

Chapter IV

CHAPTER IV

The New Theory Of Reference

On January 20th, 22nd and 29th 1970 Saul Kripke delivered three lectures at Princeton University. They produced something of a sensation. In the lecture, he argued, among other things that many names in ordinary language referred to ordinary object directly rather than by means of associated descriptions. He points out that causal chains from language user to language user were an important mechanism for preserving reference : that there were necessary *a-posteriori* and contingent *a-priori* truths : that identity relations between rigid designators were necessary and that materialists identity theories in the philosophy of mind were suspect. Interspersed with this was a considerable amount of material on natural kind terms and essentialisms. As a result of this lectures and related 1971 paper "Identity and Necessity", talk of rigid designators, Hesperus and Phosphorus, Meterbars, gold and H₂O, and such like weakly became common place in philosophical circles. The cluster of these surrounding the idea that a relation of direct reference exists between names and their referents is now frequently refer to as the New Theory of Reference.

On December 28th, 1994 Quentin Smith read a paper at the Eastern Division Meetings of the American Philosophical Association that produce a different kind of sensation. In his paper Smith suggested that most of the major ideas in the New Theory of Reference had been developed by Ruth Barcan Marcus in the period between 1946 and

1961. Smith argued that Kripke had erroneously being given credit for this ideas and, more contentiously, that Kripke had heard some of there ideas at a lecture Marcus gave in February 1962, had unconsciously assimilated them and had later incorporated them into his Princeton lecture. This view has given rise to a major controversy about who is the originator of the New Theory of Reference.

Whoever might be originator there is he denying that both of them along with many other contributed to the theory. The theory became wide spared in 1970s and is still flourishing today. Some of the new contributors to the development of this theory include Kaplan, Donnellan, Putnam, Perry, Salmon, Almog, Wettstein and a number of other contemporary philosopher. The New Theory implies that many locutions, e.g., proper names refer directly to items, which contrasts with the traditional or old theory of reference. The New Theory encompasses such notion as direct reference, rigid designation, identity across possible worlds, the necessity of identity, *a-posteriori* necessity, singular propositions, essentialism about natural kind, the argument from the failure of substitutivity in modal context that proper names are not equivalent to contingent definite descriptions, and related ideas and arguments.

Quintan Smith recounts six main ideas of the New Theory of Reference that were given by Marcus in her 1961 article.

First, let us start with the idea that proper names are directly referential and are not abbreviated of disguised definitions, as Frege and Russell and most philosophers up to the 1970s believed. Marcus writes

But to give a thing a proper name is different from giving a unique descriptions (And) identifying tag in the proper name of the thing This tag, a proper name, has no meaning. It simply tags. It is

not strongly equitable with any of the singular description of the thing.¹

This is the basis of the contemporary direct reference theory of proper names where proper names are argued not to be disguised description. For example "Scot" refers directly to "Scot" and does not express a sense expressible by such a definite description as "the author of Waverley".

A second idea that Marcus introduces is that we can single out a thing by a definite description, but this description serves only to single it out, not to be strongly equitable with a proper name of the thing. She says "It would also appear to be a precondition of language (especially assigning names) that the singling out of an entity as a thing is accompanied by many ... unique description, for otherwise how would it be singled out? But to give a thing a proper name is different from giving a unique."² This idea later became widely disseminated through Kripke's discussion of how reference fixing description are sometimes used to single out a thing as a bearer of a name, but that names are not disguised descriptions.

A third component of the New Theory of Reference introduced by Marcus is the famous modal argument for the thesis that proper names are directly referential rather than disguised contingent descriptions. Contrary to Nathum Salmons claim that modal arguments are chiefly due to Marcus. Let us begin with this passage where Marcus is discovering the following statements.

1. The evening star eq. the morning star.
2. Scot in the author of Waverly.

The symbol "eq" stands for name equivalence relation. Types of equivalence relation include identity, indiscernibility, congruence, strict

equivalence, material equivalence and others. Marcus wants to argue that the equivalence relation to be unpacked in (1) and (2) are not strong enough to support relevant theses of the “disguised contingent description” theory of proper names. She writes “If we decide that ‘the evening star’ and ‘the morning star’ are proper names for the same thing, and that “Scot” and the author of *Waverley* are proper name for the same thing, then they must be intersubstitutable in every context. In fact, it often happens, in a growing, changing language that a descriptive phrase comes to be used as a proper name – an identifying tag – and the descriptive meaning is lost or ignored.³ Marcus will find that not all relevant expression are names for the same thing. They are not intersubstitutable in modal context. She writes : “If they express (Statement [1] and [2]) a true identity, than “Scot” or to be any where intersubstitutable for “the author a Waverly” in modal context, and similarly for the morning star” and “the evening star”. If they are not so universally intersubstitutable that is, if our decession in that, they are not simply proper name for the same thing; that they express an equivalence which is possibly false, e.g., someone else might written *Waverley*, the star first seen in the evening might have been different from the star first seen in the morning – then they are not identities.⁴ Marcus modal argument shows why the “disguised contingent description” theory of proper name is false. Since (1) and (2) do not express identity, the expression flanking “is” are not proper names for the same thing. In (1) and (2) a weaker equivalence relation should be unpacked, for example, by a theory of descriptions. By contrast, the sentence “Hesperus in Phosphorus” equinces an identity sign, flanked by the two expressions. Thus it passes Marcus’ modal test for containing two proper name of the same thing.

This modal argument goes back to Marcus’ formal proof of the necessity of identity in her extension of S4, which is a fourth component she introduced into the new theory of reference. She showed that

(T) $(xly) \equiv \Box (xly)$

is a theorem of QS4, QS4 being her quantificational extension of Lewis' S4. The quadruple bar here means strict equivalence. Since identities are necessary, a failure of intersubstitutivity in modal contexts will show that a proper name does not express the relevant descriptive sense. If "Scoot is not intersubstitutable with "the author of *Waverley*", Scoot does not express the sense expressed by this definite description. This opens the door to the theory that proper names do not express descriptive senses but instead are directly referential.

Of course, this argument does not prove that proper names do not express senses, merely that they do not express senses of contingent definite descriptions. Marcus's modal argument is consistent with the idea of Linsky and A. Platinga that proper names express senses expressible by necessary definite descriptions that express modally stable senses. For example, "Scoot" may express the modally stable sense of "the actual author of *Waverley*".

In order to rule out this modally stable descriptive theory of proper name, one needs further argumentation, such as the epistemic argument that proper names are directly referential. If the descriptive theory of proper names is true (that is if proper names are defined by descriptions), then "Venus is the evening star" should express a truth knowable *a-priori*, that is knowable merely by reflection upon the concepts involved. But it cannot be known *a-priori* that Venus is the evening star. This is known *a-posteriori*, through observation of the empirical facts. As Marcus writes :

You may describe Venus as the evening star, and I may describe Venus as the morning star, and we may both be surprised that, as an empirical fact,

the same thing is being described. But it is not an empirical fact that Venus I Venus.

Here “I” is the identity symbol if “Venus” expresses the modally stable sense expressible by “whatever is actually the evening star and morning star”, then the persons designated by ‘you’ and ‘I’ in the passage quoted from Marcus’ article should be able to know *a-priori*, simply by reflection upon the semantic content of the expressions “Venus” “the morning star” and “the evening star” that Venus is both the morning star and the evening star. The fact that they cannot know this indicate that Venus does not express the modally stable sense expressed by “ whatever is actually the evening star and morning star”.

Marcus’ arguments for the direct reference theory make manifest her discovery of fifth crucial component of the new theory of reference, the concept of rigid designation (although the name of the concept, “rigid designation” was first coined by Kripke). Hesperus is intersubstitutable *Salva Veritate* with either occurrence of “Phosphorus”. Each of these two names actually designates Venus in respect of every possible world in which Venus exists and does not actually designate any thing in respect of worlds in which Venus does not exist. If these two names were instead equivalent to contingent description (e.g., “the morning star” and “the evening star”), they would not be intersubstitutable *Salva Veritate* in this modal context and this would be non-rigid designators.

Although we have used the rigid designation terminology Marcus does not use it since Kripke’s introduction of this expression in his “Identity and Necessity” (1971) assimilated proper names (viz, modally stable descriptions), which obscure their, different semantic property. Marcus’ points can be accommodated consistently with the continuity of “rigid designators”, if we make the following classification which is familiar to those working with the New Theory of Reference. Adopting the genus/species terminology, we may say that the genus is rigid

designators, and the different species are (a) proper names (b) referentially used definite descriptions (in Donnellan's sense), (c) attributively used definite description that express a modally stable sense, (d) uses of indexical, (e) natural kind term and certain other expression. We avoid assimilating proper name to some modally stable description, since proper name refer directly, whereas attributively used definite descriptions that express modally stable senses refer indirectly, via the expressed sense.

A sixth idea of introduced into the New Theory of Reference by Marcus is the idea of *a-posteriori* necessity. Let us recall our earlier question of Marcus' remark about Venus and the evening star.

You may describe Venus as the evening star, and I may describe Venus as the morning star, and we may both be surprised that, as an empirical fact, the same thing is being described. But it is not an empirical fact that Venus I Venus.

Consider the expression "Hesperus is Phosphorus". We do not know this to be true *a-priori*. It is not an analytic assertion whose truth value is known by analysis of the concept involved. Nonetheless, it is necessarily true since both names directly refer to the some thing, Venus. It is true that

Hesperus I Phosphorous

Whereas, as before, "I" is the sign of identity. Given Marcus' theorem of the necessity of identity, it follows that

Necessarily, Hesperus I Phosphorous.

Thus "Hesperus is Phosphorous" can be viewed as a synthetic *a-posteriori* necessary truth.

Kripke eloquently elaborated upon Marcus' idea and extended it to new sort of item.

Section II

Kripke's causal Historical Theory of Reference

Once Marcus presented her ideas in 1961 soon after that Kripke gave it a complete form adding more new ideas with it. His one original contribution to the New Theory of Reference was his causal theory of reference. The basic idea of causal, or historical, theories of reference is that a term refers to whatever it is causally linked in a certain way. These links do not require speakers to have identifying beliefs about the referent. The causal links relate speakers to the world and to each other.

