ON REMOVING PUZZLES ABOUT BELIEF ASCRIPTION Michael Devitt Pacific Philosophical Quarterly 71 (1990): 165-81

A bluff good sense pervades Bill Lycan's <u>Judgement and Justification</u>: ¹ robust realism about the external world; functionalist realism about mind; truth-conditional realism about meaning; skepticism about anomalous monism and the arguments for it.²

Too much applause is boring. I have some criticisms of Lycan's discussion of belief ascriptions. But even there, we are in broad agreement. For convenience, I will number my criticisms.

I. Beliefs and Their Ascription

Near the beginning of the book, Lycan points out that "until recently, semanticists investigating belief sentences, particularly those semanticists working within the possible-worlds format, have paid no attention to the question of what psychological reality it is that makes such sentences true". He thinks that such attention is necessary for our theory of belief ascriptions. Furthermore, it promises to rid that theory of "language-independent propositions Platonistically construed" (pp. 8-9). This is a very important feature of Lycan's approach to belief ascription.³

Indeed, I think we should go further in criticizing the traditional approach to the semantics of belief ascriptions. This semantics should start with close attention to psychological reality. In general, it is a mistake to offer a semantic theory of sentences that seem to concern a certain reality without first attempting to get a clear picture of the nature of that reality. For, unless things have gone very wrong, the sentences relations to that reality will determine their meanings. We should, as I like to say, "put metaphysics first." And since propositions, nonactual possible worlds, and the like, could play no causal role in the mind, we have

 $^{^{1}}$ 1988. All references are to this work unless otherwise indicated.

²The discussion of anomalous monism (pp. 25-53) is an excellent example of a lycan at work ("LYCAN, n. An automated trash sorter containing a powerful solvent; one deposits a jumble of theories in it, pushes a button, and the mess is dissolved into its components, neatly packaged and ready to discard." Dennett 19..: 7). However, it strangely fails to dispose of the principle of rationality, finding "at least two" of the arguments for it "convincing" (p. 40); cf Levin 1988; Devitt 1984b: 172-9.

³The feature is to be found also in an earlier work; 1981: 143. It was not prominent before that; see Boer and Lycan 1975 and 1980.

the best of reasons for thinking that they are not part of mental reality. So it is unlikely that they will play any essential role in the semantics of sentences that describe that reality. Crudely, if there are not any propositions in the head, it is unlikely that the folk are talking about propositions in describing what is in the head.

A great advantage of putting metaphysics first is that it removes puzzles about belief ascriptions. The problems that remain seem tractable and have no <u>aura of significance</u>: they are not deep puzzles about us, but rather routine problems about semantics.⁴

A theme of my criticisms is that Lycan does not go far enough in criticizing traditional semantics and its puzzles.

What then is the metaphysics of belief? Lycan has a standard view, which I share, and which goes back to Sellars. Believing is distinguished functionally from other propositional attitudes like desiring by its distinctive mode of storing representations. And one belief is distinguished from another by its representation. Such representations have the same sorts of syntactic and semantic properties as sentences in a natural language. So, believing is a functional relation between a person - the believer - and a "mental sentence" - the object of belief (pp. 6-7).

This representational account of beliefs encourages a certain plausible view of belief ascriptions which also goes back to Sellars. Lycan explains the view as follows: "the sentential complement of a belief-ascription serves as a sort of exemplar of what is said to be believed, the semantical function of the complementizer `that' being to ostend or demonstrate this examplar. Thus:

(1) Jones believes that broccoli causes erysipelas.

is to be understood along the lines of

(2) Jones believes some .Broccoli causes erysipelas.

where the Sellarsian dot quotes are common-noun-forming operators that also serve to ostend the linguistic token that they enclose (pp. 7-8).

The sentential complement specifies what sort of mental sentence token Jones must have stored if the belief ascription is to be true. The question then comes up: Which sort does it specify? What is a .Broccoli causes erysipelas.? How does that complement sentence individuate beliefs? There are a range of possible answers and maybe more than one is correct, as Lycan points out. It may be the case

⁴For more along these lines see my 1984a: 385-6.

that we use more than one individuating scheme so that belief ascriptions are ambiguous: on one occasion .Broccoli causes erysipelas. specifies one sort of mental sentence, on another, another.

II. Lycan's Kripke Puzzle

Lycan exploits this possibility to offer a solution to a puzzle he attributes to Kripke. The puzzle is really due more to Frege and Russell, and is rather different from the puzzle that mostly concerns Kripke, as we shall see. Anyway, Lycan's Kripke puzzle is as follows. "Suppose Jones sincerely says, `Cicero was bald and Tully was not,' unaware that Cicero and Tully are one and the same person" (p. 72). Consider now the following inconsistent triad about this situation:

- (3) Jones believes that Cicero was bald and Tully was not.
- (4) If (3) then Jones irrationally believes a contradiction.
- (5) Jones is fully rational.

