logic, that every use of an indicative sentence involves the expression of a truth or a falsehood, says Strawson. In particular, we must reject Russell's Theory of Descriptions, according to which the proposition expressed by a

sentence of the form 'the F is G' is the general proposition that there is exactly one F and every F is G.

According to Strawson, someone uttering a sentence of the form 'p or q' will standardly be taken to imply that he has non-truth-functional grounds for the assertion, i.e. he will standardly be taken to imply that he does not know which of p and q is true. Impressed by this observation, Strawson concludes that an utterance of 'p or q' in which this condition is not satisfied involves a misuse of language. It is, in some sense, part of the meaning of 'p or q', that such a locution is used correctly only if the speaker does not know that p is true and does not know that q is true. If this condition is not satisfied, the utterance is defective (on its strongest interpretation, the utterance cannot be taken to express a truth). So it would be a mistake to suppose that the meaning of the English word 'or' is given by the semantics of the logical particle 'v'; the semantics of 'v' is stipulated by the logician to be truth-functional, but the semantics of the word 'or' is determined by actual linguistic practice (use), which does not square with the logician's truth-functional analysis. (Similar points are made in connection with utterances of the form 'φ and ψ ', where the speaker is taken to imply that the event described by ϕ preceded the event described by ψ , or even that the former *caused* the latter.)

Strawson also has a few things to say about expressions for which logicians have not attempted to provide formal analyses. From a logical point of view, says Strawson, 'provided that', 'given that', and 'under the condition that' are "mere stylistic variants" of 'if'; while 'also' and 'in addition' are stylistic variants of 'and'. But Strawson claims that 'but', 'although', and 'nevertheless' are *not* mere stylistic variants of 'and', and that the implications they engender fall outside the logician's net:

Their use implies at least that there is some element of contrast between the conjoined statements or attributes; and, sometimes, that the conjunction is unusual or surprising. But this kind of implication, though it must not be neglected when we are discussing the meanings of words, is not readily expressible in terms of an entailment- or inconsistency-rule. (1952, p. 48)

Strawson does not mention Frege, but he implicitly concurs that whatever 'but', 'although', and 'nevertheless' contribute to sentences, it is not something that can be

captured in terms of logical implication. But what exactly is Strawson's positive position? He says that,

If a man said 'although she is kind, she is gentle', we should be surprised and think that he had made some kind of mistake of language (perhaps that he didn't know what 'kind' meant); but we should not say that he was being inconsistent or that he had contradicted himself. (1952, p. 48)

This passage reveals Strawson's own particular ordinary language approach to meaning. The speaker's mistake in the example is insufficient to render the utterance false or without truth-value. So the linguistic transgression must pertain to some speech act other than the assertions that the speaker is making (viz. that she is kind and that she is gentle). It is an explicit version of this idea that Grice (1961, 1989) proposes.

6.

Grice's work contains scattered discussions of colouring (but no reference to the brief remarks made by Frege and Strawson). "The vital clue" for dealing with the phenomenon, Grice suggests, is "... that speakers may be at one and the same time engaged in performing speech acts at different but related levels." (1989, p. 362). It is this idea that shapes the framework I want to explore.

Notoriously, Grice disagrees with Strawson about the semantics of the English words 'and', 'or', 'if', 'every', 'a', and 'the': the formal devices capture the essence of their meanings. The implications that Strawson latched onto, Grice suggests, although very common, are not determined by linguistic conventions governing the use of 'or' and 'and'; they are conversational implicatures, context-dependent, pragmatic implications that do not contribute to what the speaker says (in Grice's technical sense), which is to say they do not impinge upon the truth-conditions of utterances containing them. (Both what is said and what is conversationally implicated should be regarded as propositional in nature). That these non-truth-functional implications attaching to utterances containing 'and', 'or', and 'if ... then' are conversational implicatures is meant to be borne out by (i) the fact that they can be cancelled without fear of linguistic transgression (e.g. without fear of contradiction), (ii) the fact that the presence and content of such an

implication can be explained by appeal to Grice's Co-operative Principle and maxims of conversation (themselves explained by a philosophical psychology), and (iii) the "fact" that the same implication would arise in a language for which the semantics of 'and' and 'or' are given explicitly by the truth-tables for '&' and 'v'.³ (Similar points are meant to hold in connection with 'if', 'every', 'a', and 'the'.)

For Grice, such implications are different in kind from those attaching to utterances of sentences containing words like 'but', 'yet', 'although', 'whereas', 'so', 'therefore', 'moreover', and 'furthermore'. The latter class Grice calls conventional implicatures: they are determined, at least in part, by the linguistic conventions governing the uses of the words in questions. In short, unlike conversational implicatures, conventional implicatures have a genuinely semantic dimension. They do not bear on what speakers say (on the truth conditions of utterances), says Grice; but they are not (mere) conversational implicatures because they are not cancellable without linguistic transgression and depend for their existence not just upon facts about context and rational interaction (as embodied in the Co-operative Principle and maxims) but also upon the presence of those very words themselves, used with their conventional meanings, rather than words that are equivalent in respect of their contributions to the truth-conditions of utterances. As Grice puts it, what is implicated in such cases is implicated (at least in part) by virtue of the words used.

A speaker's selection of 'but' over 'and' contributes in some way to the generation of an implicature. This, in fact, forms the basis of Grice's proposal for distinguishing between conversational and conventional implicature: conversational implicatures are *non-detachable* in the following sense: if one uses an expression ϕ and thereby conversationally implicates that ψ , one will not be able find an alternative expression ϕ' with which one could have used and thereby said (e.g. stated) exactly what one actually said by uttering ϕ , that does not itself give rise to the same implicature.⁴ In the case of 'but', says Grice, there are good grounds for

³ I do not mean to be endorsing Grice's account of 'and' here. My sympathies—as will become clear at the end of this section—lie with Carston's (1988) theory, which seems to sit well with the general approach I am taking here.

⁴ The way Grice appeals to the maxim of Manner creates an obvious problem for this test.

suspecting that the implicature in question is detachable, since in place of (1) one could use (2),

- (1) She is poor but she is honest
- (2) She is poor and she is honest

and be saying the same thing; yet the implication of contrast between honesty and poverty (or her poverty and her honesty) would be lacking. In short, we are meant to regard the implicature in question as somehow connected to a difference in meaning between 'and' and 'but'.⁵

By uttering a token x (of type X), U said that p iff

- (i) (at least part of) what U meant by uttering x, was that p
- (ii) X means "p" (in virtue of the particular meanings of the elements in X and their syntactic structure).

Grice's unhappiness with this definition (or this sort of definition) derives in large part from the existence of conventional implicature. If U sincerely and nonironically utters 'She is poor but she is honest', U says only that she is poor and that she is honest; U does not say that there is some sort of contrast between poverty and honesty (or between her poverty and her honesty). So for Grice, the conjunction of (i) and (ii) above characterises not "by uttering a token x (of type X), U said that p" but only "by uttering a token x (of type X), U conventionally meant that p." On Grice's account, what U meant by uttering a token x (of type X) is broken down as follows:

what U meant

 $\begin{array}{ccc} \text{what } U & \text{what } U \\ \text{conventionally meant} & \text{conversationally implicated} \end{array}$

 $\begin{array}{c} \text{what } U \text{ said} & \text{what } U \\ & \text{conventionally implicated} \end{array}$

In short, a conventional implicature attaching to an utterance of X gives rise to a mismatch between what U conventionally meant by uttering X and what U said by uttering X (again, abstracting away from indexicality and other forms of context-sensitivity). In such a case, the latter underdetermines the former, and the gap is bridged by what U conventionally implicated by uttering X. There is a further complication for Grice: as Sperber and Wilson have argued in detail, the precise content of what U said—and, for that matter, what U conventionally implicated—by uttering a sentence that means "p" is often underdetermined by the fact that the sentence means "p".

