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SEMANTICS AND THE AMBIGUITY OF PROPER NAMES*

In the last year or two, the “causal theory” of proper names, first suggested by Saul Kripke in 1967, has received a lot of attention.¹ This paper has two aims. First, to show that the causal theory offers the most plausible solution to a problem posed by the well-known fact that proper names typically have more than one bearer (that they are typically “ambiguous”). Second, to consider the implications of this discussion, and of the causal theory, for semantics as a whole.

It is not my aim to argue for the causal theory. Rather it is to see what the theory implies and suggests.² However, if my discussion of ambiguous proper names is correct, it does supply a further argument for the theory.

1. Introduction

We are all responsible for producing sounds and inscriptions that have the peculiar property of *referring* to other parts of the universe: these sounds and inscriptions are *meaningful*; some of them are *true*.

I take the main task of the semantics of natural language to be to explain these properties of sounds and inscriptions. In virtue of what does this sound refer to that object? What is it for an inscription to be meaningful? Why is this sound true?

In recent years a certain program for the semantics of natural language has become popular. It is a program associated with the names of some of the most ingenious workers in the field, e.g. Montague, Hintikka, Scott and Lewis.³ It posits such entities as “senses”, “intensions”, “possible worlds”, and “possible individuals”.⁴ Sometimes we are told that though all these possible worlds and individuals exist only some of them are “actual”. I shall call it the “possible-worlds-program” and those associated with it “possible-worlds-semanticists”.⁵

I claim that, *on the face of it*, this approach to semantics is implausible. In particular the entities it requires are objectionable.⁶ The theories committed to them are offered as *explanations*, and yet they often seem to be little more than *clever devices* for yielding a required output. Intuitively, I claim, they are not satisfactory explanations of the phenomena in question.

This simple appeal to intuition is not enough, of course.⁷ Some justification for these claims is needed. Consider also a natural response to the claim. “Perhaps you are right to be dubious about such entities as possible worlds, but we *need* to posit them to explain the phenomena”. What is required is an *alternative program* which is more plausible and which shows that we have no need of these dim entities in semantics. Needless to say this is more than can be accomplished here. However, I shall urge an alternative program. This program is suggested by the solution offered to the problem of the ambiguity of proper names.

What is this problem of ambiguity? It is that of determining which one of the many objects that bear a certain name is designated⁸ by a particular token of that name. What is it about a particular token of ‘John’ that makes it designate *this* John and not any other of the millions of Johns?

The solution I shall offer to this problem makes use of the causal theory of names. And it is this theory that suggests an alternative program for semantics. The theory, in fact, fulfils a part of the program. Further, the discussion of the problem of ambiguity constitutes an argument for the theory and its program and against the possible-worlds-program. Thus my two aims are complementary: in achieving the first I do the groundwork for the second. At the end of the paper we shall have before us a program for semantics which, I claim, is to be preferred to the possible-worlds-program, not only on the ontological ground mentioned briefly above, but also because of its superior handling of ambiguous names. What we shall not have is a demonstration that the alternative program will lead to a satisfactory semantics free of offensive entities. However the paper should suggest that the hope that it will is by no means forlorn.

It is common to distinguish *types* and *tokens*. When we say, “‘John’ is amongst the words used in a certain book”, what we are talking about is a *name-type*. ‘John’ is used one hundred and seven times in the book. The result of each use is a *name-token*. Each token is an inscription on a page; it is a concrete object. If our concern were with spoken language, a token would be a sound, also a concrete object. If types are to be reified, on the other hand, they must be abstract objects.⁹

The fact that names are ambiguous makes it convenient to distinguish “*type-uses*” from types and tokens. A *name-type-use* is a name-type *in its use to designate one particular object*. In the above book there are three characters called ‘John’. So the one hundred and seven tokens exemplify three different uses of the name-type. Each token belongs to one of three name-type-uses of ‘John’. A name-type-use is determined by a name-type and an object.¹⁰

The problem of ambiguity that concerns us here can now be put as follows. What settles which name-type-use a given token of an ambiguous name-type belongs to?

In sections 2 and 3 I shall look critically at two received solutions to this problem. In section 4 I shall offer a new solution arising out of the causal theory. In section 5 I consider the implications of this discussion for semantics as a whole.

2. *Ambiguity and Description-Theories of Proper Names*

The central problem in giving the semantics of proper names is that of explaining the nature of the link between name and object in virtue of which the former designates the latter. From Frege and Russell through to Strawson and Searle the solution has been sought in descriptions of the object which users of the name associate with it. I call such theories “description-theories”.¹¹

What solution do description-theorists offer to the problem of ambiguous names? In considering this question I shall both reveal an insight of description-theorists and criticise what they make of it. I shall later adopt and develop the insight.

Which object did a name-token designate? It is natural to say that it designated the object the speaker *had in mind* or *meant*. This was the insight of description-theorists.¹² What we need then is a satisfactory analysis of this unclear notion. If we had one, a solution to our problem of ambiguity would be in sight: a speaker designated one object and not another by ‘John’, *because he had it in mind*.

What sort of analysis do description-theorists offer of this notion? The first step is clear enough. The speaker associates with the name an “identifying description”; i.e. a description which applies to only one object. The speaker has in mind the object picked out by the identifying description. So he has one and not another object in mind by ‘John’.

