

Postscript

to the paperback edition of *Thought and Reference* (Oxford University Press 1994)

All the main topics of this book have received considerable attention since the book first appeared. The main purpose of this postscript is to provide an up-date on relevant developments, with references to important recent work, particularly as it bears, either explicitly or by implication, on views proposed here. In some cases this work sheds new light on these topics, whether by offering new ideas or by clarifying the issues, and in some cases it raises difficulties that need to be resolved or at least acknowledged. In the course of identifying these recent developments, I hope to clarify my views and the reasons for them. This postscript is divided into sections corresponding to the four parts of the book, with sub-sections in the order of main topics. Page and section references are to this book unless otherwise indicated. All other references are new and collected at the end.

I should begin with the general observation that there has been a growing appreciation of the importance of separating problems of singular thought from those of singular reference and of distinguishing questions of pragmatics from those of semantics. So, for example, it is now widely recognized that singular thoughts are to be characterized by relations between thinkers and objects rather than by how their objects are referred to. It is also widely recognized that singular terms of all sorts (definite descriptions, proper names, demonstratives, and indexicals) can, despite their diverse semantic features, play similar roles in the expression of singular thoughts. On the other hand, they all can also occur in the expression of non-singular thoughts, by being used to refer in but a weak, descriptive sense, that is, to a unique individual of a certain kind rather than to a certain individual in particular.

1. SINGULAR THOUGHT

The problem of singular thought, as part of the general philosophical problem of intentionality, is to explain how some thoughts can be about particular things external to oneself. These thoughts contrast with those whose contents are uniqueness propositions (propositions whose truth conditions require merely the existence of a unique object of a certain sort), which are general, not singular. That is, it does not count as singular thought to think of an object under a description, as the item which satisfies a certain definite description. My account of singular thought is not satisfactional but relational. It identifies three types of *de re* relation, corresponding to the information sources of perception, memory, or communication, that can determine a thought's object. Relying on the notion of *de re* mode of presentation, this account is Fregean rather than Russellian in three respects. First, it denies that singular thoughts are simply relations to singular propositions. Second, it rejects (2.3) what Evans calls Russell's Principle, that the thinker must be able to identify the object of a singular thought. Third, it does not entail that the existence of a singular

thought is dependent on that of its object. In the last two respects it differs from Evans' account, which though billed as Fregean is anything but. This billing was based on Evans' Russellian reading of Frege, but, as David Bell (1990) has argued in his aptly titled 'How "Russellian" was Frege?', that reading is quite at odds with Frege's texts.

What singular thought is not. My account of singular thought does not lead to the provocative view, championed by John McDowell (1984, 1986) following Evans, that singular thoughts are object-dependent. This view has been resisted by a number of philosophers (Blackburn 1984, ch. 9, Carruthers 1987, Segal 1989, and Noonan 1991), but lately it has been defended by Adams, Fuller, and Stecker (1993). However, their counter-arguments depend on the supposition that non-object-dependent thoughts are either 'incomplete or general' (1993, 101). They are correct to suppose that genuine singular thought is different from and not reducible to general or descriptive thought, but they are wrong to infer from this that singular thoughts without objects can be represented simply by open sentences, with no indication of how the object is contextually determined (1.3). They fail to consider that singular thoughts are indexical and that the (causal-historical) relation that determines the object of a thought token relative to its context is itself determined by the form of the thought. On my account the object of a singular thought token is the item which stands in this relation to that very thought token (of course this applies only to concrete objects, not to abstract objects or to places and times—singular thoughts of times and places are relational, but the relation in question is not causal-historical). Consequently, singular or *de re* modes of presentation, which function as mental indexicals, can be individuated independently of their objects, so that the singular thoughts they belong to are themselves not object-dependent.

My reasons for denying that singular thought is reducible to general or descriptive thought are complemented by Tyler Burge (1991) and by McDowell (1991) in their criticisms of John Searle's descriptive theory. Searle's (1991) reply is subtle, especially in how he explains that his view does not require that contextual relations be explicitly represented. However, he does not seem to appreciate the complaint, which I had previously registered (p. 19n.), that the object of a singular thought need not be represented descriptively *as* the item which stands in a certain relation to that very thought (token), i.e., that the object is not determined satisfactorily.