The existence of conventional implicature presents a difficulty for one of Grice's dearest projects: an analysis of the philosophically important notion of *saying*. Grice proposes to analyze the notions of *utterer's meaning* and *sentence meaning* in terms of such psychological notions as intention, belief, and recognition. And, very naturally, he proposes to analyze the notion of *saying* by focusing on the terrain in which there is overlap in utterer's meaning and sentence meaning. Abstracting away from ambiguity and indexicality—both of which create further difficulties for Grice's project—the following captures the main idea behind his preliminary definition of saying (Grice, 1989, pp. 87–88 and pp. 118–121):

A conventional implicature is not a *presupposition*, as originally characterised by Strawson (1952, p. 175) and adopted by others: A is a presupposition of B, just in case the truth or falsity of B requires the truth of A. (If the truth of B requires the truth of A, but the falsity of B does not, A is an *entailment* of B). Put another way, if B presupposes A, B lacks a truth value if A is false. In the case of an utterance of (1), says Grice,

... even if the implied proposition were false, i.e. if there were no reason in the world to contrast poverty with honesty either in general or in her case, the original statement could still be false; it would be false for example if she were rich and dishonest. One might perhaps be less comfortable about assenting to its truth if the implied contrast did not in fact obtain; but the possibility of falsity is enough for the immediate purpose. (1961, p. 127)

So the implication in question is not a presupposition, at least not on the standard semantic conception of that notion.⁶

Grice proposes to handle conventional implicatures by supposing them to stem from uses of conventional devices signaling the performance of "higher-order" ("noncentral") speech acts parasitic upon the performance of "ground-floor" ("central") speech acts. The basic idea can be brought to life with one of Grice's examples, worth quoting in close to its entirety:

If a man says "My brother-in-law lives on a peak in Darien; his great aunt, on the other hand, was a nurse in World War I," his hearer might well be

There may be other conceptions that prove to be of utility to a theory of communication—so-called "pragmatic" presuppositions (see, e.g. Stalnaker (1974) and Heim (1988)). In standard cases of alleged semantic presupposition there is a strong inclination to say that what the speaker said does the implying (indeed this has motivated some people to promote many presuppositions of the type just exemplified to entailments). In the case of an utterance of (1), one does not feel particularly inclined to say that what the speaker said implied that there was a contrast between e.g. poverty and honesty. An unargued for, but very intuitive, test Grice proposes here is the following:

If accepting that the implication holds involves one in accepting an hypothetical if p then q where p represents the original statement, and q represents what is implied, then what the speaker said (or asserted) is a vehicle of the implication, otherwise not.. (1961, p. 127-8)

One does not feel at all compelled to accept the hypothetical *If she is poor but honest then there is some contrast between poverty and honesty, or between her poverty and her honesty.* This observation, together with the observation that what is asserted by uttering this sentence can be false even if what is implied is false, invites the suspicion that talk of "presupposition" is well off target in such cases. Even if the implication were false, i.e. even if there were no reason on earth to suppose that there is any contrast between poverty and honesty, what is stated could still be false, say if she were *rich* and honest.

somewhat baffled; and if it should turn out on further inquiry that the speaker had in mind no contrast of any sort between his bother-in-law's residential location and the one time activities of his great aunt, one would be inclined to say that a condition conventionally signified by the presence of the phrase "on the other hand" was not in fact realized and so that the speaker had done violence to the conventional meaning of, indeed had misused, the phrase "on the other hand." But the nonrealization of this condition would also be regarded as insufficient to falsify the speaker's statement. . . .

One part of what the . . . speaker is doing is making what might be called ground-floor statements about the brother-in-law and the great aunt, but at the same time he is performing these speech-acts he is also performing a higher-order speech-act of commenting in a certain way on the lower-order speech-acts. He is *contrasting* in some way the performance of some of these lower-order speech acts with others, and he signals his performance of this higher-order speech-act in his use of the embedded enclitic phrase, "on the other hand". The truth or falsity . . . of his words is determined by the relation of his ground-floor speech-acts to the world; consequently, while a certain kind of misperformance of the higher-order speech-act may constitute a semantic offense, it will not touch the truth-value . . . of the speaker's words. (1989, pp. 361-2)

Several questions are left open by these remarks. What constitutes a ground floor speech act? Are higher-order speech acts propositional in nature? Are higher-order speech acts meant to be comments on the contents of lower-order acts or on the acts themselves? How does a theory of higher-order speech acts work when simple sentences are embedded within larger sentences such as conjunctions, conditionals, and attitude reports? Will such a theory satisfy Principles of Composition and Semantic Innocence?

Within Grice's framework, there appear to be three types of ground floor ("central") speech act (acts of saying in his favoured sense): stating that p, asking whether p, and (roughly) enjoining someone to make it the case that p. Presumably there is meant to be a broad range of higher-order ("noncentral") speech acts; Grice explicitly mentions contrasting (signalled by expressions such as 'on the other hand', 'but', 'yet, 'although', 'whereas', and 'despite the fact that'), explaining (signalled by expressions such as 'therefore', 'so', 'hence', 'thus', 'consequently', and 'as a result'), and 'additionally').

When Grice talks of conventional implicatures, he talks of them as if they are propositional in content, and hence candidates for truth or falsity. (At the same time the falsity of a conventional implicature is insufficient to render the utterance to which it attaches false.) Since conventional implicatures are meant to be analysable in terms of higher-order speech acts, it is clear that such acts will have propositional contents on his account.

When he says that the speaker is performing a higher-order speech-act of "commenting in a certain way on the lower-order speech-acts" Grice seems to be leaving it open that the speaker could be commenting on the propositional contents of those speech acts or on the acts themselves. But his remark about "contrasting in some way the performance [my italics, SN] of some of these lower-order speech acts with others" suggests it is the acts themselves (perhaps the term "higher-order" speech act carries such an implication too).⁷

Getting two more of Grice's examples on the table, one involving *explaining* and another involving *contrasting*, will help to sharpen what is at issue here and lead the way into the framework I think we should explore. Grice claims that implications attaching to the use of 'therefore' in utterances of (3) and (4) are conventional implicatures analysable as the products of higher-order speech acts of *explaining*:

- (3) Bill is a philosopher; he is, therefore, brave
- (4) Bill is a philosopher, therefore he is brave.⁸

According to Grice, someone who sincerely and nonironically utters (3) says that Bill is a philosopher, says that Bill is brave, but does not say that Bill's being brave follows from his being a philosopher. "The semantic function of the word 'therefore'," he claims, "is to enable a speaker to *indicate*, though not to say, that a certain consequence holds" (1989, p. 121). The falsity of the proposition that Bill's being brave follows from his being a philosopher is not sufficient, according to Grice, to render an utterance of (3) false; so it is (merely) a conventional implicature.

Bach and Harnish (1979) allow for the possibility that a higher-order speech act may function as a commentary upon a lower-order act in these two distinct ways. The idea is being developed in work in progress by Bach.

Notice that 'so' can replace 'therefore' in (4) but not in (3). For a discussion of differences between 'so' and 'therefore' see Blakemore (1987).