In what does this association of identifying description with name consist? It consists, it seems, in the speaker’s readiness to produce that description if asked what he has in mind; it consists in something he could or would do.¹³

How are we to understand this? One way that is sometimes suggested by the writings of description-theorists is what we might call a “behaviourist interpretation”. It is as follows. A person has uttered a sentence including the use of a name. If he were asked soon afterwards what he had in mind by the name he would offer a certain identifying description. The object picked out by this description is the object he had in mind.

This view is obviously unsatisfactory, for it makes a certain sort of error impossible. It prevents a speaker being wrong about what he had in mind. Suppose he uses the name 'John'. When asked who he had in mind he produces a description which identifies an object with that name. Could the object picked out be the wrong John? On this view, it seems not. The description *determines* what he had in mind. Yet clearly he could be mistaken about his mental states so that he would offer the wrong description; he does not have "incorrigible knowledge" of them. He might, e.g. have become confused about, or forgotten, what he meant (a "brain-storm"). Perhaps he didn't notice what he was doing.

A more plausible way of understanding the description-theory is given by a "centralist interpretation".¹⁴ The speaker's use of the name on a certain occasion is *caused* (in part) by a mental state of a certain sort, a disposition perhaps. This mental state "involves", in some way, both the name and the associated identifying description. Knowledge of his own mental states would, in normal circumstances, lead the speaker to offer that description on request to explain his use of the name. However circumstances may be abnormal. What matters is not the description he offers, but the description that was *in fact* involved in the above way in the production of the name.

This centralist interpretation of the description-theory contains more than a grain of truth. However any such view is open to the objections to be found in Kripke's "Naming and Necessity".¹⁵ Very briefly, on many occasions we are too ignorant to associate the required descriptions with names, and on many others our beliefs are so mistaken that we associate the wrong descriptions.

I take Kripke's paper to be a decisive refutation of description-theories. Whilst abandoning such theories and hence the proposed solution to the problem of ambiguity, we can nevertheless take over the insight about *having in mind*. The causal analysis in section 4 drops from the above centralist interpretation the element open to Kripke's criticisms. This element requires name-users to *know* something about the object named; for they must associate with the name a description which really does identify the object. This requirement is unnecessary.

3. Ambiguity and the External Context

Many philosophers have felt that ambiguities in names are removed by the context of use, by which is meant the context *external* to the speaker's mind. This view, implicitly or explicitly, is the dominant one amongst possible-worlds-semanticists. It is the other received solution to be considered.

It is certainly not the case that the context will *always* give sufficient guidance. We are all familiar with cases concerning very ambiguous names like 'John' where the context leaves us uncertain of the designatum. In fact, given *any* two type-uses of a name-type, it is possible to describe a plausible context of use which seems to favour neither one nor the other. Sometimes the task is easy. For example, there were two well-known German socialists called 'Liebknecht', father and son. It takes little imagination to describe a neutral context for that name. Other times it is more difficult. It would be, for example, for the type-uses of 'Aristotle' that concern, on the one hand, the philosopher, and on the other, the shipping magnate. However, it is still easy enough to make the attempt boring to the reader.

Since the external context often supplies insufficient guidance, we may wonder whether it ever *settles* the question of which type-use a token belongs to. Intuitively, it does not settle it: the pretheoretical knowledge we all bring (or should bring) to the problem strongly suggests that it does not. We feel that a person designated the one Liebknecht and not the other because "he had him in mind" or "he meant him". I have already admitted the need for analysis here. However the words contain a clear hint as to where to look for an analysis. In particular it strongly suggests that any analysis that ignores the inner state of the speaker, the *mental factors* involved in his utterance, will be unsatisfactory.

I shall presently offer an analysis that brings the inner state of the speaker to the fore. Meanwhile, it is more appropriate to offer a challenge than an argument to those who believe that the external context removes ambiguity. It is more appropriate because, to my knowledge, no serious attempt has ever been made to specify *precisely which* features of the context determine the designatum of a name. What we find, rather, are a few gestures toward the details together with the presumption that the task of specifying them all could be completed if necessary. It is assumed that the context *must* remove ambiguities for, "*what else is there* to remove them?". So the complex matter of detail can safely be left to another time. In the absence of an alternative theory, this what-else-is-there-? response has considerable appeal. Indeed, I think it is quite reasonable.

The challenge runs as follows. "Specify the aspects of (external) context that are said to remove ambiguities. Faced with such a detailed theory, I shall do the following for *any* pair of type-uses of an ambiguous name: describe a context including a use of the name by *any* speaker familiar with both type-uses, the context being such that the theory entails that the use designated one object, and yet we should all be inclined to say that the resulting token designated the other." We should be inclined to say this

because the context described would be one in which the speaker *meant* the other. I can be confident in the challenge because I am confident that, in almost any context, the user of a name-type-use can use it to designate its bearer.¹⁶

The challenge does not pretend to refute the theory it is aimed at. Rather, it hopes to raise some preliminary doubts about the theory: it points to “anomalies”.

In the next section I conclude the exposition of a solution to the problem of ambiguous names with some remarks on the relevance of the external context. We shall see that the context is, of course, very relevant to our *way of telling* whether a speaker designates this object or that. With these remarks before us, it will then be appropriate to complete the criticism of the “contextual” solution discussed in this section.