François Recanati (1993, 98-106) utilizes the relational conception of singular thoughts to explain how they can be non-descriptive without being object-dependent. Objecting specifically to McDowell's concept of *de re* senses, which are individuated by their objects, he argues that the non-descriptiveness of *de re* modes of presentation consists in their 'truth-conditional irrelevance'. Recanati's idea here is that an object must be thought of and referred to under some aspect or another but that this aspect does not enter into truth-conditional content. If it did, then the thought in question would be general (i.e. descriptive), not singular.

Mental indexicals. Although I did not articulate the notion of truth-conditional irrelevance, I think it is fair to say that this notion is built into my characterization of *de re* modes of presentation as mental

indexicals (chapter 1) and, for that matter, into my account of the semantics of natural language indexicals in terms of referential constraints (9.4). This is clear in the latter case, for the referential constraint on a pronoun or any other indexical in natural language is not synonymous or interchangeable with the pronoun. For example, ‘the person I am now addressing’ gives the referential constraint on ‘you’ but is not interchangeable with it. Why *de re* modes of presentation are truth-conditionally irrelevant is a more subtle matter. As explained in 1.3, a *de re* mode of presentation determines the relation which determines the object that a thought of a certain form is about in a given context. The truth condition of the thought token involves the object itself, rather than the operative way of thinking of it.

The notion of mental indexicals has been utilized lately by several philosophers, notably Recanati and Graeme Forbes (1989, 1990), both of whom have developed the conception of mental names as labels attached to files on individuals (2.2). Both accounts are very interesting but too complex to summarize here. I might mention that Recanati develops my suggestion (p. 36) that we operate with temporary files labeled with indexicals or demonstratives and that Forbes incorporates the idea of files into a model of the ‘mental operating system’ at the center of our ‘cognitive architecture’. Also, Forbes mentions an interesting phenomenon that I overlooked. He suggests, as I do (p. 37), that when one comes to believe an identity, two files on ostensibly distinct individuals come to be merged, but he also points out that after the merging one can, at least for a while, distinguish what one believed about the individual in question under each of the two modes of presentation. That is, the merging does not immediately obliterate the two original files. Even so, the two files have effectively merged because anything one comes to believe of the individual under one mode of presentation one automatically believes of that individual under the other.

2. SINGULAR REFERENCE

Singular thought and singular reference. Singular reference, as something that speakers do, is characterized in chapter 3 in terms of referential intentions (they are constituents of communicative intentions). This point needs to be stressed, because philosophers have continued to speak loosely when describing referential intentions. A referential intention is not just any intention to talk about or call one’s audience’s attention to something (3.1). For example, in the context of demonstrating something it is the intention for one’s audience to think of a certain item *as* that which one is pointing at and thereby intending to be talking about (see ‘Intending and demonstrating’ at the end of the next section). Also, singular reference need not involve the expression of a singular thought. What is relevant here is not how one thinks of the object but whether it, rather than the way in which one refers to it, enters into the truth condition (3.5). As Recanati explains (1993, 46-48), when the mode of referring is truth-conditionally irrelevant to an utterance, the object itself must be identified if the utterance is to be understood. However, complete communicative success requires that the hearer think of the object in the same sort of way

as the speaker. So the way of referring to the object can be communicationally relevant despite being truth-conditionally irrelevant. Also, what is relevant to communication partly depends on the form of referring expression, as illustrated by the hierarchy of cognitive statuses constructed by Gundel, Hedberg, and Zacharski (1993).