Some share Grice's intuition on this matter, others do not: according to McCawley (1993) the falsity of the connecting proposition renders an utterance of (3) false. I am inclined to think that neither party has the full story here and that the divergent intuitions need to be explained rather than argued for. Indeed, I take the fact that intuitions differ to be important semantic data. According to the position that attracts me, Grice is right in thinking that an utterance of (3) is not equivalent to an utterance of the *conjunction* of (5)-(7) but wrong in thinking that the falsity of (7) cannot be sufficient to render and utterance of (3) false:

- (5) Bill is a philosopher
- (6) Bill is brave
- (7) Bill's being brave follows from his being a philosopher.

Let us now move away from Grice's own terminology to talk of propositions expressed. (For present purposes, I shall not distinguish the locutions "U's utterance of X expressed the proposition that p", "by his utterance of X, U expressed the proposition that p" and "relative to U's utterance of it, X expressed the proposition that p". In a more serious exposition these would need to be separated. I will sometimes use the outrageous shorthand "X expresses the proposition that p".) For the moment, I want to appear agnostic about the nature of propositions; it will suffice to say that they have truth conditions. The leading idea here is that an

⁹ McCawley prefaces his argument by claiming that neither (3) nor (4) can occupy an embedded sentence position:

⁽i) ? John doubts(/believes/hopes/said) that: Bill is a philosopher, therefore he is brave

⁽ii) ? It is not the case that: Bill is a philosopher, therefore he is brave

⁽iii) ? If Bill is a philosopher, therefore he is brave, then I am mistaken.

⁽i)-(iii) do seem very odd, and perhaps McCawley is right to say they are ungrammatical rather than just semantically odd in some way yet to be elucidated (the counterparts of (i)-(iii) containing (3) rather than (4) are surely ungrammatical). Suffice to say that an adequate theory of English must explain somehow why replacing 'therefore' by 'and' yields perfectly good English sentences. McCawley's view is that whereas 'and' functions syntactically as a two-place sentence connective, 'therefore' functions as a sentence-modifying adverb (effectively a one-place sentence connective) in (3) and (4), hence the attempted embeddings are grammatically deviant. (Notice that 'whereas' appears to function as a two-place sentence connective in the previous sentence, producing a clause that serves as the complement of 'McCawley concludes that . . .'.) Incidentally, McCawley is incorrect in supposing that Grice's account of 'therefore' treats it as a two-place sentence connective in (4); Grice says nothing that commits him to either that view or the view that it is a sentence-modifying adverb.

utterance of (3) expresses a sequence (rather than a conjunction) of the three propositions expressed individually by (5)-(7), the expression of the third proposition in the sequence being parasitic upon the expression of the other two. The semantics of 'therefore' encodes the instructions that a first and a second proposition are to be seen as standing in some sort of consequence relation, the precise nature of which is no doubt determined contextually just as the precise relation between Tom and a particular horse is determined contextually when the noun phrase 'Tom's horse' is used. (To put matters back into Grice's language for a moment, although the presence and shape of a conventional implicature are signalled conventionally, the precise contents of at least some of those that are conceived as higher-order acts of explaining—those signalled by the presence of (e.g.) 'therefore', 'so', hence', etc.—may have to be worked out in much the same way that the contents of conversational implicatures are worked out, viz. by appeals to context and pragmatic principles such as those embodied in Grice's Co-operative Principle and maxims. This should occasion no surprise: it has been noted already that aspects of what is said (the content of a ground-floor speech act) must often be worked out in this way; 10 so there is nothing odd about those propositions serving as the contents of conventional implicatures having contextually determined dimensions.)

Intuitions about the truth-value of an utterance are a function of the perceived truth-values of the particular propositions that make it into the sequence of propositions expressed by that utterance. In situations in which the three propositions expressed by (5)-(7) are judged true, an utterance of (3) will be judged true; in situations in which the three propositions are judged false, the utterance will be judged false. If (5) and (6) are judged true, in many situations an utterance of (3) will be judged true even if (7) is judged false; but in certain circumstances it may be judged false because the alleged connection between being a philosopher and being brave, or the (contextually determined) nature of the connection, might be of such importance to the particular conversational context. I am inclined to think that Grice and McCawley had different sorts of contexts in mind and that this explains their conflicting intuitions. The following preliminary generalisation suggests itself:

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¹⁰ See, e.g. Sperber and Wilson (1986) and Carston (1988).

an utterance is judged true (false) if and only if some contextually weighted number of the propositions it expresses are judged true (false).

Let us return now to 'but' and 'although'. On Grice's account, by uttering 'She is poor but she is honest' or 'although she is poor, she is honest', the speaker is performing three speech acts: he is saying that she is poor, saying that she is honest, and contrasting the two things he has said. (On the account I am attempting to motivate, the utterance expresses three propositions.) But what exactly does the higher-order act of contrasting involve? A cursory look at common examples indicates that it is not something that can be wrapped up succinctly. Dummett seems to be on the right track when he says, in his discussion of Frege's account of colouring, that

[t]he word 'but' is used to hint that there is some contrast, relevant to the context, between the two halves of the sentence: no more can be said, in general, about what sort of contrast is hinted at. It is the indefiniteness of the contrast, and the vagueness of the notion of relevance, that resolve the mystery of the distinction between asserting and suggesting: while we should regard a man's use of 'but' as inappropriate if he was unable to mention a contrast we considered relevant, or genuine, examples of this kind can furnish no foundation for the view that we can assign any *definite* condition for the appropriateness rather than the truth of a statement. (1980, p. 86)

It is common to suppose that someone using 'but' or 'although' is always indicating, or suggesting, that he thinks the truth of one or other of the pair of sentences in the construction is surprising, unexpected, or remarkable given the truth of the other. But even this is too rigid: if someone were to claim that all poor people were dishonest, it would be perfectly acceptable to counter with the sentence 'Martha is poor but she is honest' thereby indicating one's refusal, or at least reluctance, to accept the other's claim of contrast. And sentences such as 'Volvos are safe but Porsches are fast', 'Porsches are fast but John won't get a speeding ticket', 'I prefer tea but my wife prefers coffee', 'Jones is tall but Smith is (even) taller' create further problems for too rigid an account of the contents of higher-order speech acts associated with uses of 'but'. (We see very clearly here that even though the *presence* and *shape* of a conventional implicature are signalled conventionally, the precise *contents* of those that are conceived as higher-order acts of *contrasting* may have to be

worked out in much the same way that the contents of conversational implicatures are worked out, viz. by appeals to context and pragmatic principles.)¹¹

In view of the position that is emerging, it is tempting at this point to revisit a controversial case of what Grice views as *conversational* implicature. According to the ambiguity theorist, 'and' has at least three distinct meanings—logical, temporal, and causal—exemplified in 'Bill is English and Joan is Welsh', 'Bill took off his boots and he got into bed', and 'the president entered the room and everyone stood up'. Grice, by contrast, views the temporal and causal implications attaching to utterances of these sentences as only conversational implicatures. Many people find that the aesthetic appeal of Grice's view is offset by a problem it seems to encounter in connection with the Principle of Composition. It is at least arguable that when a sentence of the form ' ϕ and ψ ' is embedded in a larger sentence—e.g. when it serves as the antecedent or consequent of a conditional—the truth-value of the larger sentence might be sensitive to the temporal or causal implication that Grice sees as only conversational. Uncontroversial examples are, perhaps, not easy to find, but the following might help Grice's opponent. Let A and B be children, and let C be one of their parents. Now consider utterances of the following sentences:

- (8) If B yells and A hits B, then C will punish A and B
- (9) If A hits B and B yells, C will punish A and B.

