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Reference and Intentions to Refer: An Analysis of the Role of Intentions to Refer in a Theory of Reference

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REFERENCE AND INTENTIONS TO REFER
AN ANALYSIS OF THE ROLE OF INTENTIONS TO REFER
IN A THEORY OF REFERENCE

by

Corliss Gayda Swain

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
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VITA

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Ms. Swain has published a review of On Identity by G. Moneta in The Review of Metaphysics (December, 1982).

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INTRODUCTION

My aim in this dissertation is to examine the role that intentions to refer should play in a theory of reference. The general question a theory of reference is supposed to answer is "How are words connected to objects in the world?" The traditional answer is that the connection is grounded in a prior connection between minds and objects in the world. According to this view, human beings identify objects and entertain thoughts about them before they have language. The connection between words and objects is made by people who intend to use a word to refer to an object which they can already identify and about which they can already think.

This answer has been challenged by some twentieth century philosophers. Some have argued that our thoughts about objects in the world are mediated and structured by language. Some have argued that any attempt to explain reference in terms of intentions to refer are circular. Perhaps the most serious objection to theories that try to explain the connection between words and objects in terms of intentions to refer is that such theories cannot adequately account for the normative aspect of language, that is, they cannot account for the fact that there are correct and incorrect usages. If reference were just a matter of intentions to refer, then, with intentions of the specified kind, a word could refer to anything.

By using a divide and conquer strategy, this dissertation chal-

lenges the claim that reference is determined by intentions to refer. The claim that reference is determined by intentions to refer is divided into two claims: one is a claim about how reference is disambiguated; the other is about how expressions in a language get their reference potential. By dividing the claims in this way, we can see more clearly in what contexts, and to what extent, intentions to refer determine reference.

The first two chapters of the dissertation are devoted to methodology. Chapter One states the explanatory goals of a theory of reference. In Chapter Two I develop criteria of adequacy for a theory of reference.

Chapters Three through Six are devoted to theories of disambiguation. In these chapters I clarify and defend the claim that reference is disambiguated by intentions to refer. In Chapter Three I develop the distinction between theories of disambiguation and theories of reference potential and reject one type of intentionalist theory. According to the theory that I reject, the reference of an ambiguous referring expression is the object that satisfies some descriptive or representational content that the speaker has in mind when she utters the expression. I reject this account because it is subject to counter examples based on fortuitous satisfaction.

Chapter Four is devoted to theories of disambiguation that claim that the speaker's intentions to refer do not disambiguate reference. According to these theories, contextual features alone determine the reference of ambiguous referring expressions. I rule out contextual theories of disambiguation because the features to which these accounts appeal are themselves ambiguous. I concede, however, that contextual

features are important, even if not all-important, non-linguistic determinants of reference.

Chapters Five and Six argue that a speaker's intentions to refer do play some role in determining the reference of ambiguous referring expressions. In Chapter Five I examine the role of intentions to refer in determining the reference of proper names. I distinguish two types of proper names, official and unofficial, and argue that the reference of these names, once they are established means of referring, depends on causal chains linking the speaker's utterance to the referent. Intentions to refer are important only for breaking these causal chains and thus introducing a new referent.

Chapter Six looks at referring expressions other than proper names. It argues that there are reference chains which explain how the reference of some ambiguous expressions are determined. It also argues that intentions to refer play a role in initiating causal chains with an ambiguous referring expression. The reference of ambiguous referring expressions which initiate a reference chain is determined by the speaker's intentions to refer to the object she has in mind. This object is the one that is causally related to the mental representation that is referentially linked to the speaker's referring expression. Chapter Six concludes that the speaker's intentions do play a role in disambiguating reference, but it also concludes that when linguistic and non-linguistic determinants of reference are taken into account, the role that a speaker's intentions to refer play in determining reference turns out to be quite small.

Chapters Seven and Eight discuss intentionalist theories of reference potential. Chapter Seven rejects the claim that the reference

potential of expressions for singular reference is determined by a speaker's intentions to refer. It argues that reference rules which state how the reference of singular referring expressions is determined can and should avoid mention of a particular speaker's intentions to refer.

Chapter Eight is concerned with theories of reference potential which claim that reference potential is determined by speakers' intentions to refer. I argue that Gricean accounts, which try to explain semantic reference (or reference potential relative to a language) in terms of individual speaker's intentions to refer, are either circular or require untenable assumptions about the intellectual abilities of pre-linguistic people. I then discuss theories of reference which try to explain the reference potential of expressions in a language in terms of some group's intentions to refer. I argue that if these intentions to refer are formulated in terms of criteria for application of the term, such accounts are unacceptable. The kind of intention to refer which guides individual speakers (or the sum of individual speakers) in their application of a term, (for example, the intention to refer with the word 'gold' to all and only shiny, yellow, metallic objects) is not the kind of intention that sets the standards of correct and incorrect uses of referring expressions. The intentions which do set the standards of correctness are more general. In the case of natural kind terms, they are intentions to refer to the things that actually belong to that kind. With other terms, the standard of correctness may be different, but even with these terms it is a general intention (if any intention at all) to use a word correctly that determines a word's reference and not a specific intention to refer to all and only those

things that have certain characteristics.

CHAPTER I

THE EXPLANATORY GOALS OF A THEORY OF REFERENCE

This chapter identifies and evaluates three conceptions of reference: 1) reference as speaker's identification; 2) reference as the communication of a referent to an audience; and 3) reference as determining an object to be the subject of discourse. Since the conception of reference plays a role in setting explanatory goals for a theory of reference, the results of this chapter will provide a groundwork for developing acceptable explanatory goals for a theory of reference.

Before discussing these three conceptions of reference, a few remarks about theories of reference in general are in order. The goal of a theory of reference is to account for our ability to refer, our ability to talk (and to think in words) about things. As theories of reference have developed, two basic models of reference have emerged. On one model, reference is a relation between words and the world; words in a language refer to objects in the world. On the other model, referring is an act. A person refers to an object by means of something, either a referring expression of a language, a gesture, or perhaps a picture or image. The first model, which sees reference as a relation between words and objects in the world, is a model of semantic reference. The second is a model of speaker's reference.

While it is possible to concentrate on one or the other type of reference, speaker reference or semantic reference, an adequate theory

of reference must take account of both. For in order to explain our ability to refer it is not sufficient to say that there are connections between words in a language and things in the world and to specify what these connections are. Such an explanation does not account for our ability to exploit these connections in the act of referring. Conversely, an account of speaker's reference is inadequate as a theory of reference unless it can tell us how the devices used for referring work (i.e., how words or images connect with items in the world).

In this discussion of reference I shall assume that both speakers and words or phrases in a language refer. The basic data that a theory of reference must account for includes both the fact that speakers refer and the fact that words refer.

In accounting for our ability to refer, a primary task of a theory of reference is to identify the factors which determine or fix the referent of an expression or an act of referring. One basic question for a theory of reference is: "How is the referent of an act of referring or of a referring expression determined?" A referring expression is one which picks out an object or objects as the subject of discourse. For example, in the sentence, "Aristotle was a Greek philosopher," the name "Aristotle" picks out Aristotle as the subject of discourse. In the sentence, "I am drinking coffee now," the word "I" indicates that I am the subject of discourse. I am what the sentence is about. In an act of referring a person picks out a subject of discourse by using some referential device. For example, when I say, "Aristotle was a Greek philosopher," I make someone, namely Aristotle, the subject of my statement. I am talking about Aristotle.

The idea of 'picking out' an object is vague and metaphorical.

'Talking about' something also seems vague. Although these phrases convey (approximately) the right idea, they seem ill-suited for the purposes of a theory of reference, for saying what someone does when he or she refers or what counts as referring. To sharpen the concept of referring, we may propose viewing reference either as 1) the identification, on the part of the speaker, of some object as the referent of the expression or act of referring, 2) the communication of the referent of an expression or act of referring to an audience, or 3) determining an object to be the subject of the discourse (whether the parties to the discourse know that this is the subject of discourse or not). The explanatory goals of the theory of reference will then be formulated in terms of these conceptions of reference. Those who view reference as the speaker's identification of a referent see the theory of reference as a theory of identification. They ask a theory of reference to explain how the referent of a referring expression or act of referring is identified by the speaker. If one takes reference to be essentially a part of the communicative act, one requires that a theory of reference explain how we communicate the referents of our expressions and acts of referring to others. If reference is viewed as the determining of a referent for expressions and acts of referring, then the explanatory goal should be to account for the way in which the referent of a referring expression or act is determined.

In this dissertation, I will take the basic explanatory goal of a theory of reference to be that of discovering the determinants of reference, the mechanisms by which some object is made the referent of an act of referring or of a referring expression. That is, I believe a theory of reference is a theory of the determination of a referent for an act

of referring or for a referring expression. I choose this way of looking at the theory of reference because I believe it is the most neutral perspective from which to begin. At the very least, when someone or something refers, there is some object (or purported object) which is the referent. What we want to know is what makes that thing the referent, how is that connection made.

In the following sections I will discuss the alternative views of reference: reference as identification and reference as communication. I will argue that the basic explanatory goal of a theory of reference is neither just to account for the speaker's identification of a referent nor just to account for the ability to communicate one's referent to someone else. Rather, these two goals are subsumed under the more general goal of explaining how the referent of a referring expression or act is determined.

Reference as Identification

A more technical sounding word roughly synonymous with 'picking out' (as in the phrase, 'Picking out a referent') is 'identification'. We might want to equate reference with identification. If we did, we would want to say that a speaker refers if she identifies a referent. Thus, our theory of reference would be a theory of identification. As I have said, I will not adopt this view as it stands.

One of the problems with equating reference with identification is that the notion of identification is ambiguous. Identification is sometimes analyzed as recognition of an object by a speaker. Identification

can also mean individuation or specification of an object by a speaker.

Reference is not identification in the sense of recognizing an individuated object. An example taken from Hilary Putnam demonstrates that this interpretation of reference is too strict.¹ Putnam confesses that he cannot tell the difference between elm trees and beech trees, and yet he can refer to elm trees. When he says, "Elm trees are deciduous," he refers to elm trees (not to elm and beech trees) even though if he were asked to pick out or identify what he was talking about he could not. He would not recognize the elm trees as elm trees (and as distinct from beech trees). Such a case is enough to show that reference is not a matter of recognizing objects.

Identification as the individuation or specification of an object is very close to what I call determining or fixing a referent. To identify an object as the referent, in this sense, is to distinguish an object as the subject of discourse. To say that a theory of reference is a theory of identification, when identification is understood in this way, is more acceptable. However, I would reject the view that reference is merely speaker's identification. When reference is successful, some object is identified as the subject of the discourse, but the person or thing doing the identifying need not be the person or thing who did the referring. If it is true that both people and words can refer, then to speak of reference as speaker's identification would require another definition of reference to capture the sense in which words are said to refer.

¹ "The Meaning of Meaning," in Mind, Language, and Reality, pp. 215-271. See especially pp. 226f.

Further, the use of the term 'identification' can be misleading. One reason the term 'identification' is misleading is that it has definite cognitive elements. Identification is primarily a cognitive skill; it is something that an intelligent agent does. If this is true, then it is difficult to see how words or phrases can refer. On the identification model, the referrer, in this case the referring expression, is supposed to identify some object. But it seems that words are not the kinds of things that are capable of identifying, except derivatively. Words identify objects only in the sense that they enable an intelligent agent to identify an object. A theory of reference is better off if it does not assume without argument that one or the other type of reference, speaker's or semantic, is primary. It would be better to use a neutral concept to characterize reference, a concept such as 'specify' or 'determine'. Although 'identification' can be defined as the specification of an object as the subject of discourse, and is not objectionable if it is understood in this limited sense, the temptation to ignore this stipulation is strong. For this reason I will avoid the term 'identification' when characterizing reference and speak instead of determining a referent.

To see reference as identification can also be misleading because identification presupposes that the object to be identified is already specified in some way. Identification is a success word. That is, one can identify the correct object or the wrong object. But to be able to identify an object correctly or incorrectly the object must first be specified in some way. The identification consists in knowing which object matches those specifications or at least in recognizing the specifications. If we can choose between seeing reference as the determin-

ing of an object to be the subject of discourse and seeing reference as the determining of an object to be the subject of discourse along with the knowledge or recognition on the part of the speaker that that object is the subject of discourse, we should choose the former, once again because it is more neutral than the latter and because it does not create difficulties for understanding semantic reference.

It might be objected that a referent is determined by the very act or process of identification, so to identify and to determine a referent are actually the same thing. But it should be noted that I am not denying the possibility that identification of some kind is the mechanism of reference. What I am claiming is that even if identification were the only mechanism of reference the theory of reference should not presuppose without argument that it is. To see the theory of reference as a theory of identification at the outset is illegitimate. The explanatory goals of the theory should not be defined in terms of a preferred explanation.

Reference as Communication

Some theorists view reference as a communicative act. To refer, according to this theory, is to communicate to someone the subject of one's discourse. And the goal of a theory of reference is to explain how the speaker communicates the referent to an audience. This model of reference is an identification model which holds that referring is a matter of an audience's identification of the subject of discourse.

It would be wrong to restrict reference to communicative acts,

acts with a speaker and an audience. For although in many cases reference does serve the purposes of communication, very often a referer (either a person or a referring expression) does identify an object for an audience, nonetheless this is not always the case. The person who correctly says or thinks to himself, "This table sure is wobbly," refers to some table,² as surely as the person who says the same thing to another. Taking the audience out of the picture has no effect on reference; it does not make an act of referring or a referring expression into something else.

Of course it could be said that there is an audience and a referer whenever someone talks to himself or thinks out loud. The audience in such cases is the speaker himself. This sounds plausible enough. But being one's own audience does not seem to be the same as communicating with oneself. Real communication, I suspect, requires at least two distinct persons.

Further, if we take reference to be a matter of identifying some object for an audience other than the speaker, then we encounter some obvious counter-examples. For suppose I say to my student, "The bourse in Paris is famous." It would seem that I am referring to the bourse in Paris. But if reference is a matter of identifying some object for an audience I could have failed to refer. If my student did not know what object was being talked about, perhaps she hasn't the slightest idea what a bourse is, or she thinks bourse is a kind of soup, then she would not identify the proper object. It would follow, if reference is identification for an audience, that I had not referred. But this is

² The words 'this table' also refer to some table.

clearly wrong. Identification, so understood, is not a necessary condition for reference.

This counter-example may not be conclusive. For my student may be able to identify the object in question in another way; she may identify it by aping my referring expression. Thus, she could identify the object I was referring to by using the expression, 'the bourse in Paris', even though she doesn't know exactly what object that is, or even though she thinks the object is soup. However, the counter-example can be modified to rule out this type of reply. Instead of saying, "The bourse in Paris is famous," to my student I may say it to someone who doesn't know English well enough to identify referring terms. Such an audience wouldn't even be able to say I was referring to the bourse in Paris. Or I may say this to someone who is not paying attention. She would not be able to say that I was referring to the bourse in Paris. Nonetheless, I would still have referred to the bourse. It follows that reference is not primarily a matter of identifying an object for some audience other than oneself.

Reference as Determining a Referent

Having rejected both the identification and communication models of reference, I will understand the primary goal of a theory of reference to be that of explaining how the referent of an act of referring or of a referring expression is determined. A theory of reference should tell us what the mechanisms of reference are and how they work. A person's ability to refer and perhaps also her ability to understand the

references of others will be explained in terms of these mechanisms.

In the remainder of this chapter I will develop more fully my conception of a theory of reference as a theory of how reference is determined. Before doing so I will distinguish two things that the theory of reference is concerned to do. Briefly, the theory of reference should tell us what things or kinds of things can be used to refer. I have already said that people refer and words refer. When people refer they do so using some device. Let us call such devices 'referring devices'. Some words and combinations of words are referring devices. One task of the theory of reference is to identify the types of referring devices.³ Another part of the theory of reference, the central part, explains how these devices work. It tells us how a referring device (for example a definite description) determines a referent. This part of the theory of reference is concerned with the mechanisms of reference.

A referring device is a means of determining a referent (or referents). The task of identifying the kinds of referring devices is that of specifying what kinds of things can or do determine referents, or in other words, saying what kinds of things people can and do use to refer. What the theory of reference is concerned to do in identifying referring devices is to specify the semantically significant elements of a discourse, those which affect the truth conditions of a statement.⁴ In this section I will develop a conception of referring devices that is some-

³ The task of identifying particular devices is left to the linguist. They can do so by specifying conditions for a word or phrase's being a referring device or by enumerating the devices, or by giving rules for generating such devices.

⁴ Or satisfaction conditions for a non-indicative sentence.

what unusual, though not unprecedented. What is unusual about this conception is its generality. Theories of reference are often limited to an explanation of linguistic reference, to an explanation of how pieces of language hook up to the world. The referring devices which are considered by such theories are linguistic devices. The theory that I am developing is not limited to an account of linguistic reference or to linguistic referring devices, even though it is primarily concerned with such devices.⁵

If something is a referring device, it must satisfy two requirements: 1) it must determine or co-determine a referent for a discourse and 2) it must affect the truth or satisfaction conditions of a sentence. I shall limit my discussion of referring devices to those that are used in a sentence, assuming for the sake of argument that referring devices refer only in the context of a sentence. Thus, I will assume that the words, 'Winston Churchill' do not refer unless they are used in making a statement and, similarly, a photograph of Winston Churchill does not refer to Winston Churchill unless the photograph is part of a statement. This assumption will help us to form criteria of adequacy for a theory of reference. It may turn out that once we understand the mechanisms of reference for these devices as they occur in sentences that we can drop the restriction.

It should be noted that the identification of referring devices is not an explanation of how referring devices determine a referent. My discussion of referring devices does not purport to explain how differ-

⁵ I will count such things as pictures (in certain contexts), gestures such as pointing, and perhaps even mental images as non-linguistic referring devices.

ent types of referring devices work. It neither precludes nor presupposes explanatory or ontological relations between types of referring devices. That is, it does not presuppose that non-linguistic referring devices are the basis for linguistic referring devices, or vice-versa. Nor does it presuppose that all referring devices are on a par or can be explained in the same way. Linguistic and non-linguistic referring devices are grouped together on the basis of a functional similarity. Both types of devices can determine a referent for a statement or a discourse. This functional similarity need not be based on identical mechanisms.

Many kinds of linguistic referring devices have already been identified. Proper names, definite descriptions, and indexicals are kinds of linguistic devices for referring to individuals.⁶ Class terms are also kinds of linguistic devices for referring. Most of the basic kinds of referring terms have already been identified, though there is still some controversy over sub-divisions within these general classes.⁷ In addition to kinds of linguistic referring devices, the theory of reference should identify any non-linguistic devices for referring that may exist. The theory of reference, broadly interpreted, is a theory of how referring devices determine a referent, not just a theory of how linguistic devices determine a referent. If non-linguistic devices are

⁶ 'Individuals' should be broadly construed. It refers not only to individual objects, but also to places, times, events, feelings; in short, anything that can be individuated is an individual in this sense.

⁷ For example, Keith Donnellan has argued that there are two kinds of definite descriptions, attributive and referential. See "Reference and Definite Descriptions," The Philosophical Review, 75 (1966), pp. 281-304.

also used for referring and for making statements, then their explanation falls within the scope of the theory of reference. If this is true, there is no non-arbitrary reason for treating non-linguistic devices differently from linguistic devices in a theory of reference.

Non-linguistic devices for referring would be like linguistic devices for referring in the relevant respect if they determined a referent for a statement (or for a segment of discourse). In this section I will show that there are such devices by giving examples that fulfill this criterion. Later I will argue that a theory of reference which recognizes these non-linguistic determinants of reference is in a better position to explain linguistic reference than those that do not.⁸

In the following examples, note that sometimes the non-linguistic element of the discourse determines the referent of the statement by itself. In those cases we see that without the non-linguistic device there would be no statement because there would be no referent for the discourse. In these examples the function of the non-linguistic referring device parallels the function of linguistic devices in that 1) without the device the discourse has no truth conditions (no statement is made); and 2) had the device been different and not co-referential, the truth conditions of the statement would have been different. If a non-linguistic device fulfills these two conditions, it is semantically significant.

It is possible to determine a referent for a statement without using linguistic devices for referring. For example, an advertisement for a Chicago television network consists of a photograph of Alfred

⁸ See Chapter Four.

Hitchcock and the caption, "is a classic". This combination of photograph and caption makes a statement about something. The subject of the statement is determined by the photograph. In this case, the photograph is a non-linguistic device which is used to determine the subject of a discourse; it is a non-linguistic referring device. Other referring devices could have been used to make more or less the same statement. Instead of a photograph of Hitchcock the advertisement could have used a portrait, or an illustration, or a caricature of Hitchcock. It could also have used the words, 'Alfred Hitchcock'. Each of these devices would have determined a referent for the statement.

Gestures, either alone or in conjunction with a linguistic referring device, can also be used to determine a referent for a statement. For example, I stand in front of a classroom waving a book in the air and ask, "Red or pink?" I am asking a question about something; there is a subject of my sentence. The device I used to determine a referent for my sentence was the book-waving gesture. This gesture is another non-linguistic referring device.⁹ There are other gestures which could have determined the same referent. I could have pointed to the book and said "Red or pink?" or picked up the book and looked at it while saying "Red or pink?"

Pointing is a gesture that is often used in conjunction with linguistic referring devices, though it sometimes can determine a referent alone. The pointing gesture should be considered semantically significant when used with linguistic referring devices if the referent of the

⁹ Note that how it determines a referent is not in question here, only whether it determines a referent.

statement would have been different had the pointing gesture been different. For example, if I say "That is pretty," while pointing to a picture, the referent would be the picture. Had I said the same thing while pointing to something else, say a coffee cup, the referent would have been different. The difference in reference, and thus in truth conditions is due to the difference in the gesture, not to any difference in linguistic devices. Since the gesture does directly affect reference and truth conditions it should be considered semantically significant.¹⁰

It might be argued that mental images or other intentional states can directly affect the truth conditions of a statement. If this is true, then these images and states would also be semantically significant.

In the preceding paragraphs, I have identified several different non-linguistic referring devices. What is significant about these devices is that they determine a referent for a discourse. In Chapter Four, I will argue that such devices should be recognized as determinants of reference even within the context of a theory of linguistic reference. For if they are not recognized, the linguistic device (especially in the case when two devices are being exploited) is given the full burden of determining reference. In some cases, for example with

¹⁰ Howard Wettstein, in "How to Bridge the Gap between Meaning and Reference, Synthese, vol. 58 (1984) 63-84, develops a theory of demonstratives in which he agrees that a gesture such as pointing can determine or at least co-determine a referent. Wettstein calls non-linguistic cues semantically significant if they are the cues that the speaker relied on to communicate his referent (p. 72) or the cues which he, to all appearances, exploits (p. 73). For further discussion of his theory, see Chapter Four.

demonstratives and other indexicals, blindness to non-linguistic determinants of reference leads to an inaccurate picture of how the linguistic device works.

Once we have identified referring devices, we can begin to explain how reference is determined. Referring devices are those devices which determine a referent for a statement or a segment of discourse. The theory of reference is primarily an account of how referring devices do this. One way to develop an account of how referring devices determine a referent is to formulate a set of reference rules. These rules would determine a function from a referring device to the item which is its referent. For example, one might explain how proper names determine a referent by stating the reference rule for proper names. Some proposed rules have been: 1) the referent of a proper name is that individual who satisfies the descriptive content associated with that name,¹¹ and 2) the referent of a proper name is that individual who is called by that name in the relevant linguistic community. These rules purport to tell us how any given proper name determines a referent for a discourse. What is presupposed in such accounts is that there is some rule which governs the operation of a referring device and that the referring device determines a referent because there is a relation of the type specified by the rule between the device and its referent.

An account of reference which attempts to explain how referring devices determine reference by discovering the mechanisms of reference looks for those relations which underlie the reference relation. The reference of referring devices is explained in terms of these more basic

¹¹ This is (roughly) the descriptivist theory of proper names.

relations which are expressed as reference rules.¹² The reference of an act of referring is explained in terms of the device (or devices) the speaker uses to make a statement and the reference rule (or rules) for that device (or those devices). Sometimes a speaker refers to an object covertly (e.g., by making a statement silently to herself) and then refers to another object overtly (e.g., by making a different statement out loud). In each case, the referent of the act of referring depends on the device that was used to refer. What the referent is, in each case, depends on, or is determined by, how that referring device works.

We can understand the difference between semantic reference and speaker's reference in terms of two different acts of referring. In the case of semantic reference, the speaker refers by using publicly observable referring devices (e.g., spoken or written words, gestures such as pointing, etc.); in speaker's reference, the speaker refers by using non-observable referring devices (e.g., silent words, images, etc.). A speaker's intended referent, when it is different from the referent of the observable referring devices she uses, is the referent of the non-observable referring device she uses in making a statement she believes is equivalent to the observable sentence she produces. However, the situation can be (and usually is) somewhat more complicated than this. A person may use two different referring devices in conjunction with one act of predication. For example, she may refer to a certain object by

¹² There are other types of theories of reference which do not explain reference in terms of mechanisms of reference. For example, disquotational theories of reference, although they give rules of reference, do not account for reference in terms of mechanisms of reference. A typical reference rule for a disquotational theory would be: "Cat" refers to cat. No underlying relation between the referring device, "cat", and its referent, cat, is postulated.

means of a perceptual image of it while saying out loud, "That tree sure is big." She uses two referring devices, the perceptual image and the words 'that tree', in conjunction with the words 'sure is big'. Here also there would be a difference between semantic reference and speaker's reference. The semantic reference of the act of referring is determined by the reference rules governing the expression 'that tree'; the speaker's reference of the act of referring is determined by the reference rules governing perceptual images.

The primary goal of this dissertation is to discover whether and to what extent a speaker's intentions to refer determine the referent of the words or expressions she uses. What we want to know is whether, in the reference rules for linguistic referring devices,¹³ some reference should be made to the speaker's intended reference. Whether a speaker's intended reference should be part of the reference rule for a linguistic referring device depends on whether such a reference rule best explains how the referent of that device is determined.

In the next chapter I will develop criteria of adequacy for a theory of reference. I will say under what conditions a reference rule for a referring device (or kind of device) is acceptable. In the remaining chapters I will consider and evaluate theories of reference. The role that intentions to refer should play in a theory of reference will be the role they do play in the best explanation of how reference is determined.

¹³ Or more generally, in the reference rules for publicly observable referring devices.

CHAPTER II

CRITERIA OF ADEQUACY FOR A THEORY OF REFERENCE

In Chapter One we argued that a theory of reference should tell us how the reference of referring devices is determined by giving reference rules for these devices. In the following chapters we will be examining different theories of how reference is determined in order to discover whether and to what extent a speaker's intention to refer (or, in some cases, speakers' intentions to refer) play a role in determining reference. However, before we evaluate particular accounts of reference, we should develop some general criteria of adequacy for a theory of reference. These criteria will provide general guidelines for criticizing the theories we will be considering.

In developing our criteria of adequacy we should look for criteria which would be accepted by the proponents of any theory of reference which attempts to explain how reference is determined by providing reference rules for different types of referring devices. These criteria should be as uncontroversial as possible.

Criterion One

One criterion for a correct theory of reference that should be uncontroversial is as follows:

A reference rule for expression-type E is adequate only if, for any expression e of type E, the rule correctly specifies (or predicts) the referent of e.

The idea behind this criterion is that if one has the correct theory of reference, then one will be able to 'predict' the referent of each expression for which all the relevant features are specified and known. That is, if a theory of reference is correct, it will identify the correct referent given the proper information. If one has all the relevant information required by the theory and is still unable correctly to identify the referent, then there is something wrong with the theory.

Failure to meet this specification, however, does not mean that a theory of reference is hopelessly misguided. If the theory is incomplete, it will not meet this requirement. Of course an incomplete theory is not an adequate one, but the theory may be on the right track. One should not reject an approach to or a picture of reference just because it is incomplete. However, if a theory is purportedly complete, then failure to fulfill this criterion would indicate that something was amiss.

Using this criterion to criticize a theory of reference is difficult because in order to use it we must be able to compare the predicted referent to the 'actual' or 'correct' referent. To compare the predicted referent to the correct one, we must have some independent grounds for saying that something is the correct referent. Suppose we

were to argue that, according to the theory of reference we opposed, the referent of expression E would be x, but that, in fact, the referent is y, therefore the theory must be wrong. For the argument to succeed, we must have some theory-neutral way of discovering the correct referent. If our sole grounds for saying that the correct referent is y were that, according to our preferred theory, the referent would be y, our argument would fail. There might be other grounds for preferring our own theory, but the fact that the two theories have different implications does not, in itself, provide a justification for rejecting either of the theories.

We might appeal to ordinary linguistic practices or linguistic intuitions. We can argue that the man on the street would take the referent to be y, or that our linguistic intuitions, untainted by commitment to a particular theory of reference or other philosophical hobby-horse, would lead us to believe that y is the referent. Arguments of this sort will work only if the intuitions are clear and uncontroversial or the man in the street's response is actually a good reflection of common linguistic knowledge. And even then, the argument will not be conclusive. For the man on the street can sometimes give unjustified and even bizarre reports and intuitions can unwittingly be tainted by theory.

In summary, failure to meet this first criterion can indicate a theory's incompleteness. It can also indicate that the theory is wrong. But if we want to argue that a theory picks out the wrong thing as the referent of an expression, we must show not only what the correct referent is, but also why that should be considered the correct referent.

We can see more clearly the legitimate and illegitimate employment

of this criterion in criticizing a theory of reference by looking at some cases where it is applied. For example, this criterion is correctly applied in the criticism of a certain version of the causal theory of reference. Gareth Evans argues that the referent of a proper name cannot be determined by tracing a chain of references to a naming ceremony (given that each person in the chain intends to use the terms to refer to that individual to which the person from whom he first learned the term referred).¹ For if this type of chain of references were what determined the referent of a name, then the name 'Madagascar', for example, should refer to some part of the African mainland. However, 'Madagascar' actually refers to an island off the coast of Africa. Since even the proponents of this version of the causal theory of names would agree that 'Madagascar' refers to an island off the coast of Africa, we may conclude that there is something wrong with this version of the causal theory of names.

A similar criticism can be levelled against a certain descriptivist theory of reference.² According to this version, the referent of a referring expression, as it is used by a particular person, is determined by what the speaker had in mind when using the expression. This version would say that the referent of a natural kind term, as it is used by a particular speaker, is the set of objects that fit or satisfy that speaker's mental representation of the objects. Now suppose that someone who does not know the difference between beeches and elms says,

¹ Gareth Evans, "The Causal Theory of Names," Proceedings of the Aristotelian Society, Supplemental Volume 47, pp. 187-208.

² The example is taken from Hilary Putnam. He does not use it in precisely this way, but it is apt.

"Elm trees are subject to dutch elm disease." In this sentence, 'elm trees' refers to elm trees, that seems uncontroversial. But, by hypothesis, there are no ideas, images, concepts or other representations that the speaker has about elm trees which he doesn't also have about beech trees. What satisfies his mental representation of elm trees (if anything), are both elm and beech trees. So, according to the theory in question, elm trees would refer to beech and elm trees. Since 'elm trees' refers only to elm trees, there must be something wrong with the theory.

This argument fails. The sense in which it is uncontroversial that 'elm trees' refers to elm trees is not the same sense in which it is uncontroversial that 'elm trees' as this speaker uses it refers to elm trees. It could be argued that the speaker uses the expression 'elm trees' to refer to elephants (under certain conditions). Similarly, he could use this expression to refer to elm and beech trees. If the speaker is not using this expression as an expression of English, then our knowledge of what 'elm trees' refers to in English does not justify our saying that the referent of 'elm trees' as this expression is used by this speaker is elm trees. In fact, there seem to be no clear intuitions about what 'elm trees', as it is used by this particular speaker, refers to. Even the speaker may not be able to tell us what 'elm trees' refers to as she uses it.

In applying criterion one, our linguistic intuitions about what an expression refers to in English can only be used to discredit theories which purport to explain how the reference of English expressions is determined. Our linguistic intuitions about what an expression as used by any arbitrary English speaker refers to can only be used to criticize

theories which purport to explain how the reference of an expression as used by any arbitrary speaker of English is determined. Using criterion one, it will be difficult to discredit a theory that purports to tell how the reference of a referring expression, as used by a particular speaker, is determined, for we have few, if any, clear, theory-neutral intuitions about the reference of such expressions. It will not be impossible to apply this criterion. If, for example, it were ascertained that the speaker uses a particular expression as an English expression, then we would expect the reference of the expression as the speaker uses it to be the same as the reference of the expression in English. In that case our intuitions about English will be an independent ground for saying that something is the correct referent.

Criterion Two

A second uncontroversial criterion of adequacy for a theory of reference is taken from Gareth Evans.³ This criterion states what I take to be an (almost) universal view of the relation of reference to truth in extensional contexts. The criterion can be stated as follows:

A theory of reference is adequate only if it is such that for any statement of the form 'S is P', if what the theory identifies as the referent of the statement actually is P then the statement must be true.

The criterion simply requires that reference play a role in determining

³ Evans states the criterion differently, and in a more controversial form. Evan says that for a statement of the form 'S is P' if what the speaker refers to is P, then it follows that the statement is true. Evans thereby assumes that the speaker's referent and the semantic referent are always the same.

the truth conditions of sentences of this form. This is a requirement that intentionalists and non-intentionalists alike would accept.⁴

Criticism of theories of reference which claim that the theory fails to meet this requirement are subject to the same kind of limitations as those based on the first criterion. The problem again is finding a neutral position. With the first criterion, what was required was some alternative, neutral way of identifying the correct referent. In applying this second criterion what is required is a neutral way of deciding what statement is made and whether the statement is true.

It may seem, at first, that the critic is on firmer ground in applying this criticism. For there do seem to be ways of determining the truth of a statement which are neutral with respect to the theory of reference one employs. A competent botanist, for example, can tell whether the statement, "Elm trees are subject to dutch elm disease," is true without taking any stands on the correct theory of reference. And anyone with a rudimentary knowledge of English knows that the statement, "Elm trees are elm trees," is true.

However, one cannot determine whether a statement is true, no matter how clever one may be, if one does not know what statement is being made. What statement is made depends, in part, on what the referents of referring expressions within that statement are. So once again, criticizing a theory for failing to meet the requirements of the second criterion requires a theory-neutral way of identifying the correct referent. Here again, whether a theory meets this criterion depends on what

⁴ Intentionalist theories would not be as likely to accept Evans criterion because of its equation of speaker and semantic reference.

claim is being made. We cannot assume that the statement that is made is necessarily the same as the statement that is made by using those words as an English sentence.

Failure to take account of non-standard usages would yield very curious results. For consider the following case. Let us say that two spies make up a code according to which 'the big red bear' will refer to a certain high-ranking Soviet official. Spy number one makes the statement, "The big red bear is in Washington, D.C." Suppose the Soviet official actually is in Washington, D.C., but that there are no red bears, big or little, in Washington. According to the criterion in question, can a theory which says that the referent of 'the big red bear' is a high-ranking Soviet official be correct? If it can, then the truth of the statement must follow from the facts that the speaker was referring to a high-ranking Soviet official and that that person was indeed in Washington. However, if we do not allow for non-standard usages, then the truth of the statement "The big red bear is in Washington," does not follow from these facts, since there is no big red bear in Washington. Therefore, the statement couldn't be true.

I think that we would want to say that the sentence is true. But if we insist that the statement be interpreted literally, that is, in accordance with standard, dictionary English, then it will be false. However, I doubt that anyone would be tempted to say that any theory of reference which identifies the high ranking Soviet official as the referent of "the big red bear" is inadequate on the grounds that there were no big red bears in Washington, D.C. when the statement was made.

Once again, in applying this criterion we must be careful to note the claim that is being made. Our intuitions about truth conditions for

English sentences are irrelevant if we are evaluating theories of reference for sentences which are not in English. Intuitions about truth conditions for sentences which in a private language tend to be less clear and less neutral than necessary for a conclusive refutation of a theory of reference for that language.

Criterion Three

A third criterion of adequacy for a theory of reference might be as follows:

A reference rule for an expression E in a language L is adequate only if should the rule predict the referent of expression E is x, then we will find that competent speakers of L use E to refer to x and take other competent speakers of L to refer to x with E.

This criterion should be uncontroversial. The idea behind it is that competent speakers are those speakers who use the language (including its referring expressions) correctly. It is by looking at the linguistic behavior of competent speakers of a language that we discover what the expressions of that language refer to. Or, more precisely, it is by looking at the linguistic behavior of speakers who are competent in the use of a particular referring expression, or who have mastered the use of that expression, that we discover the correct referent of that expression. A correct reference rule for an expression in a language should predicate that x is the referent of E if and only if those who have mastered the expression refer to x when they use it. We might also argue that if the mechanism by which a referent of an expression is determined is expressed by a reference rule for that expression, then understanding that expression's reference potential consists in knowl-

edge of this rule. For example, if definite descriptions determine a referent according to the Russellian rule, i.e., the referent of a definite description is the unique individual who satisfies the description, then my understanding of a definite description consists in my knowledge of this rule.⁵ But this claim is controversial and we need not make it.

To test a reference rule for an expression in a language by using this criterion, we would compare a competent speaker's actual linguistic behavior to the behavior we would expect if her understanding of the expression consisted in her knowing the proposed reference rule. If a competent speaker's understanding of a referring expression conflicts with the understanding she would have if her understanding consisted in recognition of a proposed reference rule, then the proposed reference rule is called into question. That is, we would have grounds for rejecting a reference rule if a competent speaker understands an expression as referring to one thing, while the proposed rule of reference specifies some other thing as the referent.

On the face of it this looks like a perfectly legitimate and straightforward way of evaluating a theory of reference for expressions in a language. However, in applying this criterion we encounter difficulties, for to do so legitimately, we must be able to identify competent speakers without begging the question. Depending on how we identify competent speakers, it may also be necessary to distinguish when a

⁵ This is somewhat oversimplified. My understanding of a particular definite description would consist in my knowledge of the particular rule of reference for that description. For example, I understand the expression, "the man in room 29 wearing a flannel shirt," by knowing the rule: the referent of 'the man in room 29 wearing a flannel shirt' is the unique individual who is the man in room 29 wearing a flannel shirt.

competent speaker's linguistic behavior accords with her knowledge of the language and when it does not, since even a competent speaker can occasionally make mistakes.

We must avoid begging the question of which theory of reference is correct when we identify competent speakers. If we identify competent speakers as those whose linguistic behavior conforms to our expectations, and our expectations are, in turn, based on what we take to be the correct rules of reference, then we will obviously not get independent confirmation of our hypothesis concerning particular mechanisms of reference. Unless our hypothesis is so crazy that no one uses referring devices the way we expect them to, the hypothesis concerning mechanisms will inevitably be confirmed by the linguistic practices of all competent speakers of the language. They will be confirmed because we have ruled out of consideration the people who do not act as the rule predicts by denying that they are competent speakers or that they have mastered the device in question.

Judgments of linguistic competence or mastery are often made by comparing expected linguistic behavior to actual behavior. In his paper, "Individualism and the Mental," Tyler Burge tells a story about a person suffering from arthritis.⁶ This person, let's call him Art, has had arthritis for some time and has used the term, 'arthritis' in connection with his own condition, his father's condition, similar conditions of other elderly people, etc. He has made statements about arthritis using the term 'arthritis,' and he has interpreted the state-

⁶ Tyler Burge, "Individualism and the Mental", Midwest Studies in Philosophy, IV (1979), pp. 73-121.

ments of his doctor and others which contained the word, 'arthritis'. However, during one of his visits to the doctor, Art remarks that his arthritis has spread to his thigh. If we believe that the reference rule for 'arthritis' is as follows, "Something is the referent of 'arthritis' if and only if it is an inflammation of the joints," then Art's linguistic behavior will indicate that he has not mastered the English expression 'arthritis'. If he had, he would not have used this expression to refer to an ache in his muscle. The important thing to note in this case is that if we judge Art's linguistic competence or mastery in this way, that is, by noting whether his linguistic behavior conforms to predictions of how he should (or should not) behave, then we are basing our judgments on some rule of reference. The judgment that he should have behaved in such and such a way can only be based on some rule, in this case, a rule of reference.

This method of judging competence or mastery is fairly standard. If someone calls a cat a horse, or says, "Horse!" in the presence of cats and absence of horses, we tend to think that he has not mastered the term, 'horse'. If someone calls Ronald Reagan "Paris, France," or says, "The president of the United States is Paris France," we would conclude that she has not mastered the name, 'Paris, France' (unless we had evidence to indicate that the speaker was mentally unsound or had crazy beliefs or had not mastered 'the president of the United States').

We may also challenge someone's claim to have mastered a particular referring device if they cannot do things we would expect a person who has mastered that device to do. For example, we may expect a person who has mastered the term 'elm tree' not only to make statements about elm trees but also to represent truth conditions for statements about

elm trees in such a way that his being able to represent these truth conditions entails his ability to determine whether there is an elm tree in his field of vision.

What is behind this judgment of mastery is very likely a reference rule which says something like: the referent of 'elm tree' is that object which matches a certain mental template or satisfies a certain descriptive content in the mind. If the reference rule for 'elm tree' was quite different, for example, "The referent of 'elm tree' is whatever botanists call elm trees," then it would no longer make sense to judge a non-botanist's mastery of the term 'elm tree' by whether that person could tell there was an elm tree in her field of vision.

It may well be that comparing actual to expected behavior, especially linguistic behavior, is a legitimate way of determining whether a person has mastered a referring device. In fact, I suspect it is the only legitimate way. However, if mastery is tested in this way, then we cannot pretend that the actual linguistic practices of speakers who have mastered linguistic devices can provide independent empirical evidence for the correctness or incorrectness of a particular account of reference. As long as a particular account of reference is presupposed by the judgement of competence or mastery, the practices of competent speakers will not be an independent, empirical check on the theory of reference.