Let us explain in brief the causal theory of proper names. How is a person able to use "Einstein" to designate a physicist he has never met and whose theories he does not grasp? This problem divides into two.

- (1) How do we explain the introduction into our language of "Einstein" as a name for "Einstein"? We need to explain how people were first able to use that noise to designate certain individuals. This requires a theory of *reference fixing*. Our theory of reference fixing looks to the causal grounding of a name in an object.
- (2) How do we account for the social transmission of the name "Einstein" within the linguistic community? None of us had anything to do with the introduction of the name but can use it to designate "Einstein" because we have gained the name from

others. To explain this we need a theory of *reference borrowing*. Kripke offers a causal theory of this also.

The basic idea of the causal theory runs like this. The name is introduced at a formal or informal dubbing. This dubbing is in the presence of the object that we form them on the bearer of the name. The event is perceived by the dabbler and probably others. To perceive something is to be causally effected by it. As a result of this causal action, witness to the dubbing, will gain an ability to use the name to designate the object. Any use of the name exercising that ability designates the object in virtue of the uses causal link to the object: perception of the object prompted the thoughts which led to the use of the name. In short, those presented the dubbing acquires a semantic reality that is causally grounded in the object.

The basic idea of the causal theory of reference borrowing is this. People not at the dubbing acquire the semantic ability from those at the dubbing. This acquisition is also causal, indeed perceptual processes. The name is used in conversation. Hearers of the conversation can gain the ability to use the name to designate the object. The exercise of that ability will designate the object in virtue of a causal chain linking the object, those at its dubbing, and the user through the conversation.

A name not only have reference, it has sense. If the causal theory is to emulate the description theory in accounting for both, they must give a theory of sense. According to causal theory, the sense of a name is a particular proper of the name is a particular proper of the name, the property of designating its bearer by a certain type of causal link between name and bearer. The aspects of reality we have to call on to explain reference are all we need for sense. The reference of a name is determined by the appropriate causal chains and, in virtue of that by its sense. The chain yield what Frege would call "the mode of presentation"

of the object? So Frege was right in thinking that there was more to a name's meaning than its referent but wrong in thinking that the extra was expressed by a definite description.

With the description theory of reference went a theory of understanding, a theory of what it is to be competent with a name. Such a theory is also implicit in the above causal theory. When we talk of an ability to use a name gained at a dubbing or in conversation, we are talking of competence. So competence with the name is simply an ability with it that is gained in a grounding or reference borrowing. Underlying the ability will be causal chains of a certain type that link the name to its bearer. Since the name's sense is its property of designating by that type of chain, we could say that competence with a name involves grasping its sense. But competence does not require any *Knowledge about* the sense, any *Knowledge that* the sense in the property of designating the bearer by certain type of causal chain. This sense is largely external to the mind and beyond the ken of the ordinary speaker. In thus abandoning the Cartesian assumptions for name, the causal theory departs further from a Fregeian notion of sense and from the description theories as they have been standardly understood. Many would reject this theory simply because it posts a sense that ordinary speakers are unlikely to know about.

So the picture is like this. At a dubbing, a name is introduced by grounding it in an object. There is a causal chain linking the ability gain at the dubbing to the object. In virtue of that link, the reference of the name is fixed as the object. Exercising the ability by using the name adds new links to the causal chain: it leads to other having abilities dependent on the original ability. Thus we can use "Einstein" to designate Einstein because we are causally linked to him by a chain running through our linguistic community to someone present at his dubbing.

Let us illustrate the above view with an example. Let us take the instance of a cat called "Nana". Two people were present at her dubbing. There was no elaborate ceremony: one say "Let us call her Nana" and the other agreed. This simple suggestion agreed to was enough. Each person saw and failed the cat, saw the other person, and heard his or her words. Each person was sophisticated enough to know what was going on. The cat occupied a unique place in this complex causal interaction. In virtue of that place she was named "Nana. In Virtue of that place the abilities, the two get were once to designate Nana.

A few minutes later the name was used for the first time: "Nana is hungry". The first use designated Nana. It did so because that name token was produced by an ability created by the dubbing in which Nana played that unique role. Underlying the token is a casual chain grounded in Nana.

The two dabbers did not keep the name to themselves. They introduced others to the cat: "This is Nana". They told others of her name; "our cat is called Nana". They might have used name in conversation with others. Those who heard and understood this utterances gained abilities to designate Nana by her name. They borrowed their reference from the dabber. When they went on to use the name there were causal chains underlying those uses that stretched back to Nana via the ability of the reference lender. From those uses still others gained abilities, abilities depending similar chains such chains are "designating chains". So underlying a name is a network of designating chains.

Let us note that reference borrowing is not simply a matter a learning a word from another person. Clearly any word can be thus

learn. In case of reference borrowing, it is partly in virtue of the referential abilities of another person, that the speaker's use of the term has its reference. Not only was the other person causally responsible for the speaker's reference, but that reference is still dependent on a designating chain that runs through that other person.

The theory develop thus has many attractive features. First, it shares the description theories the capacity to account for the following special features of natural language, that it is stimulus independent in that the causal chain on which its use depends does not require the presence of the object. It is arbitrary and medium independent in that any symbol in any medium can be placed in the appropriate causal relation to the object. And because of this, it has to be learned. However unlike description theories, it can also account for the apparent abstractness of proper names; as Mill observed, names do not imply any attribute belonging to the object.

Second, the causal theory avoids the five problems of descriptions theories. Since a name does not abbreviate on cluster of definite description, there is no problem finding a principled basis for selecting which description are in the cluster for a person ; not, avoiding unwanted ambiguities arising from cluster differences between people. It does not loose the rigidity of names. Indeed the theory explains this rigidity: a name reforms in all possible worlds to the object it is causally related to in the actual world.

Let us return to the Twins example and the problem of reference change. The name Dawn was grounded in B at the dubbing, but from then on always grounded in A. The initial grounding in B pales into insignificance when compared with these thousands of grounding in A. So "Dawn" now designates A.

SECTION III

Names and rigid designators

The fact that natural-language proper names are rigid designators is an empirical discovery about natural language. However, unlike other empirical discoveries about language made in the past few decades, it is one which has been taken to have great philosophical significance. One reason for this is that it has helped simplify the formal semantical representation of ordinary modal discourse. But the central reason is that the discovery threatens a certain picture, the descriptive picture, of the content of names, upon which a great deal of philosophy was premised.

Rigidity is a semantic property of an expression. More specifically, it has to do with the evaluation of that expression with respect to other possible situations (or 'worlds'). There are many subtle issues involved in the notion of evaluating an expression with respect to a possible situation. But there are also some simple confusions about this notion. Before we begin our discussion of rigidity, it is important to dispel one such confusion.

On one way of understanding evaluation of a sentence with respect to another possible world, a sentence is true with respect to another possible world just in case, if the sentence were uttered in that other possible world, it would be true. However, this is decidedly not how to understand the notion of evaluation with respect to another possible world which underlies our modal discourse.

The correct notion of evaluation of a sentence with respect to another possible world involves considering the sentence as uttered in the *actual world*, rather than as uttered in other possible worlds. When the sentence is uttered in the actual world, it expresses some semantic value which is determined by how the words are used by speakers in the actual world. This semantic value is then evaluated with respect to other possible worlds. What the nature of the entity which is evaluated with respect to other possible world – whether it is a “proposition” (what is said by an utterance of the sentence) or some other entity – is a difficult question. For now it is only important to note that what is at issue in evaluating a sentence with respect to another possible world does not involve considering that sentence as uttered in that other possible world, but rather considering the sentence as uttered in the actual world.

How an expression *e* is used by speakers in other possible situations is thus irrelevant to the question of what the extension of *e* is when evaluated with respect to those other possible situations. For instance, what the denotation of “Cayuga Lake” is with respect to another possible world is has nothing to do with how the speakers of that world – if there are any – use the expression “Cayuga Lake”. It just has to do with which object Cayuga Lake is in that world. Now that this possible confusion has been eliminated, we may turn to the notion of rigidity.

According to Kripke’s characterization of rigidity, “a designator *d* of an object *x* is rigid, if it designates *x* with respect to all possible worlds where *x* exists, and never designates an object other than *x* with respect to any possible world”. This characterization, as Kripke intends, is neutral on the issue of the extension of the designator *d* in possible worlds in which *x* does not exist. That is, if *d* is a designator which satisfies the above criteria, there are three possibilities left open for *d*’s extension in worlds in which *x* does not exist. First, *d* could designate

nothing with respect to such possible worlds. Second, *d* could designate *x* in all such possible worlds (despite *x*'s non-existence in those possible worlds). Third, *d* could designate *x* with respect to some such worlds, and designate nothing with respect to other such worlds.

These three possibilities determine three different species of rigidity. However, only the first two species deserve discussion; a designator in the third class is a hybrid.

The first species of rigidity, corresponding to the first of the above possibilities, includes all and only those designators *d* of an object *x*, which designate *x* in all worlds in which *x* exists, and designate nothing in worlds in which *x* does not exist. Following Nathan Salmon⁵ let us call these *persistently rigid designators*.

The second species of rigidity, corresponding to the second of the above possibilities, includes all and only those designators *d* of an object *x*, which designate *x* in all worlds in which *x* exists, and designate *x* in all worlds in which *x* does not exist; or, more simply, designate *x* with respect to every possible world. Again following Salmon, let us call these *obstinately rigid designators*.

There are expressions which are uncontroversially rigid in both of the above senses. For instance, consider Kripke's class of *strongly rigid designators* in *Naming and Necessity*.⁶ This class contains the rigid designators of necessary existents. That is, this class contains all and only those designators *d* of an object *x* which exists in all possible worlds, which designate the same thing in all possible worlds (that is, *x*). for example, the descriptive phrase "the result of adding two and three" is a strongly rigid designator, since its actual denotation, namely the number five, exists in all possible worlds, and the phrase denotes that

number with respect to all possible worlds. Strongly rigid designators clearly belong to both of the above classes.