It is arguable that (8) and (9) can differ in truth value. E.g., if C thinks that A should not be punished for a yelling induced by being hit, couldn't (9) be false even if (8) were true? If so, there would appear to be a problem for Grice. If something pertaining to the order of the proceedings described in the antecedents of (8) and (9) is only conversationally implicated, how is it possible for (8) and (9) to diverge in truth value? It looks as though Grice will have to say that a conversational implicature of the antecedent of a conditional somehow gets into the truth conditions of the conditional as a whole. And the unacceptability of this might

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Although 'although', 'but', and 'on the other hand' are all used to signal the higher-order speech act of contrasting, there are important syntactic differences: as Grice observes, 'but' functions as a two-place sentence connective whereas 'on the other hand' functions as an "embedded enclitic."

suggest that Grice will have to concede that at least some occurrences of 'and' have a genuinely temporal (or causal) component.

Carston (1988) has come up with a story about 'and' that neither succumbs to the tentacles of the ambiguity theorist nor generates the compositional problem the official Gricean story faces. The meaning of 'and' is given by logical conjunction, but a hearer seeking a relevant interpretation will often construe the contents of the conjuncts as (e.g.) temporally sequenced or causally related. And if, for example, a temporally sequenced understanding of a sub-utterance of ' ϕ and ψ ' is retrieved, it will be this (stronger) conjunction that forms the content of the antecedent of the full utterance 'if ϕ and ψ then χ '.

Karttunen and Peters (1979) and Levinson (1983) point out that many more expressions than those discussed by Grice appear to generate conventional implicatures, e.g. 'even', 'still', 'yet', 'anyway', 'however', 'nevertheless', 'in fact', and 'besides'. (Levinson also argues that the 'tu'/vous' distinction in French and a range of honorifics in, for example, Japanese, Korean, and Tamil are associated with conventional implicatures.) Frege, as we saw earlier, took (10) and (11) to have the same sense:

- (10) Alfred has not arrived yet
- (11) Alfred has not arrived.

On Grice's account, what someone says by uttering these sentences is the same (that Alfred has not arrived), but by uttering (11) he is also indicating or suggesting that someone (perhaps the speaker) expects Alfred to arrive (again, this is too narrow). In the framework I am trying to motivate, the content of the suggestion is a *second proposition expressed*, parasitic upon the ground-floor proposition (that Alfred has not arrived). The difference is, perhaps, not very interesting in many cases (including this one), but it may make for the construction of a more systematic compositional semantics overall.

Compare the following:

- (12) Alfred cashed a check today
- (13) Alfred managed to cash a check today
- (14) Alfred succeeded in cashing a check today.

Someone who utters any of these says the same thing on Grice's view. But by uttering (13) or (14) the speaker performs a higher-order speech act of indicating that Alfred's cashing of a check today was something of a challenge, or less of a challenge than someone might have thought, or that there was some risk of failure (again, the precise content of this *conventionally signalled* implication may be determined contextually). On the view I am exploring, the speaker has again expressed two propositions, one parasitic on the other, something a compositional semantics needs to explain.

The phenomena noted by Frege, Grice, and others are, I think, quite natural once we take into account the nature of communication. We do not seek to transmit information only about the world; communication may also involve the transmission of information about our attitudes and emotions; thus we convey information using expressions such as 'It is raining' and also sentences such as 'Damn, it's raining', I think it's raining', and 'Damn, I think it's raining'. That is, in many cases we use simple sentences to express a single proposition and we use modifications of those sentences to express the original proposition (or its "negation", as in 'Alfred failed to cash a check today' and 'Alfred tried unsuccessfully to cash a check today') together with a second (third, . . .) proposition. I turn now to the idea that sequences of propositions expressed are not restricted to Fregean-Gricean examples of colouring, which may constitute only the tip of a semantic iceberg. 12

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Frege, as we saw earlier, retains the Principle of Composition in respect of reference in the face of apparent problems introduced by sentential verbs and other devices of subordination by treating a sentence occurring within the scope of such a device as either referring to its customary sense or else contributing to a second proposition (thereby abandoning Semantic Innocence). Since he was not particularly interested in coloring, he says nothing about compositionality in connection with this notion. Similarly, Grice does not examine conventional implicature in connection with embedded sentences; but Karttunen and Peters (1979) have examined the matter in detail and have come up with some generalizations about embedding constructions. For example, they claim that in structures of the form 'A ϕ s that p', we need to distinguish three different classes of sentential verb ϕ according as the structure (i) *inherits* ('know', 'regret', 'discover', 'forget', 'point out'), (ii) *transforms* ('believe', 'think', 'hope', 'expect', 'doubt', 'fear',), or (iii) *blocks* ('say', 'report', 'claim') the conventional implicatures generated by p. These claims are surely incorrect as far as the original Fregean and Gricean examples are concerned. Consider the following:

⁽i) a. Bill knows that Alfred has not arrived yet

b. Bill thinks that Alfred has not arrived yet

c. Bill said that Alfred has not arrived yet

⁽ii) a. Bill knows that she is poor but she is honest

7.

In the vein in which we have been proceeding, let us suppose that an utterance of a sentence expresses an initial (ground floor) proposition that plays a part in the characterisation of a second (third, . . .) proposition expressed by the same utterance in a *parasitic* or *dependent way*, a fact ultimately attributable to semantic features of lexical items. We need, I believe, to distinguish quite generally between ground-floor speech acts and those speech acts built upon the ground-floor, which may or may not be commentaries on the ground-floor speech act, and which may or may not carry the primary conversational burden.

There appear to be two types of meaningful noun phrase in natural language, referring expressions and restricted quantifiers. The former are used as the subjects of sentences, utterances of which express singular (object-dependent) propositions, the latter as the subjects of sentences, utterances of which express general (object-independent) propositions. Let us look briefly at those NPs that occur in the singular.

(i) The class of *singular referring expressions* (singular terms) contains proper names ('Hesperus', 'Plato', and so on) as well as the simple (i.e. semantically unstructured) indexicals 'T and 'you', the simple demonstratives 'this' and 'that', and the pronouns 'he' and 'she' (when used either as demonstratives or as anaphors that inherit their references from other singular referring expressions). For a moment, let us assume, following Kripke and Kaplan, that these expressions all refer rigidly. To be sure, the context-sensitive nature of (e.g.) the indexicals means that the semantic axioms governing these expressions will have a degree of complexity not encountered in the simplest formal languages; but let us put this aside as only an engineering fact.

b. Bill thinks that she is poor but she is honest

c. Bill said that she is poor but she is honest

⁽iii) a. Bill knows that Alfred succeeded in cashing a check today

b. Bill thinks that Alfred succeeded in cashing a check today

c. Bill said that Alfred succeeded in cashing a check today.

- (ii) The class of grammatically singular *quantificational noun phrases* is usually taken to consist in semantically structured phrases of the form 'DET F where F is a simple or complex nominal expression ('man', 'tall man', 'man who lives in London', etc.) and DET is a quantificational determiner such as 'some', 'every', 'a', 'one', 'no', or 'neither'. Assuming that a quantificational noun phrase 'DET F' acts as a restricted quantifier '[DET x: Fx]', Tarskian axioms of the following form are thought to suffice as far as truth-conditional content is concerned:
 - (1) '[DET x_k : ϕ] ψ ' is satisfied by a sequence s iff DET sequence satisfying ϕ and differing from s at most in the k-th place also satisfies ψ .

Now what are we to say about the various types of grammatically singular noun phrases not yet covered, e.g., those of the form 'the F (definite descriptions) and 'that F (demonstrative descriptions) occurring as the subjects of the following sentences?

- (2) The mayor is a Republican
- (3) That man is a Republican.

And what are we to say about the truth conditions of complex sentences such as the following, which involve apposition?

- (4) The current mayor, Albert Smith, is a Republican
- (5) Albert Smith, the current mayor, is a Republican.

