

Mann, would identify each as 'a leading contemporary theoretical physicist'. Such people do not assign 'senses' of the usual type to the names that uniquely identify the referent (even though they use the names with a determinate reference). But to the extent that the *indefinite* descriptions attached or associated can be called 'senses', the 'senses' assigned to 'Cicero' and 'Tully', or to 'Feynman' and 'Gell-Mann', are identical.¹⁷ Yet clearly speakers of this type can ask, "Were Cicero and Tully one Roman orator, or two different ones?" or "Are Feynman and Gell-Mann two different physicists, or one?" without knowing the answer to either question by inspecting 'senses' alone. Some such speaker might even conjecture, or be under the vague false impression, that, as he would say, 'Cicero was bald but Tully was not'. The premise of the argument we are considering for the classic position of Frege and Russell—that whenever two codegnative names fail to be interchangeable in the expression of a speaker's beliefs, failure of interchangeability arises from a difference in the 'defining' descriptions the speaker associates with these names—is, therefore, false. The case illustrated by 'Cicero' and 'Tully' is, in fact, quite usual and ordinary. So the apparent failure of codegnative names to be everywhere interchangeable in belief contexts, is not to be explained by differences in the 'senses' of these names.

Since the extreme view of Frege and Russell does not in fact explain the apparent failure of the interchangeability of names in belief contexts, there seems to be no further reason—for present purposes—not to give the other overwhelming prima facie considerations against the Frege-Russell view their full weight. Names of famous cities, countries, persons, and planets are the common currency of our common language, not terms used homonymously in our separate idiolects.¹⁸ The apparent failure of codegnative names to be interchangeable in belief contexts remains a mystery, but the mystery no longer seems so clearly to argue for a Fregean view as against a Millian one. Neither differing public senses nor differing private senses peculiar to each speaker account for the phenomena to be explained. So the apparent

existence of such phenomena no longer gives a prima facie argument for such differing senses.

One final remark to close this section. I have referred before to my own earlier views in "Naming and Necessity." I said above that these views, inasmuch as they make proper names rigid and transparent¹⁹ in modal contexts, favor Mill, but that the concession that proper names are not transparent in belief contexts appears to favor Frege. On a closer examination, however, the extent to which these opacity phenomena really support Frege against Mill becomes much more doubtful. And there are important theoretical reasons for viewing the "Naming and Necessity" approach in a Millian light. In that work I argued that ordinarily the real determinant of the reference of names of a former historical figure is a chain of communication, in which the reference of the name is passed from link to link. Now the legitimacy of such a chain accords much more with Millian views than with alternatives. For the view supposes that a learner acquires a name from the community by determining to use it with the same reference as does the community. We regard such a learner as using 'Cicero is bald' to express the same thing the community expresses, regardless of variations in the properties different learners associate with 'Cicero', as long as he determines that he will use the name with the referent current in the community. That a name can be transmitted in this way accords nicely with a Millian picture, according to which only the reference, not more specific properties associated with the name, is relevant to the semantics of sentences containing it. It has been suggested that the chain of communication, which on the present picture determines the reference, might thereby itself be called a 'sense'. Perhaps so—if we wish²⁰—but we should not thereby forget that the legitimacy of such a chain suggests that it is just preservation of reference, as Mill thought, that we regard as necessary for correct language learning.²¹ (This contrasts with such terms as 'tenate' and 'cordate', where more than learning the correct extension is needed.) Also, as suggested above, the doctrine of rigidity in modal contexts is dissonant, though not necessarily inconsistent, with a view that invokes

English, we mean that he uses all words in the sentence in a standard way, combines them according to the appropriate syntax, etc.: in short, he uses the sentence to mean what a normal speaker should mean by it. The 'words' of the sentence may include proper names, where these are part of the common discourse of the community, so that we can speak of using them in a standard way. For example, if the sentence is "London is pretty," then the speaker should satisfy normal criteria for using 'London' as a name of London, and for using 'is pretty' to attribute an appropriate degree of pulchritude.

The qualification "on reflection" guards against the possibility that a speaker may, through careless inattention to the meaning of his words or other momentary conceptual or linguistic confusion, assert something he does not really mean, or assent to a sentence in linguistic error. "Sincerely" is meant to exclude mendacity, acting, irony, and the like. I fear that even with all this it is possible that some astute reader—such, after all, is the way of philosophy—may discover a qualification I have overlooked, without which the asserted principle is subject to counterexample. I doubt, however, that any such modification will affect any of the uses of the principle to be considered below. Taken in its obvious intent, after all, the principle appears to be a self-evident truth. (A similar principle holds for sincere affirmation or assertion in place of assent.)

There is also a strengthened 'biconditional' form of the disquotational principle, where once again any appropriate English sentence may replace 'p' throughout: *A normal English speaker who is not reticent will be disposed to sincerely reflectively assent to 'p' if and only if he believes that p*.²³ The biconditional form strengthens the simple one by adding that failure to assent indicates lack of belief, as assent indicates belief. The qualification about reticence is meant to take account of the fact that a speaker may fail to avow his beliefs because of shyness, a desire for secrecy, to avoid offense, etc. (An alternative formulation would give the speaker a sign to indicate lack of belief—not necessarily disbelief—in the assertion pronounced, in addition to his sign of assent.)

anti-Millian considerations to explain propositional attitude contexts.

The spirit of my earlier views, then, suggests that a Millian line should be maintained as far as is feasible.

II. PRELIMINARIES: SOME GENERAL PRINCIPLES

Where are we now? We seem to be in something of a quandary. On the one hand, we concluded that the failure of 'Cicero' and 'Tully' to be interchangeable *salva veritate* in contexts of propositional attitude was by no means explicable in terms of different 'senses' of the two names. On the other hand, let us not forget the initial argument against Mill: if reference is *all there is* to naming, what semantic difference can there be between 'Cicero' and 'Tully'? And if there is no semantic difference, do not 'Cicero was bald' and 'Tully was bald' express exactly the same proposition? How, then, can anyone believe that Cicero was bald, yet doubt or disbelieve that Tully was?

Let us take stock. Why do we think that anyone can believe that Cicero was bald, but fail to believe that Tully was? Or believe, without any logical inconsistency, that Yale is a fine university, but that Old Eli is an inferior one? Well, a normal English speaker, Jones, can sincerely assent to 'Cicero was bald' but not to 'Tully was bald'. And this even though Jones uses 'Cicero' and 'Tully' in standard ways—he uses 'Cicero' in this assertion as a name for the Roman, not, say, for his dog, or for a German spy.

Let us make explicit the *disquotational principle* presupposed here, connecting sincere assent and belief. It can be stated as follows, where 'p' is to be replaced, inside and outside all quotation marks, by any appropriate standard English sentence: "If a normal English speaker, on reflection, sincerely assents to 'p'; then he believes that p." The sentence replacing 'p' is to lack indexical or pronominal devices or ambiguities, that would ruin the intuitive sense of the principle (e.g., if he assents to "You are wonderful," he need not believe that you—the reader—are wonderful).²² When we suppose that we are dealing with a normal speaker of

Maybe again the formulation needs further tightening, but the intent is clear.