The plausibility of (3) is obvious. (5) might well be the case. (4) is a "direct reference" thesis that appeals to Lycan because of Kripke's view of names. To solve this puzzle, Lycan proposes two individuating schemes for ascriptions.

Sometimes we group our tokens into types ... according to the inferential roles they play within their authors' conceptual schemes ... their <u>computational</u> roles. At other times we individuate them according to sameness of truth-conditions. (p. 73)

So (3) is ambiguous. If .Cicero was bald and Tully was not. individuates by the truth-conditional scheme, then it individuates the same as .Cicero was bald and Cicero was not.. Jones does indeed believe a contradiction though it is only one in the semantic sense not the syntactic sense, and so believing it does not impugn Jones' rationality. More importantly, if .Cicero was bald and Tully was not. individuates by the computational scheme, then it does not individuate the same as .Cicero was bald and Cicero was not. Jones does not believe a contradiction; the names `Cicero' and `Tully' have quite different inferential roles. So, in neither case, is (4) true (pp. 74-5).

I think that this solution is along the right lines but I have four criticisms of it.

Criticism 1. The solution will not work as it stands because our ordinary belief ascriptions do not, as a matter of fact, use a computational scheme of individuation.

Why does Lycan suppose that they do use such a scheme? He seems influenced by considerations that show that the scheme would serve a purpose. He is impressed by the arguments for "methodological solipsism" and "narrow" psychology, which suggest that the truth-conditional properties of representations - "wide" properties - are irrelevant to their roles in explaining and predicting behavior. What is relevant are the properties they have that supervene on what is inside the skin and which affect their inner functional role. Lycan thinks that the computational scheme classifies representations according to these properties and so serves the needs of narrow psychology. I agree with this view of our needs, with one important qualification.

I have argued (1989a; 1990) that the properties of a representation that are important to narrow psychology are not merely inferential or computational properties. The latter properties are syntactic ones that a representation has solely in virtue of its relations to other representations. To explain behavior, we need to take account of properties a representation has in virtue of its relations to inputs; we need to take account of properties that are functional but not merely inferential. The "Syntactic Theory of the Mind" (Stich 1983) is false. Though Lycan calls the scheme, and the properties by which it individuates, "inferential" and "computational," I think that what he really means is "functional." That is the term I shall use.

Our need for a functional scheme for narrow psychology is evidence that we have it, but it is not conclusive evidence. We should examine our ordinary belief ascriptions to see whether, as a matter of fact, they do individuate representations using this scheme. Lycan does not perform this examination. When we do, we discover that the ascriptions do not use the functional scheme. The problem is that reference is irrelevant to the functional scheme, as Lycan emphasizes, yet reference is always relevant to ordinary ascriptions: the subject's belief has to be about the right thing for the ascription to be true. Ordinary ascriptions can be construed in two ways, as Quine pointed out: construed transparently, substitutivity holds for the singular terms in the complement sentence; construed opaquely, substitutivity does not hold. Transparent ascriptions obviously

⁵These claims need various qualifications. (1) Empty terms force more cautious talk of reference (Devitt 1981: 228-9, 243-4. (2) We shall see later (section VI) that some ascriptions of self-regarding beliefs do individuate narrowly. (3) We often seem to individuate narrowly when ascribing the same belief to two people (1989a: 390-1).

⁶It is common to call these two construals "de re" and "de dicto." I think that there are very good reasons for resisting this usage. There are even better reasons for resisting the usage that applies these terms indiscriminately to both the beliefs ascribed and the ascriptions of them; 1984a: 388-90, 392-4.

make reference relevant; they use Lycan's truth-conditional scheme. The problem for Lycan is that opaque ascriptions also make reference relevant and so cannot be using the functional scheme.

As usual, Putnam's Twin-Earth fantasy helps to make the point. (3) (construed opaquely) is true. And the beliefs that led to Jones' sincere utterance are as a matter of fact about Cicero. But suppose that the beliefs were not. Suppose that they were about Twin Cicero. Then (3) would be false even if the functional role of Jones' beliefs were exactly the same. Consider a more down-to-earth example. say, demonstrating a certain horse, "Tom believes that horse is a winner." In fact Tom has never spotted that horse but has another one, indistinguishable to Tom from the first horse, about which Tom has a belief that he expresses, "That horse is a winner." ascription is false, and yet I am right about the functional matters that play a role in predicting and explaining Tom's behavior. Finally, consider my saying, "Tom believes that Bruce is a philosopher." I have the new Bruce in mind. Tom has never heard of him but has of one of the other departmental Bruces. Tom says, "Bruce is a philosopher," having that Bruce in mind. My ascription is false but I have got Tom right at the narrow level.