Semantics and pragmatics. Several critics have complained about my formulation of the semantics/pragmatics distinction, which is introduced in chapter 4 and later exploited in my account of definite descriptions and proper names. The complaint seems to be that I am inattentive to common philosophical usage and formulate the distinction to suit my own purposes. Like most linguists I characterize semantics in terms of linguistic types (not tokens—see 4.6) and the information competent speakers can glean from them apart from particular contexts of utterance. Whatever a hearer infers from collateral information about the context of a particular utterance of a linguistic type counts for me as non-semantic information. Here I am restricting semantic to linguistic information: what speakers know in virtue of their linguistic competence (see Chomsky 1986, 43–45). Even so, I have no objection in principle to the conception of semantics, shared by many philosophers, on which a systematic account of truth conditions (or of determinants of truth conditions, i.e. propositions) can count as semantic even though many (assertoric) utterances are true or false only relative to a context of utterance. Under this conception semantics is concerned not just with (in Kaplan’s terms) character, as determined by linguistic meaning, but also with content, which is sensitive also to context (other philosophers, such as Salmon (1986), Soames (1987), and Richard (1993), speak of truth conditions of sentence types ‘with respect to’ contexts). But the question for me is precisely how context enters in. In chapter 9 I reject Kaplan’s claim that ‘character is a function from context to content’, at least if the word ‘function’ is taken seriously. The meanings of a great many indexicals are not rules that determine reference as a function of context but merely impose referential constraints on their use (9.4). This will be amplified at the end of the next section, but the present point is that although Kaplan’s conception of semantics is not objectionable in principle, in practice it does not work. The reference of most indexicals (given their meanings) is context-relative but not context-determined.

Conversational implicature. No one disputes that there are various ways in which what is communicated in an utterance can go beyond sentence meaning. The problem is to catalog the ways. It is generally recognized that linguistic meaning underdetermines speaker meaning because of the need for disambiguation and reference assignment and because people can speak figuratively or indirectly. It is coming to be recognized that these are not the only ways. Unfortunately, philosophers and linguists sometimes confuse context sensitivity in general with indexicality in particular. And sometimes they assume that inexplicitness is invariably a case of conversational implicature (Sperber and Wilson (1986) are an important exception). However, in my view we need to distinguish not only the implied from the explicit but the implicit from the implied—Grice’s distinction between what is said and what is implicated is not exhaustive. In recent work (Bach 1994a and 1994b), where the discussion of chapter 4 is extended, I

describe two ways in which a speaker can, without using any ambiguous or indexical expressions and without speaking figuratively or indirectly, mean something without making it fully explicit. The first occurs when the linguistic meaning of the sentence, even after disambiguation and reference fixing, does not determine a complete proposition (4.2). If a sentence is in this way *semantically underdeterminate* (in the book the term ‘indeterminate’ is used), understanding an utterance of it requires a process of *completion* to produce a full proposition. Semantic underdetermination is not ambiguity (see Atlas 1989)—ambiguity is semantic overdetermination. The second way occurs when the utterance does express a complete proposition (possibly as the result of completion) but some other proposition, yielded by what I call the process of *expansion*, is being communicated by the speaker. This is what I call *s(entence)-nonliterality* (4.1). In both cases the speaker is not being fully explicit. Rather, he intends the hearer to read something into the utterance, to regard it as if it contained certain conceptual material that is not in fact there. The result of completion and/or expansion is what I call *conversational implicature*. Implicature is distinct from Grice’s conversational *implicature*, for in implicature one says and communicates one thing and thereby communicates something else in addition. Implicature, however, is a matter of saying one thing but communicating something else instead, something closely related to what is said. Unlike metaphorical and other sorts of nonliteral utterance implicature is not a case of using particular words in some figurative way. Rather, part of what is communicated is only implicit in what is explicitly expressed, either because the utterance is semantically underdeterminate and completion is required or because what is being communicated is an expanded version of the proposition expressed.

These ideas, though not all the labels, were presented in chapter 4 but have been misunderstood. As a result, my application of them to singular terms (see the next section) has received some misconceived objections. For example, Recanati (1993, 248-9) does not appreciate how *s*-nonliterality differs from figurative speech, where constituents are used nonliterally, and William Taschek (1990, 45) mistakes *s*-nonliterality for a kind of indirection. These misunderstandings lead to misconstruals of my account of uses of incomplete definite descriptions and of proper names, which relies on the notion of *s*-nonliterality. In such cases the linguistic content of the utterance does not make fully explicit what the speaker means, and yet nothing in the uttered sentence is being used nonliterally. *S*-nonliterality is to be contrasted with *c*(onstituent)-nonliterality: it is simply a matter of intended additional conceptual material to be read into one’s audience, a process that generally occurs so routinely as not to be noticed. That is why it does not pass Recanati’s intuitive test for nonliterality. Intuitively, people would not classify as nonliteral typical utterances of sentences like ‘Let’s go to Chez Panisse [together]’ or ‘I haven’t taken a shower [today]’, where the unuttered word in brackets indicates what needs to be filled in by the hearer. In my view, even though we may not intuitively regard such utterances as nonliteral when we reflect on them metalinguistically, in practice we take them nonliterally when we hear them. They are not literal even though they may seem to be because, as in the above examples, the conceptual material that we unreflectively insert into the utterance does not correspond to anything in the sentence being uttered. In such

cases what is meant is not strictly what is said but some expansion thereof. These examples, as well as the cases of incomplete definite descriptions and shared proper names cited below, are not special cases. *S*-nonliterality is a pervasive phenomenon, for we generally do not make fully explicit what we mean.