Usually below the simple disquotational principle will be sufficient for our purposes, but once we will also invoke the strengthened form. The simple form can often be used as a test for disbelief, provided the subject is a speaker with the modicum of logicity needed so that, at least after appropriate reflection, he does not hold simultaneously beliefs that are straightforward contradictions of each other—of the forms 'p' and '¬p'.²⁴ (Nothing in such a requirement prevents him from holding simultaneous beliefs that jointly entail a contradiction.) In this case (where 'p' may be replaced by any appropriate English sentence), the speaker's assent to the negation of 'p' indicates not only his disbelief that p but also his failure to believe that p, using only the simple (unstrengthened) disquotational principle.

So far our principle applies only to speakers of English. It allows us to infer, from Peter's sincere reflective assent to "God exists," that he believes that God exists. But of course we ordinarily allow ourselves to draw conclusions, stated in English, about the beliefs of speakers of any language; we infer that Pierre believes that God exists from his sincere reflective assent to "Dieu existe." There are several ways to do this, given conventional translations of French into English. We choose the following route. We have stated the disquotational principle in English, for English sentences; an analogous principle, stated in French (German, etc.) will be assumed to hold for French (German, etc.) sentences. Finally, we assume the *principle of translation*: if a sentence of one language expresses a truth in that language, then any translation of it into any other language also expresses a truth (in that other language). Some of our ordinary practice of translation may violate this principle; this happens when the translator's aim is not to preserve the content of the sentence, but to serve in some other sense—the same purposes in the home language as the original utterance served in the foreign language.²⁵ But if the translation of a sentence is to mean the same as the sentence translated, preservation of truth-value is a minimal condition that must be observed.

Granted the disquotational principle ex-

pressed in each language, reasoning starting from Pierre's assent to 'Dieu existe' continues thus. First, on the basis of his utterance and the French disquotational principle we infer (in French):

Pierre croit que Dieu existe.

From this we deduce,²⁶ using the principle of translation:

Pierre believes that God exists.

In this way we can apply the disquotational technique to all languages.

Even if I apply the disquotational technique to English alone, there is a sense in which I can be regarded as tacitly invoking a principle of translation. For presumably I apply it to speakers of the language other than myself. As Quine has pointed out, to regard others as speaking the same language as I is in a sense tacitly to assume a homophonic translation of their language into my own. So when I infer from Peter's sincere assent to or affirmation of "God exists" that he believes that God exists, it is arguable that, strictly speaking, I combine the disquotational principle (for Peter's idiolect) with the principle of (homophonic) translation (of Peter's idiolect into mine). But for most purposes, we can formulate the disquotational principle for a single language, English, tacitly supposed to be the common language of English speakers. Only when the possibility of individual differences of dialect is relevant need we view the matter more elaborately.

Let us return from these abstractions to our main theme. Since a normal speaker—normal even in his use of 'Cicero' and 'Tully' at names—can give sincere and reflective assent to "Cicero was bald" and simultaneously to "Tully was not bald," the disquotational principle implies that he believes that Cicero was bald and believes that Tully was not bald. Since it seems that he need not have contradictory beliefs (even if he is a brilliant logician, he need not be able to deduce that at least one of his beliefs must be in error), and since a substitutivity principle for coreferential proper names in belief contexts would imply that he does have contradictory beliefs, it would seem that such a substitutivity principle must be incorrect.

Indeed, the argument appears to be a reductio ad absurdum of the substitutivity principle in question.

The relation of this argument against substitutivity to the classical position of Russell and Frege is a curious one. As we have seen, the argument can be used to give prima facie support for the Frege-Russell view, and I think many philosophers have regarded it as such support. But in fact this very argument, which has been used to support Frege and Russell, cannot be stated in a straightforward fashion if Frege and Russell are right. For suppose Jones asserts, "Cicero was bald, but Tully was not." If Frege and Russell are right, I cannot deduce, using the disquotational principle:

- (1) Jones believes that Cicero was bald but Tully was not.

since, in general, Jones and I will not, strictly speaking, share a common idiolect unless we assign the same 'senses' to all names. Nor can I combine disquotational and translation to the appropriate effect, since homophonic translation of Jones's sentence into mine will in general be incorrect for the same reason. Since in fact I make no special distinction in sense between 'Cicero' and 'Tully'—to me, and probably to you as well, these are interchangeable names for the same man—and since according to Frege and Russell, Jones's very affirmation of (1) shows that for him there is some distinction of sense, Jones must therefore, on Frege-Russellian views, use one of these names differently from me, and homophonic translation is illegitimate. Hence, if Frege and Russell are right, we cannot use this example in the usual straightforward way to conclude that proper names are not substitutable in belief contexts—even though the example, and the ensuing negative verdict on substitutivity, has often been thought to support Frege and Russell!

Even according to the Frege-Russellian view, however, Jones can conclude, using the disquotational principle, and expressing his conclusion in his own idiolect:

- (2) I believe that Cicero was bald but Tully was not.

I cannot endorse this conclusion in Jones's own

words, since I do not share Jones's idiolect. I can of course conclude, "(2) expresses a truth in Jones's idiolect." I can also, if I find out the two 'senses' Jones assigns to 'Cicero' and 'Tully,' introduce two names 'X' and 'Y' into my own language with these same two senses ('Cicero' and 'Tully' have already been preempted) and conclude:

- (3) Jones believes that X was bald and Y was not.

All this is enough so that we can still conclude, on the Frege-Russellian view, that codesignative names are not interchangeable in belief contexts. Indeed this can be shown more simply on this view, since codesignative descriptions plainly are not interchangeable in these contexts and for Frege and Russell names, being essentially abbreviated descriptions, cannot differ in this respect. Nevertheless, the simple argument, apparently free of such special Frege-Russellian doctrinal premises (and often used to support these premises), in fact cannot go through if Frege and Russell are right.

However, if, *pace* Frege and Russell, widely used names are common currency of our language, then there no longer is any problem for the simple argument, using the disquotational principle, to (2). So, it appears, on pain of convicting Jones of inconsistent beliefs—surely an unjust verdict—we must not hold a substitutivity principle for names in belief contexts. If we used the strengthened disquotational principle, we could invoke Jones's presumed lack of any tendency to assent to 'Tully was bald' to conclude that he does not believe (lacks the belief) that Tully was bald. Now the refutation of the substitutivity principle is even stronger, for when applied to the conclusion that Jones believes that Cicero was bald but does not believe that Tully was bald, it would lead to a straightforward contradiction. The contradiction would no longer be in Jones's beliefs but in our own.

This reasoning, I think, has been widely accepted as proof that codesignative proper names are not interchangeable in belief contexts. Usually the reasoning is left tacit, and it may well be thought that I have made heavy weather of an obvious conclusion. I wish, however, to

Frege/Russell can't
can get the puzzle going

question the reasoning. I shall do so without challenging any particular step of the argument. Rather I shall present—and this will form the core of the present paper—an argument for a paradox about names in belief contexts that invokes *no* principle of substitutivity. Instead it will be based on the principles—apparently so obvious that their use in these arguments is ordinarily tacit—of disquotation and translation.