In brief, ordinary opaque ascriptions are wide whereas the functional scheme is narrow. Nevertheless, the opaque scheme does, roughly, serve the concerns of narrow psychology for it is mostly sensitive to functional differences between beliefs. Its failures in sensitivity lead to many of the puzzles about belief ascriptions, as we shall see.

The functional scheme individuates representations according to their functional properties. The opaque scheme individuates partly according to those properties and partly according to

 $^{^{7}}$ For more on this, see Fodor 1980: 66-8. I have attempted to explain why our ordinary ascriptions always make reference relevant; 1984a: 395-6; 1984b: 100-01.

We might, of course, invent a form of ascription that met narrow needs exactly. I propose a form that goes most of the way by abstracting from reference (1989a: 392-3); but this does not go far enough to cope with the subtleties revealed by the puzzles below.

At one point, Lycan suggests that psychologists need a new form of ascription that would individuate according to his computational scheme; it would use "some appropriately neutral syntactic code" (pp. 77-8). This must be a mistake for, on his view, we already have such a form of ascription: it is exemplified in the interpretation of (3) that he thinks solves the Kripke puzzle. If (3) does not individuate according to that scheme then appeals to that scheme could hardly be relevant to the semantics of (3).

reference. Two questions arise. First, what functional properties should and do count in these individuations? Second, what bearing if any, do these properties have on the determination of reference?

Criticism 2. The received answer to the first question is that all the functional properties of a representation are relevant to its individuation for narrow psychology. This is meaning holism. Lycan's discussion shows the usual holist tendencies, but I doubt that he has fully recognized this. 8 In my view, meaning holism is implausible, underargued, and false. I am in the process of arguing this (forthcoming a, b).

Criticism 3. The received answer to the second question - exemplified in the "two-factor" theory - is that the functional properties that individuate a representation are largely independent of the determination of its reference. In have argued that those functional properties are the ones that, together with the external relations of the representation, determine its reference. Those properties partly constitute the representation's "mode of presenting" its referent (1989a, b). So far as I can see, Lycan does not give an answer to this question. However, I take it that he would go along with the received answer. Certainly a holist answer to the first question encourages this answer to the second: if all of a representation's functional properties go into determining its reference, then mistakes in theory threaten reference failure.

Criticism 4. Lycan has misconceived the problem to which his two schemes are an attempted solution. This misconception makes the problem seem much more puzzling than it really is.

Without (4), there would be nothing puzzling about the Jones case. Why does Lycan find (4) plausible? He adopts Kripke's view of names and then argues: "if names are rigid and connotationless, then ... the sentence Jones has uttered is false in any possible world, and to believe what it expresses is to believe an explicitly contradictory proposition" (pp. 72-3). I claim, in contrast, that theories of names are irrelevant to the real problem.

Consider the metaphysical situation in Quine's famous case of Bernard J. Ortcutt (1966: 185). Ralph's belief store includes two distinct sets of mental sentences about Ortcutt. Those in one set involve an element that leads him occasionally to utter sentences

⁸Lycan takes functionalism to be holistic (pp. 49, 51). This view of the mind seems to encourage holism in functional-role semantics. I take his talk of functional equivalence in Boer and Lycan 1986 (pp. 53, 63) to amount to meaning holism.

⁹See, for example, McGinn 1982: 211, 230; Loar 1982: 280-2; 1983: 629.

containing the description, `the man in the brown hat.' Those in the other set involve a different element that leads him occasionally to utter sentences containing the description, `the man seen at the beach.' The sets might cooperate on an utterance: Ralph sincerely says, "The man in the brown hat is a spy and the man seen at the beach is not." Even though both descriptions refer to the one man, there is nothing irrational or puzzling about Ralph's mental life for all the sorts of reasons Lycan indicates in discussing the Jones case. The elements associated with the two descriptions are syntactically distinct and play different functional roles.

This case concerns descriptions, but nothing changes when we move to a case concerning names. Jones has two sets of mental sentences involving syntactically distinct elements, one associated with `Cicero' and one with `Tully.' When they cooperate to produce, "Cicero was bald and Tully was not," this is no more a sign of irrationality than was Ralph's utterance about Ortcutt. Kripke's discovery that names, unlike descriptions, are rigid and connotationless, has nothing to do with this problem of apparent irrationality or its solution.

At the metaphysical level of beliefs, the representational view removes the problem of Jones' apparent irrationality. And by starting at this level, the problem at the semantic level - the apparent ascription of irrationality - is made to seem tractable. We know that the beliefs of Jones and Ralph are not irrational and why they are not. Two semantic questions remain. First, do we ordinarily describe beliefs in a way that is sensitive to our psychological interest in the subtleties we have noted - in particular, to the different modes by which Jones and Ralph each represent an entity - and that hence does not attribute irrationality to Jones and Ralph? How well do our belief ascriptions "match up" to this psychological reality? Second, whether they match well or badly, what is the correct semantic theory of them?