4. *Ambiguity and the Causal Theory of Proper Names*

The central idea of the causal theory of proper names is that our present uses of a name, say ‘Aristotle’, designate the famous Greek philosopher Aristotle, *not* in virtue of the various things we (rightly) believe true of him, but in virtue of *a causal network stretching back from our uses to the first uses of the name to designate Aristotle*. Thus our present use of a name *borrowes its reference* from earlier uses. It is this social mechanism which enables us all to designate the same thing by a name.

This central idea has been argued for and developed elsewhere.¹⁷ My purpose in this section is, first, to show that the causal theory offers a solution to the problem of ambiguous names; second, to argue that the above contextual solution should be rejected in favour of this “causal” solution.

We need to introduce some terminology. Underlying a use of a name is a causal network grounded in the object designated. Mental states of a certain sort feature importantly in the network. Each user of the name gains a state of that sort when he gains the name. It is the causal role of that state in his later use of the name that determines the name’s reference; that state is causally linked to the object named. Let us call the state “an ability to designate the object by that name”. When he uses the name he “exercises” that ability.

We have earlier seen the solution to the problem of ambiguous names to lie in the ordinary, but unclear, notion of *having an object in mind* (or *meaning an object*).¹⁸ Our concern here is with having an object in mind *in using a name*. Note, however, that we can have an object in mind without talking about it. How? In general, we have an object in mind in virtue of a causal

connection between our state of mind and the object. In the particular case we are concerned with, the state of mind in question is the ability to designate that is exercised in using the name. Thus, with the help of the causal theory we give the following analysis:

For any x, y, z , x had y in mind in uttering a token of the name-type z (x meant y in uttering a token of the name-type z) if and only if x had an ability to designate y by z and that ability was exercised in the production of that token of z .

The solution to our problem of ambiguity is now to hand. What makes a remark using 'Aristotle' designate the philosopher and not the shipping magnate is that an ability causally based on the one and not the other was *in fact* involved in producing it. Which object a person had in mind in an utterance depends on which ability he in fact exercised.¹⁹

Description-theorists have rightly seen that with the ability to use a name goes a set of beliefs involving the name. Indeed I am happy to say, following a suggestion of Hartry Field's, that an ability to designate an object by a name simply is a set of beliefs involving the name. So, description-theorists would also be right (on my centralist interpretation) in thinking that it is the causal role of the set of associated descriptions (expressing the set of associated beliefs) which determines the designatum. *Where they were wrong was in thinking that this determination arose from these descriptions, or some of them, being true of the designatum and nothing else. What matters for designation is not what the descriptions are true of but what, in virtue of their association with a name, they are causally based on.*

We have considered the speaker's situation in using an ambiguous name. An analogous situation exists for the hearer of an ambiguous name. To understand the name we must associate it with an ability (unless we form a new ability on the strength of it). If on hearing a remark using 'Liebknecht' we associate it with our ability grounded in Karl Liebknecht, then we are understanding it to be about Karl and not about Wilhelm. Beliefs concerning Karl and Wilhelm are, in some sense, "stored" separately.

How is it that we do not more often misunderstand the use of an ambiguous name? According to the causal theory, the designatum of the name is settled by something to which the audience has no access. Clearly we rely primarily on the external context for clues. It is usually a reliable guide to what the speaker has in mind. However, it is only a guide to the underlying reality, it is not the reality itself. (Analogously, pain-behaviour is a reliable guide to pain, but it is not pain itself.) This is my disagreement with the earlier contextual view.

It is important to note that what clues we get from the context depends very much on *what we already believe*, particularly about the speaker. We know that people who utter sentences are usually aiming to communicate something and so they will try not to mislead. Taking account of this, we consider what in this context is *likely* to be the designatum. We are guided by what we think the speaker *can* designate with that name. Also by what we believe he thinks we can designate by it and he thinks we know about his designating-abilities. By and large, a speaker utters names he can use, that he thinks his audience can use and understand, and that he thinks his audience expects him to use. Sometimes, however, he will use a name that is new to his audience; he introduces them to a type-use.

A further important clue to the interpretation of a name-token is the predicate used with it: "Who is he likely to be saying *that* about?" Our answer to that will be guided by what we think the speaker might know about various objects, by what we think he would be likely to think worth saying to us, and so on.

Where the context leaves us in doubt we can usually ask the speaker about his intentions. His reply will supply further clues.

Mostly the context, together with a well-chosen question or two, enable us to settle on an interpretation. And mostly we will be right. However we may be wrong. Misunderstandings are possible: the context may mislead; our relevant beliefs about the speaker may be erroneous. Further, his answers to our questions may be incorrect: he may be wrong in one way or another about what he referred to (see section 2).

In section 3, I raised doubts about the contextual solution. We now have before us an alternative "causal" solution. I claim that in the light of the causal solution, the contextual solution should be rejected. Its strength was that it saw the importance of context to communication. The context is indeed important, but only as a guide. Aside from this, the contextual solution has several difficulties. (i) A major one is that of specifying the contextual details that are to count. I have said enough in this section to show that the specification must be very complex; in particular, allowance must be made somehow for the importance of the *internal* context, the beliefs speaker and audience have about each other.²⁰ (ii) Next, there are the anomalies that first led to our doubts. The causal solution enlarges the importance of those anomalies. (iii) The contextual solution must allow that even where a speaker uses a name that is new to his audience, communication may take place. (iv) Finally, the solution would handle misunderstandings awkwardly if at all. On the other hand, the causal solution is a plausible one without these difficulties. Its plausibility both comes from, and adds to, that of the causal theory of names.²¹

This completes the discussion of the problem of ambiguous names, my first aim. I shall now consider the implications of this discussion for semantics as a whole, my second aim.