Usually the argument will involve more than one language, so that the principle of translation and our conventional manual of translation must be invoked. We will also give an example, however, to show that a form of the paradox may result within English alone, so that the only principle invoked is that of disquotation (or, perhaps, disquotation plus *homophonic* translation). It will intuitively be fairly clear, in these cases, that the situation of the subject is "essentially the same" as that of Jones with respect to 'Cicero' and 'Tully'. Moreover, the paradoxical conclusions about the subject will parallel those drawn about Jones on the basis of the substitutivity principle, and the arguments will parallel those regarding Jones. Only in these cases, no special substitutivity principle is invoked.

The usual use of Jones's case as a counterexample to the substitutivity principle is, thus, I think, somewhat analogous to the following sort of procedure. Someone wishes to give a reduction ad absurdum argument against a hypothesis in topology. He does succeed in refuting this hypothesis, but his derivation of an absurdity from the hypothesis makes essential use of the unrestricted comprehension schema in set theory, which he regards as self-evident. (In particular, the class of all classes, not members of themselves plays a key role in his argument.) ★ Once we know that the unrestricted comprehension schema and the Russell class lead to contradiction by themselves, it is clear that it was an error to blame the earlier contradiction on the topological hypothesis.

The situation would have been the same if, after deducing a contradiction from the topological hypothesis plus the 'obvious' unrestricted comprehension schema, it was found that a similar contradiction followed if we replaced the topological hypothesis by an apparently 'obvious' premise. In both cases it would be clear

that, even though we may still not be confident of any specific flaw in the argument against the topological hypothesis, blaming the contradiction on that hypothesis is illegitimate: rather we are in a 'paradoxical' area where it is unclear what has gone wrong.²⁷

It is my suggestion, then, that the situation with respect to the interchangeability of codesignative names is similar. True, such a principle, when combined with our normal disquotational judgments of belief, leads to straightforward absurdities. But we will see that the 'same' absurdities can be derived by replacing the interchangeability principle by our normal practices of translation and disquotation, or even by disquotation alone.

The particular principle stated here gives just one particular way of 'formalizing' our normal inferences from explicit affirmation or assent to belief; other ways of doing it are possible. It is undeniable that we *do* infer, from a normal Englishman's sincere affirmation of 'God exists' or 'London is pretty', that he believes, respectively, that God exists or that London is pretty; and that we would make the same inferences from a Frenchman's affirmation of '*Dieu existe*' or '*Londres est jolie*'. Any principles that would justify such inferences are sufficient for the next section. It will be clear that the particular principles stated in the present section are sufficient, but in the next section the problem will be presented informally in terms of our inferences from foreign or domestic assertion to belief.

III. THE PUZZLE

Here, finally(!), is the puzzle. Suppose Pierre is a normal French speaker who lives in France and speaks not a word of English or of any other language except French. Of course he has heard of that famous distant city, London (which he of course calls '*Londres*'), though he himself has never left France. On the basis of what he has heard of London, he is inclined to think that it is pretty. So he says, in French, '*Londres est jolie*'.

On the basis of his sincere French utterance, we will conclude:

- (4) Pierre believes that London is pretty.

A PUZZLE ABOUT BELIEF

I am supposing that Pierre satisfies all criteria for being a normal French speaker, in particular, that he satisfies whatever criteria we usually use to judge that a Frenchman (correctly) uses '*est jolie*' to attribute pulchritude and uses '*Londres*'—standardly—as a name of London.

Later, Pierre, through fortunate or unfortunate vicissitudes, moves to England, in fact to London itself, though to an unattractive part of the city with fairly uneducated inhabitants. He, like most of his neighbors, rarely ever leaves this part of the city. None of his neighbors know any French, so he must learn English by 'direct method', without using any translation of English into French, by talking and mixing with the people he eventually begins to pick up English. In particular, everyone speaks of the city, 'London', where they all live. Let us suppose for the moment—though we will see below that this is not crucial—that the local population are so uneducated that they know few of the facts that Pierre heard about London in France. Pierre learns from them everything they know about London, but there is little overlap with what he heard before. He learns, of course—speaking English—to call the city he lives in 'London'. Pierre's surroundings are, as I said, unattractive, and he is unimpressed with most of the rest of what he happens to see. So he is inclined to assent to the English sentence:

- (5) London is not pretty.

He has *no* inclination to assent to:

- (6) London is pretty.

Of course he does not for a moment withdraw his assent from the French sentence, '*Londres est jolie*'; he merely takes it for granted that the ugly city in which he is now stuck is distinct from the enchanting city he heard about in France. But he has no inclination to change his mind for a moment about the city he stills calls 'Londres'.

This, then, is the puzzle. If we consider Pierre's past background as a French speaker, his entire linguistic behavior, on the same basis as we would draw such a conclusion about many of his countrymen, supports the conclusion (4) above that he believes that London is pretty. On the other hand, after Pierre lived in

London for some time, he did not differ from his neighbors—his French background aside—either in his knowledge of English or in his command of the relevant facts of local geography. His English vocabulary differs little from that of his neighbors. He, like them, rarely ventures from the dismal quarter of the city in which they all live. He, like them, knows that the city he lives in is called 'London' and knows a few other facts. Now Pierre's neighbors would surely be said to use 'London' as a name for London and to speak English. Since, as an English speaker, he does not differ at all from them, we should say the same of him. But then, on the basis of his sincere assent to (5), we should conclude:

- (7) Pierre believes that London is not pretty.

How can we describe this situation? It seems undeniable that Pierre *once* believed that London is pretty—at least before he learned English. For at that time, he differed not at all from countless numbers of his countrymen, and we would have exactly the same grounds to say of him as of any of them that he believes that London is pretty: if any Frenchman who was both ignorant of English and never visited London believed that London is pretty, Pierre did. Nor does it have any plausibility to suppose, because of his later situation *after* he learns English, that Pierre should *retroactively* be judged *never* to have believed that London is pretty. To allow such ex post facto legislation would, as long as the future is uncertain, endanger our attributions of belief to *all* monolingual Frenchmen. We would be forced to say that Marie, a monolingual who firmly and sincerely asserts, '*Londres est jolie*,' may or may not believe that London is pretty depending on the later vicissitudes of her career (if later she learns English and). No: Pierre, like Marie, believed that London is pretty when he was monolingual.

△ Should we say that Pierre, now that he lives in London and speaks English, no longer believes that 'London is pretty'? Well, unquestionably Pierre *once* believed that London is pretty. So we would be forced to say that Pierre has *changed his mind*, has *given up his previous belief*. But has he really done so? Pierre is very

set in his ways. He reiterates, with vigor, every assertion he has ever made in French. He says he has not changed his mind about anything, has not given up any belief. Can we say he is wrong about this? If we did not have the story of his living in London and his English utterances, on the basis of his normal command of French we would be forced to conclude that he still believes that London is pretty. And it does seem that this is correct. Pierre has neither changed his mind nor given up any belief he had in France.