What is needed, if the actual linguistic practices of competent speakers are to provide conclusive, theory-independent empirical evidence for one account of reference and count as conclusive counter-examples to some other account, is a theory-neutral way of judging competence. Can such a way be found?

One possibility is to judge the competence of any particular speaker by whether her linguistic behavior is similar to most speakers' practices.⁷ That is, we could define a competent speaker as one whose linguistic behavior is the same as that of the majority of other speakers belonging to the same linguistic community and who are in similar circumstances. This would be a theory-neutral definition of competence. Moreover, with this definition we can judge incompetent the speakers who seem obviously incompetent. The person who says "Look at that horse!" in the presence of a cat and the absence of a horse has clearly not mastered the use of the English term 'horse', since the majority of English-speakers would not say "Look at that horse!" under those conditions. This criterion has some intuitive appeal.

However, this criterion will not work. One reason to reject it is that it cannot be neutral with respect to rules of reference. It can be argued that the bias would be incorporated into the criterion for membership in a linguistic community. If inclusion in a certain linguistic community involves using sounds or inscriptions in the same way as others use those sounds or notations, or something similar to this, and if the basis for sameness of use is accepting or operating according to the same reference rules, then the criterion for mastery fails to be neutral.

Another reason to reject this majoritarian criterion is that it is difficult to apply. Consider this case, for example. Having an elm tree in one's field of vision may be a circumstance that many people

⁷ This criterion for mastery requires that we assume the majority of speakers have mastered the device in question. As we shall see, this assumption is problematic.

find themselves in. If this is the kind of circumstance we are interested in, then we would ask, "What do the majority of speakers say in such circumstances?" If we were to find some one thing, or even a limited range of things, that the majority of English-speakers who found themselves in this circumstance said, I should be very surprised. The mere presence of elm trees in one's field of vision is too undefined a situation to prompt any pattern of linguistic behavior common to a majority of English-speakers.

However, it is possible to define the situation more precisely by adding to the mere presence of an elm tree in the field of vision the question, "Yes or no? do you see an elm tree?"⁸ Since there is only a limited range of responses to this situation, we might reasonably expect a pattern of responses to emerge. The respondents can say either "yes," or "no" or "I don't know," or they could remain silent. It is likely that a majority of them, if they are acting in good faith, would respond in one of these ways, so we could determine who had mastered the sentence and its referring terms and who had not.

However, even if we had overcome the difficulty of picking out the members of a linguistic community in a neutral way, and had satisfactorily defined the situation, there would still be a problem with the majoritarian criterion for mastery. For if it is possible that a majority of speakers in a linguistic community have not mastered some referring device, then the fact that a person's linguistic practices conformed to those of the majority would have no bearing on whether she had

⁸ This would be in accordance with Quine's suggestions in Word and Object (Cambridge, Massachusetts: The M.I.T. Press, 1960), and The Roots of Reference (La Salle, Illinois: Open Court Press, 1973).

mastered that device.

Consider what could happen, for example, if the majority of English speakers had not mastered the use of the term 'elm tree'. Suppose for the sake of argument that mastery of the term entails being able to identify elm trees when they are present, and suppose that most people do not know the difference between beeches and elms. Each person polled is in the situation described above--that is, there is an elm tree in each person's field of vision and the person is asked the question, "Yes or no? do you see an elm tree?" It is possible that the result of the poll would show that the majority of people do not think they see an elm tree. Suppose most of them guessed, and the majority guessed incorrectly. The majoritarian criterion would say that those people who answered "no" had mastered the use of the expression, when, by hypothesis, they had not.

It might be objected that such a pattern of responses could not arise unless most of the people polled acted in bad faith. If the people were truthful, those who did not know whether there was an elm tree in their field of vision should have answered, "I don't know," rather than "yes" or "no."

There are at least two ways of replying to this objection. One is to point out the fact that people are often willing to give information when they don't really know what they're talking about, and they do so sincerely (that is, with no intention to deceive or to play a trick). Many people have found this to be the case when they have asked directions in a big city. On the basis of experiences like this, it seems reasonable to conclude that there are people who would prefer answering a question incorrectly to admitting ignorance. It is also quite common

that people think they know the answer to a question when in fact they do not. So it could be that the people being polled about elm trees answered in good faith, in the sense that they did not intend to lie and were willing to answer the question to the best of their ability. Nonetheless, the majority happened to answer incorrectly.

Even if it were not possible that the majority of language users would, in good faith, answer incorrectly in a situation like the one described above, the majoritarian criterion would still fail correctly to identify those speakers who had mastered the referring devices in the sentence, "Yes or no, is there an elm tree in your field of vision?" Suppose that the majority of speakers did not know whether the tree in front of them was an elm tree and they also knew that they didn't know, so they responded "I don't know." Could the majoritarian criterion correctly identify those speakers who had mastered the referring device, 'elm tree'? If the criterion is applied straightforwardly, then those who answered, "I don't know," will be the ones who have mastered the sentence, since their practice corresponds to that of the majority of same language users. But, by hypothesis, mastery required being able to identify elm trees when they were present.

If those who answered "I don't know," are dropped from the pool of respondents, then it is again possible that those people who think they know an elm tree when they see one, but who do not, will outnumber those who actually do know an elm tree when they see one. In either case, the majoritarian criterion would fail to identify correctly people who had mastered the referring device.

In summary, a majoritarian criterion of mastery which says that a person has mastered a referring device if his linguistic behavior is the

same as that of the majority of same language speakers in similar circumstances will probably not be neutral with respect to rules of reference. Even if it is, it will still fail to be an accurate test of mastery if there are referring expressions which the majority of speakers have not mastered.

A majoritarian criterion for mastery would also run into difficulties if there were expressions which people would use only in situations which occurred very rarely or in situations which were essentially private (if there are any). In such situations one cannot determine what the majority of people actually do say, for the majority never find themselves in that situation.

A criterion for mastery which identifies competent speakers on the basis of what the majority of same-language users would say (as opposed to what they actually do say) will fail to be neutral.⁹ To predict what the majority of same language users would say in a well-defined situation, one must have some notion of the right thing to say in that situation, or at least of the most understandable or appropriate thing to say in that situation. The standard of correctness or appropriateness must be some kind of prescriptive rule, if the prediction is to have any justification. So in this case also a rule of reference is presupposed in the criterion for mastery.

The conclusion to be drawn from this discussion is that the theory of reference cannot be understood as a set of hypotheses on one hand and a set of linguistic practices on the other, such that we need only to

⁹ For a full development of this point see John Biro, "Intentionalism in the Theory of Meaning," The Monist, 62 (1979), pp. 238-259.

look at linguistic practices to see whether our theory is correct. A theory of reference cannot be empirical if being empirical means there are theory-neutral observations of actual linguistic practices which confirm or disconfirm hypotheses about the rules of reference which inform these practices. One cannot observe linguistic practices as linguistic practices without presupposing the correctness of some rules of reference.

Although the actual linguistic practices of competent speakers of a language do not provide theory-neutral data against which a proposed theory of reference can be tested, the theory of reference obviously cannot be evaluated independently of these practices. The relation between linguistic practices and hypotheses about the rules of reference is much like the relation between any other empirical data and hypotheses. There is a give and take. Actual linguistic practices are the bases for provisional hypotheses about rules of reference; these hypotheses, in turn, guide us in the evaluation of actual linguistic practices. In the theory of reference we try to adjust the two to get the best possible fit. Neither is given absolute authority. Actual linguistic practices may convince us that our hypotheses about the rules of reference are wrong. Generally well-supported hypotheses about rules of reference may tell us that a particular linguistic act (either a choice of referring device or an interpretation of some device) is incorrect.

CHAPTER III

DISAMBIGUATING REFERENCE

In the preceding chapters I have discussed what an acceptable theory of reference is supposed to do and how such a theory can be tested. I have argued that we should conceive of the theory of reference as a theory of reference determination rather than as a theory of identification or a theory of communication. I proposed that the theory of reference determination be developed in terms of referring devices and mechanisms of reference. The mechanisms of reference are to be expressed as reference rules of the following form: The referent of device D is whatever 'y's, or the referent of D is whatever stands in relation R to D. I then developed my position on how a theory of reference should (and can) be tested.

The primary goal of this dissertation is to show what role intentions to refer should play in a theory of reference. In terms of this purpose the preceding chapters have merely been stage setting. My general strategy for working out the proper place of mental intentions in a theory of reference is to distinguish two roles that mental intentions have played in theories of reference. By looking at intentions in terms of these different roles, we shall get some insight into the motivations for and virtues of intentionalist theories. We shall also see where criticisms of intentionalist theories are most cogent. It will be helpful to look at the role mental intentions play in theories of reference

in terms of two explanatory tasks--(1) the task of explaining how referring expressions get the reference potential they have, and (2) the task of explaining how the referent of an expression which can be used to refer to more than one thing actually refers to only one thing on an occasion of use--since both the justifications for and the criticisms of theories which rely on mental intentions usually relate to one or the other of these tasks (but not necessarily to both).

We can categorize most theories of reference by looking at which of these tasks they perform. For example, description theories of names such as those of Frege, Russell, and Searle, which claim that there is associated with each name a description or group of descriptions which the referent must satisfy, are primarily concerned to explain the reference-potential of proper names. According to these theories, it is because there is some description associated with the name 'Aristotle' which some individual (namely, Aristotle) satisfies (or satisfies more fully than any other individual) that the name 'Aristotle' can be used to refer to Aristotle. These theories do not tell us what the actual referent of a use of the name 'Aristotle' is when 'Aristotle' is associated with several distinct sets of descriptions. According to these theories, the name 'Aristotle' is associated with a description of the Greek philosopher and Aristotle is the referent of 'Aristotle' because he satisfies that description.

However, 'Aristotle' may also be associated with a description of my cat, and with a description of the Greek shipping tycoon. In each case the fact that the referent satisfies most of the descriptions associated with the name is supposed to explain why that object is a possible referent of the name use. These descriptivist theories tell us nothing

about which possible referent of an expression is the actual referent of a use of that expression.

Of course an answer in the descriptivist spirit is easy enough to produce. We could propose, for example, a limited descriptivist theory which says that the actual referent of a use of an expression is the object which satisfies the description the speaker had in mind, or which the speaker currently associates with the name. However, this elaboration is not an essential part of the description theory of proper names, and should be evaluated separately.

Reference Potential and Reference Disambiguation

One role that mental intentions play in theories of reference is that of providing a principle of disambiguation. Intentions have sometimes been used to explain how a term which could, according to the rules of the language, be used to refer to more than one thing, actually refers to only one of these things on an occasion of use. Many referring devices can be used to refer to more than one thing. For example, the name 'Aristotle' can refer to the Greek philosopher but also to the cat I named Aristotle. When I say "Aristotle was very good at figuring things out," I could be referring to either Aristotle the philosopher or Aristotle the cat. What I am referring to, according to intentionalist theories, is determined by what I had in mind, which individual I intended to refer to, in addition to whatever it is that determines the

possible referents of 'Aristotle' (usually, linguistic conventions).¹ Thus, one of the roles intentions have played in the theory of reference is to explain how reference is disambiguated.

A second role that mental intentions have played in theories of reference (and more generally, in theories of meaning) is to explain how words and symbols get their significance. Mental intentions are brought into the explanation of the linguistic rules themselves. According to some theorists, the rules which govern the use of referring devices must be explained in terms of intentions to use these referring devices in a certain way. An intentionalist theory of reference potential says that 'Aristotle' can refer to Aristotle the philosopher and Aristotle the cat because the speaker uses this name with the intention to refer to these objects with the name.² Some intentionalist theories leave the notion of intending to refer unanalyzed. Others have attempted to analyze it in terms of a) the speaker's identifying an object through some mental content and b) the speaker's trying to communicate to an audience which object she had thus identified.³ When intending to refer is analyzed in

¹ I will leave the two notions, 'having in mind' and 'intending to refer' rather vague here. They will be spelled out more fully within the discussions of satisfaction theories and causal theories of disambiguation as well as in the discussion of reference potential. See the remainder of this chapter, Chapter Six and Chapter Eight.

² Of course the intentionalist story of how referring expressions get their reference potential is much more complicated. Examples of intentionalist theories of reference potential would be the view developed by David Lewis in Convention (Cambridge: Harvard University Press, 1969), and that of H.P. Grice in "Meaning," Philosophical Review, 66 (1957), pp. 377-388, and "Utterer's Meaning, Sentence Meaning and Word Meaning," Foundations of Language, 4 (1968), pp. 225-242. These theories will be discussed in detail in Chapter Eight.

³ One could argue that Searle's position in Intentionality: An Essay in the Philosophy of Mind (Cambridge: Cambridge University Press, 1983),

this way, the intentionalist can explain reference potential in terms of mental contents associated with the name. These contents may be a single identifying description for each object to which the name can refer, along the lines of Russell's theory of names. Or they can be a cluster of descriptions which are satisfied by the potential referent, along the lines of Searle's proposal in "Proper Names."⁴ The mental contents can also be non-discursive or non-conceptual, for example, mental images and perceptual images. What is common to all intentionalist theories is that the mechanism of reference, the relation which underlies the reference relation is one in which referring devices are linked to some mental intention, and it is by virtue of this link that a referent is determined for that referring device.

If we divide the explanatory roles mental intentions have played in theories of reference in this way, then we can distinguish two corresponding explanatory tasks for a theory of reference. The two tasks that a theory of reference must perform are as follows: (1) it must explain how the actual referent of a particular use of a referring device is determined and (2) it must explain how the possible referents of a referring device are determined.

What we have then is a two-part theory. We explain how reference is determined in terms of linguistic conventions or rules which impose constraints on uses of referring expressions. Although there is considerable disagreement about what these rules are like and how they oper-

is an example of such a view.

⁴ Mind, 67 (1958), pp. 166-173. This is not to say that either Russell or Searle held such a theory.

ate, most theorists would agree that there are linguistic conventions which specify the meaning of referring expressions in terms of general directions for the use of these expressions. These general directions tell us what the expression can be used to refer to. In our terminology we would say that they determine the expression's reference potential.⁵

Even those theorists who want to restrict talk of reference to uses of referring expressions would recognize that there is some kind of relation between expression types and possible referents. The expression 'John', for example, even in abstraction from any particular use, still seems to stand in a certain relation with some objects (namely, people named John) and not with others. The expression 'the house' similarly stands in a kind of relation with some objects (namely, houses) that it does not stand in with others (for example, trees). This relation is established by the meaning of the terms, by linguistic rules, habits and conventions. The meaning assigns possible referents to the expression. Or in other words, the meaning determines a set of potential referents. We will say, then, that expressions (types) have a reference potential. In other words, there are certain things which the expression can be used to refer to. So one stage of the theory of reference concerns the form of linguistic rules. What we need to do at this stage is to specify the relation which obtains between referring expressions and potential referents of those expressions.

Because many referring expressions in a natural language can be used to refer to more than one object, but, on an occasion of use, actu-

⁵ Reference potential should be understood as relative to a given language.

ally refer to only one of these objects, the theory of reference determination for such languages cannot be simply a theory of the meaning of referring expressions. What is needed, in addition, is an explanation of how a particular referent is determined for a given use of a referring expression when that expression can be used to refer to more than one thing. We will call this part of the theory of reference 'the theory of reference disambiguation', or 'theory of disambiguation' for short. What has to be done at this stage of the theory is to discover in what relation an object must stand to a use of a referring expression in order for it to be the referent of that expression as it would be used under these circumstances. So we would have reference rules of the form: x is the referent of a use of a if and only if x is a potential referent of a and x stands in relation R to a on this occasion of use.

In summary, on the model I will be using in the next four chapters, to explain how the referent of a referring expression is determined we must discover (a) what it is that determines the reference potential of referring expressions, and (b) what it is that determines the actual referent of a use of a referring expression (given the constraints upon possible referents of the term imposed by linguistic rules). The virtue of this model is that it allows us to see more clearly the distinct roles mental intentions have played in theories of reference. By separating these roles we are in a better position to see where mental intentions are problematic and where they are required. Although not every theory of reference can be fitted neatly into this model, it is, nonetheless, quite helpful.

Theories of Disambiguation

In the remainder of this chapter I will discuss the role mental intentions play in theories of disambiguation. Linguistic conventions and rules determine the reference potential of expressions in a language, but they do not always provide enough information to tell us which potential referent is the referent of a use of an expression. Often, even though an expression could be used to refer to many different objects, that expression on a particular occasion of use, refers to only one thing. A theory of disambiguation is needed to explain what makes that one thing the referent of that use of the expression.

Accounts of reference disambiguation assume that the set of possible referents is delimited by linguistic conventions. The size of the set can vary widely. For some devices (e.g., complete definite descriptions used attributively), there is only one possible referent--namely, the object which uniquely satisfies the description. Proper names fall in a middle range. Some proper names (e.g., 'William Shakespeare' and 'Paris, France') have a small number of possible referents, while others (e.g., 'John' and 'Bill') have a much larger one. The set of possible referents for pure demonstratives ('this' and 'that') is very large. These devices can be used to refer to almost any object, event, or activity.

There are many different accounts of disambiguation. Some accounts are limited to a particular kind of linguistic referring device. For example, there are accounts of disambiguation for proper names that cannot be extended to explain how other referring devices are disambiguated. Some accounts are quite general; they apply to all

referring devices which potentially refer to more than one object. There is no reason to suppose, in advance, that one principle of disambiguation should apply to every kind of referring device. It may be that there are differences in the principles of disambiguation which reflect differences in the form of linguistic rules for various kinds of referring device. Proper names, for example, may be a peculiar kind of referring device in that the linguistic conventions governing the use of proper names are not to be phrased in terms of a single linguistic rule. It may be that there are as many reference rules or linguistic conventions for the name 'John', for example, as there are Johns. The principle of disambiguation in such a case could be formulated in terms of which linguistic convention is being followed. This principle would be inapplicable to referring devices such as 'the table'. It seems unlikely that there are as many different linguistic conventions governing the use of the words 'the table' as there are tables, and we do not seem to have as many distinct linguistic conventions for 'the table' as we may have for 'John'. So to disambiguate the referent of 'the table' we cannot look to the particular linguistic convention that the speaker is following.

Limited Intentionalist Accounts

Limited intentionalist accounts are theories of disambiguation which hold that the referent of a use of a referring expression (or device) is that individual which is a possible referent of the expression (or device) and which the speaker has in mind or to which she

intends to refer.⁶ These accounts are limited in that they do not explain how linguistic conventions arise. They do not explain how possible referents are determined, but presuppose that they are. Therefore, according to limited intentionalist accounts, intentions have only a limited role to play in determining reference. Other factors may be important in determining reference potential. Limited intentionalist theories explain how the referent of a use of a referring expression is determined in terms of (a) linguistic conventions which determine reference potential and (b) the intentions of the person using the expression. In a limited intentionalist theory x is the actual referent of a use of a referring expression E if and only if x is a potential referent of E and x is the individual the speaker intends to refer to or has in mind. It should be kept in mind that limited intentionalist theories do not try to explain how expressions get their reference potential; they assume that expressions have such a potential.

Limited intentionalist theories explain the determination of reference for a particular use of a referring device in terms of possible referents and the speaker's intentions. The intuition behind these theories is something like this. Suppose someone says "John has all the makings of a good chairman." The person is referring to some John, but we cannot tell, from the sentence itself or from the referring expression that was used, which John the sentence is about. To discover which

⁶ In the following chapters I shall be concerned primarily with linguistic devices because most theories of reference deal almost exclusively with these devices. The points made about linguistic reference can easily be extended to include non-linguistic referring devices. I shall also restrict the discussion, for the most part, to singular reference.

John is the referent of 'John' on this occasion, we need to know which John the speaker had in mind, which one she was thinking of when she made the statement. The reason we need to know which John the speaker was thinking of is allegedly that the speaker's intentions are what determine the referent of 'John' on the occasion of use (granted that the person the speaker is thinking of can be referred to by the name 'John').

An alternative to the intentionalist account of disambiguation which says the referent of 'John' in the sentence "John has all the makings of a good chairman" is the John the speaker had in mind or intended to refer to would be an account which says that the referent of 'John' in this sentence is the object that stands in a certain causal relation to the speaker or to his utterance of 'John'. The referent is whatever object is causally related to this utterance of 'John' in the appropriate way.⁷ There are also non-intentionalist accounts of disambiguation which appeal to contextual features of the utterance to disambiguate reference.⁸

There are two basic types of limited intentionalist theories. We noted earlier that limited intentionalist theories claim that reference is disambiguated by what the speaker had in mind or intended to refer to. We can distinguish the two basic types of intentionalist theories

⁷ The 'appropriate' way would have to be spelled out in such a way that what the speaker 'had in mind' or intended to refer to was irrelevant if such an account is to be a real alternative.

⁸ See, for example Howard Wettstein, "How to Bridge the Gap Between Meaning and Reference," *Synthese*, 58 (1984), pp. 63-84, and Colin McGinn, "The Mechanisms of Reference," *Synthese*, 49 (1981), pp. 157-186. McGinn tries to account for the disambiguation of demonstratives in terms of space-time relations between the utterance and the referent.

in terms of how they analyze the concept of 'having in mind' and in terms of what they take to be the important relation between what the speaker has in mind and objects in the world. One kind of intentionalist theory sees the reference relation as a satisfaction relation. The referent of some referring device is that possible referent which satisfies or matches what the speaker has in mind. Because the relation is a satisfaction relation the analysis of 'having in mind' is usually formulated in terms of mental or cognitive contents. The other kind of intentionalist theory sees the reference relation as a causal relation between objects and utterances via mental states. According to these theories, the referent of a particular use of a referring device is that object which (directly or indirectly) caused the speaker's use of the referring device.⁹ Causal intentionalist theories need not posit mental contents or, for that matter, any particular picture of 'having in mind'. The exact causal mechanisms operating within the speaker's brain (or mind) which link the referent to the object need not be spelled out.

To evaluate limited intentionalist theories I will first present some representative satisfaction theories. The merits of these theories will be outlined and objections will be discussed. I will then discuss general objections to intentionalist theories of disambiguation. These objections motivate the search for an account which does not explain how reference is determined in terms of speakers' intentions. In the following chapters I will compare the merits of intentionalist theories of

⁹ Note that this type of causal theory traces the causal chain from the object, through the speaker's mental states, to the use of a referring device. A causal theory which by-passed mental states would not be an intentionalist one. See note 8, this chapter.

disambiguation with those of non-intentionalist (contextual) theories. I will argue that non-intentionalist theories cannot account for many cases in which determinate reference is made. In Chapters Five and Six I discuss causal intentionalist theories. I argue that causal intentionalist theories preserve the important insights of satisfaction theories while escaping some of the most damaging objections to these theories. Finally, I argue that if we take non-linguistic referring devices seriously and take account of the constraints on possible referents imposed by these devices as well as by linguistic conventions, the best explanation of how reference is disambiguated will be an intentionalist one.

Satisfaction Theories of Disambiguation

Satisfaction theories see reference determination in terms of satisfaction or fit between mental contents and objects in the world. These mental contents might be concepts (in the form of descriptions in some language or other),¹⁰ or they could be mental representations (in the form of images) or contents of perceptual experiences.

Some satisfaction theories of disambiguation restrict the analysis of 'having in mind' to conceptual contents. The speaker identifies an individual by means of mental descriptions. These descriptions determine the referent of a use of a referring device in that they set the

¹⁰ Since limited intentionalist theories presuppose the existence of linguistic rules and conventions, the language of thought could be either a natural language or mentalese or a combination of these.

conditions which a possible referent must satisfy if it is to be the actual referent of that use. An example of a descriptivist theory of disambiguation can be found in the theory of proper names developed by Michael McKinsey.¹¹ McKinsey defines the denotation of a proper name token uttered by a person at a particular time in terms of what the speaker is referring to and what the proper name can be used to refer to.

If a is a token of a proper name uttered by S at t, then a denotes x iff x is the one and only individual w such that (i) S refers to w with a at t and (ii) S's referring to w with a at t is an actualization of S's stable disposition to refer...to w with tokens of the same type as a.¹²

The second clause states McKinsey's analysis of reference potential, and since we are only concerned with theories of disambiguation in this chapter, we will ignore it.¹³ The first clause, "S refers to w with a at t," tells us how the referent of a proper name that can be used to refer to more than one individual is determined. According to McKinsey, the referent is determined by the speaker's act of referring.¹⁴ Not every theory which explains disambiguation in terms of speaker's reference is an intentionalist one. An intentionalist theory says that the

¹¹ "Names and Intentionality," The Philosophical Review, Vol. 87, No. 2 (April 1981), pp. 171-200.

¹² Ibid., p. 195.

¹³ Chapters Seven and Eight will be devoted to intentionalist theories of reference potential.

¹⁴ This analysis of the principle of disambiguation for proper names is similar to Tyler Burge's. Burge, like McKinsey, sees disambiguation as a function of a person's act of reference. Disambiguation, for Burge, is a matter of what the speaker designates or refers to with a particular proper name. For a statement of Burge's theory of proper names see "Reference and Proper Names," The Journal of Philosophy, Vol. 70, No. 14 (August 1973), pp. 425-439.

referent of a referring expression (for example, a proper name) is, at least in part, determined by the mental states of a speaker or the contents of those states, in other words, by what the speaker had in mind. Usually speaker's reference is defined in terms of what the speaker had in mind, but it need not necessarily be defined that way. For example, one could define speaker's reference in causal terms:

\underline{S} refers to \underline{x} with \underline{a} at \underline{t} if and only if \underline{x} caused \underline{a} to be a referring device for \underline{S} and the use of \underline{a} at \underline{t} is the result of a causal chain terminating at \underline{x} alone.

Thus, not every theory of disambiguation in which speaker's reference plays a role is an intentionalist theory.

McKinsey's account of speaker's reference is clearly an intentionalist one. McKinsey defines speaker's reference as follows:

\underline{S} refers to \underline{x} with \underline{a} at \underline{t} = (by definition) \underline{x} dominantly satisfies $\underline{C}(\underline{a}, \underline{S}, \underline{t})$,¹⁵

where $\underline{C}(\underline{a}, \underline{S}, \underline{t})$ is "the cluster of properties associated with a token \underline{a} by a speaker \underline{S} at \underline{t} ."¹⁶ The cluster of properties which a speaker associates with a name at a given time is the cognitive content which determines the referent of the speaker's act of referring. The referent is that individual which dominantly satisfies this content.

A similar theory of disambiguation can be given for incomplete definite descriptions. An incomplete (or indefinite) definite description is a definite description which could be used to refer to a number of individuals but on an occasion of use refers to only one.¹⁷ In the

¹⁵ *Ibid.*, p. 193.

¹⁶ *Ibid.*, p. 192.

¹⁷ Definite descriptions are devices for singular reference which consist of the definite article (in English, 'the') and a predicate.

sentence, "The cat is on the mat," 'the cat' and 'the mat' are both indefinite definite descriptions. 'The cat' can be used to refer to any cat, but as it is used, it refers (or purports to refer) to only one.

A purely conceptual satisfaction theory of disambiguation for incomplete definite descriptions would say that the referent of the description a is that possible referent which satisfies (or dominantly satisfies) the descriptive (or at least conceptual) content C that the speaker associates with this use of a, or associates with a at the time of utterance. The incomplete description that the speaker actually utters is supplemented by further descriptive content which the speaker associates with this use. For example, suppose our speaker says, "The cat is on the mat." Every cat is a potential referent of 'the cat'. What makes a particular cat the referent of this use of 'the cat' is, on this account, further descriptive content which the speaker associates with her use of 'the cat' at this time. These descriptions are the ones the speaker uses to identify the cat (for herself) and, if queried about which cat was meant, would be able to supply to help her audience pick out the correct referent. The cat which is being referred to is the one which satisfies (or dominantly satisfies or satisfies more fully than any other cat, etc.) the descriptive content in the speaker's mind.

Within the theory of reference, definite descriptions have been classified in terms of (i) whether they denote anything and (ii) whether they uniquely denote something. Definite descriptions which do not denote any object are called 'improper definite descriptions'. An example of an improper definite description would be 'the present king of France'. Definite descriptions which denote something may either uniquely denote or denote several objects (but purport to refer to only one). A uniquely denoting definite description would be 'the natural number between 2 and 4'. Definite descriptions which do not uniquely denote are called 'incomplete' or 'indefinite' definite descriptions.

It is because the speaker has sufficient descriptive content to identify a particular cat (for herself, not necessarily for her audience), that this use of 'the cat' refers to some particular cat. The descriptive content which enables the speaker to identify the particular cat she is talking about must be satisfied by the cat which is the referent of this use of 'the cat' and it is because a particular cat satisfies this descriptive content that it is the referent.

The linguistic rules governing pure demonstratives¹⁸ and some pronouns determine a set of possible referents that is so large that their contribution to reference determination is almost empty. The word 'that' in the sentence "That's nice" could be used to refer to almost anything.¹⁹ With these referring expressions, the theory of disambiguation is almost the whole story of reference determination.²⁰ Perhaps for this reason the theory of demonstratives has become a kind of 'test case' (or last stronghold) for intentionalist theories.

It is possible to extend the conceptual satisfaction model to account for disambiguation of pure demonstratives. An account of this sort would say the speaker identifies (for herself) an individual by means of mental descriptions which the individual satisfies. Having

¹⁸ The pure demonstratives of English are 'this' and 'that' without further modification. An 'impure' demonstrative would have a modifier, for example, 'that man'.

¹⁹ 'Anything' does not mean any object. 'That' might refer to an object, a state of affairs, a property, etc. It could refer to any individual or feature thereof.

²⁰ Usually there are other non-linguistic referring devices (demonstrations) which co-determine possible referents for demonstratives. For the present, we will restrict our discussion to uses of demonstratives which are not accompanied by a demonstration.

thus identified the individual, the speaker is in a position to refer to it. The individual to which she intends to refer with the word 'that' is the one she has identified by means of these descriptions. It is the one that satisfies (or dominantly satisfies) these descriptions. Thus, the referent of her use of 'that' would be the individual she intends to refer to, namely, the individual which satisfies the mental content associated with this use of the word 'that'.

In "Proper Names and Identifying Descriptions," Keith Donnellan raised some serious objections to the principle of identifying descriptions.²¹ This principle says that a speaker can refer to an object only if he is in a position to supply some description which uniquely characterizes that object. Since limited descriptivist theories account for disambiguation of reference in terms of the speaker's mental descriptions which determine a particular object to be the referent of the expression, they are vulnerable to these objections.

There are basically three objections which have been raised against limited descriptivist theories.²² I will briefly characterize these objections here. A more thorough discussion of them will follow. One objection is that these theories require that whenever reference is disambiguated the speaker must have a mental description which uniquely characterizes the referent. It seems unlikely that this is always the case. A second objection is that when the speaker has more than one mental description which uniquely characterizes the referent, limited

²¹ Synthese, 21 (1970) pp. 335-358.

²² Limited intentionalist theories are intentionalist theories of disambiguation.

descriptivist accounts seem to have no way of saying which description is the correct one, the one that should count. The third objection concerns the fallibility of speakers' beliefs. Speakers can have wildly mistaken beliefs about objects and still refer to them rather than to some other object about which their beliefs are true. Let us consider these objections in turn.

The first objection is that it is not the case that a speaker will always have some description which uniquely characterizes the object to which he wants to refer, but nevertheless he does refer to that object. Donnellan offers the following proof.

Suppose a child is gotten up from sleep at a party and introduced to someone as 'Tom', who then says a few words to the child. Later the child says to his parents, "Tom is a nice man." The only thing he can say about 'Tom' is that Tom was at a party. Moreover, he is unable to recognize anyone as 'Tom' on subsequent occasions. His parents give lots of parties and they have numerous friends named 'Tom'. The case could be built up, I think, so that nothing the child possesses in the way of descriptions, dispositions to recognize serves to pick out in the standard way anybody uniquely. That is, we cannot go by the denotation of his description nor whom he points to, if anyone, etc. Does this mean that there is no person to whom he is referring?²³

Obviously not. In fact, it seems obvious that the Tom he is talking about is the one who talked to him at the party. If Donnellan is right in thinking that the child could refer to Tom even though there are no descriptions which enable him to pick out the Tom he means, then the descriptivist account of disambiguation must be wrong. The reference of 'Tom' is disambiguated even though the speaker does not have mental descriptions which only one Tom satisfies.

It is not immediately evident that Donnellan is right. If the

²³ Op. cit., p. 343.

child did not think of Tom as the guy who said such-and-such or at least as the man his parents introduced as 'Tom' at some time (the child may not be able to describe this time in English, but he can identify it in terms of a sequence of events), then the utterance is inexplicable. If the child does not have some conception of Tom, one which separates this Tom from other people he knows, it is not clear how he can make a statement about him, especially since his use is not directly parasitic.²⁴ Even though he may not be able to articulate this conception in English and even though it may not be adequate for a subsequent recognition of Tom, it may still be enough to determine a unique referent for this use of 'Tom'.

What this example might show is that the ability to have something in mind need not be a purely conceptual one. The child might not be able to think of the Tom he is referring to in terms of descriptions which this Tom satisfies, yet he might be able to distinguish this Tom from others in his ken by means of, for example, remembered images in his own subjective time. If there are other ways of 'having in mind', in addition to having mental descriptions, then an account of reference disambiguation which includes these ways would be preferable to a purely descriptivist account.

Another problem for descriptivist theories is that sometimes the speaker can volunteer several uniquely denoting descriptions, and there

²⁴ The child's use of the name 'Tom' to refer to Tom may be parasitic in the sense that he got this name from someone else. What I mean here is that the child did not just borrow his use of 'Tom' from someone who was using it in the immediate context. Had his parents been talking about Tom and the child said "Is Tom a nice man?" he could be just hooking up to his parent's use without any knowledge of who he was talking about. In Donnellan's example he does not seem to be doing this.

is no non-arbitrary way to say which one is the 'correct' one or the one that actually determines reference. If all the descriptions denote the same object, this is not a serious problem. Any description will do as well as any other. But suppose the speaker has some mistaken beliefs about the object in question. She may associate several descriptions with her use of a referring expression, each of which uniquely denotes different objects. For example, suppose I say "That is cluttered." I associate the descriptions 'the desk I am now perceiving' and 'the desk in Room 357 that belongs to Cliff Wirt' with the word 'that', believing that the two descriptions denote the same object. Unbeknownst to me, however, Cliff has switched desks with someone else.

If the descriptivist theory of disambiguation is correct, if the referent of 'that' in "That is cluttered" is the individual that satisfies the descriptive content I associate with my utterance of 'that', then it would follow that my utterance is still ambiguous or that I am referring to two different things with the word 'that'. However, neither of these alternatives seem to be the case. At the very least, the descriptivist theory would have to be modified to account for cases like this.

Michael McKinsey attempts to supplement descriptivist theories by making a distinction between derivative and primary intentions. He defines these terms as follows: "When a person's having a given intention is a part of the explanation of the person's having another intention, but not vice versa, I will say that the former intention is primary with respect to the latter or equivalently, that the latter is derivative from the former."

By making this distinction we might be able to disambiguate my

utterance of 'that' by discovering which was my primary intention: to refer with 'that' to the desk I am now perceiving or to refer to the desk that belongs to Cliff Wirt. The explanation of my intentions might go something like this. I intend to refer to the desk that belongs to Cliff Wirt because I intend to refer to the desk I am now perceiving and I believe that this desk belongs to Cliff Wirt. Moreover, my intention to refer to the desk I am now perceiving would not change if I did not believe it belonged to Cliff Wirt and therefore, did not intend to refer to the desk that belongs to Cliff Wirt. Since my primary intention was to refer to the desk I am now perceiving, the desk which satisfies this description is the referent of 'that'.

On the other hand, if I intended to refer to Cliff Wirt's desk (believing that any desk which belonged to Cliff Wirt would be cluttered) and intended to refer to the desk I was perceiving only because I believed it belonged to Cliff Wirt and I intended to refer to Cliff Wirt's desk, then the referent would, on McKinsey's account, be the desk which belongs to Cliff Wirt (even though that was not the desk I was perceiving.) This conclusion conflicts with our intuitions.

A third objection to descriptivist theories of disambiguation is that the speaker can have mistaken beliefs about an object, so it satisfies none of the descriptive content in the speaker's head, and nonetheless refer to that object. For example, suppose a person sees an object which he takes to be an antelope, but which is in fact a rock shaped like an antelope. The person says "That has been watching us all night." The descriptions the speaker associates with 'that' are such that the rock satisfies none of them (e.g., the description 'the antelope standing over there', 'the entity which has been watching us',

etc.). Nonetheless, the speaker does seem to be referring to the rock. If his mistaken beliefs were revealed, he might say something like, "Oh, it couldn't have been watching us all night. It's a rock." 'It' in these sentences refers to the same thing that 'that' referred to.

Of course, the proponent of a descriptivist theory could find some description that the speaker could have associated with 'that' and which would uniquely denote the rock, for example, the description 'the entity which I am now perceiving', or 'the entity which is causing my antelope perception'. But the fact that one can always come up with such a description does not mean that the speaker always has such a description in mind.

Thinking of an object or 'having an object in mind' does not seem to be just a matter of having a set of descriptions which uniquely characterize that object. Having a uniquely denoting definite description in mind is one way to individuate an object, but it is not the only way. We are able to think of an individual even when it would be an effort to come up with a description that uniquely and accurately characterizes that individual. Often we identify objects perceptually, without an accompanying description.²⁵ Or we can identify the object by remembering it through images, rather than through descriptions.²⁶

²⁵ Perceptually discriminating some object may provide the basis for a description (e.g., 'the object I now see'), but such a description need not accompany the perception to make it individuating. Whether a perceiver who has no concepts would be able to identify individuals is a different question.

²⁶ Earlier I suggested that the child may have identified Tom in this way. The child may not have any descriptions which uniquely characterize Tom. It could identify Tom by means of images arranged in a time or event sequence.

Considerations like those above have led to a revised version of descriptivist theories. In the revised version, disambiguation still depends on what a person 'has in mind', and the referent of a referring device with more than one possible referent is still the possible referent which satisfies or fits some mental content. What is different is that the mental content need not be a uniquely denoting description. It could be the non-propositional content of a perceptual or of a mnemonic experience.²⁷

If we add to the ways in which a speaker can be said to have an object in mind in this way, we might be able to answer at least one of the objections raised against satisfaction theories. Given these additional mental contents, we need not require that the speaker has a uniquely denoting mental description of an object in order for her to refer to that object. A perceptual or mnemonic content will do as well. However, even if satisfaction accounts are supplemented with these non-propositional mental contents, the problem of mistaken beliefs and fortuitous satisfaction remains. The person who said, "That has been watching us all night," for example, may have not only mistaken beliefs about the thing she is seeing, but also mistaken perceptions. The content of her perceptual experience may be distorted so that she actually sees antelope ears and eyes. Nevertheless, the thing she is referring to is not an antelope at all. Further, even if there were some antelope

²⁷ There is some disagreement about what it means for an object to satisfy the content of a perceptual experience. Some would see this content as a kind of picture which the referent resembles more closely than any other object. A more sophisticated theory is proposed by Searle. For Searle, an object satisfies the content of a perceptual experience if (a) it resembles that content and (b) it causes that experience.

which corresponded exactly to the content of her visual perception it would not be the referent of 'that'.

Assessment of Intentionalist Accounts

Limited intentionalist theories have the virtues of intuitive appeal and generality to recommend them. Their intuitive appeal is based on considerations like the following. When someone says something, e.g., "Aristotle was good at figuring things out" and we are not sure what the referent is because the linguistic rules of our language determine more than one possible referent, we generally try to find out which one of these possible referents the speaker had in mind. We try to find out which one the speaker meant perhaps by asking her to supply further identificatory information which we assume she has. The information may be in the form of a description, as in 'Aristotle, my cat' or in the form of an ostension by means of which the speaker conveys (or tries to convey) perceptual information--'That Aristotle' (pointing to the cat). Moreover, when we say something which is interpreted incorrectly, for example, when I say "John B. has the makings of a good chairman," and I find I have been misinterpreted, I base my judgment on the fact that my audience did not understand whom I meant. The truth conditions for the statement made depend upon the John B. I was thinking of. Moreover, these conditions are the truth conditions for the statement that was made no matter who hears the statement, if anyone. Had I been thinking of a different John B. at the time, a different statement would have been made. If someone else had said the same words with a

different John B. in mind, the statement would have had different truth conditions, and if he had the same John B. in mind, the truth conditions would have been the same.

These intuitions are powerful as long as we accept the constraints imposed upon possible referents by linguistic rules. When the speaker has an individual in mind which does not fall within the range of possible referents determined by the relevant linguistic rule, intuitions about the actual referent are not as strong or as universally shared. For example, if I had Cliff Wirt in mind when I said "John B. has the makings of a good chairman," it would not be so clear that the actual referent of my utterance was the person I was thinking of. But the theory of disambiguation does not handle such cases. It is restricted to explaining how an actual referent is determined, given that a range of possible referents has already been determined by linguistic rules or conventions. The intuitive evidence for intentionalist accounts of disambiguation is also weak when there is no strong consensus as to the nature of the linguistic rules governing a kind of referring device. Disagreement on this level, however, is typically disagreement about the extent to which intentions determine reference, not about whether intentions have some role in determining reference.²⁸

²⁸ See, for example, the interchange between Rod Bertolet and John Biro concerning demonstratives. (Bertolet, "Demonstratives and Intentions," Philosophical Studies, 38 (1980), pp. 75-78; and Biro, "Intention, Demonstration and Reference," Philosophy and Phenomenological Research, Vol. 43, No. 1 (September, 1982), pp. 35-41.) Bertolet argues that demonstrations do not determine the reference of demonstratives. His view is that the linguistic rule for demonstratives is quite empty and the disambiguating principle is the speaker's intentions. Biro's view is that the demonstrative and demonstration together determine a referent, and Bertolet's alledged counter-examples to such a view do not address this possibility.