Concerning the first question, it is clear that our ascriptions match up to the reality well. We can describe Jones using the opaque (3) and Ralph using the opaque

(6) Ralph believes that the man in the brown hat is a spy and the man seen at the beach is not.

These ascriptions are sensitive to the mode differences which make a charge of irrationality inappropriate.

The semantics of belief ascriptions are notoriously difficult. 10

¹⁰ One difficulty is the threat that (3) and (6) pose for an otherwise plausible rule of "exportation" that licences an inference from the opaque form to the transparent. The threat is the same as the one that comes from falsely believing a negative identity; 1984a:

Nevertheless, the beginnings of an answer to the second question is also clear. We do not talk of propositions, possible worlds, and the like but rather, as Lycan points out, of the functional properties of representations. As a result, the semantics of singular terms in the complement sentences is built around the failure of substitutivity: different singular terms specify different functional properties even if the terms are co-referential. And once again, names pose no special problem. 11

Putting metaphysics first has not solved our semantic problems but it has removed the air of paradox. The air came from (4). The truth behind (4) is that Jones has two beliefs that, given a certain identity statement, cannot both be true. The case of Jones involved names, but that is of no significance. The case of Ralph, which involves descriptions, yields exactly the same truth: Ralph has two beliefs that, given a certain identity statement, cannot both be true. We have seen that this truth does not encourage any charge of irrationality and so does not support the likes of (4). Lycan's idea that (4) is supported by Kripke's theory of names reflects a lingering attachment to a semantics that talks of possible worlds, propositions, and the like. So much the worse for that attachment. The apparent puzzle is an artifact of the semantics.

III. Direct Reference

Criticism 5. The particular form of traditional semantics that suggests otherwise to Lycan is the popular direct reference view of names. In part this view involves the Nondescription theory: names do not abbreviate definite descriptions or otherwise express contingent properties of their referents. In part it involves the Rigid Designation theory: names refer to the same object in each possible world. I have no objection to these parts. However, the view usually involves also a stronger Millian, or `Fido'-Fido, theory: all there is to the meaning, semantics, information value, linguistic significance, etc., of a name is standing for its referent; a name is purely designative or denotative; it is just a tag; it merely labels. Lycan puts the theory this way: "the semantical function of a name

^{403 - 7.}

¹¹ We noted Lycan's view that (3) is ambiguous. Construed transparently, it uses the truth-conditional scheme of individuation and so ascribes a contradiction in the semantic sense. (6) is similarly ambiguous and can also be taken to ascribe a contradiction in the semantic sense. Names pose no special problem.

 $^{^{12}}$ This attachment invites criticism from the traditional perspective (e.g. Tomberlin 1988: 208-11). The more radical view that I am urging undermines these criticisms.

is simply to pick out its bearer" (p. 73n). ¹³ I have argued against the `Fido'-Fido theory at length elsewhere. ¹⁴

If we were to restrict ourselves to transparent contexts like

(7) Cicero is Tully

my differences with Lycan over names might seem merely verbal. 15 I have argued that the meaning of `Cicero' is its mode of presenting Cicero - a certain type of causal mechanism - because that mode is the property of the name that enables it to play its role in the explanation of behavior and as a guide to reality. And roles such as these are the phenomena that prompted semantic theory in the first place. Because of Nondescription and Rigid Designation, Lycan thinks that a name is "a semantically simple, unstructured individual constant at the level of logical form" (1985: 83). As such, all it can contribute to the truth condition of a sentence is its bearer. So that is its semantical function. Since we agree on Nondescription and Rigid Designation, there would be a substantive disagreement only if Lycan claimed that the semantical function of a name, understood in his truth-conditional way, was all that was needed for the meaning of a name, understood in my explanatory way; for example, that it was all that was needed to explain the role of `Cicero' in (7). If he does claim this, I have argued he is wrong: the same explanatory considerations that motivate talk of truth and reference in a semantic theory motivate talk of modes of reference. 16 If he does not, it is important to see that his remarks suggesting a Millian or `Fido'-Fido theory add nothing substantive to Nondescription and Rigid Designation and so leave us without a complete theory of meaning for names (in my sense).

¹³See also Boer and Lycan 1986: 128-9.

¹⁴¹⁹⁸⁹b. In that paper I pointed out that Kripke did not subscribe to the `Fido'-Fido theory - despite many suggestions in the literature to the contrary - and that there was no decisive evidence that Donnellan did either. A recent paper (in the same volume) shows that Donnellan does indeed believe `Fido'-Fido; 1989:275-6. He also seems to have the usual dismissive attitude of direct-reference theorists toward the idea - exemplified below and argued for in my 1989b - that the meaning of a name is a non-Fregean mode of presenting the object; 1989: 277.