5. *Semantics*

I shall begin by applying the findings about proper names to the possible-worlds-program. I shall then outline an alternative program suggested by the causal theory.

The possible-worlds-semanticists do not, in general, show any special interest in the ambiguity of proper names. Their concern is rather with more traditional “indexical expressions”, such as personal pronouns and tensed verbs; i.e. with expressions *whose reference is said to depend on the context of use*. Nevertheless their remarks about singular terms are clearly meant to be general, and hence can be taken to be about proper names, however little that fact is emphasised. Lewis is the most explicit about names, and so I shall discuss his view. It seems that this view is, implicitly at least, the common one amongst possible-worlds-semanticists.

For Lewis, the meaning of a term is a function assigning it an extension in all circumstances of utterance in every possible world.²² Given an input of such relevant factors as time of utterance, place of utterance, the speaker and the surrounding discourse, the function yields as output the appropriate extension of the term. He calls the package of relevant factors an *index* and each factor a *coordinate*. The function is called an *intension*.

How does Lewis apply this general approach to names?

... a meaning for a name is something that determines what thing, if any, the name names in various possible states of affairs, at various times, and so on.²³

I take it that this is the contextual solution to the problem of ambiguous names. Lewis does not *explicitly* say this, but it is implicit in his talk of indices. Further, *what else* are the coordinates he mentions supposed to do here? His reference to “various possible states of affairs” *can* be otherwise explained. We can assume that he has in mind his theory of “counterparts” according to which the designatum of a name changes from possible world to possible world.²⁴ This theory seems to me mistaken, but it is not my concern here.²⁵ Setting that coordinate aside, what effect are *the time* and the other coordinates covered by “and so on” supposed to have on what a name names? The only plausible answer seems to be that they are supposed to distinguish one type-use of a name-type from another; i.e. to resolve the ambiguity of the name-type.²⁶

So, the view is that there is something the name-type ‘John’ has, an intension, which determines that when spoken by a certain person at a certain

time and place to a certain audience (etc.) the name designates a certain object. Further, as we vary the context used as input, that intension will yield as output other objects until, when we have run through all possible contexts, it will have yielded all past, present and future objects called 'John'.²⁷ And, presumably, there are different intensions for 'Liebknecht' and 'Aristotle' (since they have different "meanings").

This is precisely the sort of view I have recently rejected. I have claimed in contrast that what determines the designatum of a name-type on a particular occasion of use is the underlying *cause* of that use. Oversimplifying, it is *what the speaker had in mind* that determines reference, and I have given a causal account of that. The cause of the token is, of course, a contextual feature of the use of the type, but it is a feature of the *internal* context (largely) and it is the *only* relevant one.²⁸ *Furthermore, there is nothing that one name-type has (except application to certain objects), no function, intension, or meaning, that distinguishes it from any other name-type.* For any name-type *x* and any object *y*, a use of *x* designates *y* (has *y* as its extension) if and only if the causal chain underlying that use is grounded in *y*.²⁹

The causal theory of proper names, therefore, supplies an argument against the possible-worlds-program in semantics. Scientific programs do not, of course, fall as a result of such "refutations". However the causal theory does more than supply an argument against this program: it suggests an altogether different approach.

Proper names have no "meanings". Talk that is clearly wrong for them is also best avoided elsewhere. We should talk not of "meanings", but rather of "mechanisms of reference". Language refers to the world. How does it do this? There must be mechanisms of some sort; these are the mechanisms of reference. I have said something here (and more elsewhere) about the mechanisms for proper names: they are causal networks of a certain sort. I am now supposing analogous causal mechanisms for other parts of speech.³⁰ Such mechanisms link the tokens of our language to the world.

Just as the mechanism of reference of a name-token settles which use of its type is in question, so also does the mechanism of reference of a general-term-token. Thus we cope with terms like 'bank'.³¹

What our attention to ambiguity has suggested is a program for semantics (for its central problems, at least) focussed not on types (often, implicitly, type-uses) and their meanings but rather on tokens and their mechanisms of reference. I offer the barest outline of such a "causal" program.

First, we need to explain the semantics of complex expressions (sentences) in terms of the semantics of simple expressions (words), and then the semantics of simple expressions. These two steps yield the following three tasks in the program.

(1) The first task is to explain the semantics of the sentences of a natural language in terms of the semantics of “underlying” base-sentences. The base-sentences are in a simple language analogous to the predicate calculus. The talk here is of grammatical categories and transformations. Each sentence-token that counts as being in the language can be paired with a base-sentence which explains, in part, the way the token is understood. The token can be regarded as “generated” by transformations from the base-sentence.³² What a sentence-token means will depend on which base-sentence it is correctly paired with. The correct pairing will be determined by which base-sentence *in fact* explains the token. This is determined by *what the speaker meant*, i.e. by the processes within the speaker that (causally) produced the token. In this way a syntactically ambiguous sentence-type is linked to only one base-sentence on each occasion of use.³³ Clearly we look to modern “transformational” linguistics to fulfil this part of the program.³⁴

(2) The next task is to show how the semantics of each base-sentence depends on the semantics of its parts. Tarski is the guide here.³⁵

If we were to complete these two tasks we would have available an explanation of the semantics of any possible sentence-token in the natural language (or indeed in *any* natural language having the same grammatical structure) ultimately in terms of the semantics of the parts of that sentence.³⁶

(3) Finally, we must investigate the semantics of the parts. Tasks (1) and (2) reduce the semantics of complex expressions to the semantics of simple expressions. Task (3) is the semantics of simple expressions. To perform it we must examine the mechanisms of reference of these simple expressions. The causal theory of names is a beginning for one category. The task is not entirely a philosophical one: much will have to be left to the more empirical sciences.