3. SINGULAR TERMS

The doctrine of direct reference remains popular despite its difficulties with Frege's four puzzles (8.4). To be sure, serious attention has been paid to the problems of belief reports (see Salmon 1986 and Crimmins 1992) and of identity statements (see Ramachandran 1991) as they arise for direct reference theories, but controversy still rages on both. On the other hand, Michael Devitt's (1989) complaint remains valid that the 'Emptiness Problem' (the meaningfulness of vacuous names) and the 'Existence Problem' (the nontriviality of true existence statements and the meaningfulness of true negative ones) continue to be neglected. Another problem for direct reference theories is that both names (7.4) and indexicals (9.5) can be used to make descriptive reference, where what enters into what is said is not the referent but its distinguishing property. Stephen Neale (1990, ch. 6) and Recanati (1993, ch. 16) have both examined descriptive uses of indexicals.

Recanati, though recognizing the descriptive uses of names and indexicals, claims that they are semantically marked as referential expressions—their meaning includes the feature 'REF' (1993, 17). REF is supposed to distinguish names and indexicals from quantified noun phrases. However, he provides no linguistic evidence for this feature. Indeed, from a linguistic point of view names and pronouns are distinguished by the fact that they do not take overt determiners. For example, the phrases 'the Recanati' and 'one he' are ill-formed. Moreover, as Neale (1993) suggests, at the level of LF (the linguistic counterpart of philosophy's logical form) names and pronouns occupy argument positions, whereas quantified noun phrases are represented as variable-binding operators, with the variable occupying the argument position at LF. For example, (1) is represented as (1_{LF})

Most philosophers are near-sighted. (1)

[Most *x*: philosopher *x*](*x* is near-sighted). (1_{LF})

Neale uses restricted quantifier notation, as exemplified by '[Most *x*: philosopher *x*]' in (1_{LF}), for two reasons. First, it is suited to non-standard quantified noun phrases (12.1), such as 'most philosophers'. Second, it avoids the syntactic contortions characteristic of the usual representations of standard quantified noun phrases in first-order logic, so that what is described in 5.1 as the misleadingness of grammatical form as to logical form is merely an artifact of notation. At any rate, as far as Recanati's claim is concerned, if quantified noun phrases are treated as variable-binding operators, then referential terms may be distinguished from them by the absence of that feature rather than by the presence of REF. So we may accept Recanati's and Neale's distinction between referential terms and quantified noun phrases. But it is one thing to accept that distinction and quite another to agree on which expressions belong to which category.

Definite Descriptions. Russell's theory of descriptions is first defended (chapter 5) and then incorporated (chapter 6) into a pragmatic account of the referential/attributive distinction. Neale (1990) has independently done likewise, giving Russell's theory a book-length defense within a rigorous semantic framework. We both employ Kripke's pragmatic strategy (discussed in 5.3) to show that definite descriptions are quantified noun phrases and to undermine the suggestion that they are systematically ambiguous expressions with referential readings as well. Ludlow and Neale (1991) have extended the argument to indefinite descriptions, which also have been thought to have referential readings.

Russell's theory, as a semantic account of sentences containing definite descriptions, is not obliged to explain referential uses, where the referent itself enters into the content of the speaker's statement. It is important to note here that a pragmatic account of referential uses does not imply that they are not literal. Ordinarily when one uses a definite description referringly, one does intend the description to apply to the referent. So, as I argue in 6.3, referential uses of definite descriptions, at least complete ones, are literal but not direct. Nonliteral referential uses are a special case, because the description is not intended to be taken to apply to the referent (6.5).