It is unclear to what degree issues about persistent rigidity versus obstinate rigidity are substantive, rather than merely disguised terminological discussions about how best to use the expression "evaluation with respect to a world". There is a sense of this expression in which it seems to presuppose the existence of the denotation in the world; and if someone is using the expression in this sense, then persistent rigidity might be the more appropriate notion. If, on the other hand, one has a purely semantical understanding of "denotation with respect to a world", then the fact that the semantic rules directly assign a denotation to an expression might lead us to think that even in worlds in which that object does not exist, it is still the denotation of the relevant expression. But these are certainly just terminological issues.⁷

A further distinction is often made in discussions of rigidity; that of Kripke between *de jure* rigidity and *de facto* rigidity.⁸ An expression is a *de jure* rigid designator of an object just in case the semantical rules of the language immediately link it to that object. All other rigid designators of objects are *de facto* rigid designators of them. To give an example from Kripke, the description "the smallest prime" is supposed to be *de facto* rigid, because it is not metaphysically possible for there to be a smallest prime distinct from the actual smallest prime, that is, two. The fact that "the smallest prime" denotes the same object in every world flows not from semantics, but from the metaphysical fact that mathematical facts are true in all metaphysically possible worlds. If, on the other hand, the semantical rule for a term *t* takes the form of a stipulation that it denotes a certain object *x*, then *t* is *de jure* rigid, since it is part of the semantical rules that it denotes that object.

The intuitive content of *de jure* designation lies in the metaphor of “unmediated” reference. A rigid *de jure* designator is supposed to denote what it denotes without mediation by some concept or description. A *de facto* rigid designator, on the other hand, is supposed to denote what it denotes in virtue of its denotation meeting some condition. That is, a *de facto* rigid designator denotes via mediation of some concept or description.

The core notion of rigidity has been taken by philosophers to be *de jure*, obstinate rigidity. This is the notion which lies at the center not only of Kripke’s work, but also of David Kaplan’s work on direct reference. Rigidity arose in the development of the semantics of Quantified Modal Logic (henceforth QML), and in particular, as a part of the explanation of the proper treatment of variables in QML. In that context, there is no question that *de jure* rigidity is the relevant concept.

The pre-theoretic notion of rigidity began its life as a concept in the semantics for QML. In particular, rigidity arose in connection with the ‘objectual’ interpretation of QML, where the quantifiers were taken to range over objects, rather than non-constant functions. Even more specifically, rigidity was relevant to issues concerning Quine’s “modal paradoxes”, raised as objections to the coherence of QML. Now I will attempt to show where the notion of rigidity enters into the attempt to give a coherent and natural semantic interpretation to QML.

One of the first issues which arose in QML was what the proper intended interpretation of quantification should be. The two camps in the 1940s were the conceptual interpretation, championed by Alonzo Church and Rudolf Carnap, and the objectual interpretation, championed by Ruth Barcan Marcus. But while Church Carnap, and Barcan Marcus and others were developing axiom systems for QML,

Willard Van Orman Quine was busy attempting to demonstrate their incoherence.

Quine raised two influential objections to QML.⁹ According to the first of these objections, quantification into modal contexts violated fundamental logical laws. According to the second (and obviously related) objection, if QML and its intended interpretation could be so formulated as to evade the first objection, then it would inexorably carry with it unpalatable metaphysical commitments. Since the defenders of QML partially defined their own positions against the first of these objections, something must be briefly said about it here. Following this we will outline the conceptual interpretation of QML, and then the objectual interpretation, explaining how their original espousers evaded Quine's worry.

According to the principle of substitution, for any terms a and b , if " $a = b$ " is true, then for any formula Φ containing " a ", the result of replacing one or more occurrences of ' a ' and ' b ' does not change the truth-value of Φ . However, according to Quine, QML essentially involved a violation of this principle. For "nine = the number of planets" is true. Furthermore, "Necessarily, nine = nine" is true. But the result of substituting "the number of planets" for the first occurrence of "nine" in "Necessarily, nine = nine" yields a falsity, namely, "Necessarily, the number of planets = nine".

Quine took the failure of substitution in model contexts also to demonstrate the failure of existential generalization in QML. That is, Quine took the failure of substitution to show that the inference from " $\Box Fa$ " to " $\text{Ex } \Box Fx$ " is illegitimate. The reason Quine thought that a failure of substitution demonstrated the failure of existential generalization is that he thought that substitutability by co-referential terms was a *criterion* for the legitimacy of quantifying in.

Here is one reason why Quine thought that the substitutability of co-referential terms in a linguistic context C was a criterion for the legitimacy of quantification into C. Consider a quotational context, such as :

- (1) The first sentence of the (English translation of the) *Duino Elegies* is "Who, if I cried out, would hear me among the angles' hierarchies?"

Inside such a quotational context, substitution of co-referential terms fails to preserve truth-value. For example, (1) is true, but (2), which results from (1) by the substitution of co-referential terms is false:

- (2) The first sentence of the (English translation of the) *Duino Elegies* is "Who, if Rilke cried out, would hear Rilke among the angles' hierarchies?"

Thus, substitution of co-referential terms fails in quotational contexts.

But it is also illegitimate, according to Quine, to quantify into such contexts. To see this, consider the sentence:

- (3) There is something x such that "Who, if x cried out, would hear x among the angles' hierarchies?" is the first sentence of the *Duino Elegies*.

Sentence (3) is false. The reason (3) is false is, as Quine is fond of pointing out, that the quoted sentence in (3) names not some sentence which results from replacing 'x' by a term, but rather a sentence containing the symbol 'x'. That is, a quotation such as "x flies"

' denotes the result of concatenating the symbol 'x' with the word 'flies', not the concatenation of some replacement term for 'x' with "flies". Thus, for Quine, it is illegitimate to quantify into quotational contexts.

But Quine does not simply conclude from the failure of both substitution and quantifying into quotational contexts that substitution is a criterion for quantifying in. For Quine, the failure of substitution in a linguistic context demonstrates a deep incoherence in quantifying into such contexts. For in giving the semantics of a quantified sentence, one must avail oneself of the notion of satisfaction; the sentence is true just in case some object satisfies the relevant open sentence. Yet, for Quine, the failure of substitution shows that there is no available notion of satisfaction in terms of which one can define the truth of such sentences. There is no notion of objectual satisfaction for quantifying into quotational contexts, for instance, because such contexts are sensitive not just to objects, but also to how they are named.

Thus, for Quine, the failure of substitution in modal contexts demonstrated that there was no appropriate notion of objectual satisfaction for open formulas such as " $\square Fx$ ". For the failure of substitution seemed to show that whether or not an object satisfied an open, modalized formula depended upon how the object was named. Quine hence thought there was a similarity between modal and quotational contexts: in both cases, what matters is how the object is named, rather than just the object itself. Quine concluded that there was no way of giving a coherent semantics for sentences such as " $\exists x \square Fx$ ", since there was no available notion of satisfaction in terms of which one could define the truth of the sentence. He hence declared that quantification into modal contexts was illegitimate (since incoherent), and that existential generalization fails.

There is also a historical reason for Quine's analogy between modal and quotational contexts: for Quine's target, Carnap, wished to explicate necessity in terms of the analyticity of certain sentences. That is, Carnap in *Meaning and Necessity* believed that to say that a certain proposition was necessary was "really" to say, of a certain sentence, that it was analytic, thus, according to Carnap, a construction such as (a) "really" expressed (b) :

- (a) Necessarily, bachelors are unmarried men.
- (b) "Bachelors are unmarried men" is analytic.

So, according to Carnap, modal contexts were really disguised quotational contexts. If so, then quantifying into modal contexts seems tantamount to quantifying into quotational contexts.

There are several responses which have been given to Quine's challenge. One response stems from the interpretation of QML which emerged from the work of Church and Carnap. According to this approach, variables in modal languages ranged over individual concepts, describable (in contemporary terms) as functions (possibly non-constant) from possible worlds to extensions. The principle of substitution, on this approach, was interpreted as licensing not substitution of terms for two extensionally equivalent individual concepts (that is, functions which yield the same denotation in the actual world), but rather, substitution of terms which denote the same individual concept.

Now, "nine" and "the number of planets" do not express the same individual concept, for though they are extensionally equivalent, there are possible situations in which the extension of "the number of planets" is different from the extension of "nine". Thus, the principle of substitution does not license the substitution of "the number of planets"

for "nine", on this account of QML. Furthermore, any two expressions which do express the same individual concept (are "L-equivalent", in Carnap's terms) will be substitutable, even in modal contexts.

This 'conceptual' interpretation of QML thus has a systematic, logically consistent account of the notion of the satisfaction of an open-modal formula. On the conceptual interpretation of QML, one can take the quantifier in " $\text{Ex } \Box Fx$ " to range over individual concepts. In this case, the relevant notion of satisfaction is satisfaction by individual concepts, rather than objects.

However, the conceptual interpretation of QML does not seem to accord with our natural interpretation of QML. The sentence:

(4) $\text{En } (\Box n \text{ numbers the planets})$

is intuitively false on a natural reading of the quantifier. The reason it seems false to us is that, according to a very natural reading of (4), what it asserts is that there is some object which necessarily numbers the planets. However, on the conceptual interpretation, (4) is true, because the individual concept expressed by "the number of planets" will satisfy the open formula:

(5) $\Box n \text{ numbers the planets}$

since, in every possible world, the number of planets numbers the planets.

What such examples suggest is that the natural reading of quantification into modal contexts is as quantification over objects, rather than over individual concepts. If we wish to capture this intuition, then we should think of, say, an existential quantification into an open-

modal formula (henceforth OMF) as true just in case some object satisfies the relevant modal condition. On this account, which we shall call the objectual interpretation of QML, the first-order quantifiers range only over objects, rather than over concepts.

According to the objectual interpretation, a sentence such as “ $\exists x Fx$ ” is true just in case some object is necessarily F. But what about Quine’s worry? Can the objectual interpretation supply a natural account of the satisfaction of OMFs? □

An OMF, such as “ $\exists x Fx$ ”, is, on the objectual conception, satisfied by an assignment just in case the respect to every possible situation, *irrespective of any names of that object*. We are not to understand the satisfaction of such an OMF “substitutionally”, as satisfied by an assignment, just in case, for some name a of the object which that assignment by an assignment, just in case the object which that assignment assigns to ‘ x ’ satisfies F with respect to every possible situation.