By talking always of tokens, we have no need to attend to the aspects of the context that loom so large in the work of the possible-worlds-semanticists. A token is a physical object that brings its context with it. Our only concern with the context is with its role in the causal explanation of the token.

The aim is to do without all possible worlds save the actual world, to do without meanings, intensions and the like. It is hard to see, in any case, that these entities give much aid to explanation. What, for example, *are* Lewis's intensions? They are functions, we are told. But what are *they*? The problem of connecting words to the world is shut up unsolved in this notion. We need to know the *nature* of the links between a word, its intension, and its extension. We need to know *how* the circumstances of utterance come to bear on a term's intension to affect its extension. And firm resistance is surely appropriate to the positing of nonactual possible worlds.³⁷

To have an aim is one thing, to achieve it another. Important to the program's prospects is its handling of the contexts of propositional attitudes. This cannot of course be demonstrated here. However, the strategy can be indicated. In seeking the truth conditions of sentences expressing propositional attitudes, we attend to the relationships amongst mechanisms of reference: for "Ralph believes that Tom is a spy" to be true, Ralph must have access to mechanisms standing in certain relationships to those for 'Tom' and 'spy'.

Our talk of mechanisms of reference leaves much to be explained. But it points the way. We do not know precisely what mechanisms of reference are, but we do know roughly the sort of thing we expect to cause utterances. The causal theory points the way to a semantics that is compatible with physicalism, to a "semantics naturalised".

Though we have no need of meanings, we can, if we are so inclined, introduce them. We obtain meanings by abstracting from mechanisms of reference. Consider some predicate. Underlying all tokens of a type-use of that predicate uttered by a speaker during a certain period will be mechanisms of reference having a common part. In that common part we can expect to find something that is plausibly identifiable with the meaning of the type-use for the speaker in that period.³⁸ The meaning of the type-use *in the language* of the speaker is obtained from the meanings for each person who speaks the *same* language as the speaker. A language is defined in terms of the word-types its tokens belong to, the mechanisms of reference underlying those tokens, and the grammar that explains how sentences can be generated from words and also how, with the help of Tarski, the semantics of these sentences depend on the semantics of the words they contain.

What is the relationship between the two programs? The theories of the one *need* not be inconsistent with the theories of the other. After all, if a possible-worlds-theorist is prepared to tolerate possible worlds and enough coordinates in an index he can accommodate any facts uncovered by the causal program;³⁹ he could, for example, cope with the facts about ambiguous names. Why then prefer the causal program to the other? Should the prospects of the causal program be as promising as I take them to be, we should prefer it because its theories offer *better explanations* of the phenomena under investigation; i.e. of the referential and other semantic properties of language. In particular, the theories have the virtue of compatibility with physicalism. If the program is successful, only those theories in the possible-worlds-program that *can be reduced* to a theory within the causal program should seem satisfactory; only then does talk of "possible worlds", "intensions" and the like, have explanatory power. Further, if this

is so, we need to consider whether there is *any point* to theorising in the possible-worlds-way.⁴⁰ The discussion has suggested (though by no means shown) that in two of the favourite areas of recent theorising, there is not: the areas are those of *propositional attitudes* and *indexical expressions*. In the area of *modality* the situation is rather different. This is the area of greatest triumph for the possible-worlds-program and no alternative approach has been forthcoming. Here, then, there does seem to be a reason to posit possible worlds. The hope must be for a reduction in the future.

Finally, the causal program has consequences for certain ways of dividing up the study of language. Montague adopts an old division into three branches, syntax, semantics and pragmatics. Syntax deals with expressions alone, semantics with expressions together with their reference, and pragmatics, besides these, with the users of expressions and the possible contexts of use.⁴¹ For us, semantics studies the referential properties of the tokens of language. Syntax is subsidiary to semantics: it studies the grammatical properties of simple tokens which bear on the semantics of the complex tokens containing them. We have no need of pragmatics.

Lewis distinguishes two topics:

first, the description of possible languages or grammars as abstract semantic systems whereby symbols are associated with aspects of the world; and second, the description of the psychological and sociological facts whereby a particular one of these abstract semantic systems is the one used by a person or population.⁴²

The causal program might be considered a program for the first topic, but fulfilling it would make the answer to the second topic easy and the distinction somewhat pointless. A person uses a language when he utters tokens of the appropriate form with the appropriate mechanisms of reference as causes. Just as each user of a name-type-use is linked by the casual network for a name, so also is each member of a linguistic community linked by the mechanisms of reference of the language. That's what being a member of a linguistic community *consists in*.