In addition to their intuitive appeal, limited intentionalist theories also have the advantage of generality. The principle of disambiguation is the same for every linguistic device that requires disambiguation. It could be argued that the same principle of disambiguation is operative for non-linguistic referring devices as well. For example, we noted earlier that the picture of Alfred Hitchcock in the advertisement which consisted of this picture and the words, "is a classic," had more than one possible referent. The picture could be referring to the man, or to some prominent feature of the man, or to something associated with him (e.g., his movies or his television program). The actual referent of the picture in this use is indeterminate. A limited intentionalist theory could explain how this picture has a determinate referent in terms of the speaker's intentions.²⁹ A similar point could be made about gestures such as waving a book and asking "Red or pink?" or pointing to something and saying "I love that." In both cases we find a restricted range of possible referents. A limited intentionalist theorist could claim that the actual referent is that possible referent which the 'speaker' had in mind.

Although limited intentionalist theories are highly intuitive and general they are not universally accepted. In the following paragraphs I will briefly characterize the major objections to limited intentionalist theories and evaluate these objections. These objections apply to any kind of intentionalist theory, not just to satisfaction theories.³⁰

²⁹ The notion of a speaker would have to be extended when applied to non-linguistic reference. Perhaps we could say the speaker is the person who is primarily responsible for that particular occurrence of that configuration of symbols.

Some of the reasons for rejecting intentionalist theories actually have very little to do with limited intentionalist theories. I suggested earlier that dividing theories of reference into (1) theories of disambiguation and (2) theories of reference potential would be beneficial because some criticisms which would apply to theories of reference potential are beside the point when applied to theories of disambiguation. For example, one cannot criticize a limited intentionalist theory for failing to recognize the normative force of language, since limited intentionalist theories presuppose linguistic rules which set the limits on what could be referred to with a certain device. Let us assume, for the time being, that limited intentionalist theories are logically independent of intentionalist theories of meaning. We shall discuss only those objections that are directed specifically to limited intentionalist theories.

One objection to limited intentionalist theories is motivated by a particular view of how reference determination and an audience's identification of the referent are related. The general lines of the objection are as follows. If reference is determined in part by what the speaker had in mind, and it is not possible to observe what someone has in mind, how is it possible for an audience to know what the referent is? People who are not mind readers often (perhaps even generally) correctly identify the referent of a use of a referring device. They do not need to know what was going on in the speaker's head. Since it is very unlikely that their repeated success is the result of a series of

³⁰ For objections that apply only to satisfaction theories see above, pp. 60-67.

lucky guesses, something else, something which is publicly accessible, must account for their ability to identify the correct referent. Whatever it is that the audience relies on must at least be related to the determinants of reference.

One way to formulate the objection is to say that limited intentionalist theories of reference flout an important methodological principle. According to one theorist, Michael Pendlebury, the principle in question is that

a semantic convention which assigns denotations to referring expressions must be such that mastery of that convention would help an audience to ascertain the denotation of an utterance of the expression on the basis of purely public facts about the context of utterance.³¹

Limited intentionalist theories seem to flout this principle since the semantic convention (or rule) which they say determines a referent (in Pendlebury's terms--assigns a denotation) is: the actual referent of a use of a referring device is the possible referent which the speaker had in mind (or was thinking of). The question an intentionalist theory must answer is this: how is mastery of this rule or convention going to help the audience to identify the correct referent? All the audience has to go on are the "purely public facts" about the context of utterance (and the publicly accessible linguistic rules which determine reference potential). These are not facts about what the speaker is thinking. In fact, there are no purely public facts which could tell us what the speaker is thinking. It is not clear, then, how knowledge of the

³¹ This expression of the principle is Michael Pendlebury's. See "How Demonstratives Denote," The Southern Journal of Philosophy, Vol. 22, No. 1 (Spring 1984), pp. 91-104, especially, p. 102. In this paper, Pendlebury develops what he calls a "mental reference" theory for demonstratives and he considers (and dismisses) this objection.

relevant semantic rule is supposed to "help" the audience identify the correct referent.³² To identify the correct referent she will have to rely on those aspects of the speech situation to which she does have access.

We should look at Pendlebury's requirement more closely. Why should knowledge of the relevant semantic convention help (or enable) an audience to identify the correct referent? Pendlebury suggests that this requirement derives from the nature of natural languages. He accepts the gist of the principle "on the strength of the fact that natural languages are public institutions which are learnable on the basis of public facts about language use."³³ It is difficult to deny that public facts about language use are what enable us to learn the semantical rules of the language. However, it is not clear what the important connection between learning semantic rules and identifying correct referents is. Pendlebury seems to think that because we have to rely on public facts about language use to learn the semantical rules of the language, we must also rely on public facts to apply the semantical rules in ascertaining correct referents. However, he does not say why.

It seems quite possible that on the basis of purely public facts about language use we could learn that the reference rule for referring expressions with more than one possible referent is something like what

³² Pendlebury requires only that mastery of the semantic convention help an audience identify the correct referent. Some theorists might go even further. It could be argued that knowledge of the semantic convention must allow the audience to identify the correct referent, in the sense that if one knows the semantic conventions and relevant facts about the situation, one knows the referent.

³³ Ibid., p. 102.

a limited intentionalist theory says. Intentionalist theorists, after all, use public facts about language use to justify their theories. There is no reason to suppose that language users could not do the same thing. The fact that we must rely on publicly accessible data to learn reference rules seems to have little to do with the methodological principle which says that mastery of semantic conventions should either enable or help an audience to determine the correct referent of a use of a referring device.

The important connection between the determinants of reference and what the audience uses to identify the referent is that the two must be so related that it is not a matter of luck that the audience gets the referent right. If the audience always gets the referent right, then there must be an obvious and close relationship between what determines reference and what the audience relies on. If it sometimes gets the referent wrong, the relationship need not be so close. The closest relationship is that of identity. If what the audience uses to identify the correct referent are the same things that determine reference, then we would expect the audience to identify the correct referent most of the time.³⁴ If the audience identifies the referent on some other basis, it is more likely to fail to identify the correct referent. Since we seem usually (but not always) to get the referent right, there should be a fairly direct relationship between what the hearer relies on to identify the referent and what actually determines reference which would guarantee that degree of success in identifying the correct referent.

³⁴ We would want to make some allowances for sloppiness or lapses of attention and things of that sort.

The real problem, then, is not a problem about how reference rules are learned; it is, instead, a problem about how we successfully communicate reference. Successful communication requires that an audience be able to identify the correct referent in some non-arbitrary manner. Limited intentionalist theories, by making the speaker's thoughts an important determinant of reference, rule out the possibility that correct identification of a referent is due to an identity between the determinants of reference and the information the audience relies on to identify the referent. The information an audience has to go on does not and can not include knowledge of what the speaker is thinking (at least not in the sense of directly accessible knowledge). For there is no way for the audience to get inside the speaker's head to see what he is thinking. This does not mean, however, that the audience's identification of the referent must be arbitrary if intentionalist theories are correct.

What Pendlebury is concerned about is the relationship between the rules of reference which tell how reference is determined and the audience's basis for identifying the correct referent. Pendlebury acknowledges that knowing how reference is determined should help the audience to identify the correct referent. But it is not clear how it should help the audience or how much. We can propose that knowing how reference is determined should at least suggest a strategy for identifying the referent. If reference is determined, in part, by what the speaker had in mind, then to identify the referent one should try to find out what the speaker was thinking of. This is the answer Pendlebury gives to the objection. He notes that we do use this strategy when we are in doubt about the referent of some expression, either by asking the

speaker what he meant, or when that is not possible, by trying to reconstruct what the speaker must have been thinking of on the basis of his interests, the preceding conversation, the non-linguistic context, and other behavioral cues.

If it were not possible to figure out what the speaker had in mind with some relatively high degree of accuracy, then the de facto ability of an audience to identify the correct referent (within a range of possible referents) would be inexplicable for the limited intentionalist theorist. The privacy of thoughts blocks any direct access to the determinants of reference, but there do seem to be indirect ways to tell what someone is thinking of. The existence of such ways of ascertaining what the speaker was thinking of is enough for the limited intentionalist theories to account for the possibility of correct identification of the referent. The fact that there is some discrepancy between what an audience relies on to identify the correct referent and what determines reference also explains how it is possible to identify a referent incorrectly. Since we do identify the wrong referent often enough, this explanatory power should count in favor of limited intentionalist theories.

The objection I have considered so far concerns the necessity that there be some connection between what determines reference and what an audience relies on to identify the referent. We have seen that this part of the objection is not a problem for limited intentionalist theories. Another objection to limited intentionalist theories is that there are some cases when the speaker's intentions take a back seat to other factors which determine reference. In these cases what the speaker has in mind seems to be irrelevant. Howard Wettstein presents

such a case.³⁵

Suppose that our speaker walks up to Smith, stares straight at him, extends his finger right in Smith's face, and says "That is a self-destructive man." No one...could have any doubt that the speaker intends to ostensibly indicate Smith. Unfortunately...our speaker was merely stretching, his mind was elsewhere, and he intended to convey his reference by more subtle background cues, cues that indeed identify Jones, his intended referent. In such a case, I am strongly inclined to suppose...that Smith, the individual apparently pointed to, is the referent.³⁶

The moral Wettstein draws from this story is that the speaker's intentions were not what determined the referent in this case. The speaker was thinking of Jones, yet the referent of 'that man' was Smith.

I am hesitant to accept Wettstein's conclusions so quickly. I agree that the audience has some justification for taking Smith to be the referent. However, the fact that it is justified does not entail that the correct referent is Smith. The initial plausibility of the view that the referent was Smith even though the speaker had Jones in mind is seriously compromised if we extend the conversation so that it becomes clear to the audience that Smith was not the intended referent. Suppose Smith protests, "What makes you think I'm self-destructive?" and our speaker says "I wasn't talking about you. I was thinking of Jones." Smith might well correct his interpretation of "That man is self-destructive." He may challenge the appropriateness of the pointing gesture ("Then why did you point at me?"), and the speaker may have to explain his action ("Oh, I'm sorry. I wasn't pointing, I was just stretching.")³⁷

³⁵ Op. cit.

³⁶ Ibid., p. 72.

³⁷ This further interchange might indicate that pointing and saying

One reason we cannot conclude that the speaker's intentions did not determine the referent of 'that man' is that we do not have any theory-independent way of deciding who was the correct referent of 'that man' in this case. We would agree that the audience has some justification for taking Smith to be the referent, but we do not know why it is justified. One possibility is that the audience is justified because it based its identification of the referent on the very things which determined the referent. The cues 'that man', looking at Smith, and pointing in Smith's face actually determined the referent according to the rule:

The referent of 'that man' is whatever individual is a possible referent of 'that man' and is the actual man which is being demonstrated.³⁸

If the audience identifies Smith as the referent because Smith is a possible referent of that man and he is the man who is being demonstrated, and if this is the correct reference rule for 'that man', then the audience is justified in believing that Smith is the referent.

However, the audience would also be justified in believing that Smith is the referent of 'that man' if the reference rule is a version of a limited intentionalist theory. For example, suppose the correct reference rule is:

The referent of 'that man' is whatever is a possible referent of 'that man' and is the individual the speaker was thinking of when she said 'that man'.

Since the audience cannot get 'inside' the speaker's head to discover

'that' is a conventional means for determining reference. It may also indicate that pointing must be an intentional action--it must be used to refer--if it is to determine reference, or it may be that the difference between pointing and stretching is an observable one. It does seem that pointing and stretching do not look the same.

³⁸ This is Wettstein's position.

what she is thinking of, its justification will depend on whether it is justified in inferring what the speaker is thinking of on the basis of publicly accessible clues. On the basis of the clues available to the audience at the time of the utterance the audience is justified in believing that the speaker was thinking of Smith. Of course, because the evidence an audience has to go on never entails the belief, the justification is always defeasible. Further evidence may lead the audience to revise its hypothesis about what the speaker was thinking of.

The kind of case that Wettstein cites cannot support the conclusion that the actual referent of a use of a referring device is not determined in part by what the speaker had in mind. Even if we accept Wettstein's intuition that the referent was Smith--the person who was pointed at--instead of Jones (the person the speaker had in mind), the case for an intentionalist theory of disambiguation is not seriously compromised. If the correct referent of 'that man' is Smith rather than Jones, it cannot be the case that the correct reference rule for demonstratives is as follows: The referent of 'that x' is whatever x the speaker had in mind. If this were the correct rule, then the referent would have been Jones. But an intentionalist theorist need not accept this reference rule.

It is consistent with limited intentionalist theories to say that reference is determined by rules governing the use of referring devices such that sometimes the speaker's intentions have almost no role in determining reference. Looking at Wettstein's case, we find more than one referring device at work. There is the linguistic referring device 'that man' which does not determine a unique referent. Any man could be the referent of 'that man' according to the rules of English. But there

is also a pointing gesture (or what seems to be a pointing gesture) and other, more subtle, gestures. These gestures are also referring devices.³⁹

If we take all the referring devices together, the linguistic as well as the non-linguistic ones, we find that they do, together, determine a unique referent. If that is the case, then there is no need for a principle of disambiguation which takes into account the speaker's intentions. So even if Wettstein is right in thinking that the referent in this case is not the man the speaker had in mind, a limited intentionalist theory of demonstratives may be correct. Intentions may not have as large a role in determining referents as some theorists have supposed.⁴⁰ Other non-linguistic devices may, along with linguistic referring devices, determine a referent regardless of the speaker's intentions.

We have considered and dismissed two objections to intentionalist theories so far. One objection was that the determinants of reference must have some connection with the cues the audience relies on to identify the referent and this seems impossible if private mental contents are determinants of reference. We answered this objection by noting that the cues the audience relies on enable the audience to make reason-

³⁹ I agree with Wettstein that these 'cues' are actually referring devices--that they are capable of determining or co-determining a referent. I am not sure I would call what the speaker did on this occasion pointing. I suspect that for a gesture to count as a case of pointing, the speaker must do it deliberately--she must intend to single out some object with the gesture. To overcome possible objections of this sort, let us assume that the speaker was actually pointing at Smith, not just stretching his arm.

⁴⁰ See, for example, Bertollet, *Op. cit.*

ably good inferences about what the speaker had in mind, so that successful communication is not a matter of chance. The second objection was that the referent of some referring devices which require disambiguation (e.g., 'that man') is not the individual the speaker had in mind, so the speaker's intentions do not determine the actual referent of a referring device of that type. We answered this objection by appealing to non-linguistic referring devices. These devices, such as pointing at someone and looking him straight in the eyes (while saying "that"), together with linguistic devices, may be capable of determining a unique referent, so that there is no need for disambiguation. In the absence of these auxiliary referring devices, however, the speaker's mental contents do seem important for determining the referent of 'that man' and even more so for determining the referent of 'that' when no predicate is added. If someone were to say out of the blue "That man is self-destructive" or "That is self-destructive" without any accompanying demonstrations, the expressions 'that man' and 'that' could still have referred. It certainly seems plausible that the individual to whom they referred is the one the speaker had in mind.

Perhaps the most serious objection to the kinds of intentionalist theories we have been considering is that the satisfaction relation is more problematic than other types of relations that account for the data equally well. The intentionalist accounts in question view the reference relation as a satisfaction relation between mental contents and objects in the world. Alternative intentionalist accounts view reference as a "causal" relation between objects and the world.

We have looked at satisfaction accounts of 'having an object in mind' and found that they are problematic. For one thing, they require

that a speaker have some uniquely denoting description or representation for each individual that she refers to. It is unlikely that speakers do have such descriptions in mind whenever they refer to an individual. Another short-coming of satisfaction theories of having an object in mind is that they cannot account for cases in which the speaker has radically mistaken beliefs about, or representations of an object, but nonetheless has that object in mind. Finally, satisfaction theories leave open the possibility of fortuitous satisfaction. That is, a speaker may have a uniquely denoting representation of an object (e.g., a representation of an antelope) which is not satisfied by the thing the speaker 'has in mind' (e.g., a rock that looks like an antelope), but is satisfied by some other object about which the speaker knows nothing (e.g., an antelope hidden behind the rock). The weight of the evidence goes against the theory that a speaker has an object Q in mind if (and only if) she has a mental representation R (either linguistic or non-linguistic) such that Q and only Q fits or satisfies R.

The failure of satisfaction theories adequately to account for what is involved in 'having an object in mind' presents us with a choice. We can either give up intentionalist accounts of disambiguation or develop an alternative account of 'having an object in mind'. The reason intentionalist accounts looked attractive in the first place was that they seemed to make sense of the fact that when we are not sure what a use of a referring expression refers to, we look to what the speaker had in mind. But this fact may be misleading. There are many things we rely on to discover what a use of a referring expression refers to. It may be that these other factors are the real determinants of reference, and that the speaker's intentions to refer to some object

are really unimportant. Since 'having an object in mind' has not been adequately explained and is difficult to explain without begging the question, we might do better to abandon it altogether and look for a less problematic way of explaining how reference is disambiguated. In the next chapter we will consider some non-intentionalist accounts of disambiguation. These accounts say that features of the context of utterance, together with linguistic devices for referring, determine reference. What the speaker intends to refer to is irrelevant.

CHAPTER IV

CONTEXTUAL THEORIES OF REFERENCE

We have looked at satisfaction accounts of 'having an object in mind' and found that they are problematic. For one thing, they require that a speaker have some uniquely denoting description or representation for each individual that she refers to. It is unlikely that speakers do have such descriptions in mind whenever they refer to an individual. Another short-coming of satisfaction theories of having an object in mind is that they cannot account for cases in which the speaker has radically mistaken beliefs about, or representations of an object, but nonetheless has that object in mind. Finally, satisfaction theories leave open the possibility of fortuitous satisfaction. That is, a speaker may have a uniquely denoting representation of an object (e.g., a representation of an antelope) which is not satisfied by the thing the speaker 'has in mind' (e.g., a rock that looks like an antelope), but is satisfied by some other object about which the speaker knows nothing (e.g., an antelope hidden behind the rock). The weight of the evidence goes against the theory that a speaker has an object Q in mind if (and only if?) she has a mental representation R (either linguistic or non-linguistic) such that Q and only Q fits or satisfies R.

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Alternatives to intentionalist theories of disambiguation generally look to contextual features of the use of referring expressions. These features might include gestures made by the speaker, the preceding conversation, the audience, the physical environment of the speaker, and so forth. The contextual theories we will be considering are those which hold that features of the context of utterance directly determine reference.

For these contextual theories to be adequate theories of reference disambiguation, they must tell us how the contextual features of a use of a referring expression systematically contribute to the determination of reference when combined with linguistic referring devices. An ade-

quate account cannot just tell us how an audience uses these contextual clues or cues to understand what is being referred to, for in a theory of disambiguation we are interested in explaining how reference is determined, not in explaining how reference is communicated. The fact that an audience relies on certain contextual cues to discover which object is being referred to does not entail that these cues are what determine reference any more than the fact that an audience looks to what a speaker 'had in mind' entails that intentions to refer to the object one 'has in mind' are what determine reference. These facts suggest a way of explaining how reference is determined, but they do not prove that reference is determined in that way.

With these constraints in mind, let us look at some current contextual theories of reference according to which reference is not determined (or disambiguated) by what the speaker had in mind. A non-intentionalist account of disambiguation for proper names was recently proposed by Mark Norris Lance.¹ Lance argues that the context of utterance, particularly the audience to whom a sentence containing a proper name is addressed, is an important determinant of reference. According to Lance, the audience is part of a subcommunity of an entire language community, for our purposes--the English-speaking community. Within these subcommunities, names that are ambiguous for the English language community as a whole, are not ambiguous. Lance argues his case as follows.

The statement 'Dick is wearing a green tie' when put before the English language community at large, can be given no truth value for it

¹ "Reference Without Causation," Philosophical Studies, 45 (1984), pp 335-351.

contains an ambiguous term. Only by considering the context within which it was uttered, in particular the other people to whom it is intended to communicate information, can it be given a truth value. When I am speaking as a member of the linguistic community consisting of my high school friends, 'Dick' refers to a certain balding bicycle racer. When I am speaking as a member of the philosophical community of Ohio State, it refers to someone else.²

The referent of a use of an ambiguous proper name, then, is determined by which community the proper name was uttered within. We could formulate a reference rule for proper names as follows:

S refers to x with 'N' (or a use of 'N' refers to x) if and only if x is a possible referent of 'N', and S is speaking as a member of community C in which 'N' is (typically) used to convey information about x and only about x.

There seems to be something right about this proposal. We do find that when we use names which have a number of possible referents and there is no question about who is meant, usually there is only one likely bearer of that name within that conversational context. However, there are problems with Lance's way of accounting for this fact.

One problem is that even in very limited communities there can be more than one possible referent of a proper name. In the philosophy department at Loyola there are three Davids. Now, when I say to one of my colleagues in the philosophy department, "David was in California last weekend," it at least seems that 'David' refers to one David. Lance's account of disambiguation cannot explain this. In fact, rather than explain it, Lance chooses to deny what seems to be obvious, namely, that I referred to a particular person. His answer to such an objection is this: "I might have intended to refer to one particular person but there is a difference between intending to do something and doing it."³

² Ibid., p. 348.

His response to me, then, would be that I had failed to refer to any particular person and that, since my use of the name 'David' was irredeemably ambiguous, no truth value can be assigned to my statement. The only justification he gives for his claim that such uses are ambiguous is that, "reference for me is a social matter. My intentions, so long as they are not communicated to the rest of the linguistic community, do not carry any semantical weight."⁴

I do not find Lance's response very convincing. Surely we can believe that reference is a social matter without requiring that for every actual reference there must be an audience to whom the reference is successfully communicated. That is much too strong a requirement. If it were true, it would be difficult to explain how a new name could be introduced into a sub-community by one person. As long as the audience did not know whom this person was talking about, he would not actually be referring. Further, our intuitions tend to support the claim that 'David' referred to one particular person in the sentence "David is in California this weekend," and that this statement has a truth value. The audience would not dismiss this statement because it lacked a truth value. Instead it might ask me which David I meant, or it might take 'David' to have referred to the David about whom it is reasonable for me to believe that he was in California. If we are looking at actual social institutions and social practices, we should conclude that the audience does take this statement to have a truth value, and it does take the name 'David' to have referred even when it is not in a position

³ Ibid., p. 348.

⁴ Ibid.

to know to what or to whom the name was referring.

There are further problems with Lance's account of disambiguation. Lance himself admits that the notion of a community is vague. The basic idea is that using a name in a community should be understood in terms of transfers of information among members of the community. There is some question as to whether this notion can be made precise enough to be of much use in a theory of disambiguation.

However, even if we suppose that communities can be identified in some way, there is still a question of which community is relevant for a particular use of a name. Each one of us belongs to many sub-communities of the kind Lance identifies (e.g., the community of his high-school friends and the philosophical community at Ohio State). Some of these sub-communities are nested within larger sub-communities. For example, the philosophical community at Loyola University is part of a larger philosophical community. Within the philosophical community at Loyola there is a smaller community of moral philosophers at Loyola. The community of moral philosophers at Loyola is part of a larger community of moral philosophers in Chicago, and an even larger community of moral philosophers in the Mid-west, etc. For the sake of the argument, assume that Lance is correct in saying that the referent of a use of a name is determined, in part, by the speaker's relationship to a certain community (i.e., the speaker is speaking as a member of that community). What community are we to take a speaker to be a member of when she uses a name? Suppose someone is a member of Loyola's philosophical community, a member of the community of moral philosophers at Loyola, a member of the community of moral philosophers specializing in business ethics, etc. Suppose also that 'Dick' refers to one person within the philo-

sophical community at Loyola, and to another person within the community of moral philosophers who specialize in business ethics. If our speaker uses the name 'Dick', to whom does she refer? According to Lance, it depends on which community she is speaking as a member of. But which community is that? Since the speaker belongs to both communities, mere membership cannot provide the principle. Perhaps it depends on the community membership of the audience. Let us assume that our speaker is speaking to two people. One of them, A, is a member of Loyola's philosophical community but not a member of the community consisting of specialists in business ethics. The other, A', is a member of both communities. If we say that the speaker is speaking as a member of the community to which her audience belongs, then we will have to conclude that she is making two statements here. To A' she makes a statement that is ambiguous, and therefore has no determinate truth value. For A, her statement is about the person referred to with the name 'Dick' in the philosophical community at Loyola. Clearly, this cannot be correct. The speaker does not make two statements with two different truth values just because there are two people with different community memberships in her audience.⁵

⁵ We might want to say that the speaker is speaking as a member of community C if and only if she intends to speak as a member of C, or she intends her audience to take her to be speaking as a member of C, but this seems to needlessly complicate matters. Why not just take her to be referring to the Dick she intends to refer to?

A more promising tack would be to look to the context to discover which community is relevant. For example, if the conversation had been about business ethics, the relevant community would be the community of specialists in business ethics. If the conversation was about departmental politics, the relevant community would be the philosophical community at Loyola. But the context will not always tell which community is relevant, and the speaker may abruptly change the subject.

If we recognize the fact that sub-communities often either overlap or are contained in one another, we find that Lance's account of disambiguation will not get us very far. The purpose of the theory is to explain how uses of ambiguous names refer to only one potential referent of that name. What we end up saying is that most (or at least, many) uses of ambiguous names do not refer to only one person or thing. Because we often cannot identify which community a speaker is speaking as a member of, the number of ambiguous references remains quite high. This is one reason to reject Lance's account of disambiguation. It is not a conclusive reason, since it is possible that many uses of names are irremediably ambiguous.

Another reason to reject Lance's account of disambiguation is that it does not jibe with actual linguistic practices. When someone uses an ambiguous name, we do not usually try to find out which community that person is speaking as a member of in order to understand to whom the name she uses refers. For example, if I say "I saw a book that was dedicated to Cathy," you are not likely to ask yourself which community I might be speaking as a member of in order to discover to whom 'Cathy' refers in my sentence.

Before we dismiss Lance's account of disambiguation we should consider what seemed right about it. We admitted earlier that a name which is ambiguous for the entire English-speaking community is often not ambiguous within a smaller community. This is true not only for names like 'John' and 'Bill' but also for more completely specified names, such as 'Kelly Mink'. My friend Kelly has informed me that there are 13 Kelly Minks in the United States. That means that in the entire American English-speaking community the name is ambiguous. There are at

least 13 possible referents of the name in American English. Nonetheless, when I use the name, and when I hear others use the name, the question of which Kelly Mink is being referred to never even arises. In some sense, there is only one Kelly Mink that it could refer to.

Lance would explain the fact that there is only one Kelly Mink that my use of 'Kelly Mink' could refer to by relativizing the reference potential of the name to a community. According to Lance, in the community to which I belong, 'Kelly Mink' is used to convey information about a certain Kelly Mink and only about him. Because this is true of my community, when I use the name, it refers to that Kelly Mink. We could argue that the reference potential of 'Kelly Mink' is not relative to a given linguistic sub-community, for it is clear that anyone who knows that there are 13 people named 'Kelly Mink' in the United States, also knows that 'Kelly Mink' can be used to refer to 13 different people. On the basis of what I know about the bearers of the name, 'Kelly Mink', I can refer to one of the other 12 Kelly Minks. I can say, for example, "Kelly Mink is a woman," and my sentence will be true, even though the Kelly Mink about whom information is typically conveyed in my linguistic community is not a woman.

We can better explain the fact that within certain sub-communities of English-speaking people a use of an ambiguous proper name seems not to require disambiguation with an intentionalist theory of disambiguation. According to such a theory, the reason we do not usually consider names such as 'Kelly Mink' ambiguous is that typically there is only one person that the speaker is able to intend to refer to with the name,⁶

⁶ Assuming that intending to refer to some person with a name

and only one person about whom the speaker is likely to have anything to say.

Lance's observation that if he uses the name 'Dick', speaking to his high-school friends, 'Dick' refers to someone different from the person he refers to when he uses the name 'Dick' at Ohio State, can be explained in a similar way. When he is among his high school friends, who could be expected to know one Dick that Lance might want and be able to talk about, Lance need not, for the purposes of communication, make his intentions to refer to that person more explicit. He expects his audience to understand that the bicycle racer, Dick, was the one he had in mind, because they would normally have no reason to suppose he had another Dick in mind or would want to tell them about some other Dick. But 'Dick' probably does not always refer to the bicycle racer when Lance talks to his high school friends. He could say, for example, "Dick is a person I know at Ohio State." Obviously, 'Dick' in this sentence does not refer to the high-school Dick. Nor will Lance's high school friends take it to refer to that person. From the context they can tell that he is talking about someone else named 'Dick', someone they probably do not know. What makes it the case that he is talking about someone else cannot be the fact that he is speaking to his high school friends, or is speaking as a member of that community.

The phenomenon that Lance bases his theory of disambiguation on can be better explained by intentionalist theories than by Lance's contextual theory. In addition, Lance's theory does not account for many cases in which someone seems to make a determinate reference. Lance

requires that the speaker believes that this person bears this names.

would have to say that in these cases the reference was ambiguous and therefore the sentence lacked a determinate truth value. Further, if Lance's account were correct, we would expect people to use a certain strategy to discover to whom a use of a name referred--namely, we would try to ascertain which community the speaker was speaking as a member of. But we do not seem to use this strategy. Instead, we try to ascertain whom the speaker was thinking of or to whom she intended to refer. These reasons together justify our rejecting Lance's account.

A stronger case can be made for non-intentionalist accounts of disambiguation for demonstratives and other indexicals. One such account is the contextual theory of demonstrative reference developed by Colin McGinn.⁷ McGinn argues that the reference of demonstratives is determined in part by gestures, e.g., pointing. He suggests the following spatio-temporal reference rule for demonstratives:

the referent of a token of 'that F' is to be the first F to intersect the line projected from the pointing finger, i.e., the F at the place indicated--one might almost say geometrically--by the accompanying gesture.⁸

He arrives at this reference rule by considering cases in which the speaker does not perceive the object to which he points and has only very general knowledge of it (the speaker may believe that it is an F and that it is located in a certain place). In one of these cases a factory inspector, while absent-mindedly looking away, gestures towards a car and says, "That car is road-worthy." Although the factory-inspector has no perceptual image of a car which the intended referent might

⁷ "The Mechanisms of Reference," Synthese, 49 (1981), pp. 157-186.

⁸ Ibid., p. 163.

satisfy,⁹ and even though the car itself is not causally related to his utterance, the inspector still refers to the car he is pointing at.

McGinn's account of demonstrative reference includes 'paralinguistic' gestures among the determinants of reference. I suspect that such gestures are institutionalized referring devices, in the same sense that some linguistic expressions are. However, there are difficulties with McGinn's account of how such non-linguistic devices operate. First of all, McGinn's account can apply only to demonstratives which are accompanied by a sortal (e.g., 'that man' rather than simply 'that'). McGinn says that the rule according to which the referent of a demonstrative 'that F' is determined, determines the referent to be the first F which intersects the line projected from the pointing finger. If we try to generalize this rule to account for 'pure' demonstratives, for example, the word 'that' in the sentence, "That has been watching us all night," McGinn's spatio-temporal account will not work. We should have to say something like, "The referent of 'that' is the first thing (or individual) to intersect the line projected from the pointing finger." But the first thing to intersect that line might be a speck of dust, a molecule of oxygen or a mosquito too far away to be seen. In most cases, however, such things would not be the referent of 'that'. In addition, the 'thing' which first intersects the line could be described as many different 'things'. The thing in question could be a complete object, a part of an object, a property of an object, an activity, etc. The pointing itself is too indeterminate to be able to disambiguate refer-

⁹ A satisfaction theorist might say that he intends to refer to the car at which he is now pointing. This would be enough to fix the reference.

ence. But certainly we can and do refer to individuals with pure demonstratives like 'this' and 'that'.

McGinn might want to argue that a sortal is always implicit in demonstrative reference. When the sortal is not explicitly stated, as in the sentence, "That has been watching us all night" either we have to say that the referent is ambiguous and so the sentence has no determinate truth value or we will have to find some principle according to which the sortal is supplied. Since in the case of the antelope-looking rock it seems that there is a referent for the word 'that', we should not accept the first alternative. That means we must find some way of determining which sortal is to be supplied. Spatio-temporal factors will be of little help here.

Another reason for rejecting McGinn's account of demonstrative reference is that it limits demonstrative reference to things which can be pointed at. But we are able to refer to things with a demonstrative of the form 'that F' even when the thing cannot be pointed to.¹⁰ For example, on hearing a clap of thunder, one can say "That noise was loud," even though one could not point to the noise.

Perhaps the most serious short-coming of McGinn's contextual theory is that it falls prey to the problem of fortuitous 'satisfaction'. Suppose our speaker had seen an antelope-looking rock and said, "That antelope has been watching us all night" while pointing to the rock. As he points, an antelope is grazing several miles away but on a line with the pointing. On McGinn's account, the referent of 'that

¹⁰ Howard Wettstein makes this point in "How to Bridge the Gap between Meaning and Reference," Synthese, 58 (1984), pp. 63-84. See p. 77 for a discussion of McGinn.

antelope' will be the first antelope to intersect the line projected by the pointing finger; in this case, the antelope that is several miles away. But surely, 'that antelope' does not refer to some antelope that the speaker has neither seen nor heard, which is and has been completely out of view. It is clear that, in this case, 'that antelope' either refers to nothing at all because the speaker has mis-spoken, or it refers to the rock the speaker is pointing to. It does not refer to the antelope that just happened to be the first one to intersect the line projected by the pointing finger.

Another version of a contextual theory of reference for indexicals and demonstratives can be found in Howard Wettstein's paper, "How to Bridge the Gap Between Meaning and Reference."¹¹ On Wettstein's view, there are contextual cues which the speaker exploits to make his intended reference available to his audience. Such cues include pointing to something and looking directly at it. One can also narrow down the field of possible referents of an expression by taking advantage of the fact that one individual is the only one in view (e.g., one relies on the fact that there is only one table in the room when one says, "The table is too crowded,"). Or one can take advantage of the fact that some individual is prominent. The cues that the speaker exploits (or to all appearances exploits) not only help the audience to figure out what the speaker intends to refer to, they actually determine reference.

¹¹ Ibid. This is the most complete and recent exposition of Wettstein's contextual theory. For earlier discussions along a similar line see Wettstein's "The Semantic Significance of the Referential-Attributive Distinction," Philosophical Studies, 44 (1983), pp. 187-196 and "Demonstrative Reference and Definite Descriptions," Philosophical Studies, 40 (1981), pp. 241-257.

Wettstein characterizes the cues which determine reference as follows.

One who utters a demonstrative is responsible, from the point of view of the natural language institution, for making his intended reference available to his addressee, and so he is responsible for the cues that a competent and attentive addressee would take him to be exploiting. The cues for which he is responsible, those that he, to all appearances, exploits, are the cues that determine the reference.¹²

There is much that is right in Wettstein's paper. In particular, it seems right to look at non-linguistic (but conventional or at least institutionally recognized) cues as determinants of reference, not merely as clues which help the audience identify the object which is the referent.

The intentionalist's alternative to seeing pointing, for example, as a co-determinant of reference, is to say that pointing merely provides a clue to the audience about which object is the referent. The referent was determined by the speaker's intentions to refer to that object, or by her having that object in mind. To show that the intentionalist account is wrong, we need to find cases in which the speaker has one object in mind (and intends to refer to it) but actually refers to something else--namely, the thing pointed to. David Kaplan has provided examples of cases like this.¹³

Suppose that without turning and looking I point to a place on my wall which has long been occupied by a picture of Rudolph Carnap and I say:

Dthat [I point as above] is a picture of one of the greatest philosophers of the twentieth century.

¹² "How to Bridge the Gap Between Meaning and Reference," p. 73.

¹³ "Dthat," in Peter French, T. Uehling and H. Wettstein (eds.), Contemporary Perspectives in the Philosophy of Language (Minneapolis: The University of Minnesota Press, 1979), pp 383-400.

But unbeknownst to me, someone has replaced my picture of Carnap with one of Spiro Agnew....I have said of a picture of Spiro Agnew that it pictures one of the greatest philosophers of the twentieth century. And my speech and demonstration suggest no other natural interpretation to the linguistically competent public observer.¹⁴

What we see in these cases is that pointing at some F and saying, 'that F' together can override the speaker's intentions. Even though the speaker intended to refer to Rudolph Carnap's picture, the actual referent was not the picture of Rudolph Carnap, it was the picture Kaplan pointed to. From cases of this kind, we should conclude that pointing at F and saying 'that F' do together determine reference.¹⁵

Pointing at an F that is in view and saying, 'that F' does appear to determine a unique referent at least sometimes. The pointing is not merely a cue for the audience; it is actually a determinant of reference which can override the speaker's intentions. And pointing is not the only cue that operates this way. We can determine a unique referent using other gestures in conjunction with ambiguous referring devices. For example, if I pick up a book and wave it in the air while saying, "This book is a classic of Western civilization," my waving the book co-determines a unique referent for 'this book'. Had I picked up the wrong book, my intention to refer to a certain book would be thwarted. For example, I may have inadvertently picked up a volume of Copleston's A History of Philosophy. If I did, then I inadvertently referred to that volume. To this extent, Wettstein is correct in saying that "ref-

¹⁴ Ibid., p. 396.

¹⁵ It is not clear what kind of reference rule governs pointing. We have already seen that a purely spatio-temporal one like McGinn's will not work. Usually, we can point at something only if it (or some part of it) is visible (over a period of time).

erence is determined by the very features which make reference available to the auditor."¹⁶

Wettstein does not want to count every cue that helps the audience identify the referent as a determinant of reference. He limits the semantically significant cues, the ones that count as determinants of reference, to those which the speaker is responsible for. According to Wettstein, the cues the speaker is responsible for are those which the addressee would take her to be exploiting.

Although I agree with Wettstein that there are non-linguistic determinants of reference and that these devices also serve as cues for the addressee, I do not accept Wettstein's way of characterizing these semantically significant cues.¹⁷ Consequently, some of the cues which he accepts as semantically significant I would not accept.

Wettstein says that the determinants of reference are those cues which a competent and attentive addressee would take the speaker to be exploiting, rather than those which the speaker actually does exploit or intends to exploit. The reason for holding a speaker responsible for cues which an addressee would take her to be exploiting is not entirely clear. Wettstein introduces this stipulation after considering the case cited above,¹⁸ in which the speaker "walks up to Smith, stares straight at him, extends his finger right in Smith's face, and says, 'That is a self-destructive man'." What Wettstein notices in this case is that if

¹⁶ Op. Cit., p. 64.

¹⁷ Note that semantically significant cues are those cues which actually determine (or co-determine) reference.

¹⁸ See pp. 40f.

the speaker does all these things, then he refers to Smith, even if he did not do these things in order to make his intended reference available to the audience. In fact, in this case his intended reference was not Smith at all. Nonetheless, if one does all these things, one refers to Smith. That is the basic intuition. But the intuition alone does not count for much unless we can explain why this is the case. Wettstein explains it in terms of what the speaker can be held responsible for doing. The speaker, whether he wanted to use these cues or not, did use them and is thus responsible for using them. In much the same way, a speaker is responsible for saying something, or rather, producing certain sounds which constitute a sentence in the language of his addressee. What the speaker says, strictly speaking, is a matter of what the sentence he produced says. It does not matter, "from the point of view of the natural language institution,"¹⁹ whether he meant them or not, or whether he intended to say what he said. We could try to explain the fact that the speaker said what his sentence said in terms of the cues an attentive and competent addressee would take the speaker to be exploiting, just as Wettstein explains the fact that the speaker referred to Smith even though he did not mean to, by looking at what cues the addressee would take the speaker to be exploiting. But to leave it at that is unsatisfactory. The important question is: Why would the competent and attentive addressee take the speaker to be exploiting certain cues? I propose that the answer is that certain cues are conventional means for referring. They are part of the natural language institution

¹⁹ This is Wettstein's phrase. This is a useful point of view to take when talking about reference.

just as words and phrases are. This means that anyone who uses these devices is responsible for their 'effects', whether he intended them to have these effects or not, whether he intended them to be devices or not. Because the addressee (and the linguistic community as a whole) can be reasonably expected to recognize these conventional means for saying something or for referring, it will (or would) take the speaker to be exploiting these cues.

We can formulate the distinction between semantically significant cues and cues which merely help the audience identify the referent (without actually determining the referent) in terms of conventional devices. If we do, there is no need to appeal to an audience to find out which cues a speaker is responsible for. We may use the notion of a competent and attentive addressee as a heuristic device to help us determine which cues are conventional devices and which are not, but the emphasis should be placed on the fact that there are publicly recognized, conventional means for determining reference. These non-linguistic devices are on a par with linguistic devices. If one uses these devices, either deliberately or inadvertently, then a referent is determined.

Not all cues that an audience relies on to identify the referent of some expression are semantically significant. Further, not all cues that a speaker exploits (or appears to exploit) to communicate his intended reference are semantically significant. Some features of a context of utterance may help us to communicate reference and to identify an intended referent, and yet they may fail to be conventional means for determining reference.

What kinds of cues should we count as conventional means for

determining reference? I propose that a conventional means for determining reference is one which, whenever used, affects what is said. Pointing seems to be a conventional means for determining reference, since whenever one points to an F and says 'that F', one refers to the F that was pointed to. Other gestures typically used in conjunction with demonstratives (or quasi-demonstratives), such as waving an object, picking it up and thrusting it into the air, etc., also affect what is said, regardless of the speaker's intentions.