Similar difficulties beset any attempt to deny him his new belief. His French past aside, he is just like his friends in London. Anyone else, growing up in London with the same knowledge and beliefs that he expresses in England, we would undoubtedly judge to believe that London is not pretty. Can Pierre's French past nullify such a judgment? Can we say that Pierre, because of his French past, does not believe that (5)? Suppose an electric shock wiped out all his memories of the French language, what he learned in France, and his French past. He would then be exactly like his neighbors in London. He would have the same knowledge, beliefs, and linguistic capacities. We then presumably would be forced to say that Pierre believes that London is ugly if we say it of his neighbors. But surely no shock that *destroys* part of Pierre's memories and knowledge can give him a new belief. If Pierre believes (5) after the shock, he believed it before, despite his French language and background.

If we would deny Pierre, in his bilingual stage, his belief that London is pretty and his belief that London is not pretty, we combine the difficulties of both previous options. We still would be forced to judge that Pierre once believed that London is pretty but does no longer, in spite of Pierre's own sincere denial that he has lost any belief. We also must worry whether Pierre would gain the belief that London is not pretty if he totally forgot his French past. The option does not seem very satisfactory.

So now it seems that we must respect both Pierre's French utterances and their English counterparts. So we must say that Pierre has contradictory beliefs, that he believes that London is pretty and he believes that London is not

pretty. But there seem to be insuperable difficulties with this alternative as well. We may suppose that Pierre, in spite of the unfortunate situation in which he now finds himself, is a leading philosopher and logician. He would never let contradictory beliefs pass. And surely anyone, leading logician or no, is in principle in a position to notice and correct contradictory beliefs if he has them. Precisely for this reason, we regard individuals who contradict themselves as subject to greater censure than those who merely have false beliefs. But it is clear that Pierre, as long as he is unaware that the cities he calls 'London' and 'Londres' are one and the same, is in no position to see, by logic alone, that at least one of his beliefs must be false. He lacks information, not logical acumen. He cannot be convicted of inconsistency: to do so is incorrect.

We can shed more light on this if we change the case. Suppose that, in France, Pierre, instead of affirming "Londres est jolie," had affirmed, more cautiously, "Si New York est jolie, Londres est jolie aussi," so that he believed that if New York is pretty, so is London. Later Pierre moves to London, learns English as before, and says (in English) "London is not pretty." So he now believes, further, that London is not pretty. Now from the two premises, both of which appear to be among his beliefs (a) If New York is pretty, London is, and (b) London is not pretty, Pierre should be able to deduce by *modus tollens* that New York is not pretty. But no matter how great Pierre's logical acumen may be, he cannot in fact make any such deduction, as long as he supposes that 'Londres' and 'London' may name two different cities. If he did draw such a conclusion, he would be guilty of a fallacy.

Intuitively, he may well suspect that New York is pretty, and just this suspicion may lead him to suppose that 'Londres' and 'London' probably name distinct cities. Yet, if we follow our normal practice of reporting the beliefs of French and English speakers, Pierre has available to him (among his beliefs) both the premises of a *modus tollens* argument that New York is not pretty.

Again, we may emphasize Pierre's lack of belief instead of his belief. Pierre, as I said, has no disposition to assent to (6). Let us concern

trate on this, ignoring his disposition to assent to (5). In fact, if we wish we may change the case: suppose Pierre's neighbors think that since they rarely venture outside their own ugly section, they have no right to any opinion as to the pulchritude of the whole city. Suppose Pierre shares their attitude. Then, judging by his failure to respond affirmatively to "London is pretty," we may judge, from Pierre's behavior as an English speaker, that he lacks the belief that London is pretty: never mind whether he disbelieves it, as before, or whether, as in the modified story, he insists that he has no firm opinion on the matter.

Now (using the *strengthened* disquotational principle), we can derive a contradiction, not merely in Pierre's judgments, but in our own. For on the basis of his behavior as an English speaker, we concluded that he does not believe that London is pretty (that is, that it is not the case that he believes that London is pretty). But on the basis of his behavior as a French speaker, we must conclude that he does believe that London is pretty. This is a contradiction.²⁸

We have examined four possibilities for characterizing Pierre while he is in London: (a) that at that time we no longer respect his French utterance ('Londres est jolie'), that is that we no longer ascribe to him the corresponding belief; (b) that we do not respect his English utterance (or lack of utterance); (c) that we respect neither; (d) that we respect both. Each possibility seems to lead us to say something either plainly false or even downright contradictory. Yet the possibilities appear to be logically exhaustive. This, then, is the paradox.

I have no firm belief as to how to solve it. But beware of one source of confusion. It is no solution in itself to observe that some *other* terminology, which evades the question whether Pierre believes that London is pretty, may be sufficient to state all the relevant facts. I am fully aware that complete and straightforward descriptions of the situation are possible and that in this sense there is no paradox. Pierre is disposed to sincerely assent to 'Londres est jolie' but not to 'London is pretty'. He uses French normally, English normally. Both with 'Londres' and 'London' he associates properties sufficient to determine that famous city, but he does

not realize that they determine a single city. (And his uses of 'Londres' and 'London' are historically [causally] connected with the same single city, though he is unaware of that.) We may even give a rough statement of his beliefs. He believes that the city he calls 'Londres' is pretty, that the city he calls 'London' is not. No doubt other straightforward descriptions are possible. No doubt some of these are, in a certain sense, *complete* descriptions of the situation.

But none of this answers the original question. Does Pierre, or does he not, believe that London is pretty? I know of no answer to this question that seems satisfactory. It is no answer to protest that, in some *other* terminology, one can state 'all the relevant facts'.

To reiterate, this is the puzzle: Does Pierre, or does he not, believe that London is pretty? It is clear that our normal criteria for the attribution of belief lead, when applied to this question, to paradoxes and contradictions. One set of principles adequate to many ordinary attributions of belief, but which leads to paradox in the present case, was stated in Section II; and other formulations are possible. As in the case of the logical paradoxes, the present puzzle presents us with a problem for customarily accepted principles and a challenge to formulate an acceptable set of principles that does not lead to paradox, is intuitively sound, and supports the inferences we usually make. Such a challenge cannot be met simply by a description of Pierre's situation that evades the question whether he believes that London is pretty.

One aspect of the presentation may misleadingly suggest the applicability of Frege-Russellian ideas that each speaker associates his own description or properties to each name. For as I just set up the case Pierre learned one set of facts about the so-called 'Londres' when he was in France, and another set of facts about 'London' in England. Thus it may appear that 'what's really going on' is that Pierre believes that the city satisfying one set of properties is pretty, while he believes that the city satisfying another set of properties is not pretty.

As we just emphasized, the phrase 'what's really going on' is a danger signal in discussions of the present paradox. The conditions stated

On Frege/Russell's response

may—let us concede for the moment—describe 'what's really going on'. But they do not resolve the problem with which we began, that of the behavior of names in belief contexts: Does Pierre, or does he not, believe that London (not the city satisfying such-and-such description, but *London*) is pretty? No answer has yet been given.

Nevertheless, these considerations may appear to indicate that descriptions, or associated properties, are highly relevant somehow to an ultimate solution, since at this stage it appears that the entire puzzle arises from the fact that Pierre originally associated different identifying properties with '*London*' and '*Londres*'. Such a reaction may have some force even in the face of the now fairly well known arguments against 'identifying descriptions' as in any way 'defining', or even 'fixing the reference' of names. But in fact the special features of the case, as I set it out, are misleading. The puzzle can arise even if Pierre associates exactly the same identifying properties with both names.