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NOTES

* Earlier drafts of this paper were delivered at Macquarie University (April 1972), University of Sydney (July 1972), Australian National University (October 1972), and Tufts University (February 1974). It has benefitted from criticisms received on those occasions. It has also benefitted from the criticisms of Hartry Field, Ross Poole, Alan Reeves, Max Deutscher, Graham Nerlich, and Georges Rey.

1. Kripke's views have been known to a few through lectures from 1967 onwards. However they did not appear in print until Kripke 1972. Dummett 1973 and Evans 1973 contain criticisms of Kripke. A development of the causal theory is to be found in Devitt 1974. See also the discussion in Putnam 1974(b) and De Sousa 1974.

2. Kripke 1972 leaves a great deal of work to be done on the theory but it establishes the theory's plausibility adequately enough to justify this investigation. Amongst the matters that require attention are *empty names* and *referential opacity*. Such matters need a book to do them justice. I am at present writing one with that aim.

3. See Montague 1968, 1969 and 1970; Hintikka 1962, 1967, 1968, 1970(a) and (b), and 1971(a) and (b); Scott 1970; Lewis 1969, 1970 and 1973.

4. Hintikka (1971(a), pp. 153–54) accepts that he is committed to possible worlds but argues that he is not *ontologically* committed to them. The distinction he wishes to draw here is obscure. His semantic theory requires quantification over possible worlds. If we treat semantics as a science on a par with other sciences (as we should), then we must regard the commitments of its quantified statements no differently, and as seriously, as we regard those of other sciences. So he is ontologically committed to possible worlds.

5. Kripke's position in this respect is curious. He had an important role in stimulating the possible-worlds-program with his writings on the semantics of modal logic (e.g. in Kripke 1963). However he is also the originator of the causal theory of proper names which lies behind the alternative program outlined below. Further, he has recently argued vigorously against over-literal interpretations of talk of "possible worlds" (Kripke 1971 and 1972). One wonders what construal we should put on his earlier possible-worlds-semantics. Perhaps he has in mind some kind of reduction.

6. Lewis is commendably straightforward about his talk of possible worlds (Lewis 1973, sec. 4.1): he means it to be taken literally. He admits his commitment to possible worlds and scorns any shame-faced attempt to identify them with entities generally found more agreeable. He will regard my remarks here as vulgar abuse of respectable, indeed lovable, entities: "Where is the argument?" Though this paper offers an argument against the possible-worlds-program, it does not offer any against possible worlds *themselves*. The *assumption* that underlies my remarks is that there is *obviously* something suspect about positing them. This places me with those who react to Lewis's views with "incredulous stares". What argument can one offer to someone who does not find the assumption obvious?

The best I can do is as follows. Lewis's view is that there exist objects which do not actually exist. This is paradoxical. The only grip we have on the notion of *existence* ties it to our notion of *actuality*: what exists is what is actual. Deny this and you are not talking of existence when you use 'exists'. Such a conclusion is not surprising: ordinary uses of 'exists', 'there are', etc., are notoriously loose.

This is not a powerful argument: it seems hard to argue for what is so obvious. What could lead someone to accept possible worlds? Perhaps a mistaken picture of them. Consider, e.g. such passages as this:

Our actual world is only one world among others. We call it alone actual not because it differs in kind from all the rest but because it is the world we inhabit. [Ibid., p. 85]

It is as if the actual world was *our planet* and other possible worlds were *other planets* which we can but dimly perceive. But this is a false picture as Kripke has often pointed out.

7. But it is not unimportant. Recent work in the philosophy of science has revealed the extent to which our attitudes to theories are dependent on intuitions whose bases we cannot make explicit: see Kuhn 1962 and 1970, Feyerabend 1970(a) and (b).

8. I use the term "designate" to express the relationship between a name-token and a certain object which we might ordinarily say is "its bearer", "the object it refers to", perhaps even "the object it designates". The relationship in question is picked out by its crucial bearing on the truth value of sentences containing the name.

9. Types need not be reified: to say that a token is of a certain type is just to say that it has certain physical characteristics (that certain physical predicates are true of it).

10. When we talk about a name what we are talking about is often a name-type-use; it is, e.g., in "'Pegasus' is an empty name".

11. In Devitt 1974 I used the term 'sense-theories'. The present usage seems more apt.

12. See particularly, Strawson 1959, p. 182.

13. On these last two paragraphs, see e.g. Strawson 1959, pp. 181–83 and Searle 1969, pp. 77–96.

14. I know of no description-theorist who has explicitly taken this line: but then they do not push their enquiry as far as I am now pushing it.

15. Kripke 1972.

16. The qualification is necessary because it is psychologically very implausible that a person could mean a certain object in some contexts: e.g. that he could mean the philosopher in saying "Aristotle is getting Jackie a drink" whilst on Onassis's yacht. However I do claim that there are many contexts in which the detailed theory will give the wrong answer even for this pair of type-uses of 'Aristotle', a name where the theory is on its *strongest* grounds. Only one such context for each pair is needed for the challenge.

17. Kripke 1972 and Devitt 1974.

18. Such locutions can be construed opaquely so that one can mean Tully but not mean Cicero. Our concern is with the transparent construal.

19. This greatly oversimplifies the reality. Many things can "go wrong" with the result that causal chains grounded in more than one object are involved; see Devitt 1974, sec. 10. However, for our purposes here, the discussion of the ambiguity of proper names, these complications can be set aside.