Earlier we mentioned other features of a context that a speaker might take advantage of to communicate her intended referent. For example, we said that one may take advantage of the fact that there is only one table in the room in order to communicate to one's audience the referent of 'the table' in the sentence 'The table has a wobbly leg'. One may also take advantage of the fact that one object is prominent to communicate one's intended reference. These cues, however, do not seem to be conventional devices for determining a referent. Sometimes they are important, sometimes they are not. It is not the case that whenever they are (or seem to be) used they affect what is said.

Suppose someone walks into a room which has one very large table (a conference room or seminar room) and says, "The table has a wobbly leg." The addressee's first guess might be that the table in question is the one in the room. He might examine it to see if it wobbles, and finding that it is quite stable, say "It doesn't seem to have a wobbly leg." The speaker could reply, "Oh, not that table. The table in the other room where I was just working." In this discourse, the audience could not respond that the speaker had actually said that the table in this room had a wobbly leg (as he could if the speaker had pointed to

the table in this room). Nor could he accuse the speaker of mis-using generally recognized means for communicating reference. The fact that there is only one table in the room where the speaker says 'the table' is only sometimes useful in communicating an intended referent. It is a cue, not a determinant of reference. We do not, as a matter of fact, hold a speaker responsible for exploiting such a feature of the context of utterance, as we do hold her responsible for saying certain words or making certain gestures.

Similarly, we do not hold a speaker responsible for exploiting the fact that one F is prominent when she says, 'the F' or 'that F'. For example, suppose the following conversation takes place in front of a pig-pen containing several pigs.

S: The pig over in that corner [points to a corner] is mine.

A: [Looks in the corner. There are three pigs, but one of them is prominent. It is black and big while the others are pink and small; it is standing on its snout while the other two are lying down.] It sure is a clever one.

S: No, not that one. The little one lying over there with the black markings on its snout.

The audience would not be justified in saying, "Well, that is not the one you were talking about. Strictly speaking, you said that the big, black pig was yours, because it was the one which was prominent." Compare this conversation to a similar one in which the speaker said the same thing, but had clearly pointed to the big, black pig. In such a case the addressee would be justified if he scolded the speaker for pointing to the wrong pig and thus for mis-using the conventions of English.

Features of the context such as the fact that there is only one table in a room or that one pig stands out are cues that a speaker may exploit on some occasions to communicate his intended reference, and they can be used by an addressee to identify the intended referent, but these features of the context do not have the 'force of law' characteristic of conventional devices. The natural language institution does not incorporate such features into its structure, and probably for good reason. It is unlikely that features of the context of utterance over which the speaker has little or no control will be recognized by the linguistic community as a whole as cues that determine what one says. The reason for this may be a function of our notion of responsibility. At least in English, the conventional devices which a speaker is held responsible for exploiting are those which she can deliberately produce, such as sounds and gestures. We do not hold the speaker to a statement which the speaker would have made had the reference rule incorporated contextual features such as the fact that only one F was in sight when the speaker said 'the F'.

Of course, this line of argument is inconclusive. We do have sufficient control over our sound production to be held responsible for producing certain sounds in certain contexts. For example, I would be held responsible for yelling "Fire!" where there was no fire. Thus, we could be held responsible for exploiting certain features of the context of utterance in order to communicate our intended referent even though we have no control over those features. However, as a matter of fact, we are not generally held responsible for such cues.

To show that such features of the context of utterance are not part of the English-language institution, let us imagine a language in

which these contextual features do determine reference. In this language, there is a reference rule of the form: The referent of 'the F' is x, if x is an F and x is the only F in sight or prominent. If the speakers of this language want to observe the conventions of their language, they will have to check their surroundings before they use expressions with the form, 'the F'. To use these expressions correctly, they have to determine, before they speak, whether there is only one object or one prominent object of the kind they wish to refer to. If there is, and if that object is not the one they wish to refer to, they will have to find some other expression to communicate their intended referent. If English were a language in which this reference rule was incorporated, we would expect that conscientious speakers would pay this kind of attention to the circumstances in which they speak. But they do not. English does not require that a speaker look to see whether there is only one table in view or one prominent pig before she uses the expression 'the table' or 'the pig'. These types of cues cannot be counted as semantically significant.

The features of a context which we will count as determinants of reference are those which can be incorporated into reference rules for the language which hold under normal circumstances.²⁰ So far we have accepted gestures accompanying demonstrative expressions as determinants of reference. Wettstein also suggests that grammatical considerations should be taken into account.²¹ For example, if someone says, "That is

²⁰ These reference rules could be overruled in special circumstances, for example in fictional contexts.

²¹ Op. Cit., p. 75.

the author of an important paper on decision theory," the predicate narrows the range of possible referents of 'that'. Not just any individual can, according to the rules of English, be the referent. The color green, for example, cannot be. The referent must at least be an object.²² Similarly, the referent of 'that' in the sentence, 'The cat is on that', cannot be any individual whatever. It must be an object that something can be said to be on. We could say that the sentence in which a referring expression occurs is a feature of the context of utterance which helps to determine reference because it narrows the range of potential referents.

The referent of some referring expressions can also depend on reference links (or anaphoric chains.²³ For example, the referent of the pronoun 'he' in the following conversation is determined by its link with the name, 'Garry Trudeau'.

S: Garry Trudeau gave the most accurate portrayal of the present state of higher education that I've seen all year.

A: Oh, I saw that. Yes, he certainly seems to have captured what's going on in my classes.

The referent of this use of 'he' depends on its connection with the preceding sentence. The context in which 'he' was used plays a part in determining reference.

²² It could be argued that the referent must also be an agent, or even a person, but that seems too strong. A speaker may have bizarre beliefs and predicate something false of some object. English grammar does not protect us from this kind of mistake.

²³ For a more complete discussion of anaphora and anaphoric chains, see Charles Chastain's, "Reference and Context," in Keith Gunderson (ed.), Language, Mind, and Knowledge (Minneapolis: University of Minnesota Press, 1975), pp. 194-269.

Of course, features of the context of utterance also play a role in determining the reference of pure indexicals. The referent of 'I', for example, is normally determined by who uses it,²⁴ the context also determines the referent of 'here', 'there', 'now', 'tomorrow', etc. Since the importance of the context for determining the referent of these indexicals is almost universally recognized, there is no need for us to say more about them here.

In the preceding discussion we argued that certain features of the context of utterance should not be considered semantically significant. We argued that the fact that someone addresses a statement to a particular audience does not determine the reference of a proper name. We also rejected contextual cues such as the fact that there is only one table in the immediate surroundings when one says 'the table'. We argued that these cues do often guide the audience's interpretation of what is said, but that they do not determine reference in the way that, for example, certain gestures used in conjunction with a demonstrative do.

If we restrict contextual cues that determine reference to those which are incorporated into the rules of language, then we will find that after we have taken all these cues into consideration, there are still a number of sentences in which the referring expression remains ambiguous.

The point of looking at contextual theories of reference was to see whether they could serve as alternatives to the more problematic intentionalist theories of reference disambiguation. We have seen that

²⁴ This reference rule does not hold when 'I' is used in direct quotation or in fictional contexts.

some features of the context (e.g., pointing and other gestures), actually do determine, or at least co-determine, reference. When someone says 'that F' while pointing to an F, the referent of 'that F' is the F she pointed to.²⁵ By taking into consideration these conventional, but non-linguistic devices for referring, we can explain how reference is disambiguated in some cases. But there are many remaining cases where these cues, together with a referring expression, are not sufficient to determine a unique referent.

It seems that there are two likely responses the contextual theorist can give here. He can either supplement the contextual theory with an intentionalist one or he can argue that many times when there appears to be a determinate reference, the reference is actually ambiguous.

David Kaplan clearly opts for the first alternative. In cases where the gesture and saying 'that' (or in Kaplan's special language, saying 'dthat') is not sufficient to determine which object is the referent, the referent is determined by the speaker's intentions. Thus, he

²⁵ We have not considered cases in which the speaker says, 'that F' but points to something which is not F. For example, when she says, "that antelope" but points to a rock. The initial response is to say she refers to the thing she is pointing to. But this will not do. For one thing, there is the problem of the indeterminacy of ostension. Any time one points, there are numerous things that could be the referent of the pointing. We might resolve this ambiguity by placing a further restriction on the pointing. For example, we could propose that the referent is the x which is pointed at and which belongs to the same general category as F. In the antelope case, the general category might be 'large, physical object'. Thus in this case, the rock would be the referent. But there is a further problem. If the truth value of the statement, 'That antelope has been there all night' depends on whether the predicate is true of the referent, then the statement 'That antelope has been there all night' will be true if and only if the rock has been there all night. That seems to be wrong. (Here we might want to distinguish what the speaker meant (or intended to refer to) from what her sentence said.)

writes,

When I point at my son (and say 'I love dthat'), I may also be pointing at a book he is holding, his jacket, a button on his jacket, his skin, his heart, and his dog standing behind him--from the surveyor's point of view. My point is that if I intended to point at my son and it is true that I love him, then what I said is true.²⁶

Wettstein opts for the other alternative. He argues that when the available cues are not sufficient to determine a unique referent, the referent is simply ambiguous.

If the speaker fails to make his reference available, his speech act is defective, and not even the best intentions can repair the defect. The speaker, strictly speaking, has not asserted anything determinate, i.e., anything at all.²⁷

Earlier we saw that Lance had the same kind of response. For him, also, the speaker's intentions carried no semantical weight if they were not communicated to the rest of the linguistic community. And when the audience could not tell which David, for example, was in question when I said, "David is in California this week-end," the statement containing that name had no determinate truth value.

The problem with contextual theories that do not incorporate speakers' intentions into their account of disambiguation is that they leave too many uses of referring expressions ambiguous, and too many sentences stating nothing determinate. Surely, Kaplan states something determinate when he points to his son and says, "I love dthat." And it seems just as clear that the person who points to a rock and says, "That has been watching us all night" also says something determinate (and false). The same thing can be said of the statement "David is in Cali-

²⁶ Op. cit., p. 396.

²⁷ Op. cit., p. 75.

fornia this weekend." In all of these cases it at least seems as though one particular thing is the referent.

Although contextual factors play a role in determining reference, they do not, by themselves, account for all those cases in which reference seems to have been made to a particular object by means of ambiguous referring devices. This fact suggests that contextual theories are not adequate theories of disambiguation. We should incorporate contextual cues into our theory of disambiguation, but the theory requires something more.

We would reject a non-intentionalist theory of disambiguation, then, because such a theory cannot account for many cases in which determinate reference seems to be made, even though the referring expression and other, contextual, determinants of reference fail to determine a unique referent. We find such a case when Kaplan points to his son and says "I love that." The word 'that' can, according to the rules of English, be used to refer to any individual. The possible referents of 'that' in the sentence, 'I love that', are objects, properties of objects, actions, etc.²⁸ In addition, the possible referents of the pointing gesture are also numerous. We can also suppose that the expression is not referentially linked to some other referring expression in the preceding discourse. The non-intentionalist theorist, finding no way of explaining how a unique referent is determined in this case, has to deny that this use of 'that' refers to any particular

²⁸ The English sentence-form: 'I love X' takes a wide variety of objects. All of the following are well-formed English sentences: 'I love Justin,' 'I love green', 'I love the way she stands,' 'I love skiing', etc.

object. According to him, it is irreparably ambiguous.

Although the pure contextual theorists' conclusion flies in the face of our intuitions about this sentence, their position is not untenable. The best defense for their refusing to acknowledge what seems obvious, for example, that the word 'that' did refer to someone, requires making a clear distinction between what the speaker said and what his sentence said. Thus, a pure contextual theorist can say that in the sentence we were considering, the speaker may have said that he loves his son, even though the sentence he used did not. The fact that we would take the speaker to have said that he loves his son if we know that he intended to refer to his son, does not mean that the sentence he used says this. If we are interested in understanding what the speaker wants to say, as we generally are in everyday conversation, then we will look to his intentions to find out what he meant. This accounts for our intuition that Kaplan did say something determinate when he said, while pointing to his son, "I love that." But if we are interested in what the referents of its referring expressions are, then we will find that the sentence lacks a determinate truth-value because one of its referring expressions is ambiguous.

Clearly, there is sometimes a difference between what a speaker means and what the sentence he uses to say it says. This distinction is especially important when the speaker mis-uses the conventions of the language, either through sloppiness or because of mistaken beliefs. For example, if someone mistakenly believes that the person sitting in front of her murdered Smith (and the person to whom she is talking knows that the speaker believes this) then when the speaker says, "Smith's murderer is insane," we might want to distinguish what the speaker meant from

what the sentence said. If it is true that the person sitting in front of the speaker is insane, but false that Smith's murderer is insane, we can account for our intuition that the speaker 'said' something true even though the sentence she uttered seems to be false, by making this distinction. When a speaker mis-uses the conventions of the language, this is the best way to account for conflicting intuitions about what was said.

It is not quite so clear that this distinction between what a speaker says and what her sentence says should be made when the conventions of the language are observed, as they are, for example, in the sentence "I love that" where the speaker points to his son (among other things). The motivation for making this distinction is not the same in these cases. In the former case (Smith's murderer), we needed to distinguish between what the speaker said and what her sentence said in order to account for conflicting intuitions about the truth value of the sentence/utterance. But we do not have such conflicting intuitions about cases like the one in which someone points and says, "I love that." Suppose Kaplan's son is holding a book which Kaplan believes is one he loves (it has the same cover and is approximately the same size), but the book is, in fact, one that he dislikes. Kaplan points to the book (and his son, and his son's jacket, etc.) and says, "I love that." If we know that Kaplan intended to refer to the book, we want to say that the sentence is false. This corresponds with our intuition that the speaker said something true when she said "Smith's murderer is insane." But in this case, there does not seem to be a conflicting intuition to the effect that the sentence is not false. Here there seems to be no reason to distinguish what the speaker said from what his

sentence said other than an unwillingness to accept intentions as determinants of reference. Without some further reason for rejecting intentions as determinants of reference, we should not accept a purely contextual theory of reference disambiguation.

CHAPTER V

THE CAUSAL THEORY OF NAMES

In the preceding chapters we rejected both satisfaction theories and contextual theories of disambiguation. Satisfaction theories were problematic because they required the speaker to have a uniquely denoting description or representation in mind in order for a singular referring expression to refer to a particular individual. Even more importantly, satisfaction theories are open to counter-examples involving fortuitous satisfaction. Contextual theories were also problematic. Although we accepted the contextual theorist's claim that certain features of a context of utterance are important non-linguistic determinants of reference, we did not accept the claim that these determinants plus linguistic conventions governing reference potential were the only factors relevant to disambiguating reference. We argued that when these factors are insufficiently determinate to determine a unique reference, other factors play a role. We suggested that these other factors involve some kind of causal relation between the speaker and the referent.¹

¹ It should be noted that our case against contextual theories is provisional in the sense that it rests on intuitions about cases which need not be shared and are certainly not decisive. (For example, it seems as though Kaplan refers to a determinate thing when we says, "I love that." If he is thinking of his son, then "that" refers to his son.) Insofar as we want to accommodate these intuitions we need to go beyond a contextual theory. In this chapter I will suggest how we might

In this chapter I will develop an alternative account of disambiguation along the lines of a causal theory of reference. This account avoids the problems of satisfaction theories (especially that of fortuitous satisfaction) while accounting for the determinancy of reference when conventional linguistic and non-linguistic (that is, contextual) referring devices leave the reference indeterminate.

To develop this account I will first outline the basic tenets of causal theories of reference, by concentrating on the causal theory of names.² The reason for looking at causal theories of names first is that the causal theory of reference was first developed as a theory of names, at least with respect to singular reference. The early formulations of the theory set the stage for the development of causal accounts of other types of referring devices. By looking at these early causal theories, we can find the motivations for, and basic insights of, causal theories of reference in general.

One of the important features of causal theories is their recognition of reference chains or parasitic reference; another is the idea that primary reference is typically grounded in the referent. Once these ideas have been introduced in the context of the causal theory of names, we will be in a position to expand the causal account to cover disambiguation of other referring devices.

It should be noted that in the discussion of the causal theory of

do this. However, it will become clear through this discussion that it makes no difference whether we accept a contextual or causal theory of disambiguation for the larger issue of explaining how reference potential is determined.

² This emphasis on names is not due to the belief that names are a fundamental or basic device for singular reference.

names, I presuppose a causal theory of how the reference potential of names is determined. I do so in order to illustrate the main features of causal theories of reference, features which characterize not only the causal theory of names but also causal theories of disambiguation for other types of referring devices. One could hold a satisfaction account of the reference potential of names and a causal account of disambiguation.³

Recall that the overall goal of this dissertation is to show the proper role of speaker's intentions in the theory of reference. By developing an acceptable theory of reference disambiguation which acknowledges speaker's intentions, we will see how and to what extent the speaker's intentions are important for disambiguating reference and thus provide one part of the answer to our major question: what is the proper role of a speaker's intentions to refer in a theory of reference? Our results in the next two chapters will have important implications for the part of the theory of reference which accounts for reference potential.

In this chapter I will develop the framework for a causal theory of names. The account I present here will be based primarily on Saul Kripke's "picture" of names,⁴ but it will take into account objections to the causal theory that have been raised since the theory was first proposed. It is beyond the scope of this chapter to develop a complete

³ David Kaplan proposes such a theory in "Quantifying In," Synthese, 19 (1968-1969), pp. 178-214; see especially p. 200.

⁴ See "Naming and Necessity," in G. Harmon and D. Davidson (eds.), Semantics of Natural Languages, (Dordrecht: Reidel, 1972), pp. 253-355, especially pp. 298-303. Kripke never developed a full-fledged theory of names. He called his account a "picture" of how names work.

theory of the reference of proper names. What I hope to show is that some version of the causal theory is a genuine alternative to satisfaction theories, and that it is the most plausible account of the reference of proper names that we have, even though the details have not yet been completely worked out.

The insight causal theories of names have tried to develop is that the reference of a proper name depends on the existence of linguistic practices within a community rather than on the individual name-user's beliefs about the referent. Kripke expresses the basic idea as follows:

In general our reference depends not just on what we think ourselves, but on other people in the community, the history of how the name reached one, and things like that.⁵

Keith Donnellan makes basically the same point, with a special emphasis on the history of the name-using practice.

Suppose someone says, "Socrates was snub-nosed," and we ask to whom he is referring. The central idea is that this calls for a historical explanation; we search not for an individual who might best fit the speaker's description of the individual to whom he takes himself to be referring..., but rather for an individual historically related to his use of the name "Socrates" on this occasion.⁶

If we view the reference of proper names within the framework of name-using practices within a community the question, "how is the reference of a proper name determined?" can be broken down into two questions: (1) How are the name-using practices within a community established and preserved? and (2) Under what conditions is an individual

⁵ "Naming and Necessity," p. 301.

⁶ "Speaking of Nothing," The Philosophical Review, Vol. 83 (1974), pp. 3-32. Reprinted in Stephen P. Schwartz (ed.), Naming, Necessity and Natural Kinds, (Ithaca: Cornell University Press, 1977), pp. 216-244. See especially pp. 229f.

name user participating in a certain name-using practice?⁷ The first question is a question about the reference potential of names; the second concerns the disambiguation of names.⁸ According to the causal theory, a name N, can be used to refer to an object o if there is a practice of using that name to refer to o it can also be used to refer to b if there is a practice of using that name to refer to b, etc.⁹ What a name can be used to refer to (in a given language) is determined, then, by what practices are in effect in the linguistic community.¹⁰ For example, the name 'Kelly Mink' can be used to refer to each of the 14 Kelly Minks in the U.S. because there are at least 14 distinct practices involving that name in the American English-speaking community.¹¹ Disambiguation of reference, according to causal theories is a matter of

⁷ A name-using practice is, basically, a practice of using a name to refer to a certain individual. This may be one person's practice (e.g., a person's using the name 'St. Martin' to refer to Heidegger), or it may be the practice of many people within a linguistic community (e.g., the practice of referring to Handel with the name 'Handel').

⁸ The notion of a name-using practice only provides an explanatory framework for a theory of reference for names; it is not part of the actual account of how the reference of names is determined. An acceptable theory of names cannot explain the reference of names simply by saying there are name-using practices (or ways of using a name) within a community, and people participate in these practices. This would not be an explanation. It would however, permit us to see what needs to be explained. To account for the reference of names we shall have to say how name-using practices are established and what constitutes participation in such a practice. Once these questions have been answered, there would no longer be any reason to incorporate talk about name-using practices into the theory.

⁹ We will leave the question of how practices are established and preserved open for now.

¹⁰ It should be noted that new name-using practices are established all the time. The reference potential of names is fluid.

¹¹ There are probably others which involve people who are dead and there will no doubt be additional Kelly Minks in the future.

which practice the name, as it is used, is connected with. For example, the referent of 'Kelly Mink' in my statement "Kelly Mink is in charge of the coffee today," is determined by which 'Kelly Mink'-using practice I am participating in. If my use is connected with the practice of referring to Kelly Mink-1, then I am referring to Kelly Mink-1, if it is connected with the practice of referring to Kelly Mink-2, then I am referring to Kelly Mink-2, etc.

Saying that the determination of reference for proper names depends on name-using practices and participation in these practices gives us the basic framework for a causal theory of names, but it does not, of course, explain how reference is determined.¹² Within this general framework there are many ways of explaining how reference is determined, including the account given by satisfaction theorists. To see what is unique about causal theories, we should look at how such theories analyze name-using practices and participation in these practices.

Causal theories make two basic claims: (1) A name-using practice is established by a name-bestowing act which typically involves the object named, and (2) participation in a name-using practice involves an appropriate causal (or historical) connection between a particular use of a name and the name-bestowing act. This connection can be direct, as it would be for someone who was present at the name-bestowing "ceremony," or it can be indirect, linked to the original name-bestowing act through its connection with other uses which are thus linked. So, according to the causal theory, the reference of a proper name is determined by (1) what object(s) that name has been given to (reference

¹² See note 8. above.

potential), and (2) which name-bestowing act the use of the name is connected with (disambiguation).¹³

To illustrate the difference between causal theories of names and satisfaction theories, let us consider how a satisfaction theory might answer our two questions: (1) How are name-using practices established and preserved? and (2) Under what conditions is a person participating in a certain name-using practice when she uses a name? Satisfaction theories would hold that there is a name-using practice in a community if and only if there is a representation (or set of representations) which members of the community who use the name associate with the name, and there is one individual who satisfies these representations (or dominantly satisfies them).¹⁴ Presumably, a practice would be established by setting up the association between the representations of the referent and the name, and it would be preserved if the representations associated with the name remained fairly stable or at least continued to be satisfied by the same object. A person would participate in a name-using practice if she associated with the name the same representations as did the community (or a subset thereof which is satisfied by the same object). Some satisfaction theorists, for example P.F. Strawson and John Searle, would include another condition for participating in a practice, one which takes account of parasitic or derived reference.¹⁵

¹³ This answer is still very general. We have yet to say, for example, under what conditions a name is given to a particular object, i.e., what constitutes a name-bestowing act. This would be a basic condition for the name's referring to an object.

¹⁴ I have attempted to make this characterization general enough to admit different interpretation of the conditions, and still do justice to actual satisfaction accounts.

According to them, a speaker would also participate in a name-using practice if she associated with the name an identifying description which makes reference to another person's use of that name and that person participates in the practice (in either of these two ways).¹⁶ The conjunction of these two conditions would give us the necessary and sufficient conditions for participating in a name-using practice.

Compare this account to the causal account. According to the causal account, what a speaker (or even a community of speakers) thinks is not as important as what actually happened. And what happened? A couple of things. One thing that happened was an initial baptism. The object was given a name.¹⁷ Another thing that happened was that this way of using the name was passed from person to person within the community.¹⁸ This is how the practice is maintained. A person participates in a name-using practice only if her use of the name is causally or historically connected with the name-bestowing act either directly (one uses the name as a result of having witnessed the 'baptism'), or indi-

¹⁵ See Strawson, Individuals, (London: Methuen, 1959), p. 181n, and Searle, Speech Acts, (Cambridge: Cambridge University Press, 1969), pp. 170 f.

¹⁶ We could formulate these conditions in terms of having an object in mind. Remember, according to satisfaction theories, a person has an object in mind if there is an object which satisfies her representations.

¹⁷ Kripke uses the term 'initial baptism' in "Naming and Necessity," Op. cit., p 302. The causal theory has sometimes been criticized on the grounds that not all uses of names involve an initial baptism; sometimes, for example with nicknames, the name is just used and it sticks. This criticism is, I think misguided. One should not think of the 'baptism' too literally. There are, of course, many ways that an object can be given a name. The point is that the object is given that name.

¹⁸ We will consider later how a way of using a name can be transmitted. One condition is that the name is used. But more is needed.

rectly (one's use of the name is connected to a use which is connected with the name-bestowing act through however many other connections it takes).

It seems at first glance that these two accounts are quite different. According to satisfaction accounts, a name-using practice is established by establishing a connection between mental representations and a name, whereas according to the causal theory, a practice is established by a name-bestowing act. The satisfaction theory claims that a practice is maintained in a community if members of that community associate roughly the same group of representations with the name or associate different representations which are satisfied by the same object. The causal theory maintains that the practice is sustained by members of the community passing the way of using the name from link to link in a chain of communication. The two accounts also differ in how they understand participation in a practice. Satisfaction theories understand it in terms of representations the speaker associates with the name: causal theories understand it in terms of 'historical' or 'causal' connections between the speaker's use of the name and the name-bestowing act.

Although these accounts seem very different on the face of it, Searle has argued that Kripke and Donnellan's versions of the causal theory--the very ones from which we derived our characterization--are simply variant forms of descriptivism, and thus a kind of satisfaction theory.¹⁹

¹⁹ We made a similar, but different claim earlier, namely that both satisfaction and causal theories of disambiguation are intentionalist theories; that is, they both analyze reference in terms of what speakers 'have in mind.'

As far as the issue between descriptivism and the causal theory is concerned there is no difference: Kripke's theory is just a variant form of descriptivism. But what about the causal chain? Doesn't the causal theory require an external causal chain that guarantees successful reference? The external causal chain plays no explanatory role whatever in either Kripke's or Donnellan's account. The only chain that matters is a transfer of Intentional content from one use of an expression to the next, in every case reference is secured in virtue of descriptive Intentional content in the mind of the speaker who uses the expression.²⁰

Searle points out an important similarity between descriptivist (what we called 'satisfaction') and causal accounts, namely that both accounts recognize that reference can be parasitic on other people's uses of a name.²¹ When we discussed the conditions for participating in a name-using practice earlier we characterized the satisfaction account in this way:

A person participates in a name-using practice if and only if either (a) she associates some of the same representations with the name as the members of her community do (and her representations are satisfied by the same thing as those of other community members) or (b) she associates with the name an identifying description which makes reference to someone else's use of that name and this person participates in the practice.

Clause (b) is the relevant one for our purposes. It says that one can participate in a name-using practice (and thus refer to an object by virtue of participating in that practice) by associating with the name a description of the form 'the individual called that name by S'. Since what you refer to with the name depends on what S referred to with the name, your reference is 'parasitic' on the other person's. The causal

²⁰ Intentionality, (Cambridge: Cambridge University Press, 1983), pp. 244f.

²¹ Of course, there is a difference in emphasis. Satisfaction theories see this as just one way of participating in a practice, whereas for causal theories, unless one was present at the name-giving, it is the only way of participating in the practice.

theory also defines participation in a practice in terms of parasitic reference. According to the causal theory, a person participates in a practice if and only if her use of a name is derived in an appropriate way from a name-bestowing act, usually through intermediate links. According to the causal theory, a speaker's reference is typically parasitic on someone else's use, since for most of the names we use we were not present when the name was given.

Even though both satisfaction and causal theories of names define participation in a name-using practice in terms of parasitic reference, their accounts still seem quite different. Satisfaction accounts require that the reference borrower associate a description of the form, "The individual S referred to with N", with the name she borrows. Causal accounts make no mention of such a description. However, Searle argues that at least one account, Kripke's,² does involve such descriptions.²² When Kripke discusses how a name is passed from link to link, he notices that reference chains can be broken in a certain way. One may hear a name and decide to use it for something else.²³ For example, I may overhear a conversation in which the name 'Herkimer Feingruber' is used, decide I like the sound of the name, and use it as a name for my goldfish. Even if there is a chain of communication linking my use of the name to the naming of Herkimer Feingruber (the person), my reference is not parasitic. I do not refer to the Herkimer Feingruber that the people from whom I learned the name referred to. To account for such cases, Kripke suggested that reference is parasitic only if the receiver

²² Ibid., p. 244.

²³ Op. cit., p. 302.

of the name intends to use it with the same reference as the person from whom he learned it.²⁴ Searle interprets this requirement to mean that

at each link in the chain of communication the speaker must have the intention, "when I utter 'N' I mean to refer to the same object as the person from whom I got the name 'N'."²⁵

This looks very much like the descriptivist's requirement that the speaker associate with N an identifying description such as "the object to whom the person from whom I heard 'N' referred." It looks as though satisfaction theories and Kripke's causal account analyze participation in a name-using practice by parasitic reference in almost the same way.

Some causal theorists have claimed that their account of parasitic reference differs from that of satisfaction theorists because the latter requires that the borrower keep track of her borrowing, whereas the causal theory does not.²⁶ But Searle has argued that this is not a real difference either. There is no reason a speaker cannot associate with the name 'N' the description "the object called 'N' by the person from whom I learned the name (whoever it may have been)."

There seem to be two reasons for supposing that satisfaction theories require a reference borrower to keep track of her borrowing. One of these reasons is that according to satisfaction theories, reference succeeds only if the description associated with the name is satisfied by only one individual (otherwise the reference will be indeterminate).

²⁴ Ibid., p. 302.

²⁵ Op. Cit., p. 244.

²⁶ Kripke makes this claim about Strawson's account of parasitic reference in "Naming and Necessity," p. 299. Devitt makes the more general claim in "Singular Terms," The Journal of Philosophy 71 (1974), pp. 183-205; see especially p. 203.

In other words, the description must be an identifying description. For a description which makes reference to someone else's reference to serve as an identifying description, it must be sufficiently detailed to be satisfied by only one object. Very general descriptions will usually not satisfy this requirement. For example, the description, "the man called 'Jones'," or "the man called 'Jones' by members of this community," is not uniquely satisfied, for there are many men called 'Jones'. The description must be more specific if it is to link the speaker's use of the name with a particular Jones. A description which included the source of one's name use would supply the required identifying content.

This reason, however, is not convincing. Granted that the description must be satisfied by only one individual, there may be a number of ways of supplying the content even when one has forgotten from whom she learned the name. One could supply an identifying description such as: "the individual called 'N' by the person from whom I learned the name," or one could specify the place or time when one heard the name. Any of these descriptions could be sufficiently detailed to identify a referent as long as there was only one object which satisfied them.

Kripke hints at a second argument to show that one must, given a satisfaction account, keep track of reference borrowing. This argument is directed at Strawson's account of reference borrowing. Strawson, in a footnote, observes that one can include reference to another person's reference in an identifying description. If one's description is of this kind, Strawson continues, then "the question whether it is a genuinely identifying description turns on the question, whether the refer-

ence it refers to is itself a genuinely identifying reference."²⁷ The borrowing may go from one person to another to yet another, but it must eventually end up with an identifying description, if the descriptions which included reference to other people's references are to be genuine identifying descriptions.

Kripke's gloss on Strawson's remarks is as follows:

I may then say, 'Look, by 'Goedel' I shall mean the man Joe thinks proved the incompleteness of arithmetic'. Joe may then pass the thing over to Harry. One has to be very careful that this doesn't come round in a circle....If you could be sure yourself of knowing such a chain, and that everyone else is using the proper conditions and so is not getting out of it, then maybe you could get back to the man by referring to such a chain in that way, borrowing the references one by one....However, although in general such chains do exist for a living man, you won't know what the chain is. You won't be sure what descriptions the other man is using, so the thing won't get back to the right man at all.²⁸

The conclusion Kripke draws is that if you cannot keep track of your reference borrowing through all the links, then "you cannot use this as your identifying description with any confidence."²⁹ In other words, you cannot be sure that your description is satisfied by only one person or that it is satisfied by the 'right' one.³⁰

Let us assume, for the sake of the argument, that Kripke is right. Suppose, that is, that if we do not keep track of reference borrowing,

²⁷ Quoted in "Naming and Necessity" from Strawson's, Individuals, p. 181.

²⁸ Ibid., p. 298.

²⁹ Ibid.

³⁰ It is not clear what 'the right man' would mean here. Kripke seems to assume that the speaker intends to refer to someone who may or may not be the one Jones thinks proved the completeness of arithmetic. But in that case I am not sure his reference would be parasitic. Why not just associate one's own identifying description with the name?

we cannot use an identifying description which contains reference to another's reference with any confidence. Does it follow then, that satisfaction theories must require that the borrower keep track of his borrowings? This would only follow if satisfaction theories were to require that for a name to refer to something (or for a use of the name to refer), the speaker must not only (1) have an identifying description which she associates with the name, but also (2) she must be sure (or know) that the description is an identifying description, and perhaps, even further (3) that she must know of whom it is an identifying description. But there is no reason for a satisfaction theorist to accept anything stronger than (1): the speaker must associate an identifying description with the name. According to the satisfaction theory, in order to refer with a singular term, there must be one (and only one) object which satisfies the associated description, but it is not necessary that the speaker be sure that there is only one thing that satisfies the description in order for her to refer. Neither does she have to know what satisfies her description.

These two reasons are the most likely justification for the claim that satisfaction theories require that speakers keep track of their reference borrowing. Neither of them supports that claim. I do not believe we can convincingly argue that the difference between causal theories and satisfaction theories is that causal theories alone do not require that the speaker keep track of her reference borrowing. On either account, a speaker can refer to someone with a name by relying on someone else's use of that name, even though the speaker has forgotten where she got the name from.

There is, however, an important difference between satisfaction

accounts which incorporate reference borrowing and causal accounts. Kripke sums up the difference in this sentence: "On our view, it is not how the speaker thinks he got the reference, but the actual chain of communication, which is relevant."³¹ Even with respect to reference borrowing, satisfaction theories are vulnerable to counter-examples which exploit the speaker's mistaken beliefs. Suppose, for example, I use the name 'Tom Jones', knowing nothing about this Tom Jones except that I heard someone mention him. I am convinced that it was Ralph who had used the name, so I associate with the name 'Tom Jones' the description "The person Ralph called 'Tom Jones'." However, it turns out that I am confused. It was not Ralph who used that name; it was a friend of his. Ralph has never used that name in my presence. According to the satisfaction account, I would not be referring to anyone, because no one satisfied the description I associated with the name. According to the causal theory, I would be referring to the Tom Jones I heard someone refer to with that name.

We can alter this example slightly to illustrate the problem of fortuitous satisfaction. Suppose Ralph had called someone 'Tom Jones' but I had completely forgotten about that. My use of the name was based on remembering an episode totally unrelated to Ralph's use of the name. According to the satisfaction theory, I would be referring to the Tom Jones Ralph talked about, the one I remember nothing about, and not to the Tom Jones I heard and remembered someone talking about. This seems, at best, implausible.

According to the causal theory, it does not matter what descrip-

³¹ Ibid., p. 300.

tions the speaker associates with the name. What does matter is the actual chain of communication. The speaker may be mistaken about whence she learned the name, her identifying description may be tainted by these mistaken beliefs, nonetheless she may still borrow her reference from someone else, namely the person from whom she actually 'borrowed' the name. This is the real advantage of the causal account of reference borrowing.

I want to argue that the requirement that the speaker intend to use the name to refer to the same thing as the person from whom she learned the name minimizes this difference. The intention to refer to the same thing with 'N' as the person from whom one learned 'N' must take some particular form. One could, presumably, make this intention specific, (e.g. "I intend to refer to the same 'Tom Jones' as Ralph did"), or general (e.g., "I intend to refer to the same 'Tom Jones' as the person from whom I heard 'Tom Jones'"). In that case, the two theories are pretty much alike. Both are subject to the same objections and counter-examples. If my intentions are specific, then I fail to participate in the practice (and thus fail to refer to Tom Jones), if they are general I succeed.

Making participation in a practice depend on the speaker's intentions to refer to the same object as the person from whom one learned the name referred to minimizes the difference between causal and satisfaction theories.³² It also goes against the basic insight of causal theories that it is not just what the speaker thinks that is relevant,

³² There are, of course, further important differences which we will discuss later.

but also what has actually happened which determines reference. Further, mere intentions to refer with a name to the same thing as the person from whom one learned the name does not guarantee that one is participating in that practice.³³ For all these reasons, Kripke's explanation of what constitutes participation in a practice should be revised.

Kripke proposed that speaker's intentions play a role in the linking of one use of a name to another to take care of cases in which a person hears a name which refers to one thing (e.g., Herkimer Feingrubber, the person) and uses that name to refer to something else (the goldfish). Obviously, this person is not participating in the same practice as the person from whom she learned the name. Nonetheless her use of the name is derived from (or is causally/historically related to) that other person's use of the name. The causal theory claims that a necessary condition for participating in a name-using practice is that one's use of the name be 'causally' or 'historically' linked to the use of that name by someone who is participating in that practice. The fact that people sometimes fulfill this condition but nonetheless are not participating in the name-using practice shows that this is not a sufficient condition. Something more is needed. Kripke suggested that the additional condition should be that the speaker intends to refer to the same thing as those from whom her use of the name is derived. We have already seen that this condition introduces descriptive elements into the account of reference. We will now argue that these two conditions

³³ The detailed argument for this claim will follow in the next paragraphs along with suggestions for an alternative account of participating in a practice.

are not jointly sufficient for participation in a name-using practice. Having established that the speaker's intentions to conform to the practice are not able to do the job they were supposed to do, I will propose a different analysis of participation in a practice.

Gareth Evans offered the most convincing argument against Kripke's account.³⁴ Evans informs us that the name 'Madagascar' was originally used to refer to part of the African mainland. Marco Polo heard this name from a group of Malay or Arab sailors and used it, presumably with the intention to refer to the same thing as the sailors from whom he heard it. However, Marco Polo believed that these people were using 'Madagascar' to refer to an island off the coast of Africa. Because of his mistake, the name has come to refer to an island off the coast of Africa.

If Kripke's account of proper names were correct, 'Madagascar' would not be the name of an island, instead it would refer to a part of the African mainland. For if intentions to refer with a name to the same thing as the person from whom one learned the name guaranteed that one is participating in a particular name-using practice, and if participation in that practice determined the reference of one's name uses, then Marco Polo would have been referring to a part of the African mainland with 'Madagascar' and the people who learned the name from him (including ourselves) would also have referred to a part of the African mainland with the name 'Madagascar'. But this is not true. We refer to an island off the coast of Africa with the name 'Madagascar', and it is

³⁴ "The Causal Theory of Names," Aristotelian Society Supplementary Vol., 47, pp. 187-208. Reprinted in Schwartz, Op. cit., pp. 192-215.

most likely because of Marco Polo that we do so.

Some theorists have argued that cases of this sort show that causal theories are fundamentally misguided.³⁵ Causal chains linking a name to a referent, they would argue, are not what determines reference. If a speaker has mistaken beliefs about the referent of a name, as Marco Polo did about 'Madagascar', then what he is referring to will be different from what other members of his community refer to with that name. This is because the referent of the name is determined not by the chain of communication, but by the speaker's intentions, by what he thought he was referring to.

Reflection on the Madagascar case (and on similar cases where two individuals are inadvertently or maliciously switched) reveals there is something wrong with the causal theory of names as presented by Kripke. It could be that the whole approach is wrong; that the speaker's thoughts are terribly important in determining reference. However, it might also be the case that the approach is fine but some of the details are problematic. Given the difficulties which competing theories face, I am inclined to opt for the second alternative: Kripke may have gotten some of the details wrong, but his general approach is a move in the right direction.³⁶

If we assume that the general approach of the causal theory is

³⁵ See for example, Searle, Intentionality, pp. 237-240. Evans makes a more modest claim. He argues that such cases show that "the intentions of the speakers to use a name to refer to something must be allowed to count in determination of what it denotes." Ibid., p. 202.

³⁶ We should not be too surprised to find that this is the case. Kripke explicitly recognizes that what he has given is not a complete theory of reference for proper names. He is instead suggesting a new approach, a new "picture" of how their reference is determined.

correct, how can we account for the 'Madagascar' case and others like it? Let us suppose that there was a practice of using 'Madagascar{' to refer to a part of the African mainland and that this practice was in effect in the community to which the sailors belonged. Further, let us suppose that were a person to participate in this practice, she would be referring to that same part of the African mainland. Thus, had Marco Polo been participating in the practice, he would have been referring to some part of the African mainland. If he did not refer to the African mainland, as appears to be the case, then he was not participating in the practice, regardless of his intention to refer to the same thing as the sailors. Our question is: How do we account for this fact, assuming that the causal theory is basically correct, and that it is not what the speaker intends to refer to but his connection with a practice that determines reference.