Suppose, for the moment, we go along with Russell in (a) rejecting the idea that definite descriptions are singular terms and (b) analysing utterances of sentences with descriptions as their subjects as quantificational (that is, as expressing general propositions). In restricted quantifier notation, Russell's quantificational semantics for definite descriptions is straightforwardly encoded thus (an instance of (1) above):

(6) '[the x_k : φ] ψ' is satisfied by a sequence s iff the sequence satisfying φ and differing from s at most in the k-th position also satisfies ψ.

(The right hand side of (6) is to be understood in a Russellian spirit, i.e. as equivalent to "there is exactly one sequence satisfying ϕ and differing from s at most in the k-th position and every such sequence also satisfies ψ .")

How might we then treat examples like (4) and (5)? It might seem natural to follow Frege's approach to non-restrictive relative clauses here: after all an appositive could be viewed (semantically) as a truncated restrictive relative. In a footnote to *Descriptions*, I tentatively followed Frege in suggesting that one might view utterances of such sentences as expressing *conjunctions*, an utterance of (4) expressing the conjunction of (7) and (8):

- (7) The current mayor is a Republican
- (8) The current mayor is Albert Smith.

In the present context, there is, I believe a better idea. Suppose that the current mayor is a Republican but not Albert Smith. What do we want to say about the truth-value of an utterance of (4) in such circumstances? We don't feel inclined to say that it is true and we don't feel inclined to say that it is false. Why is this?

Under the influence of Strawson (1950), many philosophers, when presented with examples for which they are reluctant to render a judgement, have a tendency to start talking about presuppositions. But this cannot be correct here: If the current mayor is not a Republican and not Albert Smith, an utterance of (4) would be straightforwardly false. I would like to suggest that the reluctance to render a clear judgment in the previous case might stem from the fact that the question is illformed. The idea that an *utterance* has a truth-value is only as robust as the idea that an utterance of a sentence expresses a single proposition. Suppose we drop this assumption, and allow that an utterance may express one or more propositions. On such an account, utterances themselves do not have truth-values; the propositions they express do. An utterance of (4) expresses not a conjunction but two distinct propositions, (7) and (8). We can now account for the reluctance to render a judgement as to the truth or falsity of an utterance of (4) when the current mayor is a Republican but is not Albert Smith: one proposition is true, the other false. In certain circumstances, it might even be the case that one proposition carries more conversational weight than the other, and a judgement as to the truth or falsity of the utterance—for certainly utterances are *judged* true or false—will reflect this fact. It is not difficult to engineer scenarios in which the speaker is primarily seeking to convey the information that the current mayor is a Republican to one audience and the information that the current mayor is Albert Smith, or the information that Albert Smith is a Republican, to another (many cases of dramatic irony exploit this possibility). It is not implausible to suppose that ordinary judgments as to truth or falsity might not be swayed by such considerations. ¹³

8.

A few years ago, I flirted with the idea that every meaningful noun phrase in natural language is either (i) a semantically unstructured, rigid, referring expression or (ii) a semantically structured, restricted quantifier. I pushed this thesis as much on aesthetic and methodological grounds as anything else, and it turned out to be surprisingly more resilient than I had initially supposed. I pointed out that the most glaring problem for the thesis was posed by phrases of the form 'that F, which seem to be both referential and structured. At bottom, my problem with such phrases was an acute version of a general problem stemming from the fact that such expressions seem to function a bit like demonstratives and a bit like (Russellian) definite descriptions. The matter of demonstrative descriptions has received a good deal of attention of late but it is safe to say that no one seems entirely sure how to provide an adequate treatment of demonstrative descriptions, and in the light of the way we have been proceeding, I would like to explore the idea that they function in two ways at once (which is why I prefer the label "demonstrative description" to the label "complex demonstrative").

Consider an utterance by me of the following sentence, accompanied by the demonstration of a person:

Intuitive judgments about truth, falsity, contradiction, entailment, and synonymy constitute the basic data for the construction of theories of meaning, just as intuitive judgments about grammaticality are the basic data for the construction of theories of syntax. As Chomsky (1965) and Rawls (1971) have pointed out, even if such judgments are the raw data of linguistic investigations, in certain specifiable circumstances it may be reasonable, and even necessary, to re-examine and reject some of them when they conflict with predictions made by otherwise well-behaved theories. Ultimately, both semantic and syntactic theorizing must aim for a "reflective equilibrium" that weaves together theory and data supplied by intuition.

(1) That man drinking water has written on descriptions.

If the person I am demonstrating is Keith Donnellan and he is drinking water, my utterance should be judged *true*. If the person I am demonstrating is Keith Richards and he is drinking water, then it should be judged *false*. But what if it is Donnellan and he is drinking a Martini? Or Richards and he is drinking a martini? Judgements in such cases are far from robust, and it seems to me that *this fact ought to be part of the data of semantics, not something upon which semantic theory should deliver a precise ruling*. If a demonstrative description is viewed as either (i) straightforwardly referential or (ii) straightforwardly descriptive, the data seem to be out of reach. Let us consider the case where it is Donnellan and he is drinking a martini.

- (i) If an utterance of a demonstrative description gets its referent by demonstration or by demonstrative intention (rather than by description), then on a traditional single-proposition theory my utterance of (1) ought to be straightforwardly true. But this doesn't seem like a completely natural thing to say.
- (ii) Now suppose we take the other line: demonstrative descriptions are genuinely quantificational and descriptive. Kaplan (1989) has argued that the simple demonstrative pronoun 'that' is not equivalent to the definite description 'the thing I am indicating' (assume that the indexical T is a rigid referring expression). However, he points out that the competent user of a demonstrative must grasp its "character," which can be thought of as a rule for determining its reference on a particular occasion of use. So it looks as though, unlike in the case of a proper name, in the case of a demonstrative there may be some privileged description or other that is associated with the expression (on the assumption that its character can be described). So although there are counterfactual considerations that might preclude treating 'that' as simply equivalent to the ordinary definite description 'the thing I am indicating, it is not wholly unreasonable to suppose that something like this description captures its character. And so it might be thought possible to view demonstratives as equivalent to (or as having their references fixed by) Russellian descriptions (hence quantifiers) whose predicates all occur within the scope of 'actual'. For example (again, on the assumption that T is a rigid referring expression), it might be thought possible to analyse a demonstrative description

'that F in terms of a definite description such as 'the actual F I am indicating' (leaving it open whether it is desirable to go on and analyse T as 'the actual speaker', in a way that avoids obvious circularity).

One way of implementing such an idea would be to view 'this' and 'that' as quantificational determiners on a par with 'every', 'no' and 'the' (assuming, for the moment, that this is Russellian), etc. (If simple demonstratives are deemed to fall within the domain of the theory, then perhaps they will be treated as demonstrative descriptions composed of the determiner and a semantically general and phonetically null complement). One special stipulation might seem to be required however: although the insertion of the 'actual' into a description effectively eliminates a certain type of scope ambiguity in modal contexts, for some speakers it has no analogous impact on other nonextensional contexts (unless, of course, the adjective is assigned the semantics of a fancy actuality operator of the sort that is employed by some intensional logicians). For example, the English string (2) is said by some to be ambiguous between de re and de dicto readings, naturally captured by allowing the description to have either large or small scope as in (3) and (4) respectively:

- (2) John thinks: the actual man I am indicating is a fool
- (3) [the x_1 : actually (man x_1 & I am indicating x_1)] John thinks: x_1 is a fool
- (4) John thinks: [the x_1 : actually (man x_1 & I am indicating x_1)] x_1 is a fool.