20. I know of no contextual theory that even begins to give this due weight.

21. The superiority claimed for the causal solution over the contextual solution rests in part, therefore, on what has been argued elsewhere for the causal theory.

22. Lewis 1969, pp. 171–73; 1970, pp. 22–27.

23. Lewis 1970, p. 23. (On p. 25 he allows that the meaning for a name may be a *partial* function.)

24. Lewis 1968(a).

25. See Kripke 1971 and 1972 for some criticisms of it.

26. This paragraph in justification of an interpretation is made necessary by the fact that Lewis does not explicitly offer his remarks as a solution to our problem of ambiguity, and by the fact that several other passages where he discusses ambiguity (though *not* proper-name-ambiguity) suggest a rather different interpretation (1969, Chapter V, *passim*; 1970, p. 36). On that interpretation, his remarks about names would be seen as concerning not *types* but *type-uses* and our problem of ambiguity would be set aside until another time (see particularly 1969, p. 193). However, the implication of these passages is still that we must look to the context to solve the problem.

27. And also all *possible objects* that are called 'John'? Or, all actual objects that *could have been called* 'John'? Or, all *possible objects* that *could have been called* 'John'? I prescind from these nightmarish possibilities.

28. In two places (1968(b); 1970, pp. 63–64). Lewis shows some recognition of the importance of causal chains. Insofar as I understand these remarks, I gather that Lewis wants to allow in the causal mechanism behind an utterance as *one of several* coordinates affecting the extension of a name. My claim is that it is the *only* such coordinate.

29. Such a claim needs to be qualified in the light of the complications referred to in note 19.

30. This supposition is in line with views in Kripke 1972 and Putnam 1974(a).

31. Cf. Lewis 1969, p. 193.

32. The claim is not that this generation in fact takes place within the speaker. If we can find one way of generating the sentences of a natural language, we can find many. At this stage of our knowledge, we have very little to go on in preferring one of these to the others as an account of psychological reality. So, what takes place in the speaker remains very much to be seen.

33. In the light of the previous footnote, what we must expect here is a process which links the token in some way to one of our base-sentences and not others, even though the link is unlikely to mirror our process of generation. We can expect this because the speaker "knows the meaning" of what he says.

34. It is not clear how this task relates to the goal transformational linguists usually set themselves, that of explaining the "competence" of native speakers. However there are many signs in the literature that the linguists hope for the fulfilment of some such task from their researches (see e.g. Chomsky 1965, pp. v & 99; Lakoff 1970, p. 151; Seuren 1972, p. 237).

35. The bearing of Tarski on the semantics of declarative sentences is familiar enough. Much more needs to be said and done to treat the others.

36. The interpretation of Tarski underlying these remarks is due to Hartry Field; see Field 1972. He shows that Tarski can be applied to tokens and how the one "truth definition" will do for any language of the given structure. More importantly, he shows how Tarski's achievement has been exaggerated, both by Tarski and by others. According to this exaggerated view, there would be no such task as (3) remaining, because with the aid of Tarski we would have accomplished it. (In Davidson 1967, e.g. there seems to be no place for it in his program for a complete semantics).

My own views on semantics have been greatly influenced by Field in countless conversations at Harvard from 1968 to 1970.

37. A striking feature of much modern work in semantics is *how little is required of an explanation*. This has been persuasively demonstrated by Field in his contrast

between Tarski's theory of *denotation* (for names) and the physical theory of *valence* ("Tarski's Theory of Truth"). Nobody would take seriously a theory of *valence* analogous to Tarski's for *denotation*. Why then is the latter taken seriously? A tentative diagnosis. The field of semantics has been dominated by philosophers with a logico-mathematical background. As a result the standards for reduction and explanation accepted in semantics are those to be found in mathematics and not those to be found in physics. Yet it is the latter that are appropriate.

38. This may seem little more than a pious hope until we have before us a thoroughgoing theory of reference for predicates.

39. Remarks by Cliff Hooker and Graham Nerlich made this clear to me.

40. There might be: there is a point in doing chemistry the way it is done even though it is reducible to physics (or so I am told).

41. Montague 1970, p. 68.

42. Lewis 1970, p. 19.

BIBLIOGRAPHY

- CHOMSKY,
Noam *Aspects of the Theory of Syntax*, Cambridge, Mass.: Massachusetts Institute of Technology Press, 1965. (Chomsky 1965).
- DAVIDSON,
Donald "Truth and Meaning," *Synthese* 17 (1967), pp. 304–23. (Davidson 1967).
- DAVIDSON,
Donald &
HARMAN,
Gilbert (eds.) *Semantics of Natural Language*, Dordrecht-Holland: Reidel, 1972. (Davidson & Harman 1972).
- DE SOUSA, R. B. "Kripke on Naming and Necessity." *Canadian Journal of Philosophy* 3 (1974), pp. 447–64.
- DEVITT, Michael "Singular Terms," *Journal of Philosophy* 71 (1974), pp. 183–205. (Devitt 1974).
- DUMMETT,
Michael *Frege: Philosophy of Language*, London: Duckworth, (1973). (Dummett 1973).