 $^{^{15}}$ See Lycan's witty explanation of why disputes over the nature of meaning seem so intractable: it is because `meaning' in contemporary philosophy means "whatever aspect of linguistic activity happens to interest me now" of language (1984: 270-3).

¹⁶1989b. I think the slogan that should guide semantics is not "meaning is truth condition," but "meaning is mode of presenting truth condition."

Whatever the case with our differences over the transparent (7), I think that it is clear that our differences over the opaque (3) are substantive and not merely verbal. <u>Cicero' and Tully' make different functional roles relevant to the truth condition of (3).</u> Lycan must agree. So, how could the names possibly have the same semantical functions? They do not contribute only their bearers to truth conditions. Direct reference is wrong.

I think that the role of names in belief ascriptions shows decisively that there is more to the meaning, semantics, or whatever, of a name than its role of referring to its bearer (1989b: 224-6).

IV. The Real Kripke Puzzle

Lycan treats the Jones puzzle as if it were the same as the puzzle that Kripke emphasizes. At the metaphysical level, the two puzzles are indeed the same, but at the semantic level, they are quite different. 18

Kripke gives several versions of his puzzle. I shall treat the one that arises in one language, for that is the simplest.

Peter ... may learn the name `Paderewski' with an identification of the person named as a famous pianist. Naturally, having learned this, Peter will assent to `Paderewski had musical talent.' ... Later, in a different circle, Peter learns of someone called `Paderewski' who was a Polish nationalist leader and Prime Minister. Peter is skeptical of the musical abilities of politicians. ... Using `Paderewski' as a name for the statesman, Peter assents to, `Paderewski had no musical talent.' (1979: 265)

At the metaphysical level, Peter's situation is analogous to that of Jones and Ralph, and he is no more irrational than they. 19

¹⁷Crimmins and Perry (1989) are also attached to direct reference. Their approach is interestingly intermediate between the one I am urging and the one I am rejecting. On the one hand, they do attend to the mind and find "nothing particularly puzzling about any of the examples that [they] discuss, so long as we simply consider th beliefs and not the reporting of them" (p. 695). On the other hand, their view of semantics is a fairly traditional one that leads, in my view, to unnecessary problems.

¹⁸My discussion draws on a more thorough one in 1984a: 407-12. This paper criticizes Lycan for conflating the two puzzles (p. 418n). Lycan notes the criticism, though he wrongly places it in my 1984b, and promises a response (p. 72). He has not yet delivered.

¹⁹So, while there may be a puzzle about our ascriptions of beliefs

Peter's belief store, like theirs, includes two distinct sets of mental sentences. In each case the sentences in one set contain an element that leads occasionally to the utterance of a singular term, and the sentences in the other set contain a distinct element that also leads occasionally to the utterance of a singular term. There is a difference, of course. With Jones and Ralph the two elements lead to the utterance of singular terms that sound different - /Cicero/ and /Tully/, and /the man in the brown hat/ and /the man seen at the beach/, respectively - whereas with Peter the two elements lead to singular terms that <u>sound the same</u> - /Paderewski/. But this difference does not reflect on Peter's rationality any more than his having as many as thirty distinct elements in his beliefs all of which lead him to utter singular terms with the sound /John/. Syntactically distinct elements often lead to the utterance of the same name. Peter's beliefs about Paderewski are like Jones' beliefs about Cicero in that they involve distinct co-referential elements. beliefs about Paderewski are like his own beliefs about thirty different Johns in that they involve distinct elements that lead to the utterance of the same sound. There need be nothing irrational in Jones' beliefs about Cicero nor in Peter's beliefs about the various Johns. No more need there be anything irrational in Peter's beliefs about Paderewski.

Of course, Peter has made a mistake: he has failed to unify his beliefs where he should; he has two elements for Paderewski where he should have only one; his utterances of `Paderewski' differ in their speaker meanings as a result of coming from different elements, but they have only one conventional meaning because they both participate in the single convention to use `Paderewski' to refer to a particular well-known person. We all run the risk of making a mistake like Peter's all the time.²⁰ For reference is not determined by what is in the head, even the reference of elements that lead to utterances that sound the same. Co-reference is always something we have to discover by examining the world.

to Peter, there is no puzzle about his beliefs; cf. Kripke's title, "A Puzzle About Belief," and Donnellan 1989.

²⁰My appeal to speaker meanings does not involve any idea that these are independent of contextual factors. So it is not open to Owens' criticism - in a recent discussion of Kripke's puzzle - that such appeals are "Cartesian" (1989: 298-9).

We run the risk of a worse mistake than Peter's too. He has failed to unify beliefs where he should. A person may unify beliefs where she should not; she has one element where she should have two; her utterances have one speaker meaning but participate in two conventions at once. This mistake arises when a person treats tokens of what are semantically two names as if they were of one; for example, tokens of `John' referring to two people. This mistake leads to indeterminacy of reference; see my 1981: 138-52.