Nonliteral uses of description sentences, as occurs when the description is incomplete, are another matter. Here the distinction between *s*- and *c*-nonliterality comes into play. On Russell's theory, a sentence like 'The book is open' is ordinarily used *s*-nonliterally, since there are many books. But this is not a case of *c*-nonliterality because no constituent (i.e. 'the', 'book', or 'the book') is being used nonliterally (6.4). So Taschek's complaint that on my view 'we only rarely mean what we say!' (1990, 40) when using incomplete definite descriptions sounds more serious than it is. My claim is not that any word or phrase in the sentence is being used nonliterally but rather that the sentence as a whole does not make fully explicit what is meant. So when the utterance does not make explicit which F is being referred to, which F that is has to be inferred. And though that is a contextual matter, it is a case not of indexicality. Nor is it implicature. It is what I now call *implicature*, and in this regard I should have made clearer the reason why an utterance of sentence like 'The book is open' is taken as being about a certain book rather than as expressing a general proposition of the sort given by Russell's theory. The reason is not that the utterance is obviously false, as in typical cases of Gricean implicature, but that it is blatantly uninformative, given the mutual knowledge that there is more than one book in creation.

Proper names. My theory of proper names (chapters 7 and 8), the 'nominal description theory' (NDT), has met with less than whole-hearted enthusiasm. A typical objection is that a sentence like

Tipper Gore loves rock-and-roll. (2)

does not seem to say the same thing as

The bearer of 'Tipper Gore' loves rock-and-roll. (2N)

especially not if the latter is unpacked as

There is one and only one bearer of 'Tipper Gore',
and she loves rock-and-roll. (2Q)

This objection is supported by the argument that utterances of (2), (2N), and (2Q) would not have the same force in 'otherwise pragmatically identical circumstances' (Taschek 1990, 43). Such an argument is weak, however, since it ignores the fact that choice of words (from among semantically equivalent alternatives) can matter pragmatically. Compare, for example, 'I know that Caesar crossed the Rubicon' with 'I have an ungettiered justified true belief that Caesar crossed the Rubicon'. In general, substituting a long paraphrase for a word can make a big pragmatic difference.

Part of the aim of NDT (or any descriptive theory of names) is to show how a name does not have to denote anything to be meaningful and can retain its usual meaning in existence, identity, and belief contexts. David Freedman finds NDT plausible but worries that it 'leaves the notion of being the bearer of a name unexplained' (1989, 169). I take bearing a certain name to be a matter of convention, rather like having a certain license number. However, there is no one way in which a name can be acquired, and some ways are less formal than others. When responding to Kripke's circularity objection (8.3), where I argued that it is one thing for an individual to be referred to by a name and quite another for it to bear the name, I was not particularly concerned with the latter relation. The relevant point was that we can immediately understand a sentence containing a name we have never heard before, so that understanding a name as a linguistic item does not require knowing who its (intended) bearer is. That is not a semantic but a pragmatic matter. To appreciate this is consider that proper names, because they can be shared, generally do not carry the information needed to determine the referent in a particular case. That is one reason why I argued (8.5) against the view that a shared name is semantically ambiguous (with as many meanings as it has bearers), as well as against the more radical claim, made recently by Kaplan (1990), that a shared name is really a set of distinct but phonologically identical words, one for each bearer.

NDT has struck some as a desperate, rearguard action in defense of Russell's thesis that ordinary names are not logically proper names but disguised descriptions. NDT has not been refuted but merely ignored, probably because the Mill-Kripke view is so widely accepted (despite its well-known difficulties with Frege's four puzzles). At any rate, I tried to defend NDT (chapter 8) against Kripke's objections to descriptive theories generally and to NDT in particular, and to account for the 'illusion of rigidity' by explaining away the intuitions supporting the Mill-Kripke view of names. However, I should have been clearer on the distinctness of certain theses: that names are directly referential, that they are rigid, that they are not descriptive, and that their reference is explained by the causal theory of reference. Fortunately, philosophers are coming to appreciate that these theses are distinct and do not all stand or fall together. Devitt (1989), for example, not only distinguishes these theses but considers which entails which. He is particularly concerned to show that the strongest (and simplest) of the direct reference theories of names, the 'Fido'-Fido theory (defended for example by Wettstein 1986 but rejected by Devitt because it unjustifiably ignores cognitive content), is not entailed by the above theses. Recanati's concept of truth-conditional irrelevance is helpful here, because it clears the way for claiming that names can be directly referential and yet have semantic properties (senses) that determine their references. A direct reference theory can hold that

these senses are descriptive but claim that they are truth-conditionally irrelevant and that only the referents enter into truth conditions. The claim that names are rigid designators also does not preclude this possibility. Of course, NDT is incompatible with such claims if they are taken, as is customary, as strictly semantic theses, but it can accommodate a pragmatic construal of direct reference and rigid designation (8.5) and incorporate a non-descriptive causal theory of names at the cognitive level (chapter 1).