- EVANS, Gareth "The Causal Theory of Names," *Aristotelian Society, Supplementary Volume* 47 (1973), pp. 187–208. (Evans 1973).
- FEYERABEND, Paul K. "Against Method," *Minnesota Studies in the Philosophy of Science* IV, ed. Michael Radner and Stephen Winokur, pp. 17–130. Minneapolis: University of Minnesota Press, 1970. (Feyerabend 1970 (a)).
- FEYERABEND, Paul K. "Consolations for the Specialist," *Criticism and the Growth of Knowledge*, ed. Imre Lakatos and Alan Musgrave, pp. 197–230, London: Cambridge University Press, 1970. (Feyerabend 1970 (b)).
- FIELD, Hartry "Tarski's Theory of Truth," *Journal of Philosophy* 69, 1972, pp. 347–75. (Field 1972).
- HINTIKKA, Jaakko *Knowledge and Belief*, Ithaca: Cornell University Press, 1962. (Hintikka 1962).
- HINTIKKA, Jaakko "Individuals, Possible Worlds, and Epistemic Logic," *Noûs* 1, 1967, pp. 33–62. (Hintikka 1967).
- HINTIKKA, Jaakko "Epistemic Logic and the Methods of Philosophical Analysis," *Australasian Journal of Philosophy* 46, 1968, pp. 37–51. (Hintikka 1968).
- HINTIKKA, Jaakko "The Semantics of Modal Notions and the Indeterminacy of Ontology," *Synthese* 21, 1970, pp. 408–24. Reprinted in Davidson and Harman 1972. (Hintikka 1970 (a)).
- HINTIKKA, Jaakko "Objects of Knowledge and Belief: Acquaintances and Public Figures," *Journal of Philosophy* 67, 1970, pp. 869–83. (Hintikka 1970 (b)).
- HINTIKKA, Jaakko "Semantics for Propositional Attitudes," *Reference and Modality*, ed. Leonard Linsky, pp. 145–67. Oxford: Oxford University Press, 1971. (Hintikka 1971 (a)).

- HINTIKKA, Jaakko "Sosa on Propositional Attitudes *de Dicto* and *de Re*" *Journal of Philosophy* 68, 1971, pp. 489–97. (Hintikka 1971 (b)).
- KRIPKE, Saul A. "Semantical Considerations on Modal Logic," *Acta Philosophica Fennica* 16, 1963, pp. 83–94. (Kripke 1963).
- KRIPKE, Saul A. "Identity and Necessity," *Identity and Individuation*, ed. Milton K. Munitz, pp. 135–64. New York: New York University Press, 1971. (Kripke 1971).
- KRIPKE, Saul A. "Naming and Necessity," Davidson & Harman, 1972, pp. 253–355. (Kripke 1972).
- KUHN, Thomas S. *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press, 2nd ed., 1970. 1st ed., 1962. (Kuhn 1962).
- KUHN, Thomas S. "Reflections on my Critics," *Criticism and the Growth of Knowledge*, ed. Imre Lakatos and Alan Musgrave, pp. 231–78. London: Cambridge University Press, 1970. (Kuhn 1970).
- LAKOFF, George "Linguistics and Natural Logic," *Synthese* 22, 1970, pp. 151–271. Reprinted in Davidson and Harman 1972. (Lakoff 1970).
- LEWIS, David K. "Counterpart Theory and Quantified Modal Logic," *Journal of Philosophy* 65, 1968, pp. 113–26. (Lewis 1968 (a)).
- LEWIS, David K. "Language and Languages," *Minnesota Studies in the Philosophy of Science*, forthcoming. (Lewis 1968 (b)).
- LEWIS, David K. *Convention: A Philosophical Study*, Cambridge, Mass.: Harvard University Press, 1969. (Lewis 1969).

- LEWIS, David K. "General Semantics," *Synthese* 22, 1970, pp. 18–67. Reprinted in Davidson & Harman 1972. (Lewis 1970).
- LEWIS, David K. *Counterfactuals*, Cambridge, Mass.: Harvard University Press, 1973. (Lewis 1973).
- MONTAGUE, Richard "Pragmatics," *Contemporary Philosophy*, ed. R. Klibansky, pp. 102–22. Florence: La Nuova Italia Editrice, 1968. (Montague 1968).
- MONTAGUE, Richard "On the Nature of Certain Philosophical Entities," *The Monist* 53 (1969), pp. 159–94. (Montague 1969).
- MONTAGUE, Richard "Pragmatics and Intensional Logic," *Synthese* 22 (1970), pp. 68–94. Reprinted in Davidson & Harman 1972. (Montague 1970).
- PUTNAM, Hilary "The Meaning of 'Meaning'." Forthcoming in *Minnesota Studies in the Philosophy of Science*. (Putnam 1974 (a)).
- PUTNAM, Hilary "Language and Reality." Unpublished. (Putnam 1974 (b)).
- SCOTT, Dana "Advice on Modal Logic," *Philosophical Problems in Logic*, ed. Karel Lambert, pp. 143–73. Dordrecht-Holland: Reidel, 1970. (Scott 1970).
- SEARLE, John R. *Speech Acts: An Essay in the Philosophy of Language*, London: Cambridge University Press, 1969. (Searle 1969).
- SEUREN, Pieter A. M. "Autonomous Versus Semantic Syntax," *Foundations of Language* 8 (1972), pp. 237–65. (Seuren 1972).
- STRAWSON, P. F. *Individuals: An Essay in Descriptive Metaphysics* London: Methuen, 1959. (Strawson 1959).