Criticism 6. Lycan thinks that Peter's case is like the earlier ones. Metaphysically, it is, and it is just as unpuzzling. However, the cases are semantically quite different. Whereas we do have simple ways of ascribing beliefs that capture the subtleties of Jones' situation and Ralph's situation, we do not have one that captures the subtleties of Peter's. Our ordinary ascriptions are not sensitive to the relevant difference in modes. The following seem to ascribe contradictory beliefs to Peter:

- (8) Peter believes that Paderewski had musical talent.
 - (9) Peter believes that Paderewski had no musical talent.

A case can be made for the truth of both (8) and (9), and also a case for their falsity. ²¹ Perhaps the best view is that they are not determinately one or the other. What is clear is that these sentences do not match reality well enough to meet the needs of narrow psychology. Our ordinary opaque scheme of classification is distant from the functional scheme we need here.

The source of the problem has already been indicated. `Paderewski' in our mouths has just one conventional meaning and so is inadequate to capture a psychological reality that consists of two elements, with distinct syntactic roles, leading to utterances of `Paderewski.' As a result, we can capture that reality only by using a nonstandard, contrived, form of ascription; for example

- (10) Peter believes that Paderewski, <u>qua</u> pianist, had musical talent.
- (11) Peter believes that Paderewski, <u>qua</u> politician, had no musical talent.

In sum, Kripke's puzzle shows (i) that our simple forms of ascription may lack determinate truth value in cases like Peter's; (ii) that those forms are inadequate for such cases.

How bothered should we be by this? Not very. Concerning (i), this would be a not-very-surprising addition to other indeterminacies that we have discovered in language. Concerning (ii), tokens of anything can be classified into types in many ways for which we have no simple expression. Often this is because we have insufficient interest in the classification. Thus we, unlike the Eskimos, do not have single words for the many different kinds of snow. We have words

²¹I leaned toward the case for their falsity in my 1984a: 409-11. However, Soames has rightly pointed out that when we consider analogues of (8) and (9) involving `says that' the case for their truth looks strong; 1987: 62.

for female dogs, horses, and pigs, but not for female echidnas. In the absence of a simple expression, we get by well enough with a complex one. Peter's case shows that there is a way of classifying belief tokens for which we have no simple expression. This lack seems adequately explained by our lack of interest: we encounter such cases sufficiently rarely to be content to get by with the more complex expressions of (10) and (11). Even the absence of an adequate explanation should not be too alarming. After all, what is the explanation of our lack of a single word for female cats?

Kripke has posed an interesting semantic problem but, from the metaphysical perspective of the representational theory of the mind, the problem is not particularly puzzling.

V. The Richard Puzzle

Kripke's puzzle brings out dramatically a difference between our ordinary opaque scheme and the functional scheme we need for narrow psychology. A nice case due to Mark Richard, not discussed by Lycan, does so also.

A ... both sees a woman, across the street, in a phone booth, and is speaking to a woman through a phone. He does not realize that the woman to whom he is speaking - B, to give her a name - is the woman he sees. He perceives her to be in some danger - a run-away steamroller, say, is bearing down upon her phone booth. A waves at the woman; he says nothing into the phone. (1983: 439)

This case is capable of generating a number of puzzles about belief ascriptions. I shall be concerned with one that is analogous to our two earlier puzzles.

Suppose that \underline{C} is with \underline{B} in the phone booth and observes \underline{A} waving. He says to \underline{B} ,

(12) That man waving believes that you are in danger.

At the same time, on the basis of information supplied to him by B, he would be prepared to say to her,

- (13) The man on the telephone believes that you are not in danger.
- (12) and (13) seem to ascribe contradictory beliefs to \underline{A} just as (8) and (9) did to Peter. A case can be made for their truth and a case for their falsity. What is clear is that our ordinary opaque form of ascription fails to match up to the subtleties of \underline{A} 's situation just as it failed with Peter's.

At the metaphysical level, there is no puzzle on the

representational view. \underline{A} has two beliefs stored. One he has formed on the basis of his perception of \underline{B} in the phone booth, which he would express, "She is in danger." The other he has formed on the basis of his conversation with B, which he would express, "You are not in danger." The singular element in these beliefs are syntactically quite distinct and play different functional roles. So \underline{A} is no more irrational than were Jones, Ralph, and Peter.

The apparent puzzle comes from our ordinary opaque way of informing a person we are addressing of beliefs that someone has about her.

(14) X believes that you are F,

construed opaquely, requires that \underline{X} have a demonstrative belief about the person addressed, but it does not require that the belief be under any particular demonstrative; thus the belief might be associated with `she' or `you.' Any such demonstrative belief would, in normal circumstances (the absence of a "competing" negative belief) make (14) true, and yet beliefs of this sort differ in functional roles in ways relevant to explaining behavior. Our difficulty in describing \underline{A} brings this out dramatically. We get around the difficulty by resorting to nonstandard ascriptions analogous to (10) and (11).