This understanding of the satisfaction clause for OMFs undercuts Quine’s objection to the coherence of quantifying into modal contexts. For Quine’s worry can only arise if objectual satisfaction is characterized in terms of the truth of closed sentences containing names of the alleged satisfiers. Only if objectual satisfaction is given such a substitutional construal is it relevant to the coherence of quantifying into modal contexts that two closed modalized sentences, differing only in containing different names for the same object, may differ in truth-value.

If such a notion of an object satisfying a predicate necessarily indeed makes sense, then it is possible to quantify into modal contexts despite the failure of substitution. Of course, Quine’s *other* objection to QML is that, where the necessity in question is metaphysical, this notion

involves a dubious metaphysic of essentialism. But discussion of this question will take us too far away from the topic of rigidity .

This construal of the satisfaction of OMFs, combined with possible-world semantics, naturally brings with it an interpretation of variables according to which they are *de jure* rigid designators. To see why this is so, consider a sentence of QML such as “ $\exists x \square [\text{Exists}(x) \rightarrow \text{Rational}(x)]$ ”. According to the objectual interpretation of QML, this sentence is true just in case there is some assignment function which assigns to the variable ‘x’ an object *o* which, in every possible situation, satisfies the open formula “ $\text{Exists}(x) \rightarrow \text{Rational}(x)$ ”. The evaluation of the truth of the sentence hence involves relative to an assignment function, evaluating the open formula “ $\text{Exists}(x) \rightarrow \text{Rational}(x)$ ” with respect to every possible situation. Since, in each possible situation, we are considering whether or not the object *o* satisfies the formula, we need to ensure that the variable ‘x’ denotes *o* in all of the possible situations. That is, on the objectual interpretation of QML, when taken with respect to an assignment *s*, variables are rigid designators of the objects which *s* assigns to them. The reason that variables are *de jure* rigid designators is because there is nothing else to the semantics of variables besides the stipulation that, when taken with respect to an assignment *s* which assigns the object *o* to a variable, it designates *o* in every possible situation.

If we understand variables as rigid designators (with respect to an assignment), then the following version of substitution is validated :

$$(6) \quad \forall x \forall y [x = y \rightarrow [\Phi \leftrightarrow \psi]]$$

(where Φ differs from ψ only in containing free occurrence of “x” where the latter contains free occurrences of “y”). For even if Φ

and ψ contain modal operators, the rigidity of the variables will guarantee the intersubstitutability of "x" and "y".

The situation is slightly more complicated in the case of term. Quine's challenge is to validate, not just (6), but also the fully schematic version of substitution:

$$(7) \quad t = s \rightarrow (\Phi \leftrightarrow \psi)$$

(where Φ differs from ψ at most in containing occurrences of t where the latter contains occurrences of s , and no free variables in t and s become bound when t and s occur inside Φ and ψ . But where t and s are replaceable by non-rigid designators then (7) will, in the modal case, fail to be valid; thus the defender of the objectual interpretation who wishes to preserve full classical substitution must disallow non-rigid terms from her language.

There are also other motivations for restricting the class of terms to rigid ones on the objectual interpretation. For example, to do so would allow a uniform treatment of the class of terms. If all terms are rigid, then non-variables can be treated in the semantics as free variables whose interpretation does not depend on assignments. Another reason is that, if one allowed non-rigid designators, one would have to restrict universal instantiation to rigid designators to retain (6), and some might hold that such a restricted UI rule is unappealing. Finally, non-rigid terms raise further technical problems which, though certainly solvable, nevertheless complicate the semantics.

At this point the reason for the introduction of terms which directly represent objects is purely technical – it is a technical response to a logico-semantical dilemma. If one wishes to preserve classical substitution, as well as the objectual conception of satisfaction, then one must ensure that one's variables and terms are rigid. In availing

ourselves of such terms, there is no commitment to thinking that any terms in ordinary language are rigid. Rigid terms only play the role, at this stage, of desirable formal-semantical tools, which allow us a better grasp of the objectual notion of satisfaction, as well as an explanation of the validity of classical substitution.

However, if we wish QML to serve as a representation of ordinary modal discourse, then the rigidity constraint on terms may seem problematic. Without a philosophical justification of this restriction, or a semantical argument to the effect that natural-language terms are rigid, this restriction is *ad hoc*. If natural-language singular terms are non-rigid, then the extra logico-semantical complexities which attend the addition of non-rigid terms into QML will either have to be accepted as realities or used as a basis for rejecting its coherence.

Even in the late 1940s it was recognized that a philosophical/semantical argument demonstrating the rigidity of natural-language terms would be desirable. However, it was not until the seminal work of Saul Kripke in 1970 that a fully explicit argument for this conclusion was forthcoming. But Kripke's ambitions went far beyond demonstrating that natural-language terms are rigid. For Kripke used the notion of rigidity as a basis for quite substantive claims about the nature of intentionality. It was thus with Kripke that the *philosophical* construal of rigidity began.

The Descriptive Picture

According to the picture of intentionality attacked by Kripke, the way our words hooked onto an extra-linguistic reality was via description. That is, a name such as "Aristotle" denoted the person, Aristotle, because the name was associated with a series of descriptions (such as "the last great philosopher of antiquity") which were uniquely

satisfied by the person Aristotle. More relevant for our purposes, however, is Kripke's attack on the descriptive picture of the *content* of proper names. According to this, the content of a name was given by the description which fixed its referent. That is, what someone said when they uttered a sentence such as "Aristotle is F" was a descriptive proposition to the effect that, say, the last great philosopher of antiquity, whoever he was, is F.

Kripke (1980) first demonstrated that ordinary-language proper names were rigid. He then used this feature of names as part of a larger attack on a certain version of the above picture of content.

In the next section, we will discuss how Kripke used rigidity to attack the descriptive picture. But before we do so, it is important to gain an understanding of what the descriptive pictures of intentionality and content are. In particular, we will distinguish between two different versions of the descriptive picture which are often not distinguished in the literature.

The problem of linguistic intentionality, in one of its forms, is the question of what it is in virtue of which an expression has the reference it does. According to the first descriptive picture of linguistic intentionality, what it is in virtue of which a primitive expression has the referent it does is that it is associated with a set of descriptions, in purely general, non-indexical, or particular involving terms. These descriptions are uniquely satisfied by an entity which then counts as the reference of that term.

A less problematic and more commonly held version of the description theory dispenses with the requirement that the descriptions which fix referents must be given in purely general terms. According to this version, which is most explicit in the works of Strawson and

Dummett, but at least implicit in Frege, the descriptions which fix referents can, and indeed often must, contain non-descriptive elements.

It is worthwhile to mention briefly a motivation for the latter picture of intentionality. One might think that, in the case demonstrative reference, one has reference without any description. But this is merely a myth. Suppose I point to a brown table, and say, "This is brown." It is not my pointing alone which fixes the reference of the occurrence of "this", for my finger will also be pointing at the edge of the table, or a small brown patch on the table. Rather, a factor in fixing the reference of my demonstrative is that I intend to be demonstrating some object whose identity criteria are those of tables, rather than those of small brown patches or edges. Such identity criteria play a crucial role in overcoming the massive indeterminacy of ostensive definition. It is for their specification that descriptive material is required.¹⁰ But this insight in no way required that we ignore the non-descriptive element inherent in true demonstrative reference.

A final relevant factor which distinguishes descriptive accounts of intentionality from each other has to do with the role of the social. According to Russell, as well as the account of descriptive intentionality attacked by Kripke, a term refers, in the mouth of a speaker, to that object which satisfies the descriptions the *speaker* associates with the term. However, according to other traditional descriptive accounts, such as that of Strawson,¹¹ what is relevant is not which descriptions the speaker associates with the term, but rather, which descriptions are associated with the term in the language community. On this latter, more plausible account, a use of a term in the mouth of a speaker refers to the object it does in virtue of her participation in a language community which associates certain descriptions with the term that are uniquely satisfied by the object in question.

There are thus two different versions of the descriptive picture, one according to which the descriptions must be in general terms alone, and another in which they may contain irreducible occurrences of demonstrative and indexical expressions. Each of these two versions has two sub-versions; one according to which it is the descriptions the speaker associates with a term which are relevant for determining the reference of terms she uses, and the other according to which it is the descriptions the language community of the speaker associates with the term which determine the reference of the term when she uses it.

Each of these versions corresponds to a theory of the content of sentences containing proper names. On the first picture, utterances of sentences containing proper names express descriptive propositions, where the relevant descriptions only contain expressions for general concepts. According to the second version of the description theory, utterances of sentences containing proper names also express descriptive propositions. However, these descriptive propositions typically are also irreducibly indexical propositions. So, on this latter account, a sentence such as "Bill Clinton is F" would state some proposition equivalent to what is expressed by "The *present* president around here of the United States is F".

If the descriptive picture is true, then, for each expression in our language, we possess, *a priori*, uniquely identifying knowledge about its referent. Such a premise is more than just a useful tool in epistemological and metaphysical theorizing. For if the descriptive picture is true, then we have a rich store of *a priori* knowledge. This makes more plausible a classic picture of philosophy, according to which it proceeds by *a priori* methods. The Kripkean challenge to the descriptive picture is thus not merely a challenge to an empirical thesis, but also threatens to undermine deeply rooted conceptions of the nature of philosophy.

Kripke's Argument And The Rigidity Thesis

In this section I will first describe an argument, due essentially to Kripke, for the thesis that names are rigid designators. I will then conclude with an argument from rigidity against the descriptive picture of content.

One of the central contributions of Kripke (1980) lay in the argument that natural-language proper names are rigid designators. In what follows, we will go through this argument. More exactly, what we will motivate is the following thesis, which we will call RN, the Rigid Name thesis:

(RN) If N designates x, the N designates x rigidity

where "N" is replaceable by names of English-language proper names. Throughout the argument for RN, it will be assumed that variables under assignments are rigid designators, and it will be argued from this assumption that natural-language proper names are also rigid designators.