First, the considerations mentioned above in connection with 'Cicero' and 'Tully' establish this fact. For example, Pierre may well learn, in France, 'Platon' as the name of a major Greek philosopher, and later, in England, learn 'Plato' with the same identification. Then the same puzzle can arise: Pierre may have believed, when he was in France and was monolingual in French, that Plato was bald (he would have said, "*Platon était chauve*"), and later conjecture, in English, 'Plato was not bald,' thus indicating that he believes or suspects that Plato was not bald. He need only suppose that, in spite of the similarity of their names, the man he calls 'Platon' and the man he calls 'Plato' were two distinct major Greek philosophers. In principle, the same thing could happen with '*London*' and '*Londres*'.

Of course, most of us learn a *definite* description about London, say 'the largest city in England'. Can the puzzle still arise? It is noteworthy that the puzzle can still arise even if Pierre associates to '*Londres*' and to '*London*' exactly the same *uniquely identifying* properties. How can this be? Well, suppose that Pierre believes that London is the largest city in (and capital of) England, that it contains Buckingham Palace,

the residence of the Queen of England, and he believes (correctly) that these properties, conjointly, uniquely identify the city. (In this case, it is best to suppose that he has never seen London, or even England, so that he uses *only* these properties to identify the city. Nevertheless, he has learned English by 'direct method'.) These uniquely identifying properties he comes to associate with '*London*' after he learned English, and he expresses the appropriate beliefs about '*London*' in English. Earlier, when he spoke nothing but French, however, he associated *exactly* the same uniquely identifying properties with '*Londres*'. He believed that '*Londres*', as he called it, could be uniquely identified as the capital of England, that it contained Buckingham Palace, that the Queen of England lived there, etc. Of course he expressed these beliefs, like most monolingual Frenchmen, in French. In particular, he used '*Angletorre*' for England, '*le Palais de Buckingham*' (pronounced '*Bookengam*') for Buckingham Palace, and '*la Reine d'Angletorre*' for the Queen of England. But if any Frenchman who speaks no English can ever be said to associate *exactly* the properties of being the capital of England, etc., with the name '*Londres*', Pierre in his monolingual period did so.

When Pierre becomes a bilingual, *must* he conclude that '*London*' and '*Londres*' name the same city, because he defined each by the same uniquely identifying properties?

Surprisingly, no! Suppose Pierre had affirmed '*Londres est jolie*', if Pierre has any reason—even just a 'feeling in his bones', or perhaps exposure to a photograph of a miserable area which he was told (in English) was part of '*London*'—to maintain '*London*' is not pretty', he need not contradict himself. He need only conclude that 'England' and 'Angletorre' name two different countries, that 'Buckingham Palace' and '*le Palais de Buckingham*' (recall the pronunciation!) name two different palaces, and so on. Then he can maintain *both* views without contradiction, and regard *both* properties as uniquely identifying.

The fact is that the paradox reproduces itself on the level of the 'uniquely identifying properties' that description theorists have regarded as 'defining' proper names (and a fortiori, as fixing

their references). Nothing is more reasonable than to suppose that if two names, A and B, and a single set of properties, S, are such that a certain speaker believes that the referent of A uniquely satisfies all of S and that the referent of B also uniquely satisfies all of S, then that speaker is committed to the belief that A and B have the same reference. In fact, the identity of the referents of A and B is an easy *logical consequence* of the speaker's beliefs.

From this fact description theorists concluded that names can be regarded as synonymous, and hence interchangeable *salva veritate* even in belief contexts, provided that they are 'defined' by the same uniquely identifying properties.

We have already seen that there is a difficulty in that the set S of properties need not in fact be uniquely identifying. But in the present paradoxical situation there is a surprising difficulty even if the supposition of the description theorist (that the speaker believes that S is uniquely fulfilled) in fact holds. For, as we have seen above, Pierre is in no position to draw ordinary logical consequences from the conjoint set of what, when we consider him separately as a speaker of English and as a speaker of French, we would call his beliefs. He cannot infer a contradiction from his separate beliefs that London is pretty and that London is not pretty. Nor, in the modified situation above, would Pierre make a normal *modus tollens* inference from his beliefs that London is not pretty and that London is pretty if New York is. Similarly here, if we pay attention only to Pierre's behavior as a French speaker (and at least in his monolingual days he was no different from any other Frenchmen), Pierre satisfies all the normal criteria for believing that '*Londres*' has a referent uniquely satisfying the properties of being the largest city in England, containing Buckingham Palace, and the like. (If Pierre did not hold such beliefs, no Frenchman ever did.) Similarly, on the basis of his (later) beliefs expressed in English, Pierre also believes that the referent of '*London*' uniquely satisfies these same properties. But Pierre cannot combine the two beliefs into a single set of beliefs from which he can draw the normal conclusion that '*London*' and '*Londres*' must have the same referent. (Here the trouble

comes not from '*London*' and '*Londres*', but from 'England' and 'Angletorre' and the rest.) Indeed, if he *did* draw what would appear to be the normal conclusion in this case and any of the other cases, Pierre would in fact be guilty of a logical fallacy.

Of course the description theorist could hope to eliminate the problem by 'defining' 'Angletorre', 'England', and so on by appropriate descriptions also. Since in principle the problem may rear its head at the next 'level' and at each subsequent level, the description theorist would have to believe that an 'ultimate' level can eventually be reached where the defining properties are 'pure' properties not involving proper names (or natural kind terms or related terms, see below). I know of no convincing reason to suppose that such a level can be reached in any plausible way, or that the properties can continue to be uniquely identifying if one attempts to eliminate all names and related devices.²⁹ Such speculation aside, the fact remains that Pierre, judged by the ordinary criteria for such judgments, *did* learn both '*Londres*' and '*London*' by exactly the same set of identifying properties; yet the puzzle remains even in this case.

Well, then, is there any way out of the puzzle? Aside from the principles of disquotation and translation, only our normal practice of translation of French into English has been used. Since the principles of disquotation and translation seem self-evident, we may be tempted to blame the trouble on the translation of '*Londres est jolie*' as 'London is pretty' and ultimately, then, on the translation of '*Londres*' as 'London'.³⁰ Should we, perhaps, permit ourselves to conclude that '*Londres*' should not, 'strictly speaking' be translated as 'London'? Such an expediting is, of course, desperate: the translation in question is a standard one, learned by students together with other standard translations of French into English. Indeed, '*Londres*' is, in effect, introduced into French as the French version of 'London'.

Since our backs, however, are against the wall, let us consider this desperate and implausible expedient a bit further. If '*Londres*' is *not* a correct French version of the English 'London', under what circumstances can proper names be translated from one language to another?