Before answering this question, I would like to make a few observations about this particular case. First, it should be noted that this case involves two separate linguistic communities: the community to which the sailors belonged and the European community to whom Marco Polo passed along the name.³⁷ This already makes the case atypical. Secondly, it is not clear at exactly what point 'Madagascar' began to refer to an island off the coast of Africa. We can say, with some degree of assurance, that before Marco Polo heard the name, it did not refer to an island and that after the name was introduced in Europe it did refer to

³⁷ Although there are problems in giving identity conditions for linguistic communities, we can assume that these linguistic communities are distinct, since they have different languages (as defined by their grammar, vocabulary and history) and there is virtually no contact between members of each.

an island. What it referred to in the intervening time is not so clear. Did 'Madagascar' refer to an island when Marco Polo used that name for the first time? Suppose his first contact with the name took place this way. Marco Polo and some sailors were sitting around after dinner telling sea stories. One of the sailors says to his friend: "Hey, remember the time we landed on/in Madagascar? That was some trip! We were lucky to get out of there alive." The two sailors reminisce, as sailors will, about the good old days in Madagascar. Eventually Marco Polo asks, "Is Madagascar far from here?" To what does Madagascar' refer in this sentence? (Suppose Marco Polo had not yet formed any hypotheses about what Madagascar referred to.) Most likely it refers to the place the sailors were talking about when they used 'Madagascar' in the previous conversation. Suppose that on the basis of their answers to this and other questions, suppose Marco Polo comes to the conclusion that 'Madagascar' is the name of an island off the African coast. Perhaps he even marks the island with the name 'Madagascar' on his charts. The next day, Marco Polo asks another sailor, "Have you ever sailed to Madagascar?" (What does 'Madagascar' refer to here?) The sailor answers, "Yes." Then Marco asks for more information about Madagascar: "Is it inhabited?" "What do the people there do?" etc. We should not pretend that it is easy to see what 'Madagascar' refers to in all these different uses (the sailor's and Marco Polo's). There are two likely possibilities: either (a) 'Madagascar' refers to part of mainland Africa whenever the sailor uses it and to the island whenever Marco Polo uses it, or (b) 'Madagascar' refers to part of mainland Africa, regardless of who uses it, but Marco Polo thinks it refers to an island (and forms a number of mistaken beliefs because of this). Thirdly, we should note that this

case would not be so clear-cut if Marco Polo had died among the sailors (and all his documents concerning Madagascar had been destroyed). What is obvious is that our name 'Madagascar', which we got from Marco Polo, refers to an island off the coast of Africa. If this practice of referring to an island off the coast of Africa with the name 'Madagascar' did not exist, we would be stuck with the uncertainty noted above: Did 'Madagascar' refer to one thing when Marco Polo used it and to another when the sailors used it? or did it always refer to part of the African mainland, no matter who used it?

Now, how can we explain the Madagascar case within the framework of the causal theory of names? In general terms, we will say that at some point Marco Polo failed to participate in the practice. Since he intended (or we can assume that he intended) to refer to the same thing the sailors who used the name referred to, we cannot attribute his failure to participate in the practice to 'bad' intentions, as we could when I called my goldfish 'Herkimer Feingruber'.

What is common to the 'Madagascar' case and the 'Herkimer Feingruber' case is that in both cases a new name-using practice is established. It is perfectly consistent with the main thrust of the causal theory to say that because this new practice has been established, the name can now be used to refer to two different things, and which thing a particular use of it refers to depends on which practice it is connected to. What I would propose is that the causal theory should analyze participation in a name-using practice in this way: a person participates in practice P'N' if and only if (1) her use of 'N' either derives from the name-bestowing act or is derived from a use which ultimately goes back to the establishment of the practice (the name-bestowing act) and

(2) she does not establish a new practice with 'N'. This new criterion for participating in a practice does not appeal to the speaker's intentions to participate in that practice. What it says is that, whether she intends to or not, a speaker participates in a particular name-using practice P'N' if and only if her use of 'N' is derived from another use which is 'historically' or 'causally' connected with the name-bestowing act, unless she establishes a new practice with 'N'. Whether this analysis is different from a satisfaction theory and to what extent this account makes a speaker's intentions important for determining reference depends on how we analyze 'establishing a new practice'. Under what conditions is a new name-using practice established?³⁸

To develop this account we should first make a distinction between official names and unofficial names. Official names are those names which are given to individuals according to generally recognized and accepted guidelines. Within a society there are naming institutions, institutions for giving official names. These institutions say who can give a name to whom and under what conditions. For example, in the United States (and probably in most Western societies) we now name human beings by putting a name on a birth certificate. Names are typically given only to infants and only by the infant's legal guardians.³⁹ The choice of names is not totally up to the parents. The child's surname must usually be the surname of one of its parents. The method of giving

³⁸ Note that my analysis of participation in a name-using practice does not complicate matters for the causal theory, since this question has to be answered anyway.

³⁹ It is interesting to note that when there is no legal guardian a pseudo-name such as 'Baby Doe' is given until a guardian is found.

an official name is to write the infant's name on a birth certificate, sign it, and register the birth with the state in which the child is born. If the child was born in a hospital where there is a possibility of mixing up the babies, the infant who is so named will be the one who has literally been tagged with the parents' surname. There are, likewise, institutionalized means for naming places (cities, countries, planets, etc.), species, and pets. These institutions specify who can name an individual and under what conditions. Further, it is a feature of official names that members of the society in which that institution exists are under some obligation to recognize the name as the name of the person to whom it was given.

With official names the speaker's intentions are not important. What is important is that the name-giver fulfills the requisite conditions and performs the requisite acts. If I had inadvertently written the name 'Aristotle' on my son's birth certificate, signed the document and filed it with the state of North Dakota, my son's name would have been 'Aristotle', whether I had intended to name him 'Aristotle' or not. And if I had signed the birth certificate intending thereby to name the neighbor's child 'John', I would not have named the neighbor's child 'John'.

Unofficial names fall into many different classes. There are nicknames which are derived from official names according to well-known formulas. For example, 'Jack' is a nickname for 'John', 'Pat' is a nickname for 'Patricia', etc. Other nicknames can be derived from an official name in an original way, as 'Ike' was derived from 'Eisenhower'. Some nicknames are given on the basis of an outstanding feature of the bearer, e.g., 'Red' for a red-head. What distinguishes unofficial

names from official names is that the procedure for giving the name is much less strict, and there is no obligation to recognize the nickname as a name of the person or thing to whom it was given until the name has caught on. There is no guarantee, that is, that the name will catch on.⁴⁰

Whether a person is participating in a particular name-using practice depends in part on whether she establishes a new practice with the name. One can establish a new practice by performing those actions under those circumstances which a name-bestowing institution requires or by introducing a new unofficial name. In both the 'Madagascar' case and the 'Herkimer Feingruber' cases, the speaker established a new practice by participating in a naming institution. As the discoverer of an heretofore unnamed island (at least unnamed within the European community), Marco Polo was entitled (within that community) to name the island.⁴¹ The institutional acts Marco Polo performed most likely involved reporting the discovery of the island (identifying the island by conventional means, either by depicting it on a map or by giving its coordinates and perhaps a description) and calling the island 'Madagascar'. Similarly, I am entitled, as a pet goldfish owner, to name my goldfish. In this case, my deciding that he should be called 'Herkimer Feingruber' is sufficient to make that his name, whether anyone actually calls him that or

⁴⁰ It should be noted that there are some constraints on establishing an unofficial name-using practice. For example, no practice will exist with the name if it is not consistently used as a name for an individual over a period of time.

⁴¹ Note that he was not entitled to name the island for the members of the community to which the sailors belonged.

not.⁴² Here the speaker's intentions are important. I make 'Herkimer Feingruber' the name of my goldfish by intending to use that name in the future to refer to my goldfish. But the speaker's intentions to refer are not sufficient. The speaker must fulfill the role required by the pet-naming institution--she must be the pet owner or be given permission by the pet owner to name the pet. I cannot name my neighbor's bull terrier by deciding to call it 'Miss Piggy' unless the pet-owner authorizes me to do so.⁴³ 'Miss Piggy' could, however, become the dog's unofficial name.

Causal theories provide a good account of official names. What the name can refer to depends on what individual it was given to in accordance with the prevailing name-giving institution. If all names were official names we could say that uses of a name which are derived from (or causally connected with) a name-giving act refer to the individual to whom the name was given, unless the use is itself a name-giving act. Here a speaker's intention to refer to a particular thing with a name is neither necessary nor sufficient for the name to refer to that thing. A particular speaker's intention to refer to the same thing as the person from whom she learned the name is not even required. Unless she establishes a new official name, her use would be parasitic and she would refer to whatever the person from whom she learned the word referred to.⁴⁴

⁴² I may decide to change his name so that 'Herkimer Feingruber' is no longer his name. To some extent the name of a pet is up to the whims of his owner.

⁴³ Naming pedigreed dogs is more difficult. The name must be written on a document and registered with the kennel.

Name-using practices involving unofficial names present a problem for the causal theory. According to this theory, what a use of a name refers to is ultimately determined by the name-giving act which originates the name-using practice. With official names, this name-giving act is usually a discrete, identifiable event, (e.g., the name was given when the birth certificate was signed, when the discovery was reported, etc.). With unofficial names the case is more difficult. Except for those rare cases in which the speaker decides, in first using the name, that this shall henceforth be his name for a certain object, the unofficial name is not given in a discrete act. Instead, it gradually becomes a name by virtue of being consistently used to refer to the same object. Usually there is no one name-giving act. There seem to be several acts which together constitute the name-giving.

I have argued that with official names, intentions to refer to a particular individual with a name play a very small role in determining the reference of the name. This cannot be said of unofficial names.

⁴⁴ Granted, sometimes the intention to refer to a particular object with a name, if it is the intention of a specially situated person and if the object fulfills certain requirements, does determine the referent of a name. For example, my decision to name my pet goldfish Herkimer Feingruber is sufficient to make it the case that my pet goldfish is named Herkimer Feingruber. If what makes my goldfish the referent of this name is my intention, however, not just any intention will do. An intention to name the goldfish that looks thus and such (followed by a representation of the goldfish) will not work, since the goldfish that looks thus and such may not be my pet goldfish. It may be a goldfish I am not entitled to name. I cannot give the official name ostensibly either, by pointing to a goldfish and forming the intention to call this goldfish Herkimer Feingruber. For suppose, unbeknownst to me, my children had traded goldfish with the neighbors for a day. My decision to call that goldfish 'Herkimer Feingruber' would not make 'Herkimer Feingruber' the name of that goldfish. My intention will be sufficient for that goldfish's being officially named 'Herkimer Feingruber' only if the goldfish is actually one I am entitled, by the naming institution, to name.

The establishment of an unofficial name-using practice takes time and usually the willing cooperation of other speakers. With official names, individual speakers do not decide whether they will recognize a particular name as the name of some person. As long as they live in the society in which this institution is in force, the force of the institution is exerted on their particular name-using practices.⁴⁵ With unofficial names there is no such institutional force to back up a name-using practice. If using an unofficial name to refer to a certain individual becomes a practice it does so through the force of habit rather than the force of law.

While the causal theory of names is well suited to explain how the reference of official names is determined, special difficulties arise when we try to account for unofficial names.⁴⁶ It seems that the introduction of unofficial names into a community will involve a speaker's intentions to refer much more than the introduction of official names. We may be tempted to analyze these intentions in terms of satisfaction. Moreover, participating in a practice of these sort, especially in the early stages of its becoming a practice, seems also to involve intentions to use the name in a certain way. With respect to unofficial names, it may seem that satisfaction accounts are more likely to be cor-

⁴⁵ An individual or group can opt out of the society by becoming hermits or forming a cult cut off from the rest of the society. But as long as these people maintain some ties with the society the pressure of its naming institutions is hard to escape, since official names tend to be tied up with one's social identity.

⁴⁶ It could be argued that accounting for unofficial names is far more important than accounting for official names, since official names seem to be a cultural modification of unofficial names. The question of how words hook up with the world is more likely to be answered in the account of unofficial names.

rect and that causal mechanisms are unimportant.

The general idea behind the causal theory of names is that the reference of a particular use of a name typically depends on what name-using practice the speaker is participating in. This, in turn, depends on where her use of the name came from. By tracing her use back to an original name-giving act, and seeing to whom or what that name was given, we discover the referent of her use of the name. With unofficial names there is not one name-giving act, but many uses of the name which together constitute a name-giving. It is incumbent upon the causal theorist to give an account of this kind of name-giving.

One thing that has to be recognized is that there can be unofficial name-givings that do not catch on, that do not result in a new practice. For example, I may use the name 'Pig-face' to refer to the neighbor's bull terrier once or twice, thus giving that name to that dog. Later I decide that this name is too nasty and I never use it again. As long as no one picks up the name from me, I do not establish a name-using practice. Nevertheless 'Pig-face' seems to have referred to the neighbor's dog the times I did use it.

Another thing to note is that until the practice is established, the referent of an unofficial name can fluctuate. Imagine this case. I hear a dog barking, and say to my son, "That dog sure is obnoxious. I wish those people would take better care of it. Just today I saw Miss Piggy routing around in the garbage." Suppose I am using 'Miss Piggy' to refer to the bull terrier I saw routing around in the garbage (her official name is 'Spike') and this is the first time I am using the name

this way.⁴⁷ The next day, on his way to school, my son sees a bull-terrier who looks like Spike, but is actually Spike's sibling, Rover. He says to his friend "There goes Miss Piggy," borrowing the name from me. His friend then starts using the name 'Miss Piggy' to refer to Rover. Other kids pick up the name from him and after a while it is common practice to refer to Rover with the name, 'Miss Piggy'.

Here, before the practice is established, borrowing the name does not guarantee that one will refer to the same thing as the person from whom one heard the name; even if one does intend to refer to the same thing, it does not always happen. My son may have intended to refer to the same dog with 'Miss Piggy' as I did, but he did not actually refer to the same dog. However, once the practice is established, mistaken beliefs about the referent have much less influence on the practice. If, after 'Miss Piggy' has become an established name for Rover, I see Spike and say, "There goes Miss Piggy," my unconventional use of 'Miss Piggy' will very likely be corrected (especially if there are children around). Someone may gently point out that Spike is not Miss Piggy. So even with unofficial names the causal theory seems to be on the right track. Cases of this sort illustrate the need for a more subtle analysis than has been presented so far. With unofficial names, merely tracing an unbroken chain of communication back to its first link will not tell us what the referent of the name is. The history of the use of an unofficial name along with some account of how the referent of the first use was determined, will not tell us what that use of the name refers

⁴⁷ For the culturally deprived, 'Miss Piggy' is the name of a television celebrity.

to. What we need to find is that use (or those uses) that established the practice. These are not necessarily the first uses.

What we might look for is the first string of uses which were derived from each other and which all referred to the same thing.⁴⁸ If we take this approach we shall have to give an account of how the reference of a name is determined when there is no name-using practice for that name or when the use of the name is not part of some established practice. One might be tempted to give a satisfaction account for these uses. For example, one might say that the reference of my use of 'Miss Piggy' in the story developed earlier was the object I intended to refer to with the name 'Miss Piggy'. And further, it was because I intended to refer to something that participants in the existing 'Miss Piggy'-using practice do not refer to with 'Miss Piggy' that I failed to participate in the existing practice. But this explanation will not work. For suppose I had seen a dog routing around in the garbage and took it to be the dog that belongs to the occupants of apartment 1-C (about whom I have a great many beliefs, including the belief that it is called 'Fido'). On the basis of this information I form the intention to refer to Fido, the neighbor's bull-terrier, who barks at nights and runs freely around the neighborhood, etc., with the name 'Miss Piggy'. As it happens, however, the dog I saw routing around the garbage was not Fido at all, but Spike (another sibling). When I said, "I saw Miss Piggy routing around in the gargage," the dog I actually referred to was not Fido, but Spike. How do we explain this?

⁴⁸ This is a suggestion which I hope will make the causal theory of names more plausible. It is not within the scope of this dissertation to develop a full account of the establishment of unofficial names.

A satisfaction theorist may simply deny that I referred to Spike with the name 'Miss Piggy'. But this denial seems to have no independent justification. If the satisfaction theory is correct, then the dog I referred to is the one which satisfies the representations I associate with the name. But that is assuming the satisfaction theory is correct. A more subtle satisfaction theorist might accept the intuition that I referred to Spike and explain my reference by making minor adjustments in his theory. For example, Searle might explain my reference to Spike rather than Fido by weighting the representations. My representation of the visual experience in which the dog was presented to me is more important than other representations I may have of the dog. Reference is still determined by which object satisfies a certain mental representation (or Intentional content).

At least some causal theorists would explain how the reference of my use of 'Miss Piggy' was determined in terms of my intentions to refer to the dog I had in mind.⁴⁹ However, their account is different from satisfaction accounts. Rather than explaining 'having an object in mind' in terms of mental representations (or perceptual presentations) which the object satisfies, these causal theorists would say that the object the speaker has in mind is the one that caused her mental state or caused her use of the name.⁵⁰ The success and plausibility of satisfaction theories can be explained by the fact that usually the represen-

⁴⁹ For example, Michael Devitt, "Singular Terms" *Op. cit.*, and *Designation* (New York: Columbia University Press, 1981).

⁵⁰ The causal analysis of having an object in mind is mentioned here to show that causal theories are different from satisfaction theories even respect to unofficial names. In the following chapter we will discuss the causal account of having an object in mind more fully.

tation (or presentation) which the speaker has of an object is satisfied by the object which caused it. But the object which satisfies the representation and the one which causes the speaker to have such a representation do not always coincide. It is in those cases where the representations are not satisfied by their causes but by something else that fortuitous satisfaction creates difficulties for satisfaction theories.

The intuitions of contextual theories, which say that knowing the context of an utterance is sufficient to enable one to know what a speaker was referring to, can also be accommodated by the causal version of 'having an object in mind'. A detailed description of the context in which a name is used often gives us sufficient information about what object caused the speaker to 'have x in mind'. Further, this information may put us in a better position to know what the speaker was referring to than the speaker himself is in.

Before closing this chapter on the causal theory of names, there is one more aspect of the reference of names that must be dealt with. We claimed earlier that the reference of a use of a name is determined by which practice the speaker is participating in. This, in turn, depends on (1) whence the speaker learned the name and (2) whether the speaker was giving the name to a new object.⁵¹ Some name-givings are the result of the speaker being in a certain position and doing certain things which result in the establishment of a new official name. In these cases, what the name refers to depends on the particular situation and the name-giving institution. The intentions of the speaker to refer

⁵¹ (2) was proposed as an alternative to Kripke's requirement that the speaker intend to refer to the same thing as the person from whom she learned the name.

to a particular object can be totally irrelevant. Unofficial names can be given by just about anyone to just about anything. In giving an unofficial name to something, the speaker's intentions seem quite important, for it seems to be at least a necessary condition for giving a name that the speaker intend to refer to a particular object (the one she has in mind) with that name. But this is not a sufficient condition, at least not when the speaker's use of the name is causally connected to or derived from some other use of the name.⁵² When a person uses a name for which there is already a name-using practice in the community and her use is connected to that practice (she heard the name from someone who participated in the practice), opting out of the practice requires more than intending to refer to something with the name. A person would not be giving a new name to some object if she intended to refer to the thing which happened to be the same object that the person from whom she learned the word referred to. Neither would she be giving a new name if she had mistaken beliefs about the referent of a name and so thought she was referring to one thing (the thing she had in mind), even though she had no intention of giving something a name. For example, I may get Spike and Rover mixed up. When I use the name 'Spike', intending to refer to Rover, I am not giving Rover a new name. 'Spike' still refers to Spike and not to Rover. Intending that a name should refer to something different from what the person from whom one learned the name referred to does not, by itself, constitute a name-giving. For a use of a name that is causally connected to an existing

⁵² If a person simply makes up a name, e.g., 'Charles Bon' and intends to refer with it to the thing she has in mind, this may count as an unofficial name-giving.

name-using practice to be a name-giving act, it seems necessary that the speaker do something to separate this use from the practice. What seems to be required is that the speaker intend to use the name in a new way. To do so, she must be aware that what she intends to refer to with the name is different from what the person from whom she learned the name referred to with that name. So a double intention is necessary, the intention to refer to x with 'N', and the intention to use 'N' differently than it is usually used. This turns Kripke's requirement on its head. A speaker need not intend to refer to the same thing as the person from whom she learned the name in order to participate in the name-using practice. Instead, in order to fail to participate in the practice one must intend not to use the word to refer to the same thing as the person from whom one learned the name.

There is one more problem. Sometimes when there is confusion about the referent of a name, an unofficial name can be given to an object on the basis of this confusion. For example, suppose you buy one of a set of twin Irish Wolfhounds. When you pick out your puppy, you indicate your preference for the one which has been officially named 'Romulus'. A friend of yours buys the other puppy, Remus. One of the conditions for the sale is that you keep the official names. Now suppose that while you are signing the papers and paying for the puppy, a mischievous semantic theorist, trying to make trouble for causal theorists, switches the puppies so that you take home Remus and your friend takes Romulus. You call your puppy 'Romulus', it learns to respond to that name, and everything is going fine until one day, about two years later, the semantic theorist shows up. He hears you saying to your friend, "I'm worried about Romulus. He seems to have lost his appe-

tite." The semanticist then comes over and says "No, you are wrong. Romulus has as good an appetite as ever. Remus, however, may have lost his appetite." Then he goes on to explain his little experiment, concluding, "So you see, if the causal theorist is right, when you use the name 'Romulus' you do not refer to the dog you've known since he was a puppy, you are really referring to your friend's dog."⁵³

Cases like this do pose a problem for the causal theory. Even though no one intended to give a new name to either of the dogs, a new name was given. The dog whose official name was 'Remus' is now named 'Romulus', and Romulus is Remus. To handle such cases, we should first recognize that the dogs now have two names each.⁵⁴ The official names of the dogs have not changed. That is why you could respond to the semanticist's story by saying, "You mean Romulus is really Remus?" The two names refer to the same dog. One refers to the dog by virtue of its status as an official name. The other has become an unofficial name. A practice of referring to that dog with that name has been established. What is tricky about such cases is that no one deliberately introduced new names for the dogs. There were no intentional name-giving acts. Yet the names were given.

In this kind of case, the unofficial name is not given in a single act, but becomes that name over a period of time during which the name is used repeatedly to refer to the object. This seems obvious if we consider the difference between the case of the mischievous semantic

⁵³ Since you were obviously not referring to your friend's dog, it is easy to draw the conclusion that the causal theory must be wrong.

⁵⁴ This fact is sometimes ignored by mischievous semantic theorists.

theorist and a similar case involving an innocent mix-up. Suppose the person who sold you the dog inadvertently gave you the wrong puppy. You take the puppy home, play with it, call it 'Romulus', make statements about it using the name 'Romulus', etc. The next day, the previous owner, having realized his mistake, calls you and tells you that he gave you Remus by mistake and arranges a switch. In that case, 'Romulus' would not have become a name for 'Remus'. When you talked about Romulus, strictly speaking, your statements were not about the puppy you had taken home. (You may have been talking about Remus when you said 'Romulus'. But 'Romulus' did not refer to Remus. Here speaker's reference is different from the semantic reference.)

It may not be possible to identify the exact point at which the name 'Romulus' became a name for Remus,⁵⁵ so there will be a number of uses of the name where we are not certain what the referent actually is, though we may know what the intended referent is.⁵⁶ I do not find this an unacceptable implication of the theory.

Let us sum up our discussion of the causal theory of names. The basic idea is that there are name-using practices in a community, based on original name-givings. Those who participate in a particular practice refer to the object that was given that name when the practice was established. A name-using practice can be established by an institu-

⁵⁵ Maybe it becomes the name at the point where, if the owners were informed of the mix-up, they would not be willing to start using the official name.

⁵⁶ You may not be too sure about the referent when the dog-seller switched the dogs for a day. The number of times the mistake is made can be reduced in the example, until your intuitions match mine. (Suppose the dog-owner gave you the wrong dog, but caught you before you went out the door.)

tional name-giving act. In that case, it is only by looking at the particular institution, at its requirements for someone's giving a name to an individual by performing a certain act, etc. that we can discover what the referent of the name is. The referent is determined by the act performed according to an institution. An unofficial name can be established by a string of uses of a name, in which each speaker intends to refer to the same object with the name (whether or not he or she knows that she is intending to refer to the same object). The referent of the name is, then, the one which 'caused' each of the speakers to have a certain object in mind which she intended to refer to.⁵⁷

A use of a name typically refers to that thing which was given that name when the practice from which this use derived (or to which it is causally or historically related) was established. Or in more general terms, the reference of a derived use of a name is determined by which practice the use is derived from or which one the speaker is participating in. A use of a name is derived from a practice if the speaker uses that name to refer to some object on the basis of having heard the name from someone who was participating in the practice (either by deriving the name from some other use or by establishing the practice). One can fail to participate in a practice even though one's use of a name is derived if either (a) one establishes a new official name with this use or (b) one intends not to use the name to refer to the same object as the person from whom one learned the name and intends to refer to some object which actually is different, or (c) one's use is

⁵⁷ See Chapters Six and Eight for a more extensive discussion of this point.

derived from the establishing of an unofficial name-using practice.

The causal theory explains how reference is disambiguated as follows. Suppose someone says "Romulus has really grown." The reference potential of the name "Romulus" is determined by name-giving acts. 'Romulus' can refer to anything that has been given that name. What it refers to in this sentence is determined by which name-giving act (or acts) this use of the name is derived from. By tracing the use of this name back to an original name-giving, one discovers the referent.

Sometimes the chain of communication can be observed from the outside, simply by looking at who learned the name from whom. This would be more likely to be true of unusual names (e.g., 'Paris', 'Madagascar') and full names (e.g., 'John D. Jones', 'Cliff Wirt'), than with names that are common (e.g., 'Mary Smith') or with first names such as 'Bill'. This is because the speaker is more likely to have been exposed to only one 'Cliff Wirt'-using practice, and so his use, if it is derived, can only be derived from that practice. Many times, however, not even an omniscient observer of history could tell, without further information, what a name, as it is used in a particular sentence, refers to.⁵⁸ A person may have been exposed to two different practices involving the same name. It is not possible to see, from the outside, which of these practices her use of that name in a particular sentence is derived from. Nonetheless, if the causal theory is correct, the reference of her name is determined by which practice her use is, in fact, connected with. The fact that we cannot always tell what practice her use is connected

⁵⁸ Donnellan suggests that an omniscient observer of history could do this. (*Op. cit.*).

with is no more an objection to the causal theory than the fact that we cannot always tell what object satisfies the descriptive content in a speaker's mind is an objection to satisfaction theories. The important point is that reference is determined by which practice (and ultimately, by which name-giving act or acts) the use is connected with. How we figure out which one that is, is a different question.⁵⁹

When we turn to referring devices other than proper names, two aspects of the causal theory of names as we have developed it will be significant. Reference borrowing, or chains of communication, will be used to explain how the referents of some referring devices are determined. For other referring devices, typically those which initiate a reference chain, the causal analysis of having an object in mind will be used to explain how reference is determined.

⁵⁹ The speaker may not even know.

CHAPTER VI

CAUSAL THEORIES OF DISAMBIGUATION

In our discussion of the causal theory of names we saw that the referent of certain uses of a name could be determined by the links between those uses and other uses which ultimately derived from name-giving acts. The general idea was of a reference chain in which later links derived their reference from the first link. In the case of names, uses of the same name (or tokens of the same name-type) were linked. When we expand our account to cover other types of referring devices, we will use the notion of reference chains to explain how the reference of some uses of other types of referring devices are determined. In the expanded account the terms to be linked need not be uses of the same referring device which together constitute a term-using practice as they were with names. What we export from the causal theory of names is the idea that the reference of some uses of a referring device can depend upon the connection between that device and some other use of a referring device.

We shall define a reference chain as a sequence of referring devices linked in such a way that if one of them refers to something, then all of them refer to that thing.¹ Chastain calls these reference

¹ This definition is taken, with some modification, from Charles Chastain's paper on reference chains, "Reference and Context" in Keith Gunderson (ed.), Language, Mind and Knowledge: Minnesota Studies in the

chains "anaphoric chains." In such chains there is one device that refers to an object independently. We shall call this device the primary referring device, and reference made with such a device primary reference. Other referring devices in the chain refer only by virtue of their connection with the primary referring device. We shall call devices that have this place in a reference chain secondary referring devices and reference made with them, secondary reference.

The account of disambiguation for referring expressions other than names should spell out the general conditions for referential linkage and tell us how the reference of ambiguous primary referring devices is determined. Spelling out the conditions for referential linkage is analogous to spelling out the conditions under which one's use of a name is derived from another use of the same name. Explaining how the referent of an ambiguous primary referring device is determined will follow the lines of explaining how early uses of unofficial names get their referent. The referent, very roughly speaking, is that possible referent which the speaker 'had in mind' in using the term.

Secondary Reference and Disambiguation

The basic issues we will address in this section are (1) to what extent do linguistic conventions leave the reference of secondary referring devices indeterminate and thus necessitate a theory of disambiguation; and (2) what kind of reference rule should the theory give for

disambiguation of secondary reference. In our previous discussion of reference potential, we noted that linguistic rules or conventions determined a set of possible referents for referring expressions. For example, the linguistic conventions governing the use of the English word 'he' determine the set of possible referents consisting of male agents. If we consider the sentence, "He recently proposed a bill in the city council," and try to discover how the referent of the word "he" is determined, we find that the linguistic convention by which a set of possible referents is assigned to the word 'he' leaves the reference quite indeterminate. Any male creature could be the referent of 'he'.² But this is only one of the linguistic conventions governing the use of the word 'he'. There are other, syntactical, linguistic rules which

² It could be argued that 'he' in this sentence could only refer to male human beings, since only human beings can propose bills in the city council. However, as I argued earlier (see Chapter Four), semantic constraints on possible referents do not prevent us from making false or silly statements. 'He' in the sentence, 'He recently proposed a bill in the city council,' could, according to the rules of English, be used to refer to an animal. In fact, the sentence may even be true. Suppose, for instance, that to show his contempt for the council, the mayor appointed a donkey to the city council. Suppose also that during a session of the council the donkey gave to the council president a piece of paper on which a bill was written and on which his hoofprint was stamped (as a signature). Under these conditions it could truly be said that the donkey recently proposed a bill to the city council.

It could also be argued that 'he' in this sentence could properly be used to refer to a female agent, since there is a generic sense of 'he'. Certainly 'he' in the generic sense can apply to women as well as to men, but only in certain kinds of sentences--namely, those which have universal import. In those sentences 'he' means any arbitrarily chosen person, and it refers to no one. Since we are not dealing with such a sentence here, we need not worry about this sense of 'he'. However, I might concede that 'he' could refer to a female animal. If the donkey who proposed the bill were a female, we might still properly say 'He proposed a bill.' I have no clear intuitions about such a case.

At any rate, the important fact is that the set of possible referent for 'he' is quite large when we consider only the sentence in which it occurs.

also have a bearing on the reference of 'he'. Consider the following paragraph.

Chicago's 49th ward alderman, David Orr, is trying to expand renter's rights. He recently proposed a bill in the city council.

In this passage, the referent of 'he' is determinate. 'He' refers to David Orr, Chicago's 49th ward alderman. Often, especially in written works, syntactic conventions which determine the possible referents of secondary referring expressions in terms of their referential links to other expressions leave no question about what primary referring expression a secondary referring device is to be linked with.³ In those cases there is no further need to explain how the referent of the secondary expression is disambiguated (unless it is linked to an expression which is itself ambiguous). For example, in the following sentences syntactical rules alone determine which secondary referring devices are linked to which primary devices.

Maria and Mark were both students of mine. She took two courses. He only took one.

In this paragraph 'she' can only correctly be linked to 'Maria', and 'he' to 'Mark'.

Syntactic rules determine the reference potential of referring devices other than pronouns. In the following paragraph there are several reference chains involving a variety of referring devices.

At eleven o'clock that morning, an ARVN officer stood a young prisoner, bound and blindfolded, up against a wall. He asked the prisoner several questions, and when the prisoner failed to answer, beat him repeatedly. An American observer who saw the beating, reported that the officer "really worked him over." After the beating, the

³ Discovering these rules is a task for linguistics. We need only note that there are such rules and that they affect the reference potential of secondary referring devices.

prisoner was forced to remain standing against the wall for several hours.⁴

Here we have one reference chain linking 'an ARVN officer', 'he', and 'the officer'; another linking 'a young prisoner', 'the prisoner', 'the prisoner', 'him', 'him', and 'the prisoner'; and so forth.

Linguistic rules alone are not always sufficient to tell us which referring expression is linked to which others. Consider the following conversation between Smith and Jones.

"I saw Myra [Jones' wife] and Norma going into the Pump Room today," says Smith.

"That woman! She told me she was going to be home working all afternoon."

'That woman' and 'she' seem to be referentially linked to some other referring expression, but the linguistic rules cannot tell us which one. (Presumably, they would narrow down the possibilities to either 'Myra' or 'Norma'.) Something other than linguistic rules that determine reference potential determine the reference of 'that woman' and 'she'. Here, the same alternative accounts of how reference is disambiguated resurface. The reference of Jones' expressions might be determined by his intentions to refer to the same thing as 'Myra' or 'Norma' referred to. Or perhaps some feature of the context of Jones' utterance makes it the case that his expressions are linked to either 'Myra' or 'Norma'. Or Jones' referring expressions might refer to 'Myra' or 'Norma' depending upon which one prompted or caused his utterance.

At first glance each of these alternatives seems plausible. How-

⁴ This paragraph is quoted by Chastain, *op. cit.*, from Jonathan Schell's, The Village of Ben Suc.

ever, if we vary the example or elaborate upon it somewhat, it will become clear that a contextual account will not do. One contextual theory, that of Colin McGinn, would propose that the relevant feature of the context is the spatio-temporal relation between the referring devices. According to this account, the expression in question is referentially linked to the immediately preceding one.⁵ In our example, this would be 'Norma'. However, when you read this example, it is quite likely that you did not conclude that 'that woman' referred to whomever 'Norma' referred to.⁶ It is also not likely that the only thing you took into account was the spatial or temporal order of the names.

Although spatial or temporal order may not be the important feature of the context, there may be other contextual factors which do, in fact, disambiguate the reference. In this example, the feature of the context that does seem to be important is that one of these names refers to Jones' wife. This fact and what Jones said are what would guide you

⁵ McGinn, "The Mechanisms of Reference," Synthese, 49 (1981), pp. 157-186. See especially p. 169.

⁶ McGinn would protect his claim from counter-examples of this kind by saying that his account is an "idealization." However, I do not see how this will do much good. It shifts the ground away from counter-examples based on sound intuitions about language as a way of testing any account of reference determination. But if we accept McGinn's account as an idealization, why should we not accept other accounts as idealizations? Then they will be immune to counter-examples also. What we would be left with, given the acceptability of such idealizations, would be intuitions about 'normal' cases, or about 'basic' structures and mechanisms. Given the choice between my intuitions about what constitutes a 'normal' case or a 'basic' structure and my intuitions about the reference of terms in a particular English sentence, I would put my trust in the latter. I suspect this is true for most people. If we are going to have a justified theory of reference, we would do well to justify it on the basis of intuitions about particular expressions in particular contexts and stay away from intuitions about 'normal' cases and idealizations based on them.

in your interpretation of the sentence. But does this feature of the context really determine to which of Smith's expressions Jones' expressions are linked? Suppose it does not matter to Jones where his wife is, but Norma had promised him that she would finish a project she was working on at home by 5:00 that afternoon, and he believed it would take the whole day. In that case, we would take this fact to be important for interpreting Jones' utterance. However, even if we do take into account what matters to Jones, this will still not be sufficient to disambiguate the reference of 'that woman'. For suppose it matters to Jones where his wife is and it matters where Norma is, and suppose that both women had told him they were going to be at home that afternoon. In that case, both women would be likely referents, but the context cannot tell us which is the actual referent. In cases like this, reference seems to depend on whom the speaker meant, or which name he intended to link his utterance with.

Syntactic rules along with other linguistic rules tell us what referring expressions can be linked to which others,⁷ but they do not tell us which ones are actually so linked. Sometimes where there can be a referential link, there is none. A speaker can, for example, use a pronoun out of the blue (i.e., deictically) in the middle of a conversation.

C: I saw General Westmoreland on T.V. last night. He really looked old and tired. Sometimes I almost feel sorry for him.

R: Well, he brought it on himself. He did it again!

⁷ For example, in English 'he' can be linked with a man's name, or with a definite description of a male, etc.

This last 'he' could belong to the chain 'General Westmoreland'-'he'-'him'-'he', but it need not. Suppose that while this conversation was taking place, R had been rummaging through his desk looking for his pen. On finding it, he says "He did it again!" As it happens, someone had borrowed the pen, not for the first time, and left the cap off, not for the first time. When he said "He did it again," R intended to refer to the person who borrowed the pen. It seems quite likely that this person is the referent of 'he' in this sentence.

By considering cases of this sort we discover that what a theory of disambiguation for secondary referring devices should provide are reference rules which state the conditions under which the expressions of a particular language which could (according to linguistic conventions for that language) be linked to other expressions, actually are so linked. There are two types of problem cases: (a) cases in which there are two different referring expressions to which an expression could be linked (e.g., 'Myra' and 'Norma'); and (2) cases in which an expression could be linked to another, yet is not so linked. The analogs to these cases in the causal theory of names are (1) cases in which there are two different practices with the same name from which a use of a name could have derived (e.g., 'Romulus' could be derived from the practice which originated when the official name was given or from the practice that was established after the dogs were switched); and (2) cases in which a use of a name was derived from another use connected to a practice (e.g., the practice of referring to a person with the name 'Herkimer Feingruber') but does not refer to the same thing (e.g., the name refers to a goldfish).

A theory of disambiguation for secondary reference should tell us

under what conditions expressions that could be linked actually are linked. We find the same kinds of answers here as we did in the casual theory of names. We might say that the expressions are linked whenever the speaker intends to refer to the same thing with both expressions. This intention may make reference to the expression in question. For example, Jones may have had the intention: "I intend to refer with 'that woman' to the person which 'Myra' referred to." This is similar to Kripke's requirement for non-deviant causal chains which says that the speaker must intend to use a name to refer to the same thing as the person from whom he learned it. Here we say that the speaker must intend to refer to the same thing as some other expression referred to. This answer may also be one part of a satisfaction theorist's answer.

The general answer we would expect from a satisfaction theory of disambiguation is that, in cases of this sort, the referent of a referring expression is determined by what the speaker intended to refer to. This intention to refer involves identifying the referent by means of some uniquely denoting intentional content. This content may be an identifying description which makes reference to the reference of some other term (e.g., "the person S referred to by 'Myra'"), but it need not. Jones may have associated with the expression 'that woman' the identifying description "the person who is my wife"

An intentionalist account of reference chains which says that the referent is determined by (1) linguistic rules which determine reference potential and (2) the speaker's intentions to refer to an object with an expression, will not work. For suppose someone says to you, "My friends, Chris and Pat, are coming to visit this week-end. They're just now returning from their honeymoon. They got married two weeks ago."

You say, "Whom do you know better, the bride or the groom?" Suppose you did not know Chris and Pat. On hearing the names you assumed that Chris was a woman and Pat a man. When you said, 'the groom' you intended to refer to the person 'Pat' referred to in the previous sentence, and you intended to refer to the person 'Chris' referred to with 'the bride'. However, you were wrong. Pat is the bride and Chris is the groom.

If it were necessary, in order for two expressions, E-1 and E-2, to be referentially linked, that the speaker intend to refer with E-2 to the same thing as E-1 referred to, then in the preceding example, 'the bride' would not be referentially linked to 'Pat' and 'the groom' would not be linked with 'Chris'. But it seems clear that the expressions are so linked. The speaker's mistaken beliefs do not affect the reference of her expressions in this case.

Nor is intending to refer with E-2 to the thing referred to with E-1 sufficient to link the two. Consider the following conversation:

Ralph: I just saw Cynthia in the hall. Weren't you looking for her? [He sees another woman, Vicky, in the hall.] Excuse me, I have to go talk to her. [He nods his head in the direction of the hall as he says 'her', then leaves the room.]

Cliff: [Calling after Ralph] Tell her to come back here when you've finished. I want to ask her about a book she borrowed.

Ralph: [From the hall] Vicky borrowed a book from you?

We can safely assume that Cliff intended to refer to Cynthia with 'her',

yet 'her' in this context referred to Vicky.⁸ Even though Cliff intended to link his expression to the name 'Cynthia', it did not refer to Cynthia, but to Vicky.⁹

It may be that our requirement that the speaker intend to link E-2 to E-1 is overly restrictive. The speaker's intentions should be more general. Rather than requiring that the speaker intend to refer with E-2 to the same thing as E-1 referred to, we might simply require that the speaker intend to link his discourse with some other discourse.¹⁰ By changing the requirement in this way, the preceding counter-examples can be avoided. In that case the speaker's intentions to refer are not important, what is important is his intention to link his whole discourse to another one. Such an explanation avoids the kinds of counter-examples we have raised, but it presupposes that speakers actually intend to link one discourse to another. It is difficult to find evidence that they form such intentions. In fact, the discourses seem to be linked automatically. Another, perhaps less serious, difficulty with this type of account is that it would leave some cases ambiguous (e.g., the 'Myra' 'Norma' case).

An alternative account of reference linking which does not involve the speaker's intentions to refer or to link would look to the 'causes'

⁸ That is why Ralph's closing remark makes sense. We may accuse him of being too literal, but the basis for his literal interpretation is what we are worried about in semantics.

⁹ We might want to argue that syntactic considerations are important here. Cliff's {'her' could only refer to what Ralph's 'her' referred to, because of certain rules governing the use of pronouns.

¹⁰ We should have to then give some account of the units of discourse. These might be sentences, paragraphs, or conversational units segmented in terms of speakers.

of the speaker's utterance. We would see what utterances prompted the speaker to say what she did in order to see what she was referring to. An expression E-2 would be linked to another E-1, if and only if E-1 was in some appropriate way causally responsible for the speaker's using E-2. For example, if it was because Jones heard the name 'Myra' that he said "That woman!", then 'that woman' would be referentially linked to 'Myra'. Or again, if Cliff's use of 'her' was prompted by Ralph's statement, "Excuse me, I have to go talk to her," then his use of 'her' would refer to whatever 'her' referred to in Ralph's statement. This account seems more plausible than the hypothesis that one forms intentions concerning linkage in the course of a conversation or within a discourse. In the course of an actual conversation, connections between expressions seem more a matter of promptings than of intentions.