Reference, pronouns, and context. In my view there is a fundamental difference between mental and linguistic indexicals. As explained earlier, I take *de re* modes of presentation to function as mental indexicals, by determining the relation between a thought (token) and an object that must obtain in the context for the former to be a thought of the latter. From this it follows that for them reference is a function of context: the object is that which stands in the relevant relation to the thought. But this is generally not the case for the pronouns and other linguistic indexicals. Except for special cases like ‘I’ and ‘now’, indexical reference is, though context-relative, not strictly context-dependent. That is, it is not a *function* of context. With words like ‘she’, ‘they’, ‘this’, and ‘then’, singular indexical reference depends on the speaker’s intention, and intention does not count as a parameter of context. This is because the speaker’s intention is not part of the input to the audience’s inference but part of what is to be inferred (9.1).

Intending and demonstrating. Even if it is agreed that the contribution of the speaker’s intention is not on a par with other contextual contributions, there remains the following question, which is addressed in 9.3 but has received further attention lately: when you refer to something demonstratively, what determines the reference, your demonstration or your intention? David Kaplan used to think it is the demonstration but now, in his ‘Afterthoughts’ (1989), he says the intention. Marga Reimer (1991a, 1991b) thinks he was right the first time and produces various counterexamples designed to show that the intended demonstratum is not automatically the actual demonstratum. She argues that something else—or nothing at all—may be the actual demonstratum, in which case the speaker’s intention is overridden. In reply (Bach 1992a, 1992b) I have defended the priority of intentions over demonstrations by showing that there is more to a referential intention than having something in mind and intending to refer to it. Not just any intention to refer to something counts as a specifically referential intention. A referential intention is part of a communicative intention intended to be recognized by one’s audience (for more on the reflexive character of communicative intentions see Bach 1987). As such, it is the intention for one’s audience to identify a certain individual by thinking of it a certain identifiable way (3.1). Such an intention is not fulfilled if the audience fails to identify the right individual in the right way, that is, the one intended in the way intended (not that the latter is part of the truth-conditional content). If one has mistaken beliefs about which object that is, as in Reimer’s counterexamples, then any intention one has to be referring to what is in fact not the demonstratum will not be fulfilled. But such an intention is not a specifically referential intention. The intention to refer to the object one is demonstrating is the controlling intention, because it is one’s demonstration on which one intends the audience to rely in identifying the referent.

The claim that referential intentions determine reference might suggest that they succeed by magic or are somehow self-fulfilling. So it is important to appreciate that this claim does not lead to the absurd consequence that one can utter any old thing and gesture in any old way and still manage to refer to whatever one has in mind. To think that it does would be to misunderstand the role of referential intentions and their relationship to the utterances used to express them. You do not say something and then, as though by an inner decree (an intention), determine what you are using it to refer to. You do not just have something 'in mind' and hope that your audience is a good mind reader. Rather, you decide to refer to something and try to select an expression whose utterance will enable your audience, under the circumstances, to identify that object. Referential intentions, if they are to be fulfilled, must satisfy the rational constraints on communicative intentions generally.

Singular terms in belief contexts. In my view the distinction between transparent and opaque occurrences of singular terms in belief contexts is not semantically grounded (10.1). In particular, the semantics of belief sentences do not determine the extent to which true belief ascriptions impute concepts to the ascriber (see Loar 1988). A singular term in the embedded clause, the so-called content clause, can be used to refer to an individual or to impute a conception of an individual (similarly, a general term can be used to indicate a property or relation or to impute a concept). However, this is not a case of semantic ambiguity but of underdetermination. Understanding the full import of an utterance of a belief sentence requires the pragmatic process of completion.