But nobody understands (5) as ambiguous in the same way:

(5) John thinks that man is a fool.

Perhaps, then, demonstrative descriptions must always have scope over attitude verbs, and this is something that would need to be explained at some point. But an explanation of this would do nothing to disguise the fact that the theory appears to make the wrong prediction in connection with (2) when the person I am indicating is Donnellan, who has in fact written on descriptions but is drinking a Martini. It predicts that my utterance is false, but this doesn't seem like a natural thing to say.

There are further technical problems with this approach. Unlike quantification into positions inside definite descriptions and (other quantified NPs), quantification into positions inside demonstrative descriptions seems to be very unnatural. While (6) is naturally interpreted as (7), (8) does not seem to have a legitimate interpretation—but see below—unless, the "demonstrative" is simply interpreted as a definite description, in which case (8) is also read as (7) and the referential hypothesis is irrelevant:

- (6) [Every guitarist]₁ likes the guitar he₁ is playing
- (7) [every x_1 : guitarist x_1][the x_2 : guitar x_2 & x_1 is playing x_2] x_1 likes x_2
- (8) ? [Every guitarist], likes that guitar he, is playing.

If the function of the descriptive material in a demonstrative description is to steer the hearer to a particular individual who is (or is being made) salient in some way or other, and if the material does not contribute to the semantical value of the NP, then the relativization of a unique guitar per guitarist in (6) cannot be mirrored in (8).

Actually, matters are more complicated. It *does* seem to be possible to bind a pronoun in such an environment when the antecedent is semantically singular as in (9) and (10):

- (9) Keith₁ likes that guitar he₁ is playing
- (10) The guitarist likes that guitar he₁ is playing.

This suggests that the real issue concerns *relativity* rather than binding *per se*. This seems also to be supported by the felicity of the following point (due to Ernie Lepore). Suppose the same (token) guitar is being played by every guitarist at the same moment; one could just about get away with pointing at the guitar in question and uttering (8). That there is still a real difference between demonstratives and descriptions reveals itself in the fact that the second sentence of (11) is ambiguous between strict and sloppy readings while the second sentence in (12) is not:

- (11) Keith, likes the (actual) guitar he, is playing. So does Ron.
- (12) Keith₁ likes that guitar he₁ is playing. So does Ron.

I believe there is something artificial about both accounts of demonstrative descriptions just sketched: as stated, each presupposes that a single proposition is expressed by an utterance of 'that F is G'. Perhaps a better picture of what is going on will emerge if we say that both a descriptive proposition and a singular proposition are expressed. Only when both are true or both false do we feel pulled to judge the utterance true or false. Indeed, I suspect that just such a synthesis is required if we are ever to get to the bottom of the semantics of singular terms, and that those who are moved deeply by Fregean substitution problems have been feeling the attraction of the general proposition while those moved more by the sorts of modal considerations that Kripke and Kaplan have stressed have been feeling the attraction of the singular proposition. Might it not be the case that a general proposition typically does the communicative work in epistemic environments while a singular proposition normally does it in modal environments? And might this not be a reflex of a distinction between epistemology/psychology and metaphysics? (When we investigate our thoughts about things we are interested in the properties or features that we use to identify them and the concepts under which we take them to fall; when we investigate the nature of things themselves, we are interested in the things themselves and the properties they actually, necessarily, and accidentally possess.)

How might we explore this idea? Again, the course of least resistance seems to be one that treats the meaning of an expression as a sequence of instructions: (i) an initial array of lexical information provides a sequence of instructions that, in conjunction with syntactic information, "yields" an initial (ground floor) proposition (or propositional matrix) that is general in nature, i.e. a proposition built around the properties that might be used to identify something; (ii) after the generation of the initial proposition, any lexical instructions that cannot operate until such a proposition is generated come into play, effectively yielding a secondary array of lexical information which, in conjunction with syntactic information and semantic content of the initial proposition, yields a *parasitic* proposition that is singular in nature, i.e. a proposition built around an object; (iii) the two propositions will typically end up ranked as a direct result of contextual factors (perhaps of the sort that Searle (1975) has articulated in connection with primary and secondary speech acts).

On such an account, we might begin to construct a theory of demonstrative noun phrases by thinking of the semantics of 'that F is G' in the following way (this is not meant to be a final account). In the first instance, lexical instructions conspire with the syntax (another set of instructions) to yield the ground-floor proposition that we can describe using the formal language sentence (13), in which 'the' is Russellian and 's' stands for the speaker:

(13) [the x: s is indicating x & Fx] Gx.

Once this proposition is obtained, the lexical instructions tell the hearer to look for the unique object satisfying the description (if there is one) and obtain the corresponding singular proposition about the satisfier, a proposition we might describe using the formal language sentence (14), in which α is directly referential:

(14) $G\alpha$.

(For the moment, let us put aside what the hearer is meant to do in cases where nothing seems to satisfy 's is indicating x & Fx'.) I am not sure what it means to entertain a singular proposition except in so far as one entertains it in a certain way. The idea here would be that, when all is going well, the proposition described by (13) provides a minimal specification of the object that the proposition described by (14) is about. With demonstratives, typically, it is the singular proposition that carries the conversational weight; but in exceptional circumstances that can change, as Nunberg (1977) and others have shown.¹⁴

Where a demonstrative description occurs in a sentence containing a modal operator or a verb of propositional attitude, issues of scope arise. As far as recovering the ground floor proposition is concerned, the hearer is in a similar situation to someone who hears an utterance of a sentence containing a description and a modal operator or psychological verb ('the first person into space might have been American', 'John thinks the man who lives upstairs is a spy'). The difference (perhaps) is that the default setting for a demonstrative description is for it to be understood with large scope over nonextensional items (perhaps this is also the case

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¹⁴ It is sometimes said that demonstratives, indexicals, and descriptions all have both referential and attributive readings. The point underlying such a remark is well taken, but I still find the referential-attributive dichotomy theoretically unhelpful.

for definite descriptions, the real difference being only that it is easier or more common to override the default in connection with such phrases). As far as the higher-order proposition is concerned, the hearer is being instructed to look for the actual satisfier. A modal environment will likely push the interpreter to focus on this singular proposition built around the actual satisfier.

There is a Searlean flavour to this proposal: (13) is a means to (14), and conventionally so. It is part of the lexical meaning of 'that' that the hearer is meant to find the indicated object (if there is one) and the satisfier of the subsequent noun complex (if there is one), and that this should be the same object. (The account can be extended naturally to utterances of sentences containing the simple demonstratives 'this' and that', or indexical pronouns such as this T and 'you': a singular and a general proposition would be expressed (again, the former via the latter); in typical communicative exchanges, the singular proposition carries the conversational weight, especially when the pronoun in question occurs in a modal environment.

Let us turn now to failure of fit cases, which were used earlier to motivate the multiple proposition approach to demonstrative descriptions. There are many sorts of examples and scenarios that need to be examined, but there is space here for only a few, best introduced through dialogue:

- Dialogue I A: That goat hasn't moved since we sat down
 - B: That isn't a goat, it's a ram.
- Dialogue II A: That goat hasn't moved since we sat down
 - *B*: That isn't a goat, it's a shadow.
- Dialogue III A: That goat with a bell around its neck is limping
 - B: It's not a bell, it's a thick beard.