Classical description theories suggest the answer: translation, strictly speaking, is between idiocents; a name in one idiolect can be translated into another when (and only when) the speakers of the two idiolects associate the same uniquely identifying properties with the two names. We have seen that any such proposed restriction, not only fails blatantly to fit our normal practices of translation and indirect discourse reportage, but does not even appear to block the paradox.³¹

So we still want a suitable restriction. Let us drop the references to idiolects and return to 'Londres' and 'London' as names in French and English, respectively—the languages of two communities. If 'Londres' is not a correct French translation of 'London', could any other version do better? Suppose I introduced another word into French, with the stipulation that it should always be used to translate 'London'. Would not the same problem arise for this word as well? The only feasible solution in this direction is the most drastic: decree that no sentence containing a name can be translated except by a sentence containing the phonetically identical name. Thus when Pierre asserts '*Londres est jolie*', we English speakers can at best conclude, if anything, Pierre believes that *Londres* is pretty. Such a conclusion is, of course, not expressed in English, but in a word salad of English and French; on the view now being entertained, we cannot state Pierre's belief in English at all.³² Similarly, we would have to say: Pierre believes that *Angletierre* is a monarchy, Pierre believes that *Platon* wrote dialogues, and the like.³³

This 'solution' appears at first to be effective against the paradox, but it is drastic. What is it about sentences containing names that makes them—a substantial class—intrinsically untranslatable, express beliefs that cannot be reported in any other language? At best to report them in the other language, one is forced to use a word salad in which names from the one language are imported into the other. Such a supposition is both contrary to our normal practice of translation and very implausible on its face.

Implausible though it is, there is at least this much excuse for the 'solution' at this point. Our normal practice with respect to some famous people and especially for geographical localities is to have different names for them in dif-

PROPOSITIONAL ATTITUDES

ferent languages, so that in translating sentences we translate the names. But for a large number of names, especially names of people, this is not so: the person's name is used in the sentences of all languages. At least the restriction in question merely urges us to mend our ways by doing always what we presently do *sometimes*.

But the really drastic character of the proposed restriction comes out when we see how far it may have to extend. In 'Naming and Necessity' I suggested that there are important analogies between proper names and natural kind terms, and it seems to me that the present puzzle is one instance where the analogy will hold. Putnam, who has proposed views on natural kinds similar to my own in many respects, stressed this extension of the puzzle in his comments at the conference. Not that the puzzle extends to all translations from English to French. At the moment, at least, it seems to me that Pierre, if he learns English and French separately, without learning any translation manual between them, must conclude, if he reflects enough, that 'doctor' and 'médecin'; and 'heureux' and 'happy' are synonymous; or at any rate, coextensive.³⁴ Any potential paradox of the present kind for these word pairs is thus blocked. But what about 'lapin' and 'rabbit', or 'beech' and 'hêtre'? We may suppose that Pierre is himself neither a zoologist nor a botanist. He has learned each language in its own country and the examples he has been shown to illustrate '*les lapins*' and 'rabbits', 'beeches' and '*les hêtres*' are distinct. It thus seems to be possible for him to suppose that 'lapin' and 'rabbit', or 'beech' and 'hêtre', denote distinct but superficially similar kinds or species, even though the differences may be indiscernible to the untrained eye. (This is especially plausible if, as Putnam supposes, an English speaker—for example, Putnam himself—who is not a botanist may use 'beech' and 'elm' with their normal (distinct) meanings, even though he cannot himself distinguish the two trees.)³⁵ Pierre may quite plausibly be supposed to wonder whether the trees which in France he called '*les hêtres*' were beeches or elms, even though as a speaker of French he satisfies all usual criteria for using '*les hêtres*' normally. If beeches and elms will not serve, better pairs of ringers exist that cannot be told apart except by an expert.) Once Pierre is in such a situation,

A PUZZLE ABOUT BELIEF

paradoxes analogous to the one about London obviously can arise for rabbits and beeches. Pierre could affirm a French statement with '*lapin*', but deny its English translation with 'rabbit'. As above, we are hard-pressed to say what Pierre believes. We were considering a 'strict and philosophical' reform of translation procedures which proposed that foreign proper names should always be appropriated rather than translated. Now it seems that we will be forced to do the same with all words for natural kinds. (For example, on pain of paradox, one must not translate '*lapin*' as 'rabbit'!) No longer can the extended proposal be defended, even weakly, as 'merely' universalizing what we already do sometimes. It is surely too drastic a change to retain any credibility.³⁶

There is yet another consideration that makes the proposed restriction more implausible: even this restriction does not really block the paradox. Even if we confine ourselves to a single language, say English, and to phonetically identical tokens of a single name, we can still generate the puzzle. Peter (as we may as well say now) 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,' and we can infer—using 'Paderewski', as we usually do, to name the Polish musician and statesman.

(8) Peter believes that Paderewski had musical talent.

Only the disquotational principle is necessary for our inference; no translation is required. 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. He concludes that probably two people, approximate contemporaries no doubt, were both named 'Paderewski'. Using 'Paderewski' as a name for the *statesman*, Peter assents to, 'Paderewski had no musical talent.' Should we infer, by the disquotational principle,

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

or should we not? If Peter had not had the past history of learning the name 'Paderewski' in

another way, we certainly would judge him to be using 'Paderewski' in a normal way, with the normal reference, and we would infer (9) by the disquotational principle. The situation is parallel to the problem with Pierre and London. Here, however, no restriction that names should not be translated, but should be phonetically repeated in the translation, can help us. Only a single language and a single name are involved. If any notion of translation is involved in this example, it is homophonic translation. Only the disquotational principle is used explicitly.³⁷ (On the other hand, the original 'two languages' case had the advantage that it would apply even if we spoke languages in which all names must denote uniquely and unambiguously.) The restriction that names must not be translated is thus ineffective, as well as implausible and drastic.

I close this section with some remarks on the relation of the present puzzle to Quine's doctrine of the 'indeterminacy of translation', with its attendant repudiation of intentional idioms of 'propositional attitude' such as belief and even indirect quotation. To a sympathizer with these doctrines the present puzzle may well seem to be just more grist for a familiar mill. The situation of the puzzle seems to lead to a breakdown of our normal practices of attributing belief and even of indirect quotation. No obvious paradox arises if we describe the same situation in terms of Pierre's sincere assent to various sentences, together with the conditions under which he has learned the name in question. Such a description, although it does not yet conform to Quine's strict behavioristic standards, fits in well with his view that in some sense direct quotation is a more 'objective' idiom than the propositional attitudes. Even those who, like the present writer, do not find Quine's negative attitude to the attitudes completely attractive must surely acknowledge this.

But although sympathizers with Quine's view can use the present examples to support it, the differences between these examples and the considerations Quine adduces for his own skepticism about belief and translation should not escape us. Here we make no use of hypothetical exotic systems of translation differing radically from the usual one, translating '*lapin*'; say, as 'rabbit stage' or 'undetached part of a rabbit'. The problem arises entirely within our usual

and customary system of translation of French into English; in one case, the puzzle arose even within English alone, using at most 'homophonic' translation. Nor is the problem that many different interpretations or translations fit our usual criteria, that, in Davidson's phrase,³⁸ there is more than one 'way of getting it right'.