According to the neutral characterization of rigidity, a designator D of an object x is rigid just in case, for all possible worlds w, if x exists in w, then D designates x in w, and if x does not exist in w, then D does not designate something different from x in w. There are thus three ways in which a designator D of an object x could fail to be rigid :

- (a) There could be a world in which x exists, but is not designated by D.
- (b) There could be a world in which x exists, but D designates something else.

- (c) There could be a world in which x does not exist, and designates something other than x .

It will be argued that each of these possibilities is ruled out in the case in which D is a proper name.

Before we proceed with the argument, it is worth noting that no separate proof is required for (b). Given that proper names designate, at most, one thing in each world, any situation in which x exists, but D designates something else will be a situation in which D does not designate x . That is, every (b) situation is an (a) situation. Thus, the demonstration that (a) is incompatible with D being a proper name will suffice to show that (b) is incompatible with D being a proper name.

So let us first argue that if "a" is a proper name designating x , then, in any world in which x exists, x is designated by "a". Suppose not, that is, suppose "a" designates x , and (a) is true. Then the following is the case:

$$(8) \quad \exists x [x = a \ \& \ \diamond (x \text{ exists} \ \& \ x \neq a)]$$

But (8) seems false when "a" is a proper name. Plugging an actual proper name in for "a" in (8) should make this clear:

- (9) There is someone who is Aristotle but the could exist without being identical with Aristotle.

This is intuitively false. Thus, it seems that if N is a proper name designating x , then, if x exists in a world, then N designates it. So, we are done with case (a) as well as (b).

Now, let us turn to the argument that if “a” is a proper name designating x, then, in any world in which x does not exist, “a” does not designate something other than x. Suppose not, that is, suppose “a” designates x, and © is true. Then the following is the case:

(10) $\exists x [x = a \ \& \ \diamond (a \text{ exists} \ \& \ a \neq x)]$

But (10), like (8), seems false when “a” is a proper name. Substituting an actual proper name for “a” in (10) should make this clear.

(11) There is someone who is Aristotle but Aristotle could exist without being him.

Like (9), (11) also seems intuitively false. Thus, it seems that if N is a proper name designating x, then, if x does not exist in a world, then N does not designate anything else. So we are done with case (c), and the argument for (RN).

The argument for (RN) exploits speaker’s intuitions about the truth-value of instances of (8) and (10). In the case of normal proper names, it seems true that, when substituted for “a” in (8) and (10), a false sentence results. (RN) is thus an empirical claim about natural language. As such, it has been challenged. That is, some have maintained that there are true instances of (8) and (10). However, the proper names that are typically considered are somewhat elaborate, involving issues in metaphysics that are beyond the scope of this chapter. The literature on “contingent identity-statements” will thus not be discussed in what follows.

In the above description of Kripke’s arguments, we have been using the expression “rigid designator” in the sense of a term which denotes its actual denotation in all possible worlds in which that

denotation exists, and nothing else in other worlds. But there are also some considerations which some have felt mitigate in favor of the thesis that names are obstinately rigid designators. For instance, Kripke¹² gives as an example the sentence:

(12) Hitler might never have been born.

Sentence (12) is true. But (12) is true just in case the sentence "Hitler was never born" is true when evaluated with respect to some possible world. If "Hitler" does not denote anything with respect to that world, then, unless one gives sentences containing non-denoting terms truth-values, it will be impossible to make the sentence "Hitler was never born" true in that world. But, if "Hitler" denotes Hitler in that world, then, despite the non-existence of Hitler in that world (or perhaps because of it), the sentence "Hitler was never born" can be true in that world.

This argument is, however, unimpressive. For it relies on the thesis that sentences containing non-denoting terms receive no truth-value. If one said that sentences containing non-denoting terms were false, then analyzing "Hitler was never born" as the negation of "Hitler was born" in a world in which "Hitler was never born" as the negation of "Hitler was born" in a world in which "Hitler" is non-denoting would yield the correct prediction.

Many have adverted, at this point, to a more indirect argument, one which exploits the analogy between tense and modality. A tense-logical obstinately rigid designator is one which denotes the same thing at all times, regardless of whether or not that thing exists at the time of evaluation. That proper names should be treated as tense-logical obstinate rigid designators is supported by the Montagovian example:

(13) John remembers Nixon.

Example (13) can be true, as uttered in 1995, despite Nixon's non-existence at the time of utterance. Such evidence is taken, by the tight analogy between tense and modality, to support the modal logical obstinancy of proper names.

However, examples such as (13) only demonstrate that proper names can denote individuals existing prior to, but not during, the time of evaluation. If proper names are to be true tense-logical obstinate rigid designators, then proper names of objects which exists subsequent to, but not during, the time of evaluation, should nonetheless denote at the time of evaluation. But this does not seem to be the case. For instance, consider the name "Sally", introduced in 1995 to denote the first child born in the twenty-first century. In the case of such as name, it is dubious that it denotes, as evaluated in 1995. For it is metaphysically likely that the future is open, and not already determined. If so, then there is no fact of the matter, in 1995, as to what the reference of "Sally" is now. Thus, it is unclear whether proper names are tense-logical obstinately rigid designators.

Whatever the outcome of the debate concerning the obstinancy of proper names is, it does seem that proper names are rigid designators. This would suggest that what fixes the referent of a proper name is not a non-rigid description, but rather something else. If so, then the descriptive account of intentionality would seem to be false.

This argument, as Kripke recognized, is, however, too swift. For it collapses once one makes Kripke's useful distinction between a description giving the content of a name and merely fixing its referent. If the description fixes the referent of a name then there is no commitment to saying that the name denotes an object in other possible worlds in virtue of that object satisfying the description. On this picture, the

description fixes the referent, which is then the denotation. On this picture, the description fixes the referent, which is then the denotation of the proper name, even in worlds in which the referent does not satisfy the description. Thus, there is no direct argument from rigidity against the descriptive picture of intentionality.

The case differs, however, with the descriptive picture of content. For there does seem to be an argument from rigidity against the thesis that the content of a proper name is descriptive. For suppose that the content of the proper name "a" is descriptive. In particular, suppose that its content is given by the non-rigid description "DD". Then the content of a sentence which results from replacing "N" by "DD" should stay unchanged, since "N" and "DD" have the same content. But, given that "N" is rigid and "DD" is not rigid, (14) and (15) do not have the same content, as (14) is true and (15) is false:

- (14) N might not have been DD.
- (15) N might not have been N.

Therefore, substitution of "DD" for "N" does not preserve truth-value, and hence also does not preserve content. Hence "DD" and "N" do not, after all, have the same content.

Let us take a concrete example. Suppose that the name "Aristotle" has the same content as the description, "the last great philosopher of antiquity" should preserve content. But:

- (16) Aristotle might not have been the last great philosopher of antiquity.
- (17) Aristotle might not have been Aristotle.

differ in content, since (16) has a true reading (for instance, there is a reading of (16) where is true because Aristotle might have died as a child, in which case he never would have become a philosopher at all), and (17) has no true reading. Thus, "Aristotle" and "the last great philosopher of antiquity" are not intersubstitutable, and hence do not have the same content.

It thus seems that Kripke's demonstration that proper names are rigid also shows that they do not have descriptive content. An obvious next step is the thesis, which Kripke attributes to John Stuart Mill, that the content of a proper name is simply its denotation. However, Kripke does not, from rigidity alone, conclude that Millianism is correct; rather, he only commits himself to the following minimal thesis, which I shall henceforth call the *Rigidity Thesis*, or RT:

The rigidity of proper names demonstrates that utterances of sentences containing proper names, and utterances of sentences differing from those sentences only in containing non-rigid descriptions in place of the proper names, differ in content.

If RT is correct, then the descriptive account of content would seem to be false. In the rest of this paper, I shall focus on various ways of defending the descriptive account of content. In the next section, I will discuss a version of the descriptive account of content which is compatible with RT. After that, I will discuss critiques of RT.

The connection between names and identifying beliefs is cut, thus avoiding the problem of ignorance and error. We do not require that name users associate descriptions with a name that identify its bearer. It offers a very different view of competence with a name. People designate

Einstein despite their ignorance with him; they designate Jonah despite their errors about him. They do this by borrowing their reference from others who in turn borrowed theirs, and so on, right back to those who named the objects. None of these borrowers needs to be able to identify his lender. No lender needs to be an expert about the object. Ignorance and error are no bar to reference. The epistemic burden is lightened.

Third, the theory can solve the problem of identity statements. This was one of the problems that led to the introduction of senses and thus encouraged description theories in the first place. That the causal theory can solve this problem may seem surprising, for this theory rather similar in spirit to the Millian view. However, this theory disagrees with the Millian view in a way that is important to the problems of identity statements. There is more to the meaning of a name than its role of designating a particular object. A name has a finer-grained meaning because it has a sense with the property of designating by a certain type of d-chain, the type that makes up the network for the name.

The problem is to explain the difference in meanings of the identity statements:

- (1) Mark Twain is Mark Twain.
- (2) Mark Twain is Samuel Clemens.

The explanation is that (1) and (2) differ because the names "Mark Twain" and "Samuel Clemens" have different senses in that they have underlying them d-chains of different types. The d-chains differ in that the grounding and reference borrowings that created them involved in one case, the sounds inscriptions, etc. of the name "Samuel Clemens". And they differ in that those for one name are linked together by speakers to from one network, those for the other, another. How is that to be explained if the causal theory is right?

Let us focus on why (1) is uninformative. To understand "is" (the same as) is to master the "law of identity": for any x , x is x . Any instance of the law will be an uninformative consequence of that understanding. An instance of the law contains two occurrences of the same name for the same object. Since (1) is obviously an instance, it will seem uninformative. In contrast, (2) is not an instance and will not seem to be an instance because "Mark Twain" and "Samuel Clemens" *Sound, look, etc.* different. So (2) will seem to be informative.