It is not difficult to come up with all sorts of contexts involving these dialogues (*A* and *B* sitting in a field containing a ram and no other visible animals, a field containing a ram and a goat, a field containing no visible animals, a field full of goats, only one of which has a bell-shaped beard, and so on; *A*'s utterance accompanied or not by a gesture; . . .). And reflection reveals that the preliminary account of demonstrative descriptions sketched above will need to be repaired if it is

to do justice to our judgments of truth and falsity. First, the absence of an object indicated by the speaker and satisfying the main noun 'goat' seems worse than the absence of an object indicated by the speaker and satisfying subordinate predicates—the depth of predicate embedding seems also to have an effect. Second, hearers do seem to manage to latch onto the objects that speakers *intend* in failure of fit cases, so any finally acceptable account must be integrated with a pragmatic theory that explains how this is accomplished.

Questions about Direct Reference and Semantic Innocence are now seen in a new light. It would be wrong, on this view, to say that a phrase of the form 'that F is directly referential; but the singular proposition described by (14) is a proposition that contains an object and not any properties used to identify it, i.e. α is directly referential. I am inclined to think this is the best way to proceed, that the work Fregeans want done by senses is already being done by the *other* proposition, the one described by (13), and that to this extent the directly referential understanding of the proposition characterised in (14) is all that is needed. Frege's remarks about colouring, when examined and developed in a larger context, lead very naturally to a theory that allows us to junk senses.

Does this theory respect Semantic Innocence? So far, yes. A demonstrative description does not change its meaning in different linguistic environments. What can change is (a) the referent (this is just the point that they are *context*-sensitive, not *environment*-sensitive), and (b) the relative conversational weight attached to the singular and general propositions.

9.

A usefully anachronistic way of viewing the debate about the semantics of descriptions is as follows. (i) From the standpoint of untutored semantic intuition, descriptions appear to be devices of *reference*; but syntactic intuition might suggest viewing them as devices of *quantification*, the word 'the' functioning as a quantificational determiner much like 'every', 'some', 'a', and 'no'. Frege was moved

more by the semantic intuition, Russell more by the syntactic. 15 (ii) As part of a broadside against formalized semantics, Strawson argued that Russell's Theory of Descriptions fails to take into account that referring is something *speakers*, rather than expressions, do (he had other objections of course). (iii) Reflection upon nonextensional contexts, the structure of propositions, the relationship between reference and intention, anaphoric relations, and the possibility of successfully communicating something about an individual while misdescribing it, led Donnellan (1966) and others to view matters as more complex than either Russell or Strawson thought. Sometimes descriptions are used in the way Russell's theory predicts, but at other times something closer to Strawson's speaker-reference theory seems to provide a more realistic picture. When 'the F is used in the Russellian way, the proposition expressed is general; when it is used referentially the proposition expressed is singular, the referent of the description functioning as a component of the proposition expressed, as it is put on some accounts.

Although Donnellan's distinction turns out to be neither exclusive nor exhaustive, his examples of referential usage and his own positive suggestions have forced philosophers to confront the issues involving descriptions anew, to realise that more theoretical machinery was needed if anything like a comprehensive account was to surface. No one disputed the philosophical and linguistic significance of Donnellan's examples, the most notorious of which involved using a description 'the F' to communicate something about someone who was not in fact F. But there was, and still is, disagreement about the precise location, within an overall account of linguistic communication, of the machinery that is needed to explain them. Roughly, there is a division between those who locate the machinery in the general (Gricean) principles of a theory of communicative capacities and those who locate it in a theory of word meaning. Over the years, an enormous interest in this topic has arisen, especially in California. Indeed, with anachronism and poetic license the battle lines can be drawn more or less geographically, as is customary in California:

Russell's theory is often put forward as the paradigm case of a theory that invokes a distinction between grammatical form and logical form, but ironically there is a sense in which it preserves symmetry: the gap between grammatical form and logical form in the case of 'the F is G' no wider than it is in the case of 'every F is G' or 'some F is G' because 'the' is of the same syntactical and semantical category as 'every' and 'some'.

North (San Francisco to Sacramento, mereologically attached to New Jersey) vs South (La Jolla to Palo Alto, mereologically attached to Maryland and Massachusetts). South argues that Donnellan's distinction is of semantical and lexical relevance; North argues that the distinction requires no departure from a unitary Russellian theory, apparent evidence to the contrary explained away by appeal to an antecedently motivated Gricean distinction between what is said and what is meant in some other way (e.g. conversationally implicated).

I want to go west, to explore the idea that North and South have both been assuming something that it may not be a good thing to assume, viz. that a single proposition is expressed by an utterance of a sentence containing a description.

On Russell's quantificational account as embodied in the axiom given earlier, if I utter

(1) The man drinking water has written on descriptions

intending to draw my hearer's attention to a particular individual (Donnellan), who is in view, then my utterance expresses a general proposition to the effect that exactly one man is drinking water and every such man has written on descriptions. The singular proposition that Donnellan has written on descriptions is part of what is meant but not part of what is said, general Gricean considerations helping to bridge the gap between the two. This is the view I defended at length in *Descriptions*. I came down in favor of the Russellian-Gricean account for one main reason: it seemed to provide an explanation of why we do not feel inclined to deliver a clear verdict as to truth or falsity when the description used is not satisfied by the intended or demonstrated object. Suppose I utter (1) and the man to whom I intend to draw my hearer's attention is not drinking water. Pace Donnellan, I think it is quite clear that even if the man in question has written on descriptions we do not have a clear intuition that my utterance is true. The Russellian-Gricean seemed to me to be able to explain this fact: something went right and something went wrong: what was said was false, what was meant (or at least part of what was meant) was true. If you are wedded to the idea that an utterance expresses a single proposition, this is surely the better way to go.

I think we are now on course for a much better explanation than the one that results from combining Russell with Grice. Both the unitary Russellian account and the ambiguity theorist's account of the semantics of descriptions might be viewed as wrongheaded because they take seriously the idea of the proposition expressed. I suggest the following. When a description is used nonreferentially, there is a single proposition expressed and it is the general proposition with quantificational truth conditions given by Russell. More precisely, the word 'the' has as its lexical meaning an initial set of instructions that leads to an initial proposition that is general. Once that proposition has been constructed, a further set of lexical instructions instructs the hearer to attempt, in favourable conditions, the construction of a parasitic proposition, a singular proposition about the object uniquely satisfying F (if there is one) or being otherwise indicated. When these conditions are met we have a candidate "referential" use of the description. So on the ground floor we have the general proposition given by (2), with the singular proposition given by (3) piggybacking:

- (2) [the x: man x & x is drinking water] x has written on descriptions
- (3) α has written on descriptions.

(Of course (2) and (3) belong to a formal language whose formulae are designed to express exactly one proposition.)

Not only does this revised approach explain our judgements and reluctance to offer judgement in failure of fit cases, it may also help to explain why Donnellan focused on such cases in his original paper: Donnellan realised that some utterances of sentences containing descriptions seemed not to be clearly false although Russell's account predicted falsity. Very naturally, he turned to embrace the view that such utterances were, well, if not false then *true*. If one is in the grip of the idea—and I think we have been—that an utterance expresses a single proposition, this is a natural first move. But the existence of colouring, conventional implicature, and the knotty case of demonstrative descriptions suggest we liberate ourselves from this position.

The important difference between demonstratives and descriptions is that it is part of the meaning of 'that' that the speaker has in mind some object or other that the hearer is meant to identify; it is part of the meaning of 'the' that the speaker *may* have such an object in mind. Of course, any finally acceptable account constructed along these lines will have to take into account the sorts of considerations adduced in the last section concerning failure of fit.

10.

Some view proper names as directly referential; others view them as having Fregean senses. Still others hold that a descriptive theory of names can still succeed, despite the battering it was given by Kripke (1980). I suspect we are ultimately going to need a hybrid theory and that a sequential analysis involving multiple propositions might do the trick.