One difficulty with a causal-genetic account of reference chains arises when we try to specify the appropriate causal relations. Clearly, Cliff's saying 'her' was prompted by Ralph's saying 'her', but to some extent it also seems to have been prompted by Ralph's saying "Cynthia". What is it about the causal relation between Ralph's saying 'her' and Cliff's saying 'her', as opposed to the one between Ralph's saying 'Cynthia' and Cliff's saying 'her', that makes the former the appropriate causal relation? Perhaps we could simply make a distinction between the proximal cause and more distant ones. We could postulate that one feature of the appropriate causal relation is that the expression E-1 is a proximal cause of E-2.¹¹

¹¹ McGinn's contextual reference rule for reference chains (E-2 should be linked with the immediately preceding expression of the appropriate kind) is quite similar to the rule that E-2 is linked with the

A more serious problem for causal-genetic accounts has been discovered by Colin McGinn. McGinn argues that the causal-genetic approach to reference chains will not work. He imagines a case where a causal relationship is not even necessary for a reference chain to be established:

[S]uppose I believe on general grounds at t that you will say at $t + 1$ "That man is drunk" at a party, and suppose I know that at $t + 1$ my hearing will be blocked. Nevertheless I plan to say at $t + 2$ "He will soon be thrown out," intending my pronoun to be anaphorically linked to your demonstrative. It seems to me that I could succeed in this plan, even though my own utterance was not causally linked to the utterance to which it is referentially chained (certainly the other people at the party will take my pronoun to be so chained).¹²

McGinn seems to be on to something here. It does seem that the plan could succeed even though the utterance "He will soon be thrown out" was not directly caused or prompted by the prior utterance.¹³ Furthermore, the plan could fail and lead to some interesting and perhaps unfortunate results. Suppose that McGinn's belief that I will say 'That man is drunk' is mistaken. I actually say "That man is the new president of the APA." McGinn, thinking that I had said "That man is drunk," says "He will soon be thrown out." I would guess that the other people at the party would take 'he' in McGinn's sentence to be referentially

expression which is the proximal cause of $E-2$, since this expression will, in most cases, be the immediately preceding one. However, it will not always be. For example in the 'Myra' 'Norma' case, the speaker's utterance could have been prompted by the first name that was used. Thus, we would not accept McGinn's reference rule. It may happen to work for most cases, but, the spatio-temporal factor is not the important one.

¹² Ibid., p. 169f.

¹³ It may have been indirectly prompted, via my belief that you would say that.

linked to 'that man', and I suspect that it would be. But why?

McGinn suggests that it is the speaker's intention that his term co-refer to the one in the preceding discourse that determines whether the term will be linked. As I said before, the reservation I have about his answer is that it is not clear that people typically have this intention when their expressions are linked. When I write a paragraph containing reference chains I certainly am not aware of forming intentions to link expressions; nor am I aware of forming such intentions when I am carrying on a normal conversation. Of course, the fact that I am not aware of forming such intentions does not mean that I do not do so. I may do so habitually, so that I do not notice; I may sub-consciously intend to link my expressions to other pieces of discourse.

It seems clear from McGinn's example that reference links do not depend on there being a direct causal relation between an expression (or utterance) and a speaker's use of a word. The expression (or larger utterance) need not have any causal impact on the speaker, and yet the speaker's expression may be referentially linked.¹⁴ However, abandoning this type of causal account need not force us to accept an intentionalist one. Indeed, to do so would be a mistake, for reference chains can exist where the speaker has no intentions to link, in fact, where the 'speaker' has no intentions at all. This point can be illustrated by considering exchanges of sentences between human beings and computers or computer programs.

¹⁴ In the case McGinn cited we could argue that there was an indirect causal connection between E-1 and E-2 via the speaker's predictions about E-1. However, when E-1 is very different from what the speaker predicted, there seems to be no causal link between E-1 and E-2.

One such program, "Eliza," was designed to key in on important words or phrases and to formulate appropriate responses. For example, a person might say to Eliza "I had a very strange dream last night. I dreamt my room was infested with rats. What do you think that means?" Eliza would make a response such as "What do you think it means?" Although Eliza has no intentions to link her referring expressions to the human speaker's, her expressions are linked.¹⁵ Nor does it seem that the links depend on causal relations between an expression and a speaker. One might be tempted to explain Eliza's reference linking in terms of causal relations between a prompting word or expression and Eliza's expression. However, we can imagine cases in which this relation breaks down and Eliza's expression is still referentially linked. Suppose, due to some kind of failure in the main computer, your sentence "My mother is coming to visit next week," is lost, and by coincidence, due to a quirk in the program, Eliza says right afterwards, "Are you angry with her?" Even though the causal relation has broken down, 'her' would still be linked with 'my mother'. If reference links depend neither on context, nor on causal relations, nor on the speaker's intentions to co-refer, what do they depend on?

I would propose that we analyze reference chains in much the same way as we analyzed participation in a name-using practice. In the case of names, we said that a use of a name is linked to a prior use, unless

¹⁵ Eliza's ability to carry on a 'conversation' (that is, to produce sentences appropriate to the conversational context) is largely a matter of exploiting the possibilities for reference linking. This ability may be derived from the programmer's intentions to link Eliza's discourses to those of her conversational partners, but this intention is of a different kind than the intention which would accompany each linked use of a referring expression in normal conversation or writing.

a new primary reference is made. With other types of reference chains I propose that expressions which could, according to semantic and syntactic rules, be referentially linked, and which satisfy certain other structural conditions are referentially linked unless a new primary reference is made. The structural conditions would be conditions under which it is possible to link referring expressions. Although we cannot specify all these conditions here, we can mention some of the most obvious. For example, it is quite clear that some expressions cannot be linked: my expressions cannot be referentially linked to what someone in a different part of the city is muttering solely to herself (unless one of us is telepathic). On the other hand, my expressions can be linked to what someone within earshot says. This might be someone in the same room as I, or someone in a different city calling long-distance, or someone whom I can hear on the radio or T.V. My expressions can also be linked to discourse in printed media. To generalize, the possibility of linkage, at least across speakers, seems to exist only when there is a certain kind of relation between the speaker and the utterance. It exists only when the person whose expressions are to be linked is in a position in which one would be able to take in the discourse either by hearing it or seeing it or otherwise receiving it.¹⁶ I suspect that when we spell out the conditions under which a person would normally be able to take in a discourse, we will find that these conditions involve some kind of causal relation between the expression and the speaker. Circum-

¹⁶ This is, then, a contextual requirement. I will not even attempt to specify the exact conditions under which linkage is possible. I suspect they are quite complicated. In addition, there may be special circumstances for deaf people, for example.

stances in which a speaker can link his referring expressions will be those circumstances in which a speaker would typically be causally affected by a preceding segment of discourse. Circumstances in which no referential linkages are possible are those in which a normal person would not be causally affected (for example, when she is too far away to have heard what someone just said, or when the area is so noisy that she could not have heard, etc.).

At any rate, reference links will require that a speaker be in a certain position with respect to an expression. When a speaker is in this position and uses expressions which semantically and syntactically can be linked to expressions in the preceding discourse, then the expression is so linked, unless the speaker does something to break the chain. So rather than asking under what conditions an expression which could be referentially linked actually is linked, we should concentrate on the conditions under which an expression which could be referentially linked fails to be. Here, as with the case of names, I would suggest that the referential chain continues unless it is interrupted by a new primary reference.

Thus, I would argue that reference chains should be explained in terms of linguistic rules, context, and primary reference. The linguistic rules would be rules of syntax as well as rules governing reference potential. These rules of reference linkage apply only in certain contexts, namely in those circumstances in which the person whose expressions are to be linked is in a position to be causally affected by the expressions with which hers are linked whether she is actually causally affected by it or not. Reference chains are broken only when there is a new primary reference. To illustrate what we mean let us examine the

reference chains in one of our test conversations. Consider the conversation that went like this:

Ralph: I just saw Cynthia in the hall. Weren't you looking for her? [He sees another woman, Vicky, in the hall.] Excuse me, I have to go talk to her. [He nods his head in the direction of the hall as he says 'her', then leaves the room.]

Cliff: [Calling after Ralph] Tell her to come back here when you've finished. I want to ask her about a book she borrowed.

There are possible reference chains in Ralph's speech which would link 'Cynthia'-'her'-'her'. However, the last 'her' is not linked. I suggest that the reason it is not linked is that, by nodding his head towards Vicky and saying 'her', Ralph made a new primary reference. When Cliff says 'her' under the appropriate conditions (he could have and did hear Ralph) his expression can only be linked with Ralph's second 'her' according to syntactical rules, and it is so linked because Cliff does not make a new primary reference.¹⁷

In conversations where the syntactic and semantic rules seem to permit links with two different expressions, I would suggest that there is no reference chain. So in the conversation between Smith and Jones where Jones said "That woman!", 'that woman' is not referentially linked

¹⁷ Whether this analysis will ultimately be correct depends on whether we can satisfactorily explain primary reference. Notice also that I assume here that the syntactic rules state that a pronoun is linked to the immediately preceding one, thus agreeing with McGinn.

with either 'Myra' or 'Norma'. The referent of 'that woman' will be determined independently, in whatever way the referent of primary expressions is determined.

At first glance, this answer may seem implausible. After all, it seems that if 'that woman' refers to anything it refers to either Myra or Norma, and thus would be referentially linked with one or the other name. To see what is wrong with this objection, let us look at some analogous cases.

Suppose you are at a party and are in a position similar to the one that McGinn imagined. You are talking to someone, and at time t you believe that this person will say at $t + 1$, "That man is drunk," and you plan to say at $t + 2$, "He will soon be thrown out." Now suppose this person says instead, "Those two men are drunk," and you say, "He will soon be thrown out." Your 'he' will not be linked to 'those two men'. There may be an apparent connection between the expressions, especially if 'he' refers to one of the men that 'those two men' refers to, but this connection is not based on referential linkage. The reason there is no linkage is that, syntactically, one may not link 'he' with 'those two men'. I suspect there is a similar constraint on linking a singular referring expression with a conjunction of such expressions, for example, for linking 'he' with 'Smith and Jones'. For imagine you are in the situation in which you hearing will be blocked at $t + 1$, and you believe at t that Rogers will say at $t + 1$ "That man is drunk," but he actually says "Smith and Jones have just been appointed to co-chair the task force on education." You say, at $t + 2$, "He will soon be thrown out." The people to whom you are speaking would be puzzled about whom you meant. They would have no more reason to take you to have referred

to either Smith or Jones, than to assume that you were talking about someone else. Your sentence doesn't fit in with the preceding one as it would have had you said, "They will soon be thrown out."¹⁸

Primary Reference

Up to now we have discussed how the reference of one referring expression can depend upon the reference of some other referring expression. We shall now look at how a causal theory might explain the reference of expressions whose reference is determined independently. Such expressions would include primary expressions in a reference chain and first uses of unofficial names.

In this section we will be concerned primarily with explaining how the reference of an ambiguous primary referring expression is disambiguated. We shall restrict our attention to those referring expressions that already have an established reference potential.¹⁹ As a first approximation we will say that the reference of a referring expression of this kind is determined by which possible referent the speaker

¹⁸ This answer suggests that linguistic rules for reference chains are quite strict. Although the proof that they are must come from an adequate account of anaphora by linguists, the reader can get some indication of the constraints on reference linking by playing a little game. Have six people independently write sentences containing expressions that can be linked (e.g., 'a man'-'he'-'the man'-'him), then try to put these sentences together into a coherent paragraph and look at what can be linked to what.

¹⁹ Since first uses of unofficial names are not governed by rules which establish reference potential, we shall not discuss them here. To explain how these names refer we need to talk about how reference potential is determined. See Chapter Seven.

intended to refer to. The account of disambiguation will be an intentionalist one.²⁰ We will explain semantic reference (what the expression referred to) partly in terms of the speaker's intended reference (what the speaker intended to refer to with that expression). Our account will be a causal, intentionalist one, as opposed to a satisfaction intentionalist account. As a rough approximation, we can say that the referent of an ambiguous referring expression will be determined by a certain kind of causal relation between the referent and the expression, via the referent's effect on the speaker.

To give a general idea of how this causal explanation accounts for disambiguation, let us contrast this explanation with those of satisfaction and contextual theorists. Recall the earlier example in which a person, looking at an antelope-shaped rock says, "That has been watching us all night." A satisfaction account would say that the referent of 'that' is the object that satisfies the mental content which the speaker associates with the word. A contextual account would say that the referent of 'that' is the object which the speaker demonstrated, for example, by pointing, or nodding his head, or by looking up, and that in the absence of such demonstrations (and other semantically significant contextual clues) the reference is indeterminate. A causal account would say that the referent of 'that' is the potential referent which caused the speaker to have a certain object in mind when she said 'that'.²¹ The potential referent which caused the speaker to have an object in mind,

²⁰ See Chapter Three for a definition of an intentionalist theory of disambiguation.

²¹ Recall that we have already said that some contextual factors do co-determine reference.

in this example, is the rock. Thus, according to the causal theory, the rock is the referent of 'that'.

We will begin our assessment of the causal theory of disambiguation with a summary of two different versions of it. One version, the one developed by Michael Devitt, gives a straightforwardly causal analysis of primary reference.²² The other, developed by Charles Chastain, analyzes primary reference in terms of a speaker's knowledge of an object.²³

Devitt argues that the reference of ambiguous referring expressions is determined by what the speaker had in mind.²⁴ For example, ambiguous definite descriptions such as 'the book' and 'the table' in the sentence "The book is on the table," refer to the objects the speaker had in mind,²⁵ so do ambiguous demonstratives, with or without an accompanying demonstration, and other indexicals such as 'he', 'she', 'it', etc. Insofar as Devitt analyzes disambiguation in terms of what the speaker had in mind, his theory is an intentionalist one. It is not, however, a satisfaction account, for the relation between the object and the speaker's mental states is not that of satisfaction or fit. According to Devitt, having an object in mind is to be analyzed in

²² See "Singular Terms," The Journal of Philosophy, 71 (1974), pp. 183-205, and Designation (New York: Columbia University Press, 1981).

²³ Chastain explains the connection between his theory and the causal theory on p. 256, Op. cit.

²⁴ When we talk about ambiguous referring expressions in this section, we will be referring only to primary referring expressions.

²⁵ Note: Devitt uses the term 'designate' in almost the same way we have been using 'refer'. For our purposes we can take the terms to mean the same thing.

terms of a causal relation between an object and the speaker's state of mind. His analysis of having an object in mind is as follows:

[T]here is an object which a person has in mind if and only if there is a certain sort of causal connection between his state of mind and the object.²⁶

Having an object in mind is not, of course, a sufficient condition for reference. For an expression in some language to refer to some object, the speaker must use an expression which can (in the sense of reference potential) be used to refer to the object he has in mind. Further, his using that expression must be causally related to his having a certain object in mind. Because there is this connection between the object and the expression, via the speaker's mental states, Devitt sometimes speaks of the cause of the utterance or the cause of the speaker's linguistic behavior. For example, in handling such cases as Kaplan's "I like that [pointing in the general direction of his son]," Devitt says,

What determines that one aspect and not another of the vaguely indicated environment is designated is that the speaker had that aspect in mind. We look to what caused the behavior in order to remove ambiguities.²⁷

Or again, when he is talking about ambiguous definite descriptions such as 'the man' or 'the cat', Devitt says,

[The description] designates the object the speaker had in mind; i.e., it designates the object that causally results in the use of the description. Our earlier speaker designated this book and that table because of their special place in the causal explanation of his utterance.²⁸

²⁶ Designation, p. 33. This causal connection can be indirect, as it is with secondary referring, or direct. We will only discuss the direct connections here.

²⁷ "Singular Terms," p. 197.

Devitt explains the causal relation between the object and the speaker's mental state primarily as a perceptual link. For example, when he is discussing definite descriptions, he says, "It would seem that, for a speaker to have an object in mind, his use of the description must be based on a perception of it."²⁹ And when he talks about demonstratives such as 'this', 'that', 'I', 'you', 'he', 'she', and 'it', when they are used "out of the blue," he says,

[I]t is clear that there is some causal link between the speaker and the object in virtue of which he uses the demonstrative. He is perceiving the object...or has recently perceived it. It is the causal action of the object on him that led him (in part) to do what he did.³⁰

The virtues of Devitt's account are as follows. First, it explains how reference is disambiguated when the expression and its context are not sufficient to determine a unique referent.³¹ Secondly, it helps to make sense of our ordinary practice of trying to find out what a speaker had in mind when we are not sure what she is talking about. Thirdly, Devitt's account can explain how a speaker refers to something about which she has radically mistaken beliefs (including beliefs based on misperception). This is where the causal theory surpasses satisfaction accounts. Not only can it explain this, but the explanation is such that it avoids the problem of fortuitous satisfaction, at least

²⁸ Ibid., p. 195.

²⁹ Ibid. p. 192. This perception need not be his own. His use of the description may be based on what someone else who had perceived the object said.

³⁰ Designation, p. 43.

³¹ In this respect it is superior to contextual accounts, and on a par with satisfaction accounts.

when the problem is due to the speaker's misperceiving or misremembering the object.³²

Chastain's account of primary reference is similar to Devitt's in many ways, but the terms of his explanation do not necessarily include causal relations. A more complete summary of Chastain's account will follow, but to orient the reader I will briefly draw some comparisons between Devitt's account and Chastain's. Both accounts say that the reference of an ambiguous singular term is determined by what the speaker had in mind. But whereas Devitt posits some kind of causal relation between a speaker's mental states, the referents of his expressions, and his expressions, Chastain uses the notion of referential links between expressions in an overt context and elements in covert (mental) contexts. Both accounts reject the satisfaction model of having an object in mind in favor of a model which downplays the speaker's conception of the referent. For Devitt the model is a causal one, usually involving an object's ability perceptually to affect a speaker. For Chastain the model is an epistemic one; primary reference requires that the speaker have knowledge of the referent by some means or other.³³ This knowledge is often based on perception, but if there are other means of having knowledge of an object--including non-causal ones, these will also suffice for primary reference.

Chastain explains reference in terms of connections between ele-

³² Jaegwon Kim has argued that the problem arises for causal theories in a different way. See "Perception and Reference without Causality," The Journal of Philosophy, 74 (Oct., 1977), pp. 606-620.

³³ This knowledge of the object is not the same as knowledge about the object. It is rather like 'having an object in mind'.

ments in a context and objects. A context, according to Chastain, is a representational system containing elements or having a content:

In general anything which has content is a context, as I use the term. Anything that has meaning or sense is a context. Anything which expresses something or { represents something is a context.³⁴

Some examples may help to illustrate the notion of a context. A linguistic discourse is a context; its elements are words, phrases, sentences, etc. A photograph is a context; its elements are silver deposits on photographic paper. A picture is a context. A map is a context; its elements are symbols signifying rivers, cities, roads, etc. One's visual field is a context. A memory is a context.³⁵

A context may be overt or covert. A sentence said out loud would be an overt context. The same sentence can be simply thought. In that case it is a covert context. Some contexts, e.g., the two just mentioned, are linguistic. Others are "quasi-linguistic," for example, one's visual field, a map, or a photograph.

The analysis Chastain gives of singular reference (in the most general sense) is as follows:

[A] singular element in a context C possessed or produced by a person P refers to an object Q if and only if either (i) E in C is referentially linked with an element E' in an antecedent context C' and E' in C' refers to Q or (ii) P has knowledge of Q via E in C.³⁶

A primary referring expression in an overt discourse (e.g., 'that

³⁴ Op. cit., p. 195.

³⁵ Those who are concerned about the ontological status of such contexts and their contents (mental images, mental pictures) are advised to read Chastain's defense of them. See Ibid., p. 195 and pp. 243ff.

³⁶ Ibid., p. 251. Thus, we could have two kinds of primary reference: primary overt reference and primary covert reference.

'couple' in the sentence "I saw that couple again today,") may be referentially linked with another referring expression in a covert discourse. For example, before I said "I saw that couple again today," I may have said to myself:

There's Kelly. Last week he told me about this strange couple who spend all their time visiting the restaurants along Sheridan Road. Yesterday he pointed them out to me.

According to Chastain 'that couple' in the overt discourse would refer to whomever 'this strange couple who spend all their time visiting restaurants along Sheridan Road' refers to in the covert discourse if the two expressions are referentially linked.³⁷ The expression, 'this strange couple who spend all their time visiting restaurants along Sheridan Road', in the covert context, could, in turn, be referentially linked with an element in another covert context, in this case it is most likely a memory context. Thus, the expression 'this strange couple who spend all their time visiting restaurants along Sheridan Road' could be linked to an element in the memory context, perhaps an image of the couple. What this image refers to is not, as a satisfaction theory would say, the couple who satisfies or fits the image most closely, but rather the couple which is causally related to the image. One could misremember the couple in such a way that some other couple who also

³⁷ I will discuss Chastain's account of the mechanisms of linking below.

Sometimes Chastain talks as if there is always a covert discourse to which an ambiguous referring expression is linked. At one point he says of 'the cat' and 'the mat' in the sentence "The cat is on the mat," that they "denote no cats or mats uniquely. Instead, they get their reference via linkage with singular terms in covert discourses," (p. 236). However, there is no reason to suppose that this step is necessary. The expressions could just as well be linked to elements in a perceptual or memory context directly.

spend all their time visiting restaurants along Sheridan Road more closely resembles the image than the couple one's memory is based on. Nonetheless, the mental image refers (in the general sense) to the couple which is causally related to the image. That couple is the one about whom I have knowledge through the image in the memory context.

A memory may also be referentially linked with an overt discourse. For example, before Kelly ever pointed out the strange couple, he may have talked about them. I may remember Kelly's talking about this couple, and some element in my memory context may refer to these people. Once again, it is not because my description or image is uniquely satisfied by a certain couple that the remembered description refers to that couple, but rather because this description is referentially linked to Kelly's overt discourse which, in turn, is referentially linked to his memory context. The primary reference in this case is not made in my memory context but in someone else's. The reference of all of these elements is the object which is causally linked to the appropriate elements in Kelly's memory context.

Ambiguous referring expressions may also be disambiguated by virtue of their links with a perceptual context. For example, one might, on seeing the couple, say "There's that couple again." The expression 'that couple' may be referentially linked to one's perceptual context which contains the perceptual image of two people. What 'that couple' refers to depends on which elements in the perceptual context the expression is referentially linked with and what objects those elements yield knowledge of. The object which the speaker has knowledge of through the perceptual image is the one which is causally responsible for the elements in the perceptual context.

Earlier I said that Chastain analyzes primary reference in terms of knowledge rather than causation. This is true only for the most primary of primary referring devices. Some primary referring devices, for example, the expression 'that couple' in an overt context, are only primary relative to that context. They are not referentially linked to other expressions in that context (though other expressions may be linked to them). However, the referent of this expression, if the expression is referentially linked to elements in a covert context, depends on the referent of those elements, so relative to the covert context, the primary referring expression in the overt context is a secondary referring expression. According to Chastain, the mechanisms for linking expressions in overt contexts to elements in covert contexts is to be explained in terms of causal connections between contexts. Thus, his account of primary referring expressions in overt contexts is much like Devitt's.

Recall that in Devitt's account, there were two causal relations: one between a speaker's use of an expression and her having an object in mind, and another, between the object a speaker has in mind and the speaker's having that object in mind. For Chastain also there is a causal relation between a speaker's use of an expression (the primary referring expression in an overt context) and her 'having an object in mind'. While Chastain does not use the expression 'having an object in mind', we could easily translate 'having an object in mind' into the language of mental contexts and elements in these contexts. According to Chastain, the reference of a primary referring expression in an overt context is determined by its causal connection with an element in a covert (or mental) context.

If an ambiguous primary expression in an overt context has a determinate referent, we would expect this referent to be determined by a causal link between this expression and some element in a covert context. To this extent, Chastain's account of primary reference is a causal one. His account of reference for the most primary of primary references (e.g., the reference made with mental representations) is not strictly a causal one. For this kind of primary reference, when the referring element is not referentially linked to any other element, this primary element refers to an object O if and only if P has knowledge of O via E in C. (Chastain makes one exception to this rule: with "terms in referentially isolated linguistic contexts" the speaker need not have knowledge of the referent.³⁸ In such contexts there is no "alternative route to the thing referred to," "there is nothing left but denotation to fix the identity of the referent.")³⁹ If the context is a perceptual or memory context, then the object of which the person has knowledge via E is the one to which E is causally related in the appropriate way.⁴⁰ One can also have knowledge of an object that is not perceived at all. For example, one may detect the presence of a burglar by seeing the mess

³⁸ Ibid., p. 237. The sentences, "Shoot the first man who comes through the door," and "Our one-millionth customer will receive a month's free groceries," are Chastain's examples of referentially isolated linguistic contexts. Presumably, "The largest whale alive weighs over 2,000 pounds," is also such a context. What seems to be important here is that in such contexts, the only way the speaker can refer to the object is by using that particular description (p. 236).

³⁹ Ibid., p. 238.

⁴⁰ It should be clear from this analysis of the object a person has knowledge of that this type of knowledge is not propositional. If pressed to say what the person knows, we might venture that she knows that there is an object, though she may be mistaken about what kind of object it is.

he made and discovering that objects are missing. One knows of the burglar by inference from the evidence one does perceive. If the thing responsible for the evidence is not a burglar, but instead a sloppy detective, then one knows of the detective even though one believes of this person that she is a burglar. Or again, a person who is allergic to cats may enter a room and detect the presence of a cat by the fact that she begins to sneeze. Although she does not perceive the cat, she knows of him through his effects. If she says "You must have a cat. I'm allergic to it," then 'a cat' and 'it' refer to the cat which the speaker knows of via its effect on her.⁴¹ Here again, if what caused her to sneeze was not a cat, but a lion, she would be referring to the lion who was causally responsible for the sneeze.

We can summarize Chastain's account of disambiguation in this way. The reference of most (overt) referring expression is determined by their referential links to elements in covert contexts.⁴² Truly primary reference (primary reference that is primary relative to all contexts) almost always occurs in a perceptual or memory context. In these contexts, the element which refers, refers to some object by virtue of a causal relation between the object and that element.⁴³

Both Devitt and Chastain hold that reference is disambiguated by

⁴¹ If there are two cats, does 'a cat' refer to both? to the one which is causally responsible for her sneezing? I am not sure that the analysis works at this level.

⁴² The only exception Chastain makes is for expressions in referentially isolated linguistic contexts. See note 38 above.

⁴³ Chastain leaves open the possibility of our having immediate, non-perceptual knowledge of some kinds of objects. If we do, then causal relations would not be important for such knowledge.

what the speaker had in mind when she uttered the ambiguous referring expression. Both ultimately analyze having an object (or at least any object that exists in space and time) in mind in terms of a causal relation between the object and the speaker's state of mind. Devitt analyzes primary reference in terms of a causal relation between an object and a state of mind (such that the person has that object in mind) and another causal relation between the state of mind and a use of a referring expression to refer to an object. So, for example, in the antelope-rock case, where the speaker says, "That has been watching us all night," the referent of 'that' is the object which caused the speaker's perceptual experience, which experience, in turn, led the speaker to say what she did.

Chastain analyzes primary reference in an overt linguistic context in terms of reference links with elements in covert contexts.⁴⁴ The elements in ordinary covert non-linguistic contexts (namely perceptual and memory contexts) refer to an object by virtue of a causal connection between the object and that element. So, for example, in the antelope-rock case, the word 'that' is referentially linked to an element in the perceptual context (e.g., the antelope-rock percept).⁴⁵ This element of the perceptual context is causally connected with the rock in the appropriate way.

The most important advantage causal theories of primary reference have over satisfaction theories is that they involve a real (that is,

⁴⁴ These reference links receive a causal analysis.

⁴⁵ The mechanisms of referential linkage may be causal or, perhaps, a combination of causal and quasi-syntactic factors.

physical) connection between the object being referred to and the person doing the referring. This connection blocks the possibility of fortuitous satisfaction based on the speaker's mistaken beliefs, her misperceptions, or her faulty memories. The object a speaker has in mind, according to causal theories, is not the one which satisfies her description of the object or the one which fits her conception of the object. One's conception (or perception) of an object can be radically mistaken and one can, nevertheless refer to that object, and have that object in mind by virtue of a causal connection between the object and the speaker's state of mind.

Both Devitt and Chastain explain how the reference of ambiguous referring expressions is determined in terms of a prior act of referring.⁴⁶ This prior act of referring may be accomplished by means of linguistic devices, as, for example, when an overt discourse is linked to a covert discourse. Or it may be accomplished through 'quasi-linguistic' means, for example, by means of a mental image or a perceptual experience. The reference of the referring expression in the overt discourse will be determinate only if the reference of the corresponding covert referring device is determinate.

For both Devitt and Chastain, perceptual experiences play an important role in explaining how the reference of ambiguous linguistic expressions is determined. A large class of ambiguous referring expres-

⁴⁶ Referring is here used in the broad sense in which not only linguistic expressions refer, but other things as well. Chastain's account of referring by virtue of having an object in mind is less problematic than Devitt's in that his analysis of any kind of reference (speaker's or semantic) involves the same three terms: a person who refers; an object that is referred to; and a means for referring.

sions are linked, directly or indirectly, to perceptual contexts. The reference of these expressions depends on what the perceptual element to which they are referentially linked refers to. The mechanisms by which the elements in a perceptual context refer to an object are causal. The basic idea here is that an element in a perceptual context refers to the object which stands in a certain causal relation to that element, rather than to the object which fits or satisfies the content of the perceptual experience. So, for example, Chastain writes:

Denotationism is, of course, false for perceptual contexts. What counts is the causal pathway along which information passes from the object perceived to the perceptual context; it is this which determines the identity of the thing which is seen, heard, touched, smelled, etc. The information may be degraded or contaminated in transit or distorted by the perceiver, but still it is that object which is perceived and not some other which, quite accidentally happens uniquely to fit the content of the perceptual context.⁴⁷

I think that an account of disambiguation along the lines suggested by Chastain and Devitt has some good points. There are aspects of such accounts that are problematic.

One aspect of these accounts, especially of Chastain's, which I do not accept is the easy rejection of denotationism. While I accept the argument that denotationism is false for elements in perceptual and memory contexts, I think it is much less clear that denotationism is false for referring expressions in a language. Chastain, however, is willing to abandon denotationism even for explaining how these expressions refer. He believes an expression can refer to something which it does not denote, "if there is an alternate route to the thing referred to," (p. 238). For example, in the sentence 'Smith's murderer is insane,'

⁴⁷ Ibid., p. 248f.

Chastain seems to think that the expression, 'Smith's murderer', can refer to someone who is not denoted by 'Smith's murderer.' In fact, from what Chastain says, we can infer that only in the absence of alternate routes to the referent is the reference of 'Smith's murderer' determined by the denotation of this expression. Were Chastain correct, reference potential would not be determined solely by linguistic rules which specify an expression's denotation. Rules of reference linkage would also have to be incorporated into the account of reference potential. Thus, the reference rule for a definite description would not only say that the possible referents of an expression of the form, 'the F' are those things which are F, it would also have to include a clause about what the description could refer to given certain reference links with elements in covert contexts. If Chastain were right, even a uniquely denoting expression could, according to the rules of English, refer to something other than the object it denotes. It would follow that even uniquely denoting expressions can be ambiguous. The mere fact that an expression uniquely denoted an object would not be sufficient for determinate reference, since it could be the case that this expression was referentially linked to some other expression.

This claim is false. It would be one thing to say that what the speaker intended to refer to when she said 'Smith's murderer' was not the person who actually murdered Smith. Chastain provides us with a helpful way of discussing speakers' intended reference. Our speaker may have covertly referred to some person not denoted by 'Smith's murderer' by some means other than the expression 'Smith's murderer'. She may have referred by means of a perceptual image or a remembered image to someone she believed was Smith's murderer but who actually was not. It

does not follow, however, that the expression the speaker used to communicate her intended referent refers to someone other than the person it denotes. Given our second criterion of adequacy for reference rules, we should reject Chastain's account of reference potential for definite descriptions. If the account of reference Chastain proposes entails that the English expression 'Smith's murderer' can refer to someone who is not denoted by the expression, then it fails to meet criterion two:

A theory of reference is adequate only if it is such that for any statement of the form 'S is P', if what the theory identifies as the referent of the statement actually is P then the statement must be true.⁴⁸

If Chastain's theory identifies the referent of the English expression, 'Smith's murderer', in the sentence "Smith's murderer is insane," as the person the speaker believes is Smith's murderer, say Jones, but who is not Smith's murderer, then his theory fails to meet this criterion. For the English statement, "Smith's murderer is insane," could be false even if Jones (the person the theory identifies as the referent of the English expression 'Smith's murderer') is insane. Suppose that the person who murdered Smith is not insane. It is quite obvious that the English statement, "Smith's murderer is insane," would be false.

In this chapter we are primarily concerned with disambiguation and not with reference potential. However, my disagreement with Chastain about reference potential will lead to disagreement about what referring expressions the theory of disambiguation applies to. I would argue that there is no reason to explain how the referent of a uniquely denoting expression is disambiguated. Chastain would not. I would also say that

⁴⁸ See Chapter Two.

a uniquely denoting expression is always a primary one; Chastain would not. In fact, Chastain holds that a definite description cannot begin a reference chain; it must always be linked to some other expression. This seems to be true for ambiguous definite descriptions such as 'the man'. If a person came upon a sequence of sentences beginning with an ambiguous definite description, she would, justifiably, assume that she had missed something, or that the speaker was linking his expression to some element in a covert context. Consider the following sequence of sentences:

The man began to jump up and down, flailing his arms. He could not be calmed even by the most soothing and reassuring facts.

In reading this paragraph, we feel we have missed something.

The situation is different however, when the definite description is uniquely denoting. We need not look at the preceding page or wonder who the writer may have had in mind when we read the sequence:

Smith's murderer began to jump up and down, flailing his arms. He could not be calmed even by the most soothing and reassuring facts.

Recall that Chastain had to make an exception to his reference rule in the case of expressions in referentially isolated linguistic contexts. The reference of expressions such as 'the first man to walk through the door' and 'the largest whale in the ocean' was determined, according to Chastain, by their denotation. Chastain seems to think that what is special about these expressions is that they occur in isolated linguistic contexts. (Exactly what makes them isolated is not clear.) I would argue that what is special about these expressions is that they uniquely denote their referent. In such cases there is no reason to inquire of the speaker what he intended to refer to, even when there is some object other than the one denoted which he intends to

refer to with that expression. There is no need to ask the speaker for clarification because it is already quite clear who or what the referent is. If the speaker says, in English, "The next person to walk through the door will be carrying a book," it makes no difference to the reference of the expression, 'the next person to walk through the door', whether she has a particular person in mind or not. The expression refers to the next person who walks through the door. If the person believed it would be Smith and knew that Smith would be carrying a book, her English sentence will still be false if someone other than Smith is the first person to walk through the door and this person fails to be carrying a book. This will be the case even if Smith walks through the door an instant later.

If we are careful to make the distinction between what a speaker intends to refer to (where her intended reference is the reference of some element in a covert context) and what her uses of English expressions refer to, there is no reason to reject denotationism as a theory of how the reference potential of English expressions is determined. What seems to motivate anti-denotationist accounts of reference potential are cases of charitable and justified interpretations. For example, we may know that Smith's murderer is not insane. We may also know that Morgenstern believes that Jones is Smith's murderer. When Morgenstern says 'Smith's murderer is insane,' we may give her credit for a true belief (namely, that Jones is insane). We may even give her credit for informing us of something true (namely, that Jones is insane). And we are justified in doing so. But the fact that we give Morgenstern credit for these things does not mean that we give her credit for uttering a true sentence. It is quite clear that her sentence is false in

this case.⁴⁹

The same arguments that show that the reference potential of uniquely denoting descriptions is determined by their denotation can be used to show that the reference potential of ambiguous definite descriptions is determined by their denotation. The expression, 'the antelope', can no more refer to a rock than 'Smith's murderer' can refer to someone who is not Smith's murderer. The sentence 'The antelope is standing still,' will be false if it is not the case that some antelope is standing still. The speaker may believe something true, and may say this sentence on the basis of this true belief, but the sentence is not true.

The notion of reference links between expressions in overt contexts and elements in covert contexts can help us to explain how the reference of ambiguous referring expressions is determined, but we have no reason to think that the reference potential of referring expressions in a language is determined by these links.⁵⁰ We shall accept Chastain's account of reference links as an account of disambiguation, but reject his view of reference potential. On my view, uniquely denoting expressions require no disambiguation. Any links between these expressions

⁴⁹ We are not likely to correct the sentence probably because to do so would be impolite. We would, however, correct her statement under certain conditions, when it matters whether the sentence is true. If Morgenstern were a court-appointed psychiatrist testifying under oath, the council for the defense would be remiss if he did not ask her to modify the statement. Similarly, a court reporter would (and should) be corrected for such sloppy and prejudicial usage.

⁵⁰ Links between referring elements in covert contexts and sounds or symbols (as physical objects) may help to explain how expressions come to have a denotation in the first place. That is a different matter. See Chapter Eight.

and elements in mental contexts are irrelevant to the reference of the expressions. Further, on my view, if a speaker intends to refer to a particular object by means of some element in a covert context she may succeed in referring to a quite determinate thing via that element. Nonetheless, the referring expression she uses may fail to have a determinate reference. If the speaker intends to refer to a determinate thing but that thing does not belong to the set of potential referents of the ambiguous expression she uses, the reference of that expression remains ambiguous. For example, if the speaker covertly refers to a rock by means of an element in her perceptual field, and says "That antelope has been standing very still," the expression 'that antelope' does not refer to the rock (if it did, we should have problems with truth conditions). If it refers to anything, it refers to an antelope. If no antelope is the intended referent, then the expression has no determinate reference.

Another aspect of causal theories which is problematic is that they seem to reduce reference to a purely physical, (i.e., causal) relation. What is problematical about this reduction is that it seems it will not work. Putnam has argued that the problem with reducing reference to some kind of causal relation is that there are too many causal relations.⁵¹ All kinds of objects are involved in one's having a perceptual image, for example, of a rock. To say which ones are relevant to the reference of the perceptual image requires that one already have a definition of reference.

⁵¹ Reason, Truth, and History (Cambridge: Cambridge University Press, 1981). See especially p. 66. Jaegwon Kim makes a similar point, Op. cit.

At this point we should distinguish two distinct claims. One claim is that the intentionality or 'aboutness' of perceptual states (or experiences) can be fully explained on a causal model. This would be the claim that a perceptual state is about x (or is a perception of x) if and only if x caused that state. A separate claim is that an element in a perceptual context is about x rather than y if and only if x, rather than y, caused (at least in part) that state. This second claim presupposes that there can be discrete elements within a perceptual context and that at least some of these elements refer, but it makes no assumptions about whether reference of any kind can occur without an established language. It is consistent with this claim to hold that the intentionality of perceptual states (their being about something) depends on the existence of a referential framework introduced only by a fairly sophisticated natural language.⁵² The second claim says only that a necessary condition for a perception to be of a particular object o is that it is caused by o. Causal theories, including those of Chastain and Devitt, provide evidence that supports the second claim; the first claim is much more problematic.

Criticisms of causal theories that say there are too many causal relations for reference to be just a matter of causality are generally directed against claims of the first type; the claim that a certain kind of causal relation is a necessary and sufficient condition for one kind of reference --the reference of elements in a perceptual context to items in the world. I will discuss these criticisms in the next chap-

⁵² Such a framework may be necessary for the individuation of elements in the perceptual context.

ter. But we should note here what is at stake. If this claim were true, then we would have a basic reference relation whose explanation does not require any linguistic or semantic notions of reference, and in terms of which these semantic notions could be analyzed. Primary reference could ultimately be explained in terms of simple physical causation, and we could explain how words come to refer by showing how their use is related to these basic referential devices and connections. In the next chapter I will argue that claims of this type are false. Causal relations between an object and a perceiver are not sufficient for a perceptual state to refer to that object.

To explain how reference is disambiguated we need not claim that certain kinds of causal relations are necessary and sufficient for reference. We can assume that there are distinct elements in a perceptual context and that they can refer, and only ask under what conditions they refer to one possible referent rather than another. With respect to the elements in a perceptual context, what we should take theories like those of Devitt and Chastain to claim is that the reference of perceptual 'images,'⁵³ is determined by causal relations rather than by relations of satisfaction or fit. Assuming that perceptual images can be about or refer to things in the world, the set of things they can be about is limited to the set of things that caused the perceiver to have this perceptual experience. We could argue for such a claim as follows: The relationship between a referring device and its potential referents is such that if no potential referent is the referent of the

⁵³ I will use the term 'perceptual images' as short-hand for elements in a perceptual context.

device, then nothing is. If the referring device is a perceptual image and the potential referents were those objects which satisfied or fit the image, then if the image did not refer to any of the things which satisfied it, it would refer to nothing. However, one can in fact have a visual image with the content described as, for example, an antelope (which might be satisfied by some antelope), but which is not a perceptual experience of any antelope at all, but rather an experience of a rock which, because of the lighting and the perceiver's position, looks like an antelope. If the reference potential of visual experiences was determined by a relation of satisfaction between the object and the visual image, then we could not perceive rocks as antelopes. Our visual experience would be an experience of nothing, if not of an antelope. This conclusion is at best implausible.

On the other hand, if the reference potential of visual images is determined by which objects caused the image, no such implausible results issue. If nothing playing a causal role in the production of the image is the referent of the image, then the image fails to refer. There actually are cases when none of the things causing a visual image are the referent of the image, for example, when someone is hallucinating. In such cases the image refers to nothing. This is exactly what we would expect if the reference potential of the visual experience depends on causal connections between the image and the thing it refers to.