Fourth, let us talk about the problem that is posed by the ambiguity of names. Proper names typically have more than one bearer. What determines which bearer is designated by a particular use of such a name? This problem can be put clearly, in terms of a helpful distinction between types and tokens. Tokens are datable, placeable parts of the physical world. Thus, Nana and her successor, Lulu, are cat tokens. The obvious example of word tokens are inscriptions of a page or sounds in the air. Types on the other hand, are kinds of tokens. Any token can be grouped into many different types. Thus Nana and Lulu are tokens of the type *cat, female, pet of x*, and so on.

We can now put the problem of ambiguity as follows. What settles which semantic type a given token of an ambiguous physical type belongs to? The semantic type is determined by *what the speaker had in mind* in producing the token. So the matter is settled by some facts about the speaker's psychology. What facts precisely? Description theories say that it is the descriptions the speaker associates with the name taken that counts. So, a token of "LIEBKNECHT" designated the father not the son because the speaker associated descriptions with it that denote the father not the son. The causal theory gives a different answer: It is the ability exercised in producing the token that counts. So "Liebknecht" designated the father because it was caused an ability which grounded in the father.

This solution to the problem of ambiguity, like that of description theories is speaker based. It does not overlook the importance of the linguistic and non-linguistic context of an utterance. The context guides an audience in removing ambiguity. It supplies evidence of what the speaker had in mind and hence evidence of the semantic reality.

Finally, and perhaps most important of all, the causal theory promises an explanation of the ultimate links between language and the world. Further more the explanation in terms of causation seems agreeably naturalistic. Description theories cannot explain the ultimate links: they make the reference of some words dependent on that of others, and thus give reference internal to the language. We need an explanation of the external relation that the whole system of words bears to the world. The causal theory makes the reference of the name dependent on an external relation.

The causal theory distinguishes empty name from non sense syllables, for even an empty name has an underlying causal network. What marks it empty is that its network is not properly grounded in an object. This can come about in two different ways.

First, a name may be introduced as a result of a false posit: a person wrongly thinks that an entity exists. Since there is nothing there he does not really name anything. His attempted grounding fails. But he tells people about his experience, believing it real, and a network grows. Names for various monsters may well have histories of this kind.

Second, a name may be introduced in what is explicitly or implicitly on work of fiction: a story, novel, film etc. Suppose that somebody (Say, Zappa) is not hallucinating but rather is bent on cashing in on the general fascination with science fiction. He writes a novel

about an extraterrestrial name "Tilda". Out of his imaginative act of network for the name grows up that is not grounded in an object.

This theory can give account of singular existent statement. The skeptical who responds to Zappa's alleged encounter with an extraterrestrial by claiming

Tilda does not exist.

will be saying something which is both meaningful and the true. It is meaningful because the name has an underlying causal network. It is true because its network is not grounded in an object.

The theory discussed so far makes reference change impossible for the reference of a name in immutably fixed at a dubbing. So the theory's account of language change is deficient. We have discussed how additions to the language occur through dubbings. It is clear how a name ties out: people seem to add new links to its network by using the name. However, there is no explanation of how the reference of a name can change.

G. Evans,¹³ has emphasized the importance of such explanation. He expresses this point with the help of examples. Let us take one such example. Twins A and B are born and dubbed "Shah" and "Dawn" respectively. After the ceremony the twins are somehow mixed up: every one calls A "Down" and B "Shan". The mistake is never discovered. The twins grow up, and grow apart with each invariably misnamed. Twin A turns out to be fiery, aggressive and physical, quite unlike twin B, who is mild self effacing and intellectual. What do we say of the boringly many utterances, "Dawn is fierce" and "Shan is mild"? Our simple version of causal theory gives the wrong result twin B was dubbed "Dawn" and B is not fierce. Hence all those "Dawn is fierce" tokens should be false. Yet they are surely not false. We want to say

that all the years of callings A “Dawn” and B “Shan” have resulted in these being their names. The names have changed the references since the dubbing.

Thus a more sophisticated causal theory is now needed. Its central idea is that a name is typically multiply grounded in its bearer. In our original sketch, the reference of a name was fixed at a dubbing. All subsequent uses of the name were parasitic on that dubbing. What this account misses is that many uses of a name are relevantly similar to a dubbing. They are similar in that they involve the application of the name to the object in a direct perceptual confrontation with it. The social ceremony of introduction provides the most obvious examples: some one says, “This is Nana”, pointing to the cat in question. Remarks prompted by observation of an object may provide others observing Nana’s behavior someone says, “Nana is Skittish tonight”. Such uses of a name ground it in its bearer just as effectively as does a dubbing. As a result it becomes multiply grounded. The dubbing does not bear all the burden of linking a name to the world.

Let us return to the twins’ example and the problem of reference change. The name “Dawn” was grounded in B at the dubbing, but from then on always grounded in A. The initial grounding in B pales into insignificance when compared with these thousands of grounding in A. So “Dawn” now designates A.

Nathan Salmon brings all the arguments given in favour of direct reference theory under one of the three main kinds. These are modal arguments, epistemological arguments and semantical arguments. Let us sum up these arguments.

The modal arguments

Let us consider the name “Shakespeare” as used to refer to the famous English dramatist. Let us consider now the property which someone – e.g., the speaker, the audience – might associate with the name as forming its sense on a particular occasion. These properties might include Shakespeare’s distinguishing characteristics or the criteria by which we identify him, such properties as being a famous English poet and playwright in the late 16th and early 17th centuries, authorship of several classic plays including *Hamlet*, *Macbeth*, and so on. This list may even include relational properties, as long as it does not include Shakespeare’s haecceity his property of being this very individual. The latter property is not the sort of property that Frege or his followers propose as forming part of the sense of a name.

Suppose then the name “Shakespeare” simply means “the person having this property, whoever he or she may be” or for simplicity, “the English playwright who wrote *Hamlet*, *Macbeth* etc.” Consider now the following sentences:

Shakespeare, if he exists wrote *Hamlet* and *Macbeth*.

If any one is English playwright who is the sole author of *Hamlet*, *Macbeth*, then he is Shakespeare.

If the descriptive theory of name is correct, then by substituting for the name its longhand synonym we find that these two sentences taken together simply mean: someone is the English playwright who wrote *Hamlet* and *Macbeth* if and only if he is the English playwright who wrote *Hamlet*, and *Macbeth*. That is if the descriptive theory is correct, the sentences displayed above should express *logical truths* – indeed they should be analytic sentences in the traditional sense. It should therefore express necessary truths, propositions true with respect to all possible

worlds. But surely it is not at all necessary that someone is Shakespeare if and only if he is an English playwright who wrote *Hamlet* and *Macbeth*. It might have happened that Shakespeare existed but never came to write these works. It might have come to pass that Shakespeare selected to enter a profession in law instead of becoming a writer. Certainly, this is a possibility. Hence the first sentence displayed above does not express a necessary truth. There are possible circumstance with respect to which it is false. Again, assuming Shakespeare has gone into law instead of drama, it could have come to pass that someone other than Shakespeare should go on to write this play. That is, it is not impossible that someone other than Shakespeare should write this play. Hence even the second sentence displayed above expresses only a contingent truth. It follows that the name "Shakespeare" is not descriptive in term of the properties mentioned.

The intuition that the two sentences displayed above are false with respect to certain possible worlds supports and is supported by a complimentary intuition. The intuition is that the name "Shakespeare" continues to denote the same person even with respect to counterfactual situation in which this individual lacks all of the distinguishing that we actually use to identify him. Since the name "Shakespeare" continues to denote the same individual even in discourse about a counterfactual situation in which not he but some other English man wrote *Hamlet* and *Macbeth*, the two sentences displayed above must be false in such discourse. Thus the main intuition behind the modal arguments is intimately connected with a related linguistic intuition concerning the denotation of proper name with respect to other possible world.

Salmon¹⁴ Contains that there is a weakness in the modal argument. They show only that names are not descriptive in term of the simple sorts of properties that come readily to mind, properties like

the authorship of a certain work. This is a significant finding. These are the sorts of properties that Frege himself sites as giving the sense of a name for an individual user. But faced with the modal argument, some descriptive theorists, such as Linsky and Platinga moved to a fancier descriptions employing modally indexed property, like the property of *actual* authorship of a certain work. It can hardly be objected, write Salmon, in the style of the modal argument just consider that there are possible world in which Shakespeare does not write *Hamlet* –in –the-*actual world*. Shakespeare wrote *Hamlet* in the actual world and it follows that it is necessary that Shakespeare *actually* wrote *Hamlet*. Thus the modal arguments seem ineffective against the thesis that proper names are descriptive in the Linskian way.

There are two serious problems with this move. First, terms such an 'actual', are precisely the sorts of terms to which the theory of direct reference applies. The property of actual authorship of a certain work is not a purely qualitative property of the sort that the orthodox theory demands. Second, though the modal arguments may no longer apply to the modally indexed version of the descriptive theory the epistemological and semantical arguments are unaffected by this recent epicycle on the descriptive theory.

The Epistemological Argument

Let us consider again the two sentences.

Shakespeare, if he exists wrote *Hamlet* and *Macbeth*.

If any one is English playwright who is the sole author of *Hamlet*, *Macbeth*, than he is Shakespeare.

The descriptive theory alleges that these sentences are analytic in the traditional sense. Assuming that the descriptive theory is correct, it would follow that both of this sentences convey information that in

knowable *a-priori*, i.e., knowable solely by reflection on the concepts involved and without recourse to sensory experience. If the name 'Shakespeare' were really descriptive in terms of the mentioned properties, it should be impossible to conceive that Shakespeare existed though he did not write any of these works, or that somebody other than Shakespeare was responsible for each of these works. Imagining that Shakespeare existed without these attributes should be as difficult as imagining a 'married bachelor'. Moreover, the consequences that these sentences convey *a-priori* knowledge obtains even if the name Shakespeare is held to be descriptive in terms of modally indexed property. Even if the name 'Shakespeare' means something like "the individual, whoever he may be, who was *actually* a playwright and who *actually* still be knowable *a-priori* that someone is Shakespeare if and only if he is the British playwright who wrote *Hamlet* and *Macbeth*. But it is not difficult to imagine circumstances in which it is discovered that, contrary to popular belief, 'Shakespeare' did not write *Hamlet* and *Macbeth* or any other work commonly attributed to him. Since this possibility is not automatically precluded by reflection on the concepts involved, it follows that the first sentence displayed above conveys information that is knowable only *a-posteriori*. One can even imagine circumstances in which it is discovered that we have been the victims of a massive hoax, and that, though Shakespeare is not responsible for any of these works, some other Englishman wrote every work commonly attributed to 'Shakespeare'. This means that even the second sentence displayed above is not analytic or true by definition, but conveys genuine *a-posteriori* information.