Foucault (1969) has suggested a hybrid account according to which names have both a designative function and a descriptive function. I think there is something right about this idea, something right about McDowell's idea about reference axioms, and something right about metalinguistic theories of names.

Utterances of the following sentence will express a truth:

(1) Vivlos is in Greece.

And since 'Vivlos' and 'Tripodes' are two names, both current, for the same town in Greece—we can substitute 'Tripodes' for 'Vivlos' in (1) to produce another sentence, utterances of which will also express a truth:

(2) Tripodes is in Greece.

If you talk to the villagers, you find there is something like a colouring difference between 'Tripodes' and 'Vivlos' (Fregeans will also say there is a difference in sense, but the village is hitherto free of Fregeans). 'Vivlos' is an older name, which regained currency during the Greek civil war. Older villagers are aware of quasi-political overtones to the choice of name in conversation (as are local map-makers and the office that erects road signs). Of course, all of this presupposes knowledge of the fact Tripodes is Vivlos. Perhaps names carry colouring simply by virtue of being names. The act of naming is loaded—people squabble about names all the time—children's names, country names, street names.

I am drawn to the idea that the ground-floor proposition expressed by an utterance of a sentence containing a name is descriptive and metalinguistic. An idea first suggested by Russell (1911) can be adapted to form part of a sequential semantics. Russell's suggestion, which at first blush seems obviously circular, was to view a name N as equivalent to a definite description that mentions N. On such as account, "Cicero" might be treated as equivalent to "the individual called 'Cicero" or something of that ilk. 16 There are two things I would like to do to convert this suggestion into something useful. Firstly, I propose introducing a basic sortal noun in connection with each name; that is I want to work with descriptions like 'the individual called "Cicero", 'the place called "Vivlos", 'the thing called "Hesperus", and 'the event called "Bloody Sunday" (these four categories will suffice). Secondly, I propose that the descriptive proposition is just the initial proposition generated, the ground-floor proposition. So the name 'Cicero' has two sets of instructions as part of its meaning, one for generating the initial, ground-floor proposition and another for generating a second, singular proposition. For example, an utterance of 'Cicero is asleep' will express the propositions given by (3) and (4), where α is rigid and, perhaps, directly referential:

- (3) [the x: x is an individual & (actually) x is called 'Cicero'] x is asleep
- (4) α is asleep.

(Remember, these formulae are designed to express exactly one proposition each.) I want to suggest that this projects into the logical space in which our attributions of utterances and mental states lie, precisely because the colouring of names is something of which we are so keenly aware.

Verbs like 'believe', 'think', 'doubt', and 'hope' create notorious difficulties for semantics, problems that I suspect will be solved only by appeal to multiple propositions. Consider the following sentence:

(5) On June 18, 1992, Stephen Neale thought he was in Vivlos.

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Russell changes his wording in successive works: "the man whose name was 'Cicero'' (1911), "the person named 'Cicero'' (1918), and "the person called 'Cicero' (1919)".

Someone who utters this sentence expresses a truth. On that day I was hiking, looking for a village that, according to my map, was called 'Tripodes', a village I thought might be large enough to have a small taverna. After losing my way for a couple of hours, at around three o'clock in the afternoon I stumbled across a tiny village, whose signs called it 'Vivlos'. I felt confident that the village I had entered was far too small to be marked on my map, and there being no one around—any Greek villager with sense is asleep on June afternoons—headed off for a village I could see in the distance, which I deduced, on the basis of size and location with respect to two hills, must be Tripodes. It wasn't Tripodes—but it did have an excellent taverna. It was not until the next day that I discovered 'Vivlos' and 'Tripodes' were names of the same place—or as some might put it, that Vivlos was Tripodes. Now consider the following sentence:

(6) On June 18, 1992, Stephen Neale thought he was in Tripodes.

Someone who utters (6) would, I think, normally be taken to be expressing a falsehood. (If I had thought the village I was in was Tripodes why would I have left in search of Tripodes?) We want, remember, to *explain* my behaviour in *this actual case*. Such an example creates serious problems for traditional theories that respect Semantic Innocence and Direct Reference.

It is my suspicion that philosophers are divided on how to view the semantics of sentences like (5) and (6) because it is so easy to engineer scenarios in which judgments of truth and falsity are malleable or unclear. But now think of utterances of (5) and (6) as expressing sequences (actually pairs) of propositions, some of which may be true, others of which may be false, and that our intuitive judgments as to the truth or falsity of the utterances depend upon the perceived truth values of those propositions relevant to particular communicative purposes. The propositions characterised by (7) and (8) are both true

- (7) On June 18, 1992 [the *x*: *x* is a place & *x* is (actually) called 'Vivlos'] Stephen Neale thought he was in *x*
- (8) On June 18, 1992 Stephen Neale thought [the x: x is a place & x is (actually) called 'Vivlos'] he was in x.

And obviously the reading with the scope of the description as in (8) is the one that interests us here; switching the description for one containing "Tripodes" yields a falsehood (not so the same substitution in (7).

Thanks to Kripke (1980), we know that a *complete* account of the semantics of proper names in terms of descriptions is out of the question; but in contextually specifiable circumstances a judgement of the truth-value of an utterance containing a name, whether subordinated to a psychological verb or not, may be shaped by the perceived truth-value of a general proposition determined by the trivial description. (Or it may, as in many modal statements, be shaped by the singular proposition constructible from the general proposition.) To say this is not to say that the description gives the sense of the name in Frege's sense. Rather it involves a rejection of Fregean sense on at least the grounds of redundancy. Clearly, there is much work to be done before a sequential approach to singular terms can be properly evaluated, but I am inclined to think that the stock problems involving, e.g., names, propositional attitudes, identity, the contingent a priori, and negative existentials will not go away within approaches that restrict themselves to a unique proposition expressed. We have been attracted modally to singular propositions and we have been attracted epistemically to general propositions. We need a semantic theory sophisticated enough to associate both types of proposition with utterances of sentences containing singular terms, and a pragmatic theory that explains how we are led to focus on one rather than the other in concrete situations. Just how dependent upon context our uses of proper names is can be made clear by comparing dialogues involving names of (e.g.) close friends, historical characters, fictional characters, and authors.

11.

I have drawn on the work of Frege and Grice to sketch a framework within which an utterance of a sentence may express one or more propositions. An initial array of lexical information provides a sequence of instructions that, in conjunction with syntactic information, creates an initial proposition. Once this has been generated, any remaining instructions kick in and a secondary array of lexical information conspires with syntactic information and semantic content of this "ground-floor"

proposition to yield one or more "parasitic" propositions. In such cases—which may be far more widespread than I have been assuming—propositions expressed may be ranked in various ways determined by contextual factors. Semantic theories founded upon these ideas will be immune to the usual technical problems besetting presuppositional theories, and at the same time ought to make predictions that accord much better with our intuitive judgements of truth and falsity, which it is the business of semantics to explain. The strength of one's inclination to judge an utterance true or false is a function of the truth or falsity of those propositions expressed by the utterance relative to the situation under consideration. Typically, it is only relative to situations in which the members of a contextually weighted subset of the propositions expressed are true that we are strongly inclined to say that an utterance itself is true; and it is only relative to situations in which the members of a contextually weighted subset of the propositions are false that we are strongly inclined to say that the utterance is false. I am inclined to think that we will not get much further in semantics and the philosophy of language until we adopt a multiple proposition framework. The present discussion is, of necessity, highly programmatic and compressed. It would be an enormous undertaking to work out a rigorous compositional theory of the sort I envision, but I hope the general shape of such a theory and my indebtedness to Grice's work have been made clear.

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