The pragmatic dimension of belief reports is central to the theories put forward in three important books by Nathan Salmon (1986), Mark Richard (1990), and Mark Crimmins (1992). All three recognize that there is more to a belief report than meets the eye (or ear), so that part of what enters into it is determined pragmatically. However, they disagree on what that is and on how it enters in. Salmon claims that imputed ways of thinking are not part of the literal content of belief reports but are merely 'pragmatically imparted'. Richard claims that 'believe' is an indexical whose reference is to a context-dependent relation that involves a particular translation function (roughly, from words used to ascribe beliefs to imputed ways of thinking). And Crimmins claims that belief reports involve a hidden indexical reference to ways of thinking (these do not depend on the reference of 'believes' but are 'unarticulated constituents' of belief reports). All three authors offer numerous insights about belief reports, but Stephen Schiffer (1987, 1992) has raised serious problems for such pragmatic approaches (but see Salmon's 1989 defense). In my opinion pragmatic accounts could benefit from the notions of semantic underdetermination and conversational implicature, and I hope to develop my rather sketchy account of belief reports (chapter 10) in more detail.

4. OTHER KINDS OF REFERENCE

Anaphoric reference. I argue (chapter 11, 12.4, and 12.5) that anaphoric reference, the use of pronouns to refer to individuals previously mentioned, deserves no special semantic or syntactic consideration: being

previously mentioned is simply one way of being salient. Unless the anaphoric reference is explicitly marked, by dedicated anaphors like reflexives and reciprocals, it is not a syntactic phenomenon. So there is no need for linguistic theory to make special provisions for the anaphoric use of ordinary pronouns or to treat the relation between them and their ‘antecedents’ as a syntactic relation, as with the device of co-indexing. Indeed I gather that many linguists now agree, who downplay the importance of principle B of the binding module of government-binding theory (roughly, principle B requires that pronouns be free in ‘local domains’, whereas principle A requires that anaphors be bound in local domains—see Chomsky 1986, 164ff.).

In the case of so-called E-type pronouns there is even less reason to regard the relation of antecedency as syntactic (12.6). Such pronouns do not require any special syntactic or semantic treatment and can be handled pragmatically. In an example like

Many drivers don’t use seat belts, and they are very foolish. (3)

‘they’ functions as a descriptive pronoun, whose intended descriptive content is ‘the drivers who don’t use seat belts’. A descriptive approach to such pronouns has been worked out in detail by Neale (1990, 187-191, 196-204 and chapter 6), who calls them ‘D-type pronouns’ to indicate that they go proxy for descriptions, contrary to Evans’ contention that they are referential, with their references fixed by descriptions.

Plural reference. There is not much new to say on plural reference, which can be made with the use of quantified noun phrases (12.2) as well as with plural pronouns (12.3) and conjunctions of singular terms. To my knowledge what little that has been written on this topic has done nothing to suggest that it is relevantly or interestingly different from singular reference, except that it admits of the linguistically interesting distinction between distributive and collective reference. It is worth reiterating the benefits of Neale’s use of restricted quantifier notation to represent both standard and non-standard quantified noun phrases. Not only does this notation provide a uniform way of representing quantified noun phrases, but it does so in a way that minimizes the fracturing of syntax characteristic of first-order representations (12.1). Moreover, it lends itself to straightforward incorporation into the analysis of L(ogical) F(orm) in syntactic theory.

Reference and natural kinds. The arguments in chapter 13 against Burge’s externalism about concepts and Putnam’s externalism about meanings of natural kind terms have been supplemented by those in Crane 1990 and Elugardo 1993 (also, Putnam’s claims about natural kinds have been debunked on empirical grounds in Dupré 1993, chapter 1). However, all these arguments are primarily concerned with the import of philosophical thought experiments. Philosophers are now becoming more interested in substantive questions about concept attribution (see Crimmins 1992, 93-98, and Woodfield 1993, for example) and concept possession and individuation (see Peacocke 1992). They are paying attention to the extensive research in the psychology of concepts, which is already too large to document here (for references and discussion see Smith 1990 and Kornblith 1993).

In philosophy as in romance one thing leads to another. So I have had to limit this discussion to recent developments closely tied to issues raised in the book. Nothing has been said about such far-reaching issues

of current interest as the nature of propositions, the relation between language and thought, and the status of mental content. I have not staked out a position on these issues, but I believe that the views put forth here are neutral on them.

References

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