The trouble here is not that many views as to Pierre's beliefs get it right, but that they all definitely get it *wrong*. A straightforward application of the principles of translation and disquotation to all Pierre's utterances, French and English, yields the result that Pierre holds inconsistent beliefs, that logic alone should teach him that one of his beliefs is false. Intuitively, this is plainly incorrect. If we refuse to apply the principles to his French utterances at all, we would conclude that Pierre never believed that London is pretty, even though, before his unpredictable move, he was like any other monolingual Frenchman. This is absurd. If we refuse to ascribe the belief in London's pulchritude only after Pierre's move to England, we get the counterintuitive result that Pierre has changed his mind, and so on. But we have surveyed the possibilities above: the point was not that they are 'equally good', but that all are *obviously wrong*. If the puzzle is to be used as an argument for a Quinean position, it is an argument of a fundamentally different kind from those given before. And even Quine, if he wishes to incorporate the notion of belief even into a 'second level' of canonical notation,³⁹ must regard the puzzle as a real problem.

The alleged indeterminacy of translation and indirect quotation causes relatively little trouble for such a scheme for belief: the embarrassment it presents to such a scheme is, after all, one of riches. But the present puzzle indicates that the usual principles we use to ascribe beliefs are apt, in certain cases, to lead to contradiction, or at least, patent falsehoods. So it presents a problem for any project, Quinean or other, that wishes to deal with the 'logic' of belief on any level.⁴⁰

IV. CONCLUSION

What morals can be drawn? The primary moral—quite independent of any of the discussion of the first two sections—is that the puzzle

PROPOSITIONAL ATTITUDES

is a puzzle. As any theory of truth must deal with the Liar Paradox, so any theory of belief and names must deal with this puzzle.

But our theoretical starting point in the first two sections concerned proper names and belief. Let us return to Jones, who assents to "Cicero was bald" and to "Tully was not bald." Philosophers, using the disquotational principle, have concluded that Jones believes that Cicero was bald but that Tully was not. Hence, they have concluded, since Jones does not have contradictory beliefs, belief contexts are not 'Shakespearean' in Geach's sense: codesignative proper names are not interchangeable in these contexts *salva veritate*.⁴¹

I think the puzzle about Pierre shows that the simple conclusion was unwarranted. Jones's situation strikingly resembles Pierre's. A proposal that 'Cicero' and 'Tully' are interchangeable amounts roughly to a homophonic 'translation' of English into itself in which 'Cicero' is mapped into 'Tully' and vice versa, while the rest is left fixed. Such a 'translation' can, indeed, be used to obtain a paradox. But should the problem be blamed on this step? Ordinarily we would suppose without question that sentences in French with 'Londres' should be translated into English with 'London'. Yet the same paradox results when we apply this translation too. We have seen that the problem can even arise with a single name in a single language, and that it arises with natural kind terms in two languages (or one: see below).

Intuitively, Jones's assent to both 'Cicero was bald' and 'Tully was not bald' arises from sources of just the same kind as Pierre's assent to both 'Londres est jolie' and 'London is not pretty'.

It is wrong to blame unpalatable conclusions about Jones on substitutivity. The reason does not lie in any specific fallacy in the argument but rather in the nature of the realm being entered. Jones's case is just like Pierre's: both are in an area where our normal practices of attributing belief, based on the principles of disquotation and translation or on similar principles, are questionable.

It should be noted in this connection that the principles of disquotation and translation can lead to 'proofs' as well as 'disproofs' of substit-

A PUZZLE ABOUT BELIEF

ativity in belief contexts. In Hebrew there are two names for Germany, transliteratable roughly as 'Ashkenaz' and 'Germaniah'—the first of these may be somewhat archaic. When Hebrew sentences are translated into English, both become 'Germany'. Plainly a normal Hebrew speaker analogous to Jones might assent to a Hebrew sentence involving 'Ashkenaz' while dissenting from its counterpart with 'Germaniah'. So far there is an argument *against* substitutivity. But there is also an argument *for* substitutivity, based on the principle of translation. Translate a Hebrew sentence involving 'Ashkenaz' into English, so that 'Ashkenaz' goes into 'Germany'. Then retranslate the result into Hebrew, this time translating 'Germany' as 'Germaniah'. By the principle of translation, both translations preserve truth-value. So: the truth-value of any sentence of Hebrew involving 'Ashkenaz' remains the same when 'Ashkenaz' is replaced by 'Germaniah'—a 'proof' of substitutivity! A similar 'proof' can be provided wherever there are two names in one language, and a normal practice of translating both indifferently into a single name of another language.⁴² (If we combine the 'proof' and 'disproof' of substitutivity in this paragraph, we could get yet another paradox analogous to Pierre's: our Hebrew speaker both believes, and disbelieves, that Germany is pretty. Yet no amount of pure logic or semantic introspection suffices for him to discover his error.)

Another consideration, regarding natural kinds: previously we pointed out that a bilingual may learn 'lapin' and 'rabbit' normally in each respective language yet wonder whether they are one species or two, and that this fact can be used to generate a paradox analogous to Pierre's. Similarly, a speaker of English alone may learn 'turze' and 'gorse' normally (separately), yet wonder whether these are the same, or resembling kinds. (What about 'rabbit' and 'hare'?) It would be easy for such a speaker to assent to an assertion formulated with 'turze' but withhold assent from the corresponding assertion involving 'gorse'. The situation is quite analogous to that of Jones with respect to 'Cicero' and 'Tully'. Yet 'turze' and 'gorse', and other pairs of terms for the same natural kind, are normally thought of as *synonyms*.

The point is *not*, of course, that codesignative proper names are interchangeable in belief contexts *salva veritate*, or that they are interchangeable in simple contexts even *salva significatione*. The point is that the absurdities that disquotation plus substitutivity would generate are exactly paralleled by absurdities generated by disquotation plus translation, or even 'disquotation alone' (or: disquotation plus homophonic translation). Also, though our naive practice may lead to 'disproofs' of substitutivity in certain cases, it can also lead to 'proofs' of substitutivity in some of these same cases, as we saw two paragraphs back. When we enter into the area exemplified by Jones and Pierre, we enter into an area where our normal practices of interpretation and attribution of belief are subjected to the greatest possible strain, perhaps to the point of breakdown. So is the notion of the *content* of someone's assertion, the *proposition* it expresses. In the present state of our knowledge, I think it would be foolish to draw any conclusion, positive or negative, about substitutivity.⁴³

Of course nothing in these considerations prevents us from observing that Jones can sincerely assert both "Cicero is bald" and "Tully is not bald," even though he is a normal speaker of English and uses 'Cicero' and 'Tully' in normal ways, and with the normal referent. Pierre and the other paradoxical cases can be described similarly. (For those interested in one of my own doctrines, we can still say that there was a time when men were in no epistemic position to assent to 'Hesperus is Phosphorus' for want of empirical information, but it nevertheless expressed a necessary truth.⁴⁴ But it is no surprise that quoted contexts fail to satisfy a substitutivity principle within the quotation marks. And, in our present state of clarity about the problem, we are in no position to apply a disquotation principle to these cases, nor to judge when two such sentences do, or do not, express the same 'proposition'.⁴⁵

Nothing in the discussion impugns the conventional judgment that belief contexts are 'referentially opaque', if 'referential opacity' is construed so that failure of coreferential *definite descriptions* to be interchangeable *salva veritate* is sufficient for referential opacity. No

doubt Jones can believe that the number of planets is even, without believing that the square of three is even, if he is under a misapprehension about the astronomical, but not the arithmetical facts. The question at hand was whether belief contexts were 'Shakespearean', not whether they were 'referentially transparent'. (Modal contexts, in my opinion, are 'Shakespearean', but 'referentially opaque'.)⁴⁵

Even were we inclined to rule that belief contexts are not Shakespearian, it would be implausible at best to use the phenomenon to support a Frege-Russellian theory that names have descriptive 'senses' through 'uniquely identifying properties'. There are the well-known arguments against description theories, independent of the present discussion; there is the implausibility of the view that difference in names is difference in idiolect; and finally, there are the arguments of the present paper that difference of associated properties does not explain the problems in any case. Given these considerations, and the cloud our paradox places over the notion of 'content' in this area, the relation of substitutivity to the dispute between Millian and Fregean conclusions is not very clear.