By starting with the representational view of the mind we have, once again, made a problem about belief ascription seem unpuzzling.

VI. The Castaneda Puzzle

Hector Castaneda (1966, 1967) produced a puzzle that concerns what Lycan calls "self-regarding" beliefs. Lycan describes the following case.

Suppose Smith believes that that man he is ostending is about to be pounced on by a crazed, homicidal puma, but unbeknownst to Smith the man he is ostending is again himself reflected in a mirror. He will proceed on his way, unconcerned about his own safety, until he turns and sees the puma in the flesh and thereby suddenly acquires the belief tht he himself is about to be pounced on, which change of belief will prompt an immediate and striking change in behavior. (p. 85)

Lycan mentions two worries that this has occasioned. First, we seem unable to <u>express</u> the belief that changed Smith's behavior. He would express it using `I am in danger,' but if we used that sentence we would not be expressing Smith's belief. The content of that belief is mysterious and inaccessible. Second, what does the <u>change</u> in belief consist in?

Smith already believed that that man he was ostending was about to be pounced on: he already believed what Kaplan (1975) calls the

"singular proposition" <Smith, x(x) is about to be pounced on)>. So what he comes to believe upon seeing the puma in the flesh is not that proposition. Yet what he does come to believe, that he himself is about to be pounced on, has exactly the same truth-conditon as that singular proposition and is true in just the same possible worlds. (p. 85)

There is no puzzle at the metaphysical level. Smith's initial belief involved an element that leads to sentences containing `that man' and his later belief involved an element that leads to sentences containing `I'. These two singular elements play very different functional roles, as this story vividly illustrates. The change in Smith's belief consisted in his moving from the one belief to the other. Our inability to express Smith's self-regarding belief is unsurprising. The identity of that belief involves both the functional role and reference of Smith's mental `I'. It is obvious that both role and reference cannot be duplicated in another person.

At the semantic level, we are concerned about how well our ordinary ascriptions match up to this psychological reality. We have detected rather a poor match in the case of \underline{A} because we do not have a simple way of distinguishing beliefs associated with `you' from ones associated with `she'. Smith's case draws our attention to the very special interest we have in beliefs associated with `I'. Given that interest, we might expect that we would have a way of distinguishing these from others, including those associated with `that man'. Castaneda showed that we do. We describe Smith's initial state:

(15) Smith believes that that man is in danger.

We describe his later state:

- (16) Smith believes that he himself is in danger.
- (15) requires that Smith have a belief that he would express using a term that demonstrates himself (e.g. `that man'). (16) requires that he have a belief that he would express using `I'. We have captured his change of belief. Our ordinary ascriptions match up well to the psychological reality in this case.

These remarks are very much in the spirit of Lycan's discussion (pp. 85-7). He would want to add that ascriptions like (16) use

²²They also draw on my discussion in 1984a: 397-400. The remarks are not, however, in the spirit of Lycan's earlier discussion (Boer and Lycan 1980), which assigned the same truth condition to (15) and (16). He still thinks that that is one way of interpreting them. An example of Sosa's (1970: 893) inclines me to think so too (1981: 262-3). We are now in agreement that they also have the interpretations discussed above.

the functional scheme of individuation. I have earlier rejected the view that ordinary ascriptions do use that scheme (criticism 1). However, here I would agree with him: ascriptions like (16) are an exception to my rejection. My main reason for the rejection was that ordinary ascriptions always make reference relevant to individuation. This applies to (16) too, but because of the peculiar way in which the reference of an self-regarding belief is determined - it is determined by the head it is in - (16) individuates beliefs exactly as they need to be individuated for narrow psychology.

Criticism 7. I have a minor difference with Lycan over the Smith case. His approach to Castaneda's puzzle, starting from the representational theory of beliefs, shows that there is nothing especially puzzling about self-regarding beliefs or our ascription of them. But Lycan does not emphasize that the idea that there is something puzzling - exemplified in the two worries he mentions - arises from trying to force these ascriptions into the mould of traditional semantics with its focus on propositions, possible worlds, and the like.

VII. Conclusion

Lycan approaches the semantics of belief ascription from the perspective of a representational theory of the mind. I think that this is both right and important. I have made some criticisms of the details of his discussion. I have urged him to go further in bringing out the radical consequences of this approach for traditional semantics. In particular, I have emphasized that the approach makes many much-discussed problems seem routine rather than puzzling.²³

University of Maryland, College Park

REFERENCES

- Asquith, P. D., and T. Nickles, eds. 1983. <u>PSA 1982</u>, Volume 2. East Lancing, Michigan: Philosophy of Science Association.
- Boer, Stephen, and William G. Lycan. 1975. "Knowing Who." Philosophical Studies 28: 299-34.
- ---. 1980. "Who Me?" Philosophical Review 89: 427-66.
- ---. 1986. Knowing Who. Cambridge, Mass.: MIT Press.
- Castaneda, H.-N. 1966. "He*: A Study in the Logic of Self-Consciousness." Ratio 8: 130-57.