The Semantical Arguments

The semantical arguments are the strongest and most persuasive of the three kinds of arguments. This is offered by Donnellan, Kaplan, Kripke and Putnam. One example is Donnellan's concerning Thales. Let

us consider the set of properties which might be associated with the name 'Thales' as giving its sense according to the Fregean theory. Linskey, a Fregean critic of the direct reference theory, contents that the sense of a name like Thales may be determined by some simple description, say "the Greek philosopher who held that all is water". On the descriptonal theory, the name denotes whoever happens to satisfy this description. Suppose now that due to some error the man referred to writers such as Aristotle, from whom our use of name 'Thales' derives, never genuinely believe that all is water. Suppose further that by a strange coincidence there was indeed a Greek philosopher who did in fact hold this bizarre view, though he was unknown to them and bears no historical connection to us. To which of these two philosophers would our name 'Thales' refer? This is the clear semantical question with our name 'Thales' refer? This the clear semantical question with a clear answer. The name would refer to 'Thales'. Our use of the name would bear no significant whatsoever. It is only by way of accident that he enters into the story.

This example is not to be confused with the corresponding modal or epistemological arguments. In the modal and epistemological argument, the main question is what the truth-value of a sentence like 'Thales' is the Greek philosopher who held that all is water", which is alleged to be true by definition, becomes when the sentence is evaluated with respect to certain imagine circumstances that are possible in either a metaphysical or an epistemic sense. The strategy in the semantical arguments is more direct. The issue here is not whom the name *actually* denotes *with respect to* the imagine circumstances. Rather the issue is whom the name would denote if the circumstances described above *were to obtain*. The modal arguments are directly related to the question of what a particular term denote *with respect to another possible world*. The semantical arguments are directly concern with the non-modal question of denotation simpliciter. The key phrase in

the definition of a descriptive singular term is not “denote with respect to a possible world”, but “whoever or whatever uniquely has this properties”. On any descriptive theory of names precisely whom a name denotes depends entirely on whoever happens to have certain properties uniquely. The theory predicts that, if this circumstances were have to obtain the name would denote the harmit instead of Thales, and Linsky explicitly acknowledges that he is prepared to accept such consequences as this¹⁵. But here the theory is simply mistaken. The existence of harmit philosopher would be irrelevant to the denotation associated with our use of the name Thales.

Kaplan On ‘Dthat’

In this connection, it is worth bringing in Kaplan’s theory of direct reference, especially his notion of ‘dthat’¹⁶ which carries the import of singular reference. Kaplan’s is a theory of singular reference which has the unique distinction of keeping the Kripkean mode of rigid reference with a modicum of the Fregean sense such that reference for him is no more a matter of pure ostension, but of reference with contextual determinations and the speaker’s intentions. Thus, for Kaplan, we must understand the use of ‘dthat’ only with reference to the speaker’s parameters of contextualized intentions and the possible determinations of the sense of the linguistic symbols. Kaplan writes :

I will speak of a demonstrative use of a singular denoting phrase when the speaker intends that the object for which the phrase stands be designated by an associated demonstration.¹⁷

That is to say that the demonstrative use of a referring expression must be accompanied by the associated contextual determinations and the speaker’s intentions. Speaker’s intentions matter for the reason that

without referring to what the speaker intends to do we cannot understand what he refers to.

But reference in the proper context must be indicated by the reference-indicating device 'dthat' which is supposed to indicate that a singular reference has been made to an object in the right context. 'Dthat' is the referential device that shows that a certain reference has been made as in the following example:

Dthat (the speaker points to a picture) is a picture of one of the greatest philosophers of the twentieth century.

Here the speaker is referring to a picture hanging on the wall, it being the picture of Rudolf Carnap. The singular reference is to Carnap's picture and not to anything else. 'Dhat' shows that the reference is uniquely fixed in this case.

But suppose that without the speaker's knowledge Carnap's picture has been replaced by that of Spirow Agnew. In this case, is there still singular reference? Kaplan is of the opinion that singular reference does not remain intact if the object itself has been misidentified. Though the speaker intends to refer to Carnap's picture only, he has by mistake referred to Agnew's picture. That is why the reference has not been successful as the speaker's intention has not been taken into account. That is why Kaplan holds that singular reference must take into account the speaker's intention. The latter alone can guarantee what has been referred to in a given context.

Kaplan, like Kripke, believes that reference across possible worlds is a must if the determinate character of reference has to be laid down. We can therefore utter a proper name that can refer to an object in a possible

world such that we can determine the truth-value of the sentence in which the name occurs. Kaplan writes:

The content of an utterance is that function which assigns to each possible world the truth value which the utterance would take if it were evaluated with respect to that world.¹⁸

The utterance takes its truth from the fact that it refers to a possible world in a unique way. Here also the role of 'dthat' can be fixed in the following way :

Dthat (the first child to be born in the twenty-first century) will be bald.

Here there is a reference to a possible world in which a child yet to be born will be bald. The reference is to a child who does not exist now in the actual world but is in a possible world. Thus reference can be made to a possible world with the help of 'dthat'.

According to Kaplan, reference-fixing is done in a linguistic as well as social context such that the act of referring is pinned down to the speaker's social and linguistic world. It is only from the speaker's point of view that reference can be given a determinate character. The necessity of such identity statement as the following remains intact because of the determinate character of the symbols involved :

Dthat (the morning star) is identical with dthat (the evening star).

Here the statement is a case of identity in which necessity is preserved because of the rigidity of reference in the Kripkean sense. Kaplan is of the opinion that 'dthat' makes rigid reference necessity-preserving.

An assessment

Russell used the four puzzles and (implicitly) his Spot-Check argument to attack the view that ordinary proper names are Millian names, in favour of the Description Theory. In turn, Kripke attacked the Description Theory in favour of the claim that ordinary proper names are rigid designators. But the latter claim does not quite amount to Millianism, for not all rigid designators are Millian names.

A Millian name is one that has no meaning but its bearer or referent. Its sole function is to introduce that individual into discourse; it contributes nothing else to the meaning of a sentence in which it occurs. If we say "Jason is fat," and "Jason" is a standard proper name, then the meaning of that sentence consists simply of the person Jason himself concatenated with the property of being fat.

Being Millian certainly implies being rigid. But the reverse does not hold. Although Kripke cites Mill and argues that names are rigid, rigidity does not imply being Millian. For definite descriptions can be rigid. Suppose we fall in with the prevalent view that *arithmetical* truths are all necessary truths. Then there are arithmetical descriptions, such as "the positive square root of nine," that are rigid, because they designate the same number in every possible world, but are certainly not Millian because in order to secure their reference they exploit their conceptual content. Indeed, they seem to Russellize: "The positive square root of nine" seems to mean whatever positive number yields nine when multiplied by itself. So that description is not Millian even though it is rigid, because it does not simply introduce its bearer (the number three) into the discourse; it also characterizes three as being something which when multiplied by itself yields nine. Thus, in defending the rigidity of names, Kripke did not thereby establish the stronger claim.

(Nor did he intend to; he does not believe that names are Millian).

However, other philosophers have championed the Millian conception, which has come to be called the "Direct Reference" theory of names. The first of these in our century was Ruth Marcus (1960,1961), cited by Kripke as having directly inspired his work. Subsequent Direct Reference (DR) theories of names have been built on Marcus' and Kripke's work (for example, Kaplan (1975) and Salmon (1986)).

The latter theorists have extended Direct Reference to cover some other singular terms, notably personal and demonstrative pronouns such as "I," "you," "she," "this," "that," as well as names. (An obvious problem about extending Direct Reference to pronouns is that any normal speaker of English knows what they mean, whether or not the speaker knows whom they are being used to designate on a given occasion).

Of course, Direct Reference must confront the four puzzles, which are generated just as surely by names as they are by descriptions. And, obviously, the Direct Reference theorist cannot subscribe to Russell's solution or anything very like it, for according to Direct Reference, names do nothing semantically but stand for their bearers.

Let us reconsider the Substitutivity puzzle first. Recall our sentence:

(1) Albert believes that Samuel Longhorne Clemens has a pretty funny middle name.

(1) goes false when "Mark Twain" is substituted for "Samuel Longhorne Clemens." How can Direct Reference explain or even tolerate that fact?

Direct Reference theorists employ a two-pronged strategy. There is a positive thesis and there is a negative thesis (though these are not often explicitly distinguished). The positive Direct Reference thesis is that the names in question really do substitute without altering the containing sentence's truth-value. On this View,

(2) Albert believes that Mark Twain has a pretty funny middle name is true, not false. At the very least, belief sentences have transparent readings or understandings, on which readings the names that fall within the scope of "believes" really do just refer to what they refer to.

We naturally think otherwise; (2) does not seem true to us. That is because when we see a belief sentence, we usually take its complement clause to reproduce the ways in which its subject would speak or think. If I assert (2), I thereby somehow imply that Albert would accept the *sentence* "Mark Twain has a pretty funny middle name" or something fairly close to it. If I say, "Albert doesn't believe that Mark Twain has a pretty funny middle name," I am suggesting that if faced with the sentence "Mark Twain has a pretty funny middle name," Albert would say either "No" or "I wouldn't know."

But the Direct Reference theorists point out that such suggestions are not always true, perhaps not ever true. Consider:

(3) Columbus reckoned that Castro's island was only a few miles from India.

We all know what one would mean in asserting (3); the speaker would mean that when Columbus sighted Cuba he thought that he was already in the East Indies and was approaching India proper. Of course, being

450 years early, Columbus did not know anything about Fidel Castro; yet we can assert (3) with no presumption that its complement clause represents things in the way that Columbus himself represented them. *The speaker* makes this reference to Cuba without at all assuming that Columbus would have referred to Cuba in that way or in any parallel or analogous way.