We repeat our conclusions: philosophers have often, basing themselves on Jones's and similar cases, supposed that it goes virtually without saying that belief contexts are not 'Shakespearean'. I think that at present, such a definite conclusion is unwarranted. Rather Jones's case, like Pierre's, lies in an area where our normal apparatus for the ascription of belief is placed under the greatest strain and may even break down. There is even less warrant at the present time, in the absence of a better understanding of the paradoxes of this paper, for the use of alleged failures of substitutivity in belief contexts to draw any significant theoretical conclusion about proper names. Hard cases make bad law.⁴⁶

NOTES

1. "Naming and Necessity," in *The Semantics of Natural Languages*, D. Davidson and G. Harman (eds.), Dordrecht, Reidel, 1971, pp. 253-355 and 763-769 (Also forthcoming as a separate monograph, pub. Basil Blackwell.) "Identity and Necessity" in *Identity and Individuation*, M. Munitz (ed.), New

PROPOSITIONAL ATTITUDES

York, New York University Press, 1971, pp. 135-164. Acquaintance with these papers is not a prerequisite for understanding the central puzzle of the present paper, but is helpful for understanding the theoretical background.

2. Frege gives essentially this example as the second footnote of 'On Sense and Reference' [Reprinted in this volume as 'On Sense and Nominatum'.] For the 'Who is ...?' to be applicable one must be careful to elicit from one's informant properties that he regards as defining the name and determining the referent, not mere well-known facts about the referent. (Of course this distinction may well seem fictitious, but it is central to the original Frege-Russell theory.)
3. For convenience Russell's terminology is assimilated to Frege's. Actually, regarding generic or 'logically proper' names, Russell is a strict Millian: 'logically proper names' simply refer (to immediate objects of acquaintance). But, according to Russell, what are ordinarily called 'names' are not genuine, logically proper names, but disguised definite descriptions. Since Russell also regards definite descriptions as in turn disguised notation, he does not associate any 'senses' with descriptions, since they are not genuine singular terms. When all disguised notation is eliminated, the only singular terms remaining are logically proper names, for which no notion of 'sense' is required. When we speak of Russell as assigning 'senses' to names, we mean ordinary names and for convenience we ignore his view that the descriptions abbreviating them ultimately disappear on analysis.

On the other hand, the explicit doctrine that names

are abbreviated definite descriptions is due to Russell, Michael Dummett, in his recent *Frege* (London, Duckworth, and New York, Harper and Row, 1973, pp. 110–111) denies that Frege held a description theory of senses. Although as far as I know Frege indeed makes no explicit statement to that effect, his examples of names conform to that doctrine, as Dummett acknowledges. Especially his 'Aristotle' example is revealing. He defines 'Aristotle' just as Russell would; it seems clear that in the case of a famous historical figure, the 'name' is indeed to be given by answering, in a uniquely specifying way, the 'who' is question. Dummett himself characterizes a sense as a 'criterion ... such that the referent of the name, if any, is whatever object satisfies that criterion.' Since presumably the satisfaction of the criterion must be unique (so a unique referent is determined), this amount to defining names by unique satisfaction of properties, i.e., by descriptions? Perhaps the point is that the property in question need not be expressible by a usual predicate of English, as might be plausible if the referent is one of the speaker's acquaintances rather than a historical figure. But I doubt that even Russell, father of the explicitly formulated description theory, ever meant to require that the description must always be expressible in unsupplemented English.

A PUZZLE ABOUT BELIEF

In any event, the philosophical community has generally understood Fregean senses in terms of descriptions, and we deal with it under this usual understanding. For present purposes this is more important than detailed historical issues. Dummett acknowledges (p. 111) that few substantive points are affected by his (allegedly) broader interpretation of Frege; and it would not seem to be relevant to the problems of the present paper.

- problems of the present paper. On Sense and Reference', see Frege's footnote in 'On Sense and Reference', mentioned in note 2 above and especially his discussion of 'Dr. Gustav Lauben' in 'Der Gedanke' (in the recent Geach-Stoothoff translation, 'Thoughts', *Logical Investigations*, Oxford, Blackwell, 1977, pp. 11-12).
5. Russell, as a Millian with respect to genuine names, accepts this argument with respect to 'logically proper names'. For example—taking for the moment 'Cicero' and 'Tully' as 'logically proper names', Russell would hold that if I judge that Cicero admired Tully, I am related to Cicero, Tully, and the admiration relation in a certain way; since Cicero is Tully, I am related in exactly the same way to Tully, Cicero, and admiration; therefore I judge that Tully admired Cicero. Again, if Cicero *did* admire Tully, then according to Russell a single fact corresponds to all of 'Cicero admired Tully', 'Cicero admired Cicero', etc. Its constituent (in addition to admiration) is the man Cicero, taken, so to speak, twice.
6. Russell thought that 'Cicero admired Tully' and 'Tully admired Cicero' are in fact obviously not interchangeable. For him, this was one argument that 'Cicero' and 'Tully' are not genuine names, and that the Roman orator is no constituent of propositions (or 'facts' or 'judgments') corresponding to sentences containing the name.
7. Given the arguments of Church and others, I do not believe that the formal mode of speech is synonymous with other formulations. But it can be used as a rough way to convey the idea of scope.
8. It may well be argued that the Millian view implies that proper names are *scopeless* and that for them the *de dicto-de re* distinction vanishes. This view has considerable plausibility (my own views on rigidity will imply something like this for *modali* contexts), but it need not be argued here either way: *de re* uses are simply not treated in the present paper.
9. Christopher Peacocke ('Proper Names, Reference, and Rigid Designation', in *Meaning, Reference, and Necessity*, S. Blackburn (ed.), Cambridge, Cambridge University Press, 1975; see Section 1), uses what amounts to the equivalence of the *de dicto-de re* constructions in *all* contexts (or, put alternatively, the lack of such a distinction) to characterize the notion of rigid designation. I agree that for *modali* contexts, this is (roughly) equivalent to my own notion, also that for proper names Peacocke's equivalence holds for temporal contexts (this is roughly equivalent to the temporal rigidity of Names). I also agree that it is very plausible to