 $^{^{23}\,\}mathrm{I}$ am indebted to Bill Lycan for comments that have led to improvements.

- ---. 1967. "Indicatiors and Quasi-Indicators." <u>American</u> Philosophical Quarterly 4: 1-16.
- Crimmins, Mark, and John Perry. 1989. <u>Journal of Philosophy</u> 86: 685-711.
- Dennett, D. C. 19... The Philosophical Lexicon. ...
- Devitt, Michael. 1981. <u>Designation</u>. New York: Columbia University Press.
- ---. 1984a. "Thoughts and their Ascription". In French, Uehling, and Wettstein 1984: 385-420.
- ---. 1984b. Realism and Truth. Oxford: Basil Blackwell.
- ---. 1989a. "A Narrow Representational Theory of the Mind." In Rerepresentation: Readings in the Philosophy of Psychological Representation, edited by Stuart Silvers. Dordrecht: Kluwer Academic Publishers: 369-402. Reprinted in Mind and Cognition: A Reader, edited by William G. Lycan. Oxford: Basil Blackwell.
- ---. 1989b. "Against Direct Reference." In French, Uehling, and Wettstein 1989: 206-40.
- ---. 1990. "Why Fodor Can't Have it Both Ways". In Meaning in Mind:
 Fodor and his Critics, edited by Barry Loewer and Georges Rey.
 Oxford: Basil Blackwell.
- ---. Forthcoming a. "Meaning Localism."
- ---. Forthcoming b. "Holism, Analyticity, and Revisability."
- Donnellan, Keith S. 1989. "Belief and the Identity of Reference." In French, Uehling, and Wettstein 1989: 275-88.
- Fodor, Jerry A. 1980. "Methodological Solipsism Considered as a Research Strategy in Cognitive Psychology". <u>Behavioral and Brain Sciences 3: 63-73.</u>
- French, Peter A., Theodore E. Uehling Jr., and Howard K. Wettstein, eds. 1984. Midwest Studies in Philosophy, Volume IX: Causation and Causal Theories. Minneapolis: University of Minnesota Press.
- ---, eds. 1989. <u>Midwest Studies in Philosophy, Volume XIV:</u>
 Contemporary Perspectives in the Philosophy of Language II.
 Notre Dame: University of Notre Dame.
- Kaplan, David. 1975. "How to Russell a Frege-Church."

- Philosophical Studies 72: 716-29.
- Kripke, Saul A. 1979. "A Puzzle About Belief." In Meaning and Use, edited by A. Margalit. Dordrecht: Reidel.
- Levin, Janet. 1988. "Must Reasons Be Rational?" Philosophy of Science 55: 199-217.
- Loar, Brian. 1982. "Conceptual Role and Truth-Conditions". <u>Notre</u>

 <u>Dame Journal of Formal Logic</u> 23: 272-83.
- ---. 1983. "Must Beliefs be Sentences?". In Asquith and Nickles 1983: 627-43.
- Lycan, William G. 1981. "Toward a Homuncular Theory of Believing".

 <u>Cognition and Brain Theory</u> 4: 139-59.
- ---. 1984. <u>Logical Form in Natural Language</u>. Cambridge, Mass.: MIT Press.
- ---. 1985. "The Paradox of Naming." In <u>Analytical Philosophy in Comparative Perspective</u>, edited by B. K. Matilal and J. L. Shaw. Dordrecht: D. Reidel: 81-102.
- ---. 1988. <u>Judgement and Justification</u>. Cambridge: Cambridge University Press.
- McGinn, Colin. 1982. "The Structure of Content." In Woodfield 1982: 207-58.
- Owens, Joseph I. 1989. "Contradictory Belief and Cognitive Access." In French, Uehling, and Wettstein 1989: 289-316.
- Quine, W. V. O. 1966. The Ways of Paradox and Other Essays. New York: Random House.
- Richard, Mark. 1983. "Direct Reference and Ascriptions of Belief."

 Journal of Philosophical Logic 12: 426-52.
- Soames, Scott. 1987. "Direct Reference, Propositional Attitudes, and Semantic Content." Philosophical Topics 15: 47-87.
- Sosa, Ernest. 1970. "Propositional Attitudes <u>de Dictu</u> and <u>de Re</u>." Journal of Philosophy 67: 883-96.
- Tomberlin, James E. 1988. "Semantics, Psychological Attitudes, and Conceptual Role." <u>Philosophical Studies</u> 53: 205-26.
- Woodfield, A., ed. 1982. <u>Thought and Object</u>. Oxford: Clarendon Press.