The advantage causal theories of primary reference have over satisfaction theories is that they involve a real connection between the object being referred to and the person doing the referring. This connection blocks the possibility of fortuitous satisfaction based on the

speaker's mistaken beliefs, her misperceptions, or her faulty memories. The object a speaker has in mind, according to causal theories, is not the one which satisfies her description of the object or the one which fits her conception of the object. One's conception (or perception) of an object can be radically mistaken and one can, nevertheless refer to that object, and have that object in mind by virtue of a causal connection between the object and the speaker's state of mind.⁵⁴

The account of disambiguation I propose explains how the reference of referring expressions is disambiguated in terms of what the speaker had in mind. The reference potential of a referring expression as it is used is not merely a matter of the meaning or denotation of the expression, taken out of context. Referring expressions can be used in conjunction with gestures which limited the range of potential referents of the expression-demonstrative combination. They can also be referentially linked to other expressions such that their potential referents are the same as the potential referents of the expression to which they are linked. These factors may be taken as co-determinants of reference potential for an expression which is actually used, if the unit of analysis is the expression as it is used. If the unit of analysis is the referring expression token considered outside of any use of it, then we might say that these contextual factors serve to disambiguate the reference.

Once we recognize referring expressions as devices which can be used in conjunction with other referring devices (either gestures or other overt expressions) and recognize the role these other referring

⁵⁴ At least up to a point. There may be further constraints.

devices play in determining the reference of the expression as it is used, we find that many seemingly ambiguous referring expressions have a quite determinate reference. However, a significant number of cases remain for which contextual factors and reference links do not uniquely determine a referent. In such cases, if there is a determinate referent, what the expression referred to is the potential referent that the speaker intended to refer to, or the one the speaker had in mind.

To explain how the reference of these expressions is determined I have adopted Chastain's model of reference links between the expression and some element in a covert context based on a causal relation between the two. The elements in a covert context may, in turn, be referentially linked to other elements in other contexts, or they may be uniquely referring on their own and thus terminate the reference chain. This approach presupposes that elements in a covert context (e.g., a perceptual or memory context; 'words' in a mentalese sentence, etc.) refer. I have suggested that the reference relation between these mental elements and their referents is, in part, a causal one.

CHAPTER VII

REFERENCE RULES FOR SINGULAR TERMS

The general question throughout this dissertation has been: To what extent do intentions to refer determine reference? In the preceding chapters I discussed the role a speaker's intentions to refer play in disambiguating the reference of the expressions she uses. I argued that the speaker's intentions to refer with a certain expression do co-determine what that expression refers to when the reference is ambiguous. I concluded that the referent of an ambiguous English expression is that potential referent which the speaker intended to refer to.¹

In the following chapters I shall discuss the role intentions to refer play in a theory of reference potential. When we are discussing reference potential, or what some referring device could refer to, it is important to note that there are at least three senses in which it can be said that an expression could be used to refer. In one sense, the reference potential is relative to a natural language. The expression, 'the blue pen', as an expression of English, could be used, in English, to refer to one of the members of the set of blue pens. In the preceding discussion of disambiguation this was the sense in which we used reference potential. In the next chapters also we will be primarily

¹ Note that a number of factors were involved in determining potential referents: semantic, syntactic and contextual factors all set limits on the range of potential referents for an expression.

concerned with reference potential relative to a language. There is another sense in which we say an expression could be used to refer to an object. In this sense reference potential is relative to a particular speaker's idiolect.² 'The blue pen', as an expression in someone's idiolect, could be used in that person's idiolect to refer to something other than a blue pen. A third sense in which an expression could be used to refer to an object is in the sense that any physical object (including expressions, mental states or events, and salt-shakers) could be used to refer to some other object on a particular occasion. In this sense, reference potential is not relative to anything.

When we talk about the reference potential of expressions in English, what we are looking for are rules, presumably linguistic rules and conventions, according to which the reference potential of particular referring expressions is determined. An example of a rule of this kind would be the rule for definite descriptions in English which says, "the potential referents of an expression of the form, 'the F', are those individuals which are F." This rule says how the reference potential of any definite description in English is determined. According to this rule, the potential referents of the English expression, 'the blue pen' will be blue pens.

Note that a theory of reference potential for expressions in a language presupposes that there is such a thing as a language (even if

² An idiolect is an individual speaker's language. Within an idiolect words have a determinate reference potential, as they do within a language, but the reference potential of the expressions in an idiolect may be totally idiosyncratic. This reference potential may be determined by the speaker's intentions to use the word in a certain way or by the force of the speaker's past uses of the word, setting a precedent for future uses.

this is understood as a theoretical construct or as an idealization of actual linguistic practices), and tries only to describe the conventions governing the correct use of referring expressions in that language. A theory of reference potential for expressions in a language is, basically, a description of correct usage of referring expressions in that language. If someone were to deny that there is such a thing as a language, or that there is correct (and incorrect) usage, then this person would deny the possibility of formulating an acceptable theory of reference potential for expressions in a language, for there would be nothing to describe.

The same kinds of comments can be made about a theory of reference potential for expressions in an idiolect. Such a theory would presuppose that there were rules governing the use of expressions in the idiolect and try to describe these rules. (A person who denies the existence of natural languages may attempt to explain linguistic behavior in terms of intersecting idiolects.) Here also one presupposes that there is correct and incorrect usage of expressions; in this case, however, the standards of correctness apply only to expressions in the idiolect and not necessarily to a shared language.

The most general theory of reference potential, the one that tries to explain how any physical object could be used to refer, does not presuppose a language (either a natural language or an idiolect). It asks the more general question: Under what conditions can any physical object refer. This theory is not a description of correct (or incorrect) usage; it describes, instead, the general conditions under which any object can be used to refer to some other object.

In this chapter our main concern will be with reference potential

for English expressions for singular reference.³ We shall be asking whether and to what extent intentions to refer determine the reference potential of such expressions in a language (in this case, English). To ascertain the proper role of intentions to refer in a theory of reference potential we shall look at the reference rules for these English expressions to see whether the correct rules contain reference to intentions to refer. Since the reference of these expressions is, by hypothesis, determined according to these rules, it will follow that if the correct rules mention intentions to refer, then intentions to refer play some role in determining the reference potential of those expressions. In this chapter I will argue that once we distinguish a theory of disambiguation from a theory of reference potential, we find that the reference rules for English expressions for singular reference need not mention intentions to refer.

An adequate reference rule for (at least attributive uses of) definite descriptions, for example, would be:

x is a potential referent of an English expression of the form 'the F' (used attributively) if and only if x is an individual and x is F.

The reference rule for demonstratives without a sortal would be:

x is a potential referent of the English expression 'this' or 'that' if and only if x is an individual;

and for demonstratives with a sortal a reference rule like the following will suffice:

x is a potential referent of an English expression of the form 'that F' or 'this F' if and only if x is an individual and x is F.

³ For ease of exposition we will use the term reference potential to refer to reference potential relative to English unless otherwise indicated.

Reference rules that do not mention intentions to refer also govern the use of pure indexicals such as 'I', 'here', 'today', and 'tomorrow', as well as pronouns such as 'he', 'you', 'it', 'they', etc. Even the reference rule for names could be formulated without mentioning intentions to refer. For example, the reference rule for names might be:

x is a potential referent of 'NN' just in case x is an NN.⁴

With each of these kinds of expressions not only can a reference rule be formulated without mentioning anyone's intentions to refer, but rival theories which do mention intentions to refer are wrong. It is easy to provide counter examples to intentionalist theories of reference potential. Suppose the claim is that the reference rule for the English word 'I' (in ordinary contexts)⁵ is as follows:

x is a potential referent of the English expression 'I', spoken by S if and only if x is the individual S intends to refer to with 'I'.

Ordinarily the persons we intend to refer to with the word 'I' is ourselves. But suppose a person, let us call him Harry, believed he was Napoleon, and when he used the word 'I' he intended to refer to Napoleon. According to the proposed reference rule, 'I' in this case would refer to Napoleon. But clearly it does not. Suppose Harry had said, "Unfortunately, I lost my last battle." If 'I' referred to Napoleon in this sentence, and Napoleon did, in fact, lose his last battle, then the

⁴ This rule is suggested by Tyler Burge in "Reference and Proper Names," The Journal of Philosophy, 70 (1973), pp. 425-439. His version of the rule is formulated in terms of truth. Thus, he says, "O'Hara is true of any object y just in case y is an O'Hara," (p. 435).

Whether x is an NN will depend on whether the name 'NN' has been given to x. We will discuss the conditions under which a name is given to an individual later.

⁵ Extraordinary contexts would be fiction and direct quotation.

English sentence would be true, but it is not.

Similar counter examples can be constructed for intentionalist reference rules which explain how the reference potential of other kinds of English referring expressions is determined. In each case we simply suppose that the speaker has a false belief about some individual and that her intention to refer is based on this false belief. When this occurs, what she intends to refer to with some English expression, E, will often fail to be what our intuitions tell us the English expression refers to.

Of course such exaggerated intentionalist theories are only a limiting case. I know of no one who actually holds that the reference potential of such expressions in English is determined by a particular speaker's intentions to refer to something with a certain English expression. When intentions to refer are actually incorporated into the reference rules for these expressions in English they are used either to explain how reference is disambiguated or to otherwise supplement a non-intentionalist rule. I have already discussed theories of disambiguation at length, and have argued that intentions to refer do play some role in disambiguating reference. What we want to know now is whether they also play a role in theories of reference potential for expressions in English, and if so, what role they do play.

Some theorists have thought that intentions to refer figure in the reference rules for a certain kind of definite description, namely, referential uses of definite descriptions. In his paper, "Reference and Definite Descriptions," Keith Donnellan proposed that there are two different kinds of definite descriptions: definite descriptions that are used attributively; and definite descriptions that are used referen-

tially.⁶ In using a description of the form, 'the F' attributively, the speaker attributes to an individual the property of being F. In such cases, what 'the F' refers to is determined by its denotation. The potential referents of such uses of definite descriptions are those things which are F. Definite descriptions can also be used referentially to single out an individual. According to Donnellan, a speaker may use a definite description, for example, 'the blue pen', merely to enable her audience to identify her intended referent, without thereby attributing the property of being a blue pen to the referent.

There are several different ways of understanding the importance of this distinction for theories of reference potential for English. One would be to say that it has nothing to do with the semantics of English.⁷ If Donnellan's distinction does have something to do with the reference potential of English expressions, we might formulate rules for the reference potential of referential uses of definite descriptions in any of the following ways:

(1) x is a potential referent of an English expression with the form 'the F' used referentially by S, if and only if, S intends to refer to x with 'the F'.

(2) x is a potential referent of an English expression of the form 'the F' used referentially by S if and only if S believes x is F and S intends to refer to x with 'the F'.

⁶ The Philosophical Review, 75 (1966), pp. 281-304. Reprinted in Stephen Schwartz (ed.), Naming, Necessity, and Natural Kinds, (Ithaca: Cornell University Press, 1977), pp. 42-65.

⁷ This is Kripke's position. He argues that the distinction is important only for pragmatics, not for semantics. See "Speaker's Reference and Semantic Reference," in French, Uehling, and Wettstein (eds.), Contemporary Perspectives in the Philosophy of Language, (Minneapolis: University of Minnesota Press, 1977), pp. 6-27.

(3) x is a potential referent of an English expression of the form 'the F ' used referentially by S if and only if x is F and S intends to refer to x with 'the F '.

Any of these versions is a plausible interpretation of Donnellan's characterization of referential uses of definite descriptions.

Donnellan rejects our second reference rule for referential uses of definite descriptions. He argues that a person could use a definite description, for example, 'the king' to refer to someone she does not believe is the king. She may believe that he is a usurper. What the English expression 'the king' refers to in her sentence, "The king is a usurper," is not the person the speaker believes to be the king. This argument is sufficient grounds for rejecting our second reference rule for referential uses of definite descriptions.

The reference rule that Donnellan seems to support is (1): The referent of a definite description used referentially is the individual the speaker intends to refer to, whether this individual fits the description or not. In the preceding chapter we saw that Chastain also accepted this reference rule. In that chapter we argued that this reference rule was incorrect. There we considered the sentence "Smith's murderer is insane." We argued that, if Jones is not the murderer, then, even if the speaker did intend to refer to Jones with the expression 'Smith's murderer', the English expression itself does not refer to Jones; instead it refers to the person who murdered Smith, if anyone. The problem with the intentionalist analysis of 'Smith's murderer' is that it fails to get the truth conditions right for the sentence "Smith's murderer is insane."⁸

⁸ This is also true of reference rule (2).

This same argument cannot be used for the expression, 'the king' in the sentence "The king is a usurper." In this case, it seems that the sentence would be true if the speaker intended to refer to a certain person (the usurper) and that person was a usurper. Since we have already established that a speaker's intentions to refer play some role in disambiguating reference, and the expression 'the king' is ambiguous, it may be that the plausibility of the intentionalist account in this case is a result of the ambiguity of the expression. However, even if the expression were uniquely denoting, it would still appear that the speaker's intention to refer to a certain person with that expression, rather than the denotation of the expression, determined the referent. Suppose someone who lived in Northumbria when it was a monarchy had said, "The present king of Northumbria is a usurper." Even if the usurper was not truly the present king of Northumbria, the English sentence would be true if the person the speaker intended to refer to was a usurper.

I argued earlier that the reference potential of any definite description was determined by its denotation. The present case seems to be a counter example to this claim. Here, it seems that 'the present king of Northumbria' could correctly be used to refer to someone who is not actually the present king of Northumbria, and thus is not denoted by this expression. Nonetheless, given the number of cases in which an intentionalist account of reference potential for definite descriptions is wrong and denotationism is correct, I am hesitant to accept the former on the basis of an isolated counter example. Rather than accept 'the present king of Northumbria' as a valid counter example to denotationism, we should examine this case more closely to see why it seems to

work when other, similar examples do not.

'The present king of Northumbria' example is a counter example to denotationism only if (1) 'the present king of Northumbria' does not denote the usurper and (2) the usurper could still be the referent. It would be difficult to deny that the usurper could be the referent. If he could not, then it would not be possible correctly to say, in English, "The present king of Northumbria is a usurper," since we could never correctly refer to the usurper with that expression. But it is clear that this is a correct English sentence and that the sentence is true if the alleged usurper is actually a usurper. If denotationism were true, and 'the present king of Northumbria' did not denote usurpers, then the sentence, "The present king of Northumbria is a usurper," would be analytically false, or at least it would lack a truth value.

We cannot dismiss this counter example to denotationism by denying that the usurper could be the referent of 'the present king of Northumbria'. If there is some ground for dismissing it, there must be something wrong with the claim that 'the present king of Northumbria' does not denote usurpers. I think there is. What is presupposed in the argument against denotationism is that 'the present king of Northumbria' denotes only those individuals who satisfy certain, very rigid criteria; they must have a special kind of entitlement to the title of king. Usurpers are people who have seized the title but lack the proper justification for doing so. For example, in a society where the rights of succession are specified such that the proper heir to the throne is the oldest living male descendant of the king and his official consort, the only person entitled to claim the throne is the person who satisfies this condition. A person who seizes the throne but fails to satisfy

this condition is a usurper.

To deny that usurpers are denoted by the expression 'the king' is to suppose that 'the king' denotes only those rulers who are entitled to be king. If this were correct, it would follow that even if someone were to exercise all the powers, privileges and responsibilities of a monarch, and even if he were to officially perform all those ceremonies necessary for claiming the title of king,⁹ he would still not be denoted by 'the king' unless he was entitled by the customs and laws of his land to claim that title. That is, 'the king' would denote only rightful kings. This seems clearly false. If a person officially performs all the ceremonies necessary for claiming the title of king, exercises all the powers, privileges and responsibilities of monarchy, and induces his subjects to permit him to exercise these powers, then he is the king, even though he may not be the rightful king. In English we make a distinction between kings and rightful kings; 'the rightful king' denotes fewer individuals than 'the king'.

If 'the present king of Northumbria' denotes not only the rightful king but also the usurper, then Donnellan's purported counter example to denotationism is not a counter example at all.¹⁰ The weight of the evidence goes against intentionalist accounts of definite descriptions in favor of denotationist accounts. We can conclude that the potential

⁹ For example, coronation by the proper authority.

¹⁰ I suspect that any half-way plausible counter example to denotationism can be explained away in a similar manner. For example, another purported counter example is found in the sentence, "Jones' wife lives in Los Angeles," where the woman the speaker intended to refer to is not Jones' lawful wife because Jones married her while he was still married to someone else.

referents of any definite description, those used attributively as well as those used referentially, is determined by the denotation of the description. Thus, we reject proposed reference rule (1).

Reference rule (3),

x is a potential referent of an English expression of the form 'the F' used referentially by S if and only if x is F and S intends to refer to x with 'the F',

accepts the truth of denotationism (x must actually be F), but adds a further condition for x's being a potential referent of a referential use of expressions of the form 'the F'.¹¹

To evaluate this reference rule, we should compare what it does with what a straightforward denotationist analysis does. We should see whether and how this rule is better than a rule which does not mention the speaker's intention to refer. The speaker's intentions to refer to x with 'the F' may serve to disambiguate the reference of 'the F'. Thus, when someone says, "The king is a usurper," the reference of 'the king' is determined not only by the denotation of 'the king' but also by the speaker's intention to refer to a certain person with 'the king'. I have already argued that this is the case. However, we are concerned in this chapter only with reference potential. We want to know what the speaker's intention to refer to x with 'the F' contributes to a theory of reference potential for expressions of the form 'the F'.

We should accept the denotation-plus-intention reference rule, as opposed to a simple denotation rule, only if there are cases in which

¹¹ Howard Wettstein interprets the referential-attributive distinction this way. See "The Semantic Significance of the Referential-Attributive Distinction," Philosophical Studies, 44 (1983), pp. 187-196 and "Demonstrative Reference and Definite Descriptions," Philosophical Studies 40 (1981), pp. 241-257.

what an English expression could refer to depends on denotation plus intentions to refer. Since intentions to refer are used to distinguish referential and attributive uses of definite descriptions, we would expect that there would be a difference between the reference potential of attributive uses of definite descriptions (whose reference potential is determined solely by denotation) and referential uses of definite descriptions (whose reference potential is purportedly determined by denotation and intentions to refer). So, for example, the reference potential of 'Smith's murderer' used attributively should be different from the reference potential of 'Smith's murderer' used referentially. The reference potential of both is, by hypothesis, determined by denotation, so if there is indeed a difference in reference potential between the two, it must be that the intentions-to-refer clause narrows the range of potential referents for referential uses of definite descriptions.

What a referential use of a definite description could refer to in English would be a subset of the set of things an attributive use of a definite description could refer to in English. For example, what 'Smith's murderer' could refer to when it is used referentially would have to be, under some conditions, only a subset of the set of things 'Smith's murderer' could refer to when it is used attributively. Suppose Mr. Spock is Smith's murderer. 'Smith's murderer, used attributively, could only refer in English to Mr. Spock. (An example of an attributive use of 'Smith's murderer' would be if the coroner, on examining Smith's mangled body, said "Smith's murderer [whoever he may be] is insane.") What could 'Smith's murderer', used referentially, refer to in English? It could refer to Mr. Spock, but, by hypothesis, only if

the speaker intends to refer to Mr. Spock. Suppose the speaker does not intend to refer to Mr. Spock with 'Smith's murderer', but intends to refer to Jones. Is it then the case that 'Smith's murderer' could not refer to anyone, since the speaker lacks the requisite intention? This is what reference rule three requires, but this seems clearly wrong. 'Smith's murderer' could still be used in English to refer to Mr. Spock. The speaker may not be able to use this expression correctly to express his beliefs because he has false beliefs about the referent of Smith's murderer, but these beliefs do not seem to affect the potential reference of the English expression, 'Smith's murderer'. Even if no one knows that Mr. Spock is Smith's murderer, and so no one ever intended to refer to Mr. Spock with 'Smith's murderer', the potential referent of this expression would still be Mr. Spock.

To conclude, intentions to refer seem to play no role in determining the reference potential of definite descriptions, not even in determining the reference potential of definite descriptions used referentially. Reference rules for definite descriptions as well as for the other singular terms can and should avoid mention of intentions to refer.

CHAPTER VIII

REFERENCE POTENTIAL AND INTENTIONS OF A GROUP

In the previous chapter I rejected specific reference rules which mention a speaker's intention to refer. I will now examine theories of reference potential that attempt to explain how the reference potential of English expressions is determined in terms of a group of speakers' intentions to refer. I will first discuss Gricean accounts of semantic reference. I will then examine accounts which try to explain the reference potential of class terms in terms of some group of speakers' intentions to refer to all and only those objects that have certain characteristics by means of which objects of that kind are identified.

While an individual speaker's intentions to refer may be irrelevant to a theory of reference potential for singular referring expressions in English, the intentions of some group of speakers may be important for determining the reference potential of English expressions. Such intentions may also provide the basis for the reference rules that we have considered so far.¹ To examine the importance of intentions to refer in determining the reference potential of class terms, I will present the case for two different kinds of intentionalist explanations

¹ Any denotationist analysis of singular terms must eventually explain the reference potential of terms that occur in the predicate position. If the potential referents of 'the king' are defined as any individual who is a king, then it still remains to say what is potentially referred to by 'king'.

of reference potential for these terms. I will then discuss the objections to and shortcomings of these explanations.

Gricean Accounts of Reference Potential

The first kind of intentionalist account of reference potential that I want to consider here tries to explain how the reference potential of expressions in a shared language (or semantic reference) is determined in terms of speaker's reference (or the reference potential of expressions in an idiolect). Speaker's reference is, in turn, explained in terms of occasion reference which involves a speaker's intending to get another person to identify a certain object. This account is based on a Gricean account of meaning, supplemented by an account of convention along the lines developed by David Lewis.²

Grice proposes that we base our analysis of conventional or timeless meaning on an analysis of occasion meaning and speaker's meaning.³

If we can elucidate the meaning of

'x meant something (on a particular occasion)' and

'x meant so-and-so (on a particular occasion)'

and of

'A meant something by x (on a particular occasion)' and

'A meant by x that so-and-so (on a particular occasion)'

this might reasonably be expected to help us with

'x means (timeless) something (that so-and-so)'.

Grice suggests that we analyze what a sentence in a language

² See H.P. Grice, "Meaning, The Philosophical Review, 66 (1957), pp. 377-388 and "Utterer's Meaning, Sentence-Meaning and Word-Meaning, Foundations of Language, 4 (1968), pp. 225-242, and David Lewis, Convention (Cambridge: Harvard University Press, 1969).

³ "Meaning, Op. cit., p. 43. Grice is talking only about non-natural meaning here.

conventionally means in terms of what some group of speakers intend to effect by that sentence.

'x means (timeless) that so-and-so' might as a first shot be equated with some statement or disjunction of statements about what people (vague) intend (with qualifications about 'recognition') to effect by x.⁴

The qualifications about recognition are supposed to tell us how non-natural meaning differs from natural meaning. X naturally means that p if x is intention-free evidence that p. For example, spots naturally mean that the person on whom these spots appear has measles. The spots are intention-free evidence that this person has measles. Non-natural meaning is a species of meaning which is such that the meaningful item, x, is evidence that p only because the person who hears or sees x recognizes that x was produced with the intention of effecting some change in the audience by means of the audience's recognition of this intention.

Grice has revised and refined his position since the publication of "Meaning," but its general lines remain the same. In a more recent paper, Grice proposed that we explain timeless meaning for a group in terms of timeless meaning within an idiolect. Grice would define the timeless conventional meaning of the assertion 'It is raining' as follows: For group G, utterance-type X means the assertion 'It is raining' equals, by definition, "At least some (? many) members of group G have in their repertoires the procedure of utter-

⁴ Ibid., p. 46. Grice adds the further qualification that "the intended effect must be something which in some sense is within the control of the audience, or that in some sense of 'reason' the recognition of the intention behind x is for the audience a reason and not merely a cause."

ing a token of X if, for some A, they want A to think that U believes that it is raining; the retention of this procedure being for them conditional on the assumption that at least some (other) members of G have, or have had, this procedure in their repertoires."⁵

Grice incorporates an element from David Lewis' analysis of convention into this definition in the clause that retention of the procedure should be conditional on the assumption that other members of the group also have this procedure in their repertoire. This clause is supposed to "get in the idea of aiming at conformity, and so perhaps (derivatively) also that of correct and incorrect use of X, as distinct from merely usual or unusual use of X."⁶

Most theorists who take this approach to semantic meaning try to explain the meaning of sub-sentential units in terms of a grammar which specifies how sub-sentential parts are to be put together to form meaningful sentences. The analysis of meaning remains, essentially, an analysis of sentence meaning.⁷ Robert Cummins, however, has proposed a Gricean analysis of the meaning of sub-sentential

⁵ This definition is taken from Grice's paper, "Utterer's Meaning, Sentence-Meaning, and Word-Meaning," *Op. cit.*, p. 233. Grice's definition is more general. It is formulated in terms of mood indicators and propositional attitude signs which would cover any kind of English sentence. I have given only a sample definition, derived from Grice's general one, in order to avoid complicating the exposition with an explanation of the technical symbols Grice uses. The overall thrust of his definition should be clear from this example.

⁶ *Ibid.*, p. 233.

⁷ See for example David Lewis, *Ibid.*, pp. 197-200; Jonathan Bennett, *Linguistic Behavior* (Cambridge: Cambridge University Press, 1976), and Grice, *Ibid.*, pp. 235-241. Grice attempts to give an analysis of adjectival meaning, (pp. 237-241), so in this respect he is an exception.

parts.⁸ Cummins defines conventional reference and meaning relative to an idiolect in this way:

There is a convention whereby N refers to x in U's language if (a) in the past U has uttered N only when he intended to identify x, and (b) this fact is mutually known by U and his hearers, and (c), because of this mutual knowledge it continues to happen that when U utters N he identifies x.

There is a convention whereby P means 'red' in U's language if (a) in the past U uttered P only when he meant 'red', and (b) this fact is mutually known to U and his hearers, and (c) because of this mutual knowledge it continues to happen that when U utters P he means (and is understood to mean) 'red'.⁹

These definitions are formulated in terms of occasion reference and occasion meaning. Cummins defines both of these in terms of intentions to refer. For example, U identifies x for A, on a particular occasion if

U intends to get A to believe that U intends to predicate something of x, and A recognizes this intention (i.e., comes to believe of x that U intends to predicate something of x),

and U predicates P of x and means 'red' by P (on some occasion) if

U identifies x for A and utters P intending thereby to get A to consider (of x) whether x is red; relying on the Gricean Mechanism.¹⁰

The Gricean Mechanism tells us how U's intention is supposed to be effected. Cummins explains the mechanism as follows:

A recognizes U's intention to get A to believe that P, and is led by that recognition--through trust in U--to believe that P.
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⁸ "Intention, Meaning, and Truth-Conditions," Philosophical Studies, 35 (1979), pp. 345-360.

⁹ Ibid. p. 352.

¹⁰ Ibid., p. 351.

¹¹ Ibid., p. 346.

Although Cummins does not define the conventional reference of x or the meaning of P for a group, we would expect his definition to follow the general lines of Grice's analysis of sentence meaning for a group. The members of a group would have a procedure for getting an audience to do certain things (e.g., to identify x) and the retention of this procedure would be conditional on whether other members of the group have this procedure in their repertoires as well.

A Gricean account of reference has these features: (a) it explains conventional reference in a language in terms of reference in an idiolect (the speaker's language); (b) reference in the speaker's language is explained in terms of a uniformity in the speaker's reference in the past and of the audience's knowledge of this regularity; and (c) the references the speaker made in the past are explained in terms of her intentions to get her audience to identify some object by means of the audience's recognition of her intention.

To evaluate this type of theory I will first consider whether it is possible to explain conventional reference in terms of occasion reference. I will later, in connection with the second kind of intentionalist account, raise some questions about the possibility of explaining conventional reference in a shared language in terms of conventional reference in an idiolect.

The move from the occasion reference of an expression to the conventional reference of that expression in the speaker's idiolect requires that the speaker has used this expression consistently in the past when she wanted to identify the referent for her audience. This follows from clause (a) of Cummins' analysis of the conven-

tional reference of N in U's idiolect which says "in the past U has uttered N only when he intended to identify x." I want to consider whether it is possible to explain the reference of N in U's idiolect in terms of consistent past intentions concerning the use of N. In particular, I will ask whether it is possible for U consistently to use N in this way if N does not already refer to x in U's idiolect. If this is not possible, then Cummins' explanation of reference in an idiolect is circular.

Clause (b) says that for an expression to have a conventional reference in U's idiolect, it must be mutual knowledge between U and his hearers that U has consistently used this expression in the past whenever he wanted them to identify a certain object. For this to be mutual knowledge, U must have successfully carried out his intention a number of times in the past. U would know that his hearers knew that he only used N in the past whenever he wanted them to identify x only if he knew that his hearers had actually identified x in the past when he uttered N, intending thereby to get them to identify x (and to believe something of it).

The project of explaining semantic reference in terms of idiolect reference and idiolect reference in terms of a speaker's reference on a particular occasion will be successful only if we can explain how U could successfully refer on a number of occasions with some expression without presupposing that any expression has a reference either in U's idiolect or in a shared language. Somehow it must be possible for U successfully to refer without the benefit of a language and for U and his audience to have beliefs about one another's intentions and knowledge without the benefit of a lan-

guage.

Let us assume, then, that neither U nor his audience has a language and ask under what conditions U could successfully refer to x with N on just one occasion. A sufficient condition for U's referring to x on a particular occasion is that

U identifies x for A and utters P intending thereby to get A to consider (of x) whether x is red; relying on the Gricean Mechanism.

I will argue that this condition could not be fulfilled unless (a) x already refers to N in U's idiolect and (b) x already refers to N in a shared language.¹² If these arguments succeed, then unless we accept some non-intentionalist account of occasion meaning, we will not be able to explain semantic reference (or semantic meaning) with a Gricean theory.

Suppose we try to explain occasion reference in terms of the speaker's intention to get her hearers to believe that she intends to predicate something of x and she intends to get them to believe this by means of their recognizing her intention. If the speaker utters some expression, then she will successfully refer with that expression only if her audience recognizes the intention with which that expression was uttered. It could recognize this intention either by guessing that the speaker must have intended something and guessing what this was or by reasoning that the speaker must have intended something and this is what the speaker intended. If the audience is to reason to this conclusion, then it must have some

¹² Note that these arguments apply to a Gricean analysis of sentence meaning as well as to a Gricean account of reference.

grounds for believing that the speaker intended it to do something (namely, to identify x). The odds against an audience's correctly guessing what I intend for them to do when I make a certain noise are staggering. Suppose I say 'Glug gluck' intending that you should identify the table I am now writing at (and to believe of it that it is brown) but I do not make my intention known in any way other than by uttering 'Glug gluck'. I am not likely to effect what I intended. If I am going to have some chance of getting you to identify the table I am now writing at, you will have to have some reason for thinking that this is part of what I intend when I say 'Glug gluck'. What reason might you have for believing that this is what I intend?

I might tell you that this is what I intend, but to do so I would have to rely on a shared language. However, if we want to explain a shared language in terms of particular instances of successful communication, then we cannot presuppose that there is a shared language in order to explain instances of successful communication. If we do, our account will be circular.

The basis for your recognition of my intention that you should identify a table when I say 'Glug gluck' might be that I have, in the past, regularly used 'glug' in certain contexts involving tables. If you could recognize the similarity between what I am doing now (namely, uttering 'glug') and what I have done in the past (namely, uttered 'glug'), and recognize the similarity between the present context and the past contexts where I did the same thing, then you might have some reason for thinking that I intended you to identify the table. But this would involve two things: (1) I must

have uttered the sound 'glug' regularly in the past in contexts where a table was involved and (2) you must recognize the relevant similarity between my past actions and my present ones, and the relevant similarity between the present context and the past ones. So in order to account for successful occasion reference such that we could explain idiolect reference and reference in a language in terms of occasion reference, we shall have to explain, in non-linguistic terms, both the basis for the regularity of the speaker's behavior and the basis for the audience's recognition of regularities in the speaker's behavior in contexts which the audience can recognize as similar in the relevant respect. This will have to be explained in order for us to understand how the speaker could successfully communicate her intention on even one occasion.

To explain how a speaker could consistently use a word to refer to certain objects, we can either assume that this consistent use is accidental, in which case the odds are against it, or we must provide some basis for the consistency. One plausible basis for consistent use of a word is the speaker's intention to use the word in a certain way.¹³ Let us suppose that the basis for a speaker's regular behavior is her intention to use the word 'glug' in a certain way. The speaker sets up a correlation between the word and

¹³ If we hold that the speaker's consistent use of a word depends on an intention of this kind, then it would seem that the word already has a reference in the speaker's idiolect. If Cummins' definition of idiolect reference is correct, then this would not be the case. Cummins requires an external justification for the speaker's continuing use of the word in the intended way in order for a word to have a conventional meaning in the speaker's idiolect. This justification is formulated in terms of successful communication.

objects via her intention to refer to these objects.¹⁴

If the speaker's consistent use of the word 'glug' depends on what she intends to refer to with the word 'glug', then she must have an intention with the general form:

I intend to refer to objects that have feature G, and only to those objects, with the word 'glug'.

What we expect from a speaker's intention concerning the use of the word 'glug' is that it should enable her to use the word consistently. For the speaker to be able to do this, she must be able to identify and re-identify tables. Feature G provides the basis for her re-identifications. It is that feature of the objects by which the speaker is able to identify and re-identify the object(s).

Exactly what feature G is is a matter of dispute even among advocates of intentionalist theories. It might be a set of characteristics which are necessary and sufficient for an object's being a table. For example, a person may intend to refer to objects that have a relatively smooth extended surface elevated parallel to the ground by a structure that supports the surface from below, and only to those objects, with the word 'glug'. Another possibility is that the feature which objects must share in order to be called tables is less well-defined. For example, a person may intend to refer with the word 'glug' to anything that resembles a mental image she has of a table (this image may be a perceptual or memory image, or it may be one formed by imagination). The feature could also be: looks

¹⁴ Grice suggests this approach when he attempts to explain the meaning of sub-sentential units. (*Ibid.*, p. 238f.) This is another role that intentions to refer might play in a theory of reference.

like (or is like) the thing that is now causing me to utter the word 'glug'.

It seems unlikely that the feature G that figures in a speaker's intention to refer to certain things with the word 'glug' is a characterization of the necessary and sufficient conditions for something's being a table. There are many class terms whose potential referents cannot be characterized in terms of necessary and sufficient conditions. For example, Wittgenstein suggests that 'game' is such a term. Moreover, most of the time, even if there are necessary and sufficient conditions for something's being a table, a person who consistently uses the term 'table', for example, cannot say what they are. Since she has such difficulty formulating the necessary and sufficient conditions for something's being a table and yet uses the term consistently and with ease, it is unlikely that the basis of her consistent use is an intention to refer with the word 'table' to all and only those things that satisfy these conditions.

Moreover, even if the speaker did intend to refer only to things satisfying certain necessary and sufficient conditions, the theory of semantic reference would be circular if occasion reference presupposed either speaker's reference or semantic reference. If the necessary and sufficient conditions are specified in the words of the speaker's idiolect or in a shared language, then occasion meaning would be explained (partly) in terms of reference in a language. To explain occasion reference without circularity, we have to find some more basic relation between the speaker's uses of words and the objects the words refer to in order to say what a speaker

would refer to with the word 'table'. To understand what a speaker would refer to with the word 'table' without appealing to other linguistic items whose reference potential must, in turn, be explained, we posit a more basic relation between the speaker's use of a word to refer to certain objects and those objects. Two different relations have been proposed as probable candidates: a relation of satisfaction (or, with respect to mental images--resemblance) and a causal relation.

Suppose that a speaker formulates her intention to use the term 'glug' in terms of the similarities between an image she has of a table and other objects. Her intention to refer might then be as follows:

I intend to refer with the word 'glug' to all and only those objects which resemble the image I have of this table.

Putnam has argued that such an intention cannot be the ultimate basis for a speaker's ability to use a word consistently.¹⁵ In his argument Putnam considers whether it is possible for someone to invent a language which refers to his own sensations as they are given to him. Suppose such a person is given a sensation X and tries to give a name to sensations of that kind.

In effect, he intends that E should apply to all and only those entities which are similar to X.

If this is all he intends--if he does not specify the respect in which something has to be similar to X...--then this intention is empty...For everything is similar to X in some respect.¹⁶

¹⁵ Reason, Truth, and History (Cambridge: Cambridge University Press, 1981), pp. 65f.

¹⁶ Ibid., p. 65.

This same point can be made with respect to tables and images of them.¹⁷ Suppose that the person wanted to make up a language that referred to physical objects. He sees a table and forms the intention to refer with the word 'glug' to all and only those things that are similar to (or resemble) the perceptual image he has of a table. Here also, if this is all he intends, if he does not specify the respect in which the things must be similar, then his intention is empty, for everything is similar to the image in some respect. Suppose that the table he perceives is brown and has round legs. It would follow that anything that is brown is similar to the image, and anything that has round legs is similar. Given all the ways in which something can be similar to something else, one will not be able consistently to use the word 'glug' on the basis of an intention to refer to all and only those things that are similar to, or resemble, the image one has of a table.

The mere intention to refer to all and only those objects that are similar to X will not provide a basis for consistently using a term to refer to things of the same kind as X. However, if one could, in one's intention to refer to things that are similar to X, specify the respect in which something has to be similar to X, then the intention might provide a basis for consistently using that term. But then, Putnam argues, being able to specify the respect in which two things must be similar requires either that the person

¹⁷ Putnam might not agree. At one point he argues, with Berkeley, that physical objects cannot be similar to mental entities such as images. If physical objects cannot be similar to mental entities, I should have to intend to refer to all and only those things whose image is similar to the image I now have of a table.

forming the intention already is able to refer to the objects for which he is trying to introduce a new term or his ability must be based on another intention to refer to a similarity that certain things have.

If, on the other hand, he specifies the respect...then, since he is able to think this thought, he is already able to refer to the sensations for which he is trying to introduce a new term E, and to the relevant property of those sensations! But how did he get to be able to do this? (If we answer 'By focussing his attention on two other sensations, Z, W, and thinking that those two sensations are similar in respect R if and only if they are similar to Z, W', then we are involved in a regress to infinity.)¹⁸

Suppose, for example, that with the word 'dot' I intended to refer to any and all objects that are similar to this, '.', with respect to size and shape, etc. If I can specify these respects, Putnam claims, then I can already refer to dots and to their relevant properties (though not necessarily with the word 'dot'). If we try to explain how I am able to refer to dots and their properties in terms of other dot tokens, then we are involved in a regress to infinity. For example, if I say that this token, '.' is similar to the original one with respect to size, shape, etc., only if they are similar to <.,.>, then we must be able to specify the respect in which <.,.> is similar to <.,.>. If we try to specify the respect in which they are similar in terms of other ordered pairs of dots, then we have the same problem. We can say <.,.> is similar to <.,.> only if they are similar to <.,.>. But then we would have to specify the conditions under which <.,.> is similar to <.,.>, and so forth.

¹⁸ Ibid.

Of course the same thing can be said with respect to introducing a term for tables. The conclusion is that the intention to refer with 'glug' to all and only those things which are similar to or resemble a mental image of a table is either useless in guiding linguistic behavior, if the respect in which they must be similar to, or resemble, the image is not specified, or else one's ability consistently to refer to certain objects with the word 'glug' rests on something more basic than an intention of this kind. A person's ability consistently to use the word 'glug' to refer to tables cannot ultimately be explained in terms of her intentions to refer to all and only those objects that are similar to some image she has of a table.

An argument of the kind that purports to show that consistent use of a class term such as 'glug' cannot ultimately be based on a speaker's intention to refer to things that are similar to or resemble a mental image, can also be advanced to show that consistent use cannot ultimately be based on intentions to refer to all and only those things that stand in the same causal relation to some act of the speaker (her uttering a word or pointing at something). Putnam argues as follows.

Just as there are too many similarities for reference to be merely a matter of similarities, so there are too many causal chains for reference to be merely a matter of causal chains.

On the other hand, if I say 'the word "horse" refers to objects which have a property which is connected with my production of the utterance "There is a horse in front of me" on certain occasions by a causal chain of the appropriate type,' then I have the problem that, if I am able to specify what is the appropriate type of causal chain, I must already be able to refer to the kinds of things and properties that make up that kind of causal chain. But how did I get to be able to do

this?¹⁹

Any way of specifying the speaker's intentions to refer to things which are alike in respect R (including causal chains) is going to have to answer Putnam's objection. If one can intend to refer to a class of things (without presupposing any existing language or connections between words and objects), then one must be able to specify the relevant respect in which the potential referents are like the thing which serves as a prototype for the term. To specify the relevant respect (whether it be the respect in which two things resemble each other or the respect in which two things are causally related), one must be able to refer to that respect. But referring to that respect would again depend on being able to use the expression for referring to that respect consistently. If the basis for doing this is an intention to refer to all and only those similarities that are like the one that obtains between two other things, then this intention will require that she specify the relevant similarity between the respects in which these things are similar, and so on ad infinitum.

The point of Putnam's argument is that if a person is going to be able consistently to refer to some object(s) with some word, she must already be able to refer to that object (though not necessarily with that word). So for a Gricean account of semantic reference to succeed, we must postulate a reference relation more basic than occasion reference. At the very least we can conclude that a Gricean account of reference is not complete. But this does not mean

¹⁹ Ibid, p. 66.

that the project is fundamentally misguided.

For a speaker to be able to use a word consistently to refer to some object or kind of object, she must either have a representational system rich enough to enable her to recognize respects in which things are similar (e.g., mentalese), or her representational system must be so limited that, given any two items, she can only recognize one respect in which they are similar. Consistent use of a word would be possible under the second condition as well as the first. For suppose there is a person whose mental abilities are very limited. The only similarity that this person is capable of recognizing is similarity in size. Now suppose she has the intention to refer with the word 'small' to all and only those things whose image is similar to the image she has now. I suggest that, on the basis of this intention, she could consistently use the word 'small' (as long as she can remember the image).²⁰ She could do this because, even though there may be an infinite number of ways in which two things may be similar, this person can only recognize one: similarity in size. She need not even specify the respect in which two things must be similar when she intends to refer with 'small' to all and only those things which resemble the image she now has, because for her there is only one possible way.

Actual human beings have much richer mental abilities than the person we were imagining. We can recognize many possible similarities between things (and we recognize many possible causal rela-

²⁰ Her use of the term would strike us as bizarre (and inconsistent) because she would call a large object that was far away, 'small', and the same object, when it was close, she would not be call small.

tions). For any actual human being to be able to use a word consistently, she must be able to tell when something is related to something else in the appropriate way. For example, to use the word 'blue' consistently to refer to things which are like some blue circle image with respect to color, a person must be able to recognize which things are similar, and which are not similar in this respect. This may be a biologically based ability. Notice, however, that for consistent use of 'blue' to refer to blue things, she need not be able to specify the respect in which, for example, one blue circle with a radius of one inch is similar to another blue circle with the same radius and not similar to a third black circle of the same size. She need only recognize that the first and second circles are similar in a way that the first and third are not. If she can do this, then she can intend to use the word 'blue' to refer to things that are similar to some blue thing in the way that the first circle is similar to the second circle and not to the third. On the basis of this intention, given that she is able to recognize when things have the relevant similarity, this person could consistently use 'blue' to refer to blue things.

It is possible, then, for an isolated speaker to use a certain term consistently whenever she wants to refer to certain items. But this is just one condition for her to be able successfully to refer to that item on a particular occasion. Recall that semantic reference is to be explained in terms of speaker's reference (or reference in the speaker's idiolect), and this, in turn, was to be explained in terms of successful occasion reference. For a speaker successfully to refer on a particular occasion, her intention to

refer to a particular object with a certain word must be successful. This intention is spelled out as an intention that her audience should identify a particular object (e.g., a table) on the basis of their recognizing that she uttered a particular sound (e.g., 'glug') intending thereby to get them to recognize that this was what she intended (the Gricean mechanism).

One condition that seemed to be necessary for successful occasion reference was that the speaker consistently used a word to refer to the same thing(s). This was necessary if the audience was to have anything to go on in interpreting the speaker's utterance, that is, in recognizing the content of the speaker's intention. In addition, for successful occasion reference, the audience would have to recognize the relevant similarities between what the speaker did in the past and what she is doing now and between the context in which the speaker acted in the past and the context in which she is now acting. If the audience can recognize these similarities, it will have a reasonable chance of recognizing that the speaker intends to get them to identify a certain object by means of its recognizing that this is what she intended when she uttered the word.

The audience may go through a reasoning process like this:

There is S. She is uttering 'glug' again right in my face. Every time there is a table around S does that. But S would not go around saying 'glug' in my face for no reason. She must be trying to do something. Since she couldn't believe that saying 'glug' in my face would have any effect save the effect it has on me, she must be trying to get me to do something. Since she always says 'glug' when there is a table around, she must want me to do something with a table. There is a table here. She must want me to notice (or identify) the table.

There are a couple of problems with this explanation. First,

there is a problem concerning the audience's ability to pick out the relevant similarities between past and present episodes in which the speaker utters 'glug'. Secondly, even if the audience does recognize the relevant similarities, it is not clear that the audience would be able to reason that the speaker intended him to recognize her intention.

Let us begin with the first problem. Here, again, the problem of recognizing relevant similarities appears. There are two similarities that the audience must recognize in order to infer that 'glug' refers to tables on this occasion: (1) the similarity between what the speaker is doing now and what she has done in the past (namely, uttered 'glug') and (b) the similarity between the contexts in which the speaker has uttered 'glug'. We already had to assume that speakers have an ability to recognize when things are similar and when they are not in order to explain how a speaker could use a word consistently to refer to some object(s), so we may as well assume that the hearers have such abilities as well. Thus, we can assume that a hearer could recognize that an utterance of 'glug' is similar to another utterance of 'glug' and different from an utterance of 'gleek'. We can also assume that the hearer can recognize that one table is similar to another table and different from an antelope. However, the hearer must not only recognize similarities and differences between things, he must also recognize the relevant similarities, as distinct from irrelevant similarities and differences. A loud utterance of 'glug' is different from a soft utterance of 'glug'; a high-pitched utterance of 'glug' is different from a low-pitched utterance. If volume and pitch are irrelevant to what

the speaker intends to effect when she utters the word 'glug', then the hearer must ignore these differences and pay attention only to similarities of a certain type. But on what basis? The same thing holds for contexts. The hearer may be able to recognize that two contexts are alike, but these contexts may be alike in any number of ways. The hearer must be able to distinguish the relevant respects in which one context is like another from the irrelevant respects in which one context is like another. If all the audience has to go on is her observation of similar actions on the part of S in similar contexts, then given the number of ways in which any two things are similar (as well as different), the audience will have trouble identifying the relevant respects in which things are similar.

It may be objected that we are making matters too difficult by restricting our attention to meaningful utterances of words. It is much easier to see how a hearer could recognize the important similarities and differences in the speaker's behavior in different contexts when the speaker uses gestures to get across his message. For example, Bennett suggests hand-wriggling as a gesture for referring to fish.²¹ Suppose whenever a speaker wants the audience to identify fish, he makes a waving motion with his hands that imitates the way a fish moves. When the 'utterance' resembles the thing it is referring to, the hearer has more to go on. He can recognize not only the similarity between the gesture that is being performed now and the gesture which was made in the past, and the similarity between the context in which the gesture occurs now and the contexts in

²¹ Op. cit., p. 272-273.

which it occurred in the past, he can also recognize a similarity between the gesture and the thing(s) it refers to (namely, fish). This greatly increases the probability that he will recognize the important similarity between the contexts in which the gesture was performed (namely, the fact that they all involved fish). In fact, when the speaker uses an iconic gesture of this type, the hearer may be able to recognize, on the first encounter with the gesture, what the speaker intends him to identify. If the hearer is able to recognize the similarity between the gesture and fish, then he will be in a position to guess correctly what the speaker wants him to identify. (Pointing gestures may also help the hearer to recognize what the speaker is trying to get him to identify.)

If words (or proto-words) are used in conjunction with iconic gestures, the audience may be able successfully to recognize the speaker's intention that it should identify a certain object the very first time it is used. The basis for recognizing this intention, when the word alone is used, could be the constant conjunction of word and gesture in the past. However, even when iconic gestures are used, recognizing the important similarities (the ones the speaker is trying to exploit) is not easy. Anyone who has played charades knows that any given gesture can look like a number of things. Which one is the correct one (the one the speaker intended) is not obvious just from the gesture. Similarly, when someone points, there are always a number of things (and aspects of things) that she might be pointing at. Discovering which of those things is the one she intended is quite difficult especially if one cannot ask the speaker which one she intended.

Nonetheless, when gestures are used the range of possible objects the hearer may recognize as similar to the object to be identified is greatly reduced (at least in comparison to when just sounds are uttered). The audience may successfully guess what the intended referent is, and so successful occasion reference would not be prohibitively unlikely.

Thus far, then, we have argued that the hearer may be able to identify what the speaker is trying to get him to identify by doing certain things. Now we turn to the next problem. How do we get from the hearer's recognition of the important similarities in the speaker's behavior over time and the contexts in which this behavior has occurred to the hearer's recognition that the speaker is doing these things in order to get the audience to do something?

Suppose an audience sees someone gesturing fishily and saying 'The fish are biting.' The audience recognizes the similarity between the fish gesture and fish. If the speaker is to successfully refer, then her audience must identify fish on the basis of their recognition that the speaker is uttering the gesture-sound combination with the intention that they should identify fish, and their recognition is supposed to be based on the recognition that this is what the speaker intended. Supposedly they recognize this intention behind the speaker's action by trying to figure out why the speaker did what she did and inferring that she did it in order to get them to do something (namely, to identify fish).

Bennett argues that knowledge of the speaker could lead the audience to believe that she intended to produce some effect in the audience by means of the audience's recognizing that this is what

she intended to effect.²² Bennett considers the following case:

[O]ne day we observe a tribesman, U, stand in full view of another, A, and emit a snake-like hissing sound while also making with his hand a smooth, undulating, horizontal motion that resembles the movement of a snake.²³

Bennett argues that on the basis of what we know about U we could conclude that U intended "to affect something other than himself," since "whenever U engages in protracted, apparently connected sequences of behavior he intends to affect something outside himself. We can also conclude that U intended "to affect A" since "it would be out of character for U to think he was affecting anything other than A, and we can conclude that he intended "to affect A auditorially and/or visually, or in some way arising from the audio-visual effect" since it would also be out of character for U to think that he was having any immediate effect on A other than an audio-visual one. Further, because "whenever U deliberately produces a sensory change in another tribesman it is in order to get him to believe something" we can conclude that U intended "to get A to believe something." In addition,

the nature of the performance--the fact that it naturally induces the thought of a snake--forces us to conclude that if U is trying to make A believe something, it is something about a snake.

This supports the conclusion that U intended "to get A to believe something about a snake." We could also conclude that U intended "to get A to believe that there is a snake nearby." The basis for this inference is that no other plausible alternative is available.

²² Ibid., pp. 138-140.

²³ Ibid., p. 138.

A cannot think of anything else that U might be trying to get him to believe about snakes. What is more, we can conclude that U expected that A would go through this reasoning process and intended that A should think that he expected this in order for A to realize that U intended him to believe that P. This last step makes it clear that it is not just we who are supposed to go through the reasoning process. Both A and U also draw these conclusions.²⁴

To suppose that two pre-linguistic tribesman (or even one) could actually go through this line of reasoning seems rather improbable. Not only are some of the steps in the reasoning process unlikely steps that a primitive tribesman would take, but the very idea that a person with no shared language or idiolect would be able to formulate an argument of this sort seems far-fetched.

Let us first go through the reasoning process step by step to identify particular inferences that are questionable. The first inference is:

Whenever U engages in protracted, apparently connected sequences of behavior he intends to affect something outside himself. Therefore when he engages in the snake pantomime he must intend to affect something outside himself.

The inference is valid, but not sound. It is difficult to imagine a person, primitive or sophisticated, whose protracted, apparently connected sequences of behavior are always directed towards affecting something outside himself. I perform such a sequence of behavior everyday when I brush my teeth, and I do not want to affect any-

²⁴ The quotes from Bennet are all taken from Linguistic Behavior, Op. cit., pp. 138f.

thing outside myself.²⁵ Having watched National Geographic specials on television, I find it quite plausible that primitive tribesmen would go through sequences of behavior aimed only at affecting themselves, for example, inspecting their bodies for lice. It also seems likely that, without the help of words, they might go through sequences of behavior in order to remember episodes in the past by re-enacting them, or aspects of them, physically. Therefore, it is unlikely that A would know that whenever U engages in protracted, apparently connected sequences of behavior he intends to affect something other than himself, or that he would reach this conclusion, because the statement is most likely false and A most likely has no reason to believe it is true. The premise has to be weakened if it is to be true. Let us say, instead, that A would be justified in inferring that since, often, when U engages in a protracted, apparently connected sequence of behavior he intends to affect something outside of himself, it may be that when he performs the snake pantomime he intends to affect something outside of himself. This inference may be enough for A to go on to the next step.

The second conclusion A is supposed to be justified in reaching is that U intended to affect A. His reason for thinking this is that "it would be out of character for U to think that he was affecting anything other than A." We should ask whether A would think that it would be out of character for U to think he was

²⁵ It might be argued that my teeth are something outside myself (assuming that my self is not identical with my body). But to ask a primitive tribesman to see that I am trying to affect something outside of myself when I brush my teeth would be going too far.

affecting anything other than A. First, why would this be out of character? and secondly, why would A think that this was out of character? Bennett argues that the members of the tribe, being limited in what they can believe, for the most part, to those propositions which are easily falsified, are likely to have mostly true beliefs. This is an important assumption, for in order for A to think it would be out of character for U to think he was affecting anything other than A, A must have noticed something about U's typical patterns of thought (or at least of thought-guided behavior). The reason A would think it unlikely that U should think he was affecting something other than A would be that A does not have any evidence that U has mistaken beliefs about the efficacy of pantomime. His evidence for this belief might be that U does not pantomime except when he wants to affect some audience. But how does A know this? If we answer, by observing U's past pantomiming behavior, we will not get any further because then we must explain how A is supposed to know what U intended to affect with his past pantomimes. We cannot explain this by saying that A noticed that in the past U only pantomimed when he intended to affect some audience.

It might be that A believes that it would be out of character for U to try to affect something other than A with his pantomime because A knows that U has generally correct beliefs about cause and effect. A could conclude this on the basis of observations of U's behavior in non-communicative contexts. But in order for A to know U has generally correct beliefs about cause and effect, U must have generally correct beliefs about cause and effect, and A must believe that he has these beliefs and that they are correct. We would have

to suppose, then, that two pre-linguistic, primitive tribesmen have generally correct beliefs about cause and effect. (Is there any reason to suppose that only later, when they have developed a sufficiently rich language, that they would start to hold false beliefs about the magical efficacy of incantations and ritual dances.) We will have to suppose that, before language developed, primitive tribesman had beliefs about cause and effect pretty much like our own (though perhaps fewer of them). Given the number of mistaken beliefs that more sophisticated tribesmen have about cause and effect, this does not seem very likely.

The same presumption of developed rationality and theory seems necessary to reach the conclusion that U must have intended to affect A auditorially or visually or in some way arising from the audio-visual effect. Bennett argues that A would believe it was "out of character for U to think he was having any effect on A other than an audio-visual one." This is just presuming too much of a primitive tribesman's knowledge of nature and natural processes.

Bennett cites a different kind of rationale for A's concluding that U wants him to believe something. A is supposed to know that whenever U deliberately produces a sensory change in another tribesman it is in order to get him to believe something. A believes that U is deliberately trying to produce a sensory change in him. Therefore, A concludes that U must be trying to get A to believe something. But what kind of evidence is A supposed to have for his general statement. Even if A could tell that U was deliberately trying to produce a sensory change in another tribesman (a dubious hypothesis), and even if U was successful in doing so, how, just by observ-

ing the proceedings, would A know what U intended to do? He cannot observe that a belief has been produced. He cannot observe U's intention. Since there is no language, he cannot be told what the third tribesman believed nor what U intended. Even if the third tribesman acted on his newly acquired belief, how would A be able to tell (or even to guess) that his action proceeded from a belief which he acquired on the basis of U's action and that U had intended the whole process to occur? All A sees is U making gestures and noises and the third tribesman going off and doing something. Why should A even think those occurrences were connected by intentions and beliefs?

A concludes that U is trying to get him to believe something about a snake because he notices that the performance naturally induces the thought of a snake and reasons that U must be aware of this fact and able to use his knowledge to get A to think about a snake. I might agree, with some reservations, that the pantomime could naturally induce A to think about a snake.²⁶ But it is another matter to hold that A is, or could be, psychologically sophisticated enough to realize that the pantomime naturally induces the thought of a snake and is also sophisticated enough to think that someone else would believe the same thing and would try to exploit this natural fact. It seems highly problematic to suppose that they understand natural physical processes as well as natural psychological processes without the benefit of a shared language which would

²⁶ There are some problems with this suggestion because there are a number of things the pantomime could 'naturally' induce someone to think of.

enable them to pool their observations and to test their psychological hypotheses.

The beliefs about human psychology which justify A's conclusion that "U realized that A would go through these steps and he realized that A would realize that U intended that A realize that U intended that A should have a belief about a snake, and A would trust U enough for this to be a reason for A to have a certain belief about a snake and U expected his intention to be successful for this very reason," are complex and subtle. Here we have A making sophisticated hypotheses about what U must have reasoned and we have U making sophisticated hypotheses about what A would think U thinks. These tribesmen will have to believe (1) that they reason, (2) that others reason in much the same way, and (3) that others also believe (1) and (2). They are supposed to believe this on the basis of non-linguistic behavioral evidence.

Every step in the reasoning process a tribesman is supposed to go through either to effect some change in another by means of gestures or sounds or to be affected by someone's gestures or sounds involves knowledge that a primitive tribesman cannot reasonably be expected to have. Moreover, the chain of inferences is one that a primitive tribesman is not likely to formulate. It is even less plausible to suppose that primitive people would be aware of their reasoning processes. It is one thing to make inferences; it is quite another to recognize that this is what you are doing. It is assuming too much to suppose that a person, without the benefit of a shared language, can go through a complicated chain of inferences of the type required in Bennett's story. I do not object, on princi-

ple, to assuming that pre-linguistic people (or animals) have some cognitive abilities. It may be reasonable to assume that human beings are naturally endowed with a representational system which enables them to see similarities and differences and to classify objects, events or sensations into general groupings. It is not reasonable to assume that human beings are by nature endowed with the ability to follow (much less to construct) fairly complicated and correct chains of inferences and to recognize that this is what we are doing.²⁷

The explanation of occasion meaning would be much simpler and much more plausible if we assumed that there already was something like semantic reference (or meaning), prior to occasion meaning. Rather than trying to explain semantic (and speaker's) reference in terms of intentions to effect some change in an audience (namely, to get the audience to identify some object) on a particular occasion, we should explain the speaker's intention to effect some change in an audience on a particular occasion by uttering particular sounds or making certain gestures, in terms of the semantic reference of those sounds and gestures. What we need in order to get the speaker into a position to use expressions and gestures for certain purposes and to get the audience to recognize that this is what the speaker is up to (in other words, the conditions for successful occasion reference) are expressions and gestures which already have a reference for both the audience and the speaker. We should explain, first, how gestures and expressions come to be apt means for carry-

²⁷ I know of human beings who find this quite difficult.

ing out certain intentions, then we can explain how people use them for communicative purposes.

Although such an explanation is not within the scope of this dissertation, I would suggest that the basic mechanism by which words and gestures become apt means for carrying out communicative intentions is conditioning and imitation. We can use Bennett's suggestion that some gestures (and perhaps even sounds) naturally induce certain thoughts and also suppose that some stimuli naturally induce certain sounds in order to account for the first pairings of sounds and gestures with objects in the world. These associations would be reinforced through use and perhaps also through their effects. After a while, a primitive tribesman might notice that certain sounds and gestures have an effect on his fellows and on himself and on the basis of this observation try to exploit the connection. When he wants to produce certain effects, he might use the words and gestures that have produced that effect in the past. His belief that they will produce this effect need not be based on any hypotheses he entertains about what others will think he is trying to do. Nor will their efficacy depend on what others believe he is doing. No one in the tribe need believe anything about the mental states or intentions of others. They need not even believe anything about their own mental states and intentions. They could still successfully communicate their intentions to an audience.

Such an account would be preferable to a Gricean account of occasion reference because it does not require that we presuppose that primitive pre-linguistic people have true beliefs about cause and effect and about the mental processes of others. It is quite

possible that language arose before anyone had any beliefs, true or false, about mental entities and processes of any kind.²⁸

Once a basic stock of referring expressions has been established in the language of the group, we can explain speaker's reference in terms of intentions to refer with a certain expression. Eventually it will be possible to introduce new expressions into the language simply by using them in conjunction with expressions and gestures in the already established language. Here the speaker's intentions to get the audience to identify some object when she utters some heretofore unheard of expression may determine the reference of that expression. However, she can reasonably expect her audience to figure out what her expression refers to by relying on their ability to understand the rest of the sentence and their knowledge of the context alone. She need not expect them to recognize that she intends them to identify a certain object and depends on their recognizing that this is what she intends in order to get them to do it.

In a developed language, there are institutionally recognized means for introducing referring expressions into a the language. Once language is sufficiently developed, reliance on speaker's intentions to determine reference potential is greatly diminished. I have already, in connection with proper names, discussed one institutional means for changing reference potential.²⁹ There are

²⁸ This seems to be Sellars' point in "The Sellars-Chisholm Correspondence on Intentionality," in H. Feigl, M. Scriven, and G. Maxwell (eds.), Minnesota Studies in the Philosophy of Science, Vol. II (Minneapolis: The University of Minnesota Press, 1958), pp. 529-539.

procedures in English for introducing and changing names. These procedures are clearly specified and publicly recognized. They say who can give a name to whom under what conditions by doing what. When the properly qualified person does the specified things under the proper conditions his action is a name-giving, and it is recognized as such by the community in which this procedure is in force.

Institutionalized procedures also exist for introducing other kinds of terms into a language. Persons with the right credentials under the right circumstances can introduce new terms into the language by doing certain things. A physicist who discovers a new sub-atomic particle may introduce a new term into the English language by calling the new particle something in her report of the finding. What she calls this particle in this context becomes the English word that potentially refers to particles of that type. Similarly, an inventor may refer to his invention with a certain word when he applies for a patent or otherwise publicly reports his invention. That word then becomes the English word which potentially refers to his invention.

I argued earlier that what a name that is given by institutional means refers to does not depend on what the name-giver intended it to refer to. This also holds true for class terms that are introduced by institutional means. What the name or word refers to depends on what the person who fulfills the institutional requirements, and is thus entitled to give the name, does, not on what she intends. In other words, the reference potential of the term is

²⁹ See Chapter Five.

determined by the institutional procedures.

Whether a term could have a determinate reference potential independently of any particular speaker's intention without someone's having intended to refer with that term to some particular thing or kind of thing, is a different matter. It could be argued that the term would not have a determinate reference potential in English unless the person who gave the term to something did certain things, but that she would not have done these things, had she not intended to refer to a particular thing or kind of thing with the term. It would follow that her intention was necessary for the term to have a determinate reference potential in English. This argument will not work. The speaker's motivations for doing what she did are irrelevant.

What does seem to be relevant is the fact that as a result of what the term-giver did, the community recognizes the term as having a certain reference potential, and that they accept the term as referring to a particular thing or kind of thing, even if the person who coined the term or gave the name should now intend to use the term or name differently. The community's acceptance of the term seems to rest on a general intention to refer with a term that is introduced by an institutional procedure to the thing(s) to which the term was given. This intention to refer with a term to the thing(s) to which it was given seems to be the important one. Whether a term introduced by means of an institutional procedure has a certain determinate reference potential in English (which includes the thing that the term was given to), may well depend on general

intentions of this kind.³⁰

Intentions to Refer and Intensions

In this section I will discuss theories of reference potential that attempt to explain how the reference potential of class terms in a language is determined in terms of speakers' intentions to refer to things with certain features shared by all and only those things which will be referred to with that term.

We have rejected a Gricean account of semantic reference which tries to explain semantic reference in terms of occasion reference, but there is another kind of intentionalist account of semantic reference. According to this account, the semantic reference of class terms is determined by what some group of people intend to refer to with the term. This group may be either the majority of people who speak the same language (in which case the account is a majoritarian one), or it may be the group of experts. The basic idea is that people have intentions to use a word to refer to certain objects which have feature G. (We have already discussed such intentions above.) The word refers, in a language, to all and only those things that have feature G if some group of people have this intention. The reference rules for expressions in a language could be formulated either in terms of the inten-

³⁰ Note that such intentions are general in two ways. First, they concern terms in general. It is not necessary to formulate the intention for each term that is introduced by institutional means. Secondly, it is a general intention in the sense that the general community of speakers has such an intention. It is not the intention of any particular person.

tions of this group of people:

In \underline{L} , \underline{x} refers to all and only those objects to which the relevant group of people intend to use \underline{x} to refer;

or, since their intentions are formulated in terms of feature \underline{G} , the reference rule can be formulated in terms of that feature:

In \underline{L} , \underline{x} refers to all and only those objects which have feature \underline{G} , where feature \underline{G} is that feature which enables speakers to identify and re-identify objects belonging to the class named by \underline{x} .

I will consider two accounts that attempt to explain how semantic reference is determined in terms of speakers' reference. Both accounts try to explain semantic reference in terms of what some group of speakers would refer to with some term. What these people would refer to is determined by their intentions to use the word in a certain way. The first account says that what an English word can be used to refer to is determined by what the majority of speakers would refer to with that term. The second account tries to explain semantic reference in terms of what the experts would refer to with that term. These accounts are based on two observations: (1) that the reference of expressions in a language does not depend on the intentions of any particular speaker; and (2) that for words to have a reference potential someone must intend to use them in a certain way.

What is significant about expressions in a language, what distinguishes them from expressions in an idiolect or other physical objects used on some occasion to refer, is that expressions in a language have a stable reference potential which is not dependent on any particular speaker's intentions regarding the word. The reference potential of English expressions does not depend on what I want it to be or on what

you want it to be. It is independent of our particular intentions. No matter how many times or with what intensity I intend to refer to keys with the word 'snow', the word 'snow' continues to refer, in English, to snow, and not to keys.³¹ Furthermore, expressions in English can refer (in the right context) even when the thing that produces those expressions cannot. A parrot can say, "Polly wants a cracker," without intending to refer to anything. Nonetheless, the word 'Polly' in the sentence she produced does refer to Polly. The same thing can be said of computers that produce English sentences. The computer does not (and cannot) refer to anything, but referring expressions in the sentences the computer produces do refer.

Although the reference potential of an English expression does not depend on any particular person's intention to refer with that expression, it is obvious that this expression would fail to have a reference potential of its own if no one had ever intended to refer with it. So while it is true that the reference potential of these expressions does not depend on any particular person's intention to refer, it does seem to depend on intentions to refer.

On the basis of considerations such as these, we conclude that a word can have a reference potential in a language only if someone intends to use that word to refer to something. This may be a necessary condition for a word's having a reference potential in a language, but it is not a sufficient condition. I can intend to refer to the kind of

³¹ 'Snow' may come to refer to keys in my idiolect. Because of this you may interpret my sentences which contain the word 'snow' as sentences about keys. But this does not mean that 'snow' in English refers to keys.

bugs I saw crawling above the sink last night with the word 'yuccuk'. But this is not sufficient for making 'yuccuk' an English expression that potentially refers to those bugs. In order for the word 'yuccuk' to refer to a certain kind of bug in English, it has to be accepted by the English-speaking community (or some portion thereof) as a word for referring to that bug. If it were, it would then become 'community property' and my intentions regarding its use would no longer be important.

Accounts that explain semantic reference in terms of speakers' intentions are also supported by the fact that the reference potential of expressions in a language sometimes changes. The mechanisms of change are often changes in the way that speakers use the word.³² These changes are of several kinds. Perhaps the most radical change in reference potential occurs when an expression which previously had no reference potential in English, acquires one. Another kind of change occurs when an expression which already has a reference potential comes to have a different one; the set of potential referents may become larger or smaller or undergo a more drastic change in which some things that were potential referents of the expression no longer are, and other things that were not potential referents become potential referents. All of these kinds of changes occur in English. New words are added to the language, (e.g., 'quark'). Names which previously had only 17 potential referents (e.g., 'Kelly Mink') come to have 18 potential referents, or which previously had 17 potential referents come to have only 16 potential referents (e.g., if one Kelly Mink changes her name). The

³² Changes by institutional means would not count as evidence.

reference potential of class terms also changes. For example, 'rummage' at one time could be used in English only to refer to the arrangement of cargo in the hold of a ship or a stowage or storage place. Now it can be used to refer to something completely different.

Although one way for the reference potential of expressions English to change is by institutional means, this cannot be the fundamental way, since the existence of such institutional procedures requires a fairly developed community, which, in turn, would require a fairly developed language. The reference potential of an English expression can change even when there are no institutional procedures for changing it. There are no institutional procedures for introducing unofficial names, yet such names often become part of the language. Slang words also become English expressions after a period of time,³³ even though there is no institutional procedure for introducing such terms. Words become obsolete and no longer have a reference potential in English without the benefit of an institutional procedure. These kinds of change in reference potential seem to be the result of changing patterns of use within the community. The basis for these changing patterns of use seems to be changing patterns of intentions to refer.

What seems to be important in these changes in reference potential is that the community comes to accept certain uses of words. When it does, the words become English expressions with determinate reference potential of their own.

To explain how a word acquires a certain determinate reference

³³ The word 'chum', now a legitimate English expression, was a slang word in 17th century England.

potential in a language, we must explain how it happens that a certain way of using the term ceases to depend on any particular person's intention to use the term in that way. Our general answer will be that a term becomes a term in a language when the linguistic community accepts that use of the word. The accounts that I will discuss say that the linguistic community accepts a certain use of a word when some group of speakers (either a majority of them or the group of experts) intends to use the word to refer to objects which have a certain feature. Majoritarian accounts say that the majority of the speakers of English have an intention to refer to these things.

Objections to majoritarian accounts of semantic reference are based on the claim that what the majority of English-speakers would (and sometimes do) refer to with a term is not always the same as what the English term can properly be applied to. This is especially obvious with respect to technical terms and with natural kind terms. For example, consider the word 'gold'. Most English-speakers, it is claimed, would refer to a shiny, yellowish, rather stiff metal with the word 'gold'. However, there are objects that fit this description but which are not gold at all (e.g., fool's gold). Further, there is gold which does not fit this description. Thus, the reference potential of 'gold' in English is not what the majority of English-speakers would call gold.³⁴

We could formulate a more general argument against the claim that

³⁴ This argument is loosely based on Putnam's argument that extension is not determined by intention in "The Meaning of Meaning," Mind, Language and Reality, (Cambridge; Cambridge University Press, 1979), pp. 215-271.

the semantic reference of technical terms, including natural kind terms, is determined by what the majority of speakers would refer to. Let us consider what ordinary speakers would call gold. Suppose that the basis of each speaker's use of the word 'gold' is an intention to refer to things which bear relation R (either a causal relation or a similarity relation) to some prototype of gold. In order for the speaker to use the term consistently, she must be able to ascertain whether something bears this relation to the prototype. What most speakers must rely on to ascertain whether an object bears a certain relation to the prototype are surface features of the prototype and the objects in question. That is what they base their use of the term on.³⁵ However, the reference potential of words of this kind, in English, often has little to do with surface features that can easily be detected by the observant speaker. Thus, the kinds of intentions on which the majority of English-speakers can base their consistent use of a term are often not the kinds of intentions on which correct usage of that term could be based.

Because it does seem possible that the majority of English-speakers could base their consistent use of a word on intentions to refer to certain things among which are included things to which the English word does not refer and also among which other things to which the English word does refer are not included, we can reject the claim that the semantic reference of English expressions is determined by what the majority of English-speakers would use the word to refer to. This

³⁵ For this reason, explaining consistent use on the basis of speaker's intentions to refer to everything which stands in the same causal relation to her utterance as some other thing, is less satisfactory than explaining consistent use in terms of resemblances. Seeing similarity of causal relation is much trickier than seeing similarities in images.

leaves the hypothesis that the reference potential of the terms is determined by what the experts intend to use the word to refer to. This hypothesis is more plausible than the majoritarian one. For although most of us cannot tell the difference between real gold and fool's gold, and so most of us would use the word 'gold' to refer to samples of both, the experts are supposed to be the people who do know the difference. What the English word 'gold' refers to could depend on what they intend to refer to with the term.

What would disprove this hypothesis would be some case where not even the experts used the term correctly. At first glance it seems quite unlikely that there could be an English expression which no one, no even the experts, used correctly. But here again, the example of 'gold' suggests such a case. Before there were adequate tests for gold, there already existed a word for gold. Although, in the absence of an adequate test, not even the experts would have used the word correctly (i.e., would have used the word to refer to all and only those things that were gold under the appropriate circumstances), the word for gold could have still referred only to gold. The discovery of an adequate test for gold would make it possible for some people (namely, the ones who could perform the test) to use the term correctly, but it need not change the reference potential of the word for gold. Before the test was invented, the word for gold could have referred to gold, and after the test was discovered the word for gold still could have referred to the same stuff. In fact, it is difficult to make sense of someone's looking for a more adequate test for gold if 'gold' only meant what the experts would identify as gold at a given time.

Although the intentions to refer to certain things with the word

'gold' which guided competent speakers' use of the term did not determine the reference potential of that word in that language, an intention of a different kind may have. To explain how it is possible for a word to have a determinate reference potential even when no one is able to use the term correctly, we have to suppose that someone has some intention to use the term in a certain way (or else that there is some magical connection between the word and what it refers to). With natural kind terms, this intention cannot be a specific intention to refer to certain things that have an identifiable feature G with the word. I would propose, instead, that the kind of intention people have with respect to the word 'gold' is the intention to refer with that word to things that really are gold. If people had such an intention before they developed an adequate test for gold, and if the reference potential of the term in their language was determined by this intention, then we can understand how it was possible for all of them to use the term in that language incorrectly. The basis for their use may have involved incorrect beliefs about what real gold was like, so that their specific intentions concerning what to apply their word for gold to may have led to incorrect usages. Nonetheless these usages would still have been incorrect, even for these people, because the word for gold was used to refer to things that were not really gold and it was not used to refer to things that were really gold. Of course, before the test was developed they could not have said which of their uses were correct and which were incorrect. But they could have admitted the possibility that no one was able to use the term correctly (in the sense of being able to say of each thing whether it was gold or not under the appropriate circumstances).

To intend to refer with the word 'gold' to things that really are gold, one must presuppose that there is a natural order in which certain things are justifiably grouped together. This does not mean that one must presuppose an order independent of any human minds. The justification for grouping certain things into kinds may be that by grouping things this way we can make sense of all our experiences. It may be that we impose an order on nature (or on experiences) and that we are constrained in doing so only by those constraints which follow from our desire to predict future occurrences effectively. If we hold this kind of intentionalist theory of how the reference of natural kind terms is determined, then we cannot at the same time say that the reference potential (or extension) of these terms is what either the majority of speakers or the experts would call gold, unless we interpret 'experts' very strictly. Only if we restrict the class of experts to those who know what gold really is, will it be true that gold can be used in English to refer to all and only those things that the experts would refer to. But this means that if no one knows what gold really is, then we will not be able to discover what the potential referents of 'gold' are by observing how people use the word.³⁶

What natural kind terms can properly be used to refer to depends, then, to some extent on what the world is like, not just on what speakers think the world is like.

³⁶ This implication should recommend my account over any other which entails that we could discover the potential referents of gold in that way. Another important implication of this intentionalist account is that no important truths about gold will be discovered by observing how people use the word 'gold'. We cannot assume that people are any less in the dark about gold (or about good) than we are.

We should reject intentionalist accounts of semantic reference which say that the reference of class terms is determined by what either the majority of speakers or what the experts would use the term to refer to. More precisely, we should reject such accounts if they say that what the relevant group of speakers would use a term to refer to depends on their intentions to use the word to refer to all and only those things that they identify on the basis of the presence or absence of a certain feature.

The kinds of facts that support an intentionalist account of reference potential do support the conclusion that speakers' intentions to refer determine reference potential. But the intentions that determine reference potential need not be specific intentions to refer to objects which have certain identifiable features, they can instead be general intentions to refer to the real things. Specific intentions to refer to objects that have certain identifiable features may sometimes be the basis for each speaker's consistent use of a word. But the basis for speakers' consistent use of a word, even of the experts' use, need not be the basis for correct use of the word.

What we have in English, and most likely in many other languages as well, are intentions to refer which presuppose a natural order or at least an ideally justified theory of nature. What we intend to refer to with natural-kind terms, for example, are the actual members of actual natural kinds--even if we do not know exactly who these members are and could not recognize them if we saw them. What we intend to refer to with terms for properties are similarly actual properties.

Our intention to refer to the real things, not just to the things we may think are the real things, explains our deference to the experts.

It is the experts who are supposed to know about these things. It also explains how the reference potential of, for example, scientific terms, does not change whenever theories change. As we learn more about reality we are better able to tell what things are potential referents of our terms, so our beliefs about which objects are potential referents of our terms may change. Nonetheless, the potential referents remain the same.

Our intentions to refer, even our general ones, do not always presuppose a natural order or ideal theory of nature. At an even more general level, however, we can say that our general intentions are to use words correctly. For natural-kind terms, the standards of correctness are the natural order or the ideal theory. For other kinds of terms, the general intentions may be intentions to use the word the way it has always been used or an intention to use the word as the linguistic elite uses it. Our intentions concerning the use of names seems to be just to respect the naming institution.

To be able to carry out these intentions, one must formulate hypotheses about how one identifies the correct referents (feature G). These hypotheses are continually revised. We ask "Would you call that blue or green?", and "Would that be called a table or a desk?" It is (usually) not important that we all have the same hypotheses, or the same means of re-identifying the correct referents. What is important for correct usage is a history of usage and standards of correct usage that have stood the test of time.³⁷ On the basis of these past usages

³⁷ It is no accident that dictionaries cite usages by famous men and women of letters as justification for a usage. The question "What makes some uses of language correct and others incorrect?" deserves more seri-

which we accept as correct, we formulate and test our hypotheses.

We could summarize our discussion of theories which try to explain the reference potential of English expressions in terms of what some group of speakers intends to refer to with the expression as follows. If the intentions of the group are supposed to be the intentions which are the basis for their consistent use of the term, then these accounts are wrong. We should make a distinction between these specific intentions by which we guide our own linguistic behavior and the general intentions which set the standards for correct usage. Of course there will be some relation between the two. Examples of correct usage which are known to be correct provide the basis for each speaker's hypotheses about how to use the term, what items to apply it to. The hypotheses of most people have to lead to behavior which is more or less similar so that people can understand each other. It is through the hypotheses that individual speakers use the language (more or less correctly). It is through something else that the standards of correct and incorrect usage are set.

The intentions that matter, then, are not specific intentions concerning the use of a word to refer, they are more general intentions to use the word properly. Sometimes the intention to use a word properly is an intention to use the word as it has been used by speakers whose linguistic competence is not a matter of dispute. Sometimes this intention is formulated in terms of an ideal theory of nature or a belief in

ous study. I suspect that there are many factors involved. Only sometimes does a usage become acceptable when a sufficient number of people use it over a sufficiently long time. 'Chum', for example, was slang in the 1600's. It has now made it to the status of a colloquialism. What would it take to make it a correct usage? Surely not more time.

a natural order. These intentions to use words properly help to explain the normative force of language. Actual linguistic behavior is guided by these intentions indirectly. Speakers of a language form hypotheses about how a word should be used. Their linguistic behavior may be (and often is) guided by these hypotheses. But these hypotheses are formulated because speakers have a more general intention to use the word correctly, and they are rejected if they do not enable the speaker to conform to the recognized standards of correct usage.

Conclusion

My primary goal in this dissertation was to see to what extent intentions to refer determine reference. My strategy was to divide theories of reference into theories of disambiguation and theories of reference potential. This strategy has been successful, for it enabled us to evaluate intentionalist theories by looking only at that evidence which was appropriate to the particular intentionalist claim. Throughout this dissertation we saw that certain intuitions supported one intentionalist claim, but were irrelevant to others. My distinction between theories of disambiguation and theories of reference potential is, in itself, an important contribution to the study of reference.

On the basis of intuitions about when determinate reference has been made, I argued that a particular speaker's intentions to refer do determine (in part) the reference of her ambiguous referring expressions. The speaker's intention to refer was spelled out as an intention to refer to the object she had in mind. This object is not the one that

satisfies or resembles her representations of the object; it is, instead, the one that caused her to have this representation, either directly or indirectly.

With respect to the theory of reference potential, I discussed both the role that a particular speaker's intentions play in determining reference potential and the role that the intentions of some group of speakers play in a theory of reference potential. The claim that a particular speaker's intentions determine the reference potential of the English expressions she uses was dismissed. The claim that a group of speakers' intentions determine the reference potential of English expressions was more plausible. Despite its initial plausibility, I rejected this claim. I argued that the sum of individual intentions to refer does not determine the reference potential of English expressions. I noted that the speakers of a language could all be mistaken about the referents of some of their terms.

The conclusions I have reached are important for the philosophy of language in general and for theories of reference in particular, but they also have implications for other fields of philosophical inquiry. Although it is beyond the scope of this dissertation to develop these implications fully, I will suggest at least some of them. The general conclusion reached, especially in the discussion of reference potential, was that, however they originated, once languages are established they take on a life of their own. They are no longer within the control of individual speakers or even of groups of speakers. Further, it is possible that no one in a linguistic community has a complete mastery of the words they use. For complete mastery requires knowledge not only of what is in one's mind, but also knowledge of what the world is really

like or at least knowledge of what the ideal theory says the world is like.

Once we see that mastery of a language requires this type of knowledge, certain projects become untenable. For example, to discover what goodness is, it will not do simply to analyze our shared concept of goodness. For while this shared concept may guide our use of the term, it need not be what determines the extension of our word 'goodness'. To find out what goodness is we must investigate the world (or at least the human world). Investigations of language alone cannot help us.

In addition, inasmuch as our thoughts and beliefs are shaped by and formulated in a language (and I think they are to a great extent), the contents of these thoughts and beliefs can always be beyond our comprehension of them. This conclusion undermines attempts to ground knowledge in the immediately given. The foundations of knowledge are not to be found in the immediate evidentness of thoughts and beliefs, since the contents of these thoughts and beliefs are not immediately apprehended by minds.

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APPROVAL SHEET

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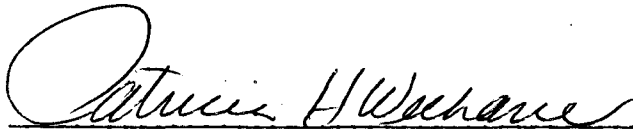
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

8/14/85

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