So it seems undeniable that there are transparent positions inside belief sentences, in which the referring expression does just refer to its bearer, without any further suggestion about the way in which the subject of the belief sentence would have represented the bearer. Singular terms can be and are often understood transparently. We might even say:

(4) Some people doubt that Tully is Tully,

meaning that some people have doubted of the man Cicero that he was also Tully. That would perhaps be a minority interpretation of (4), but we *can* at least hear (4) as asserting that the people doubt of Cicero that he was Tully.

Virtually all the Direct Reference literature has been devoted to establishing the positive thesis, that names do have Millian readings even in belief contexts. But the positive thesis is far from all that the DR theorist needs. For although we may be persuaded that every belief sentence does have a transparent reading, most of us also remain convinced that every belief sentence also has an opaque reading, that on which some substitutions turn truths into falsehoods: *in one sense* Columbus believed that Castro's island was just a few miles east of India, but in another, he believed no such thing, for the obvious reason that he had never heard (and would never hear) of Castro. Yet it seems Direct Reference cannot allow so *much* as a sense in which belief

contexts are opaque. That is DR's negative thesis: that names do not have non-Millian readings, even in belief contexts.

The problem gets worse: it is hard to deny that the opaque readings are more readily heard than the transparent readings. Indeed, that is implicitly conceded by the Direct Reference theorists, in that they know they have had to work to make us hear the transparent readings. The Direct Reference theorists must try to explain the fact away as a particularly dramatic illusion. That is, they must hold that in fact, sentences like (1)-(4) cannot literally mean what we can and usually would take them to mean; there is some extraneous reason why we are seduced into hearing such sentences opaquely

As is implied by example (4), Frege's Puzzle is even worse for the Millian. According to DR, a sentence like "Samuel Longhorne Clemens = Mark Twain" can mean only that the common referent, however designated, is himself. Yet such a sentence is virtually never understood as meaning that. And anyone might doubt that Clemens is Twain, seemingly without doubting anyone's self-identity. Here again, the DR theorist bears a massive burden, of explaining away our intuitive judgments as illusory.

The Problems of Apparent Reference to Nonexistent and Negative Existential are if anything worse yet. If a name's meaning is simply to refer to its bearer, then what about all those perfectly meaningful names that have no bearers?

We have come to a deep dilemma, nearly a paradox. On the one hand, we have seen compelling Kripkean reasons why names cannot be thought to abbreviate flaccid descriptions, or otherwise to have substantive senses or connotations. Intuitively, names are Millian. Yet because the original puzzles are still bristling as insistently as ever, it

also seems that DR is pretty well refuted. This is a dilemma, or rather trilemma, because it has further seemed that we are stuck with one of those three possibilities: either the names are Millian, or they abbreviate descriptions outright, or in some looser way such as Searle's they have some substantive "sense" or content. But none of these views is acceptable.

A few theorists have claimed to find ways between the three horns. Plantinga (1978) and Ackerman (1979) have appealed to rigidified descriptions. Devitt (1989, 1996) has offered a radical revision of Frege's notion of sense. Lycan (1994) have offered a much subtler, more beautiful and more effective weakened version of DR.

We must now make a crucial distinction. So far we have been talking about the *semantics of proper names*, that is, about theories of what names contribute to the meanings of sentences in which they occur. DR in particular takes for granted the idea of a name's referent or bearer. But then a separate question is, in virtue of what is a thing the referent or bearer of a particular name? Semantics leaves that question to philosophical analysis. A *philosophical theory of referring* is a hypothesis as to what relation it is exactly that ties a name to its referent - more specifically, an answer to the question of what it takes for there to be a referential link between one's utterance of a name and the individual that gets referred to by that utterance.

Semantical theories of names and philosophical accounts of referring vary independently of each other. The difference was blurred by Russell and by Searle, because each gave a very similar answer to both questions. Russell said that a name gets its meaning, and contributes to overall sentence meaning, by abbreviating a description; *also*, what makes a thing the bearer of the name is that the thing uniquely satisfies the description. Likewise for Searle and his clusters.

But now let us notice that if one is a DR theorist, that alone tells us nothing about what attaches a name to its referent. The same goes for Kripke's weaker rigidity thesis; up till now, he has been talking semantics only, and we have seen nothing of his theory of referring. To that we now turn.

A Summary of the Causal-Historical Theory

Most of Kripke's objections to the Name Claim and to descriptions semantics generally will also translate into objections to the Description Theory of proper of referring. The description theory will predict the wrong referent or no referent at all (as when there is no particular description the speaker has in mind).

Kripke sketches a better idea. He begins memorably: "Someone, let's say, a baby, is born ..." He continues:

[The baby's] parents call him by a certain name. They talk about him to their friends. Other people meet him. Through various sorts of talk the name is spread from link to link as if by a chain. A speaker who is on the far end of this chain, who has heard about, say Richard Feynman, in the market place or elsewhere, may be referring to Richard Feynman even though he can't remember from whom he first heard of Feynman or from whom he ever heard of Feynman. He knows that Feynman was a famous physicist. A certain passage of communication reaching ultimately to the man himself does reach the speaker. He then is referring to Feynman even though he can't identify him uniquely.

The idea, then, is that my utterance of "Feynman" is the most recent link in a causal-historical chain of reference-borrowings, whose first link is the event of the infant Feynman's being given that name. I got the name from somebody who got it from somebody else who got it from

somebody else who got it from somebody else. . . , all the way back to the naming ceremony. We do not have to be in any particular cognitive state of Russell's or Searle's sort. Nor need we have any interesting true belief about Feynman, or as to how we acquired the name. All that is required is that a chain of communication in fact has been established by virtue of my membership in a speech community that has passed the name on from person to person, which chain goes back to Feynman himself.

Of course, when a new user first learns a name from a predecessor in the historical chain, it can only be by the newbie's and the predecessor's sharing a psychologically salient backing of identifying descriptions. But as before, there is no reason to assume that that particular backing of descriptions fixes the name's sense. It is needed only to fix the reference. So long as the newbie has a correct identificatory fix on the predecessor's referent, the newbie can then freely use the name to refer to that person.

Taken at face value, this causal-historical view makes the right predictions about examples such as Donnellan's Tom. In each example, referring succeeds because the speaker is causally connected to the referent in an appropriate historical way.

Kripke offers the further case of the biblical character Jonah.. Kripke points out that we should distinguish between stories that are complete legends and stories that are, rather, substantially false accounts of real people. Suppose historical scholars discover that in fact no prophet was ever swallowed by a big fish, or did anything else attributed by the Bible to Jonah. The question remains of whether the Jonah character was simply made up in the first place, or whether the story is grounded ultimately in a real person. Actually there are subcases: someone could have made up and spread a host of false

stories about Jonah immediately after his death; or because Jonah was an exciting individual, all sorts of rumors and stories began to circulate about him, and the rumors got out of hand; or there might have been a very gradual loss of correct information and accretion of false attributions over the centuries. But in either of these cases, it seems that today the Bible is saying false things about the real person, Jonah.

It might be thought that *ambiguous* names — names borne by more than one person — pose a problem for the causal-historical view. This is no problem at all for description theories, because according to description theories, ambiguous names simply abbreviate different descriptions. (If anything, description theories make proper names *too richly* ambiguous.) But what if we endorse DR, and we deny that names have senses or descriptive connotations in any sense at all? The Causal-Historical Theory of referring has a straightforward answer to the question of ambiguous names: if a name is ambiguous, that is because more than one person has been given it. What disambiguates a particular use of such a name on a given occasion is — what else? — that use's causal-historical grounding, specifically the particular bearer whose naming ceremony initiated its etiology.

Kripke emphasizes that he has only sketched a picture; he does not have a worked-out theory. The trick will be to see how one can take that picture and make it into a real theory that resists serious objections. The only way to make a picture into a theory is to take it over literally, to treat it as if it were a theory and see how it needs to be refined. Kripke does just that, though he leaves the refinement to others.

Problems for the Causal-Historical Theory

The causal-historical theory has many merits, but it is not problem-free. The causal-historical view's key notion is that of the

passing on of reference from one person to another. But not just any such transfer will do. First, we must rule *out* the "naming after" phenomenon. My boyhood friend John Lewis acquired a sheepdog, and named it "Napoleon" after the emperor; he had the historical Napoleon explicitly in mind and wanted to name his dog after that famous person. "Naming after" is a link in a causal-historical chain: it is *only* because the emperor was named "Napoleon" that John Lewis named his dog that. But it is the wrong kind of link. To rule it *out*, Kripke requires that "[w]hen the name is 'passed from link to link', the receiver *of* the name must. . . intend when he learns it to use it with the same reference as the man from whom he heard it". This requirement was clearly not met by John Lewis, who was deliberately changing the referent from the emperor to the dog and meant his friends to be well aware of that.

Second, Kripke adduces the example of "Santa Claus." There may be a causal chain tracing our use *of* that name back to a certain historical saint, probably a real person who lived in eastern Europe centuries ago, but no one would say that when children use it they unwittingly refer to that saint; clearly they refer to the fictional Christmas character. But then, how does "Santa Claus" differ from "Jonah"? Why should we not say that there was a real Santa Claus, but that all the mythology about him is garishly false? Instead, of course, we say that there is no Santa Claus. We use the name "Santa Claus" as though it abbreviates a description. A similar example would be that *of* "Dracula." It is well known that the contemporary use *of* that name goes back to a real Transylvanian nobleman called "Vlad". But of course when we now say "Dracula" we mean the vampire created by Bram Stoker and portrayed by Bela Lugosi in the famous movie.

Having merely raised the problem, Kripke does not try to patch his account in response, but moves on. Probably the most obvious feature to note is that "Santa Claus" and "Dracula" as we use those

names are associated with very powerful stereotypes, indeed cultural icons in the United States. Their social roles are so prominent they really have ossified into fictional descriptions, in a way that "Jonah" has not even among religious people. In a way, Jonah's iconic properties are side by side with his historical properties in the Old Testament, but as we might say, "Santa Claus" and "Dracula" are pure icons. And for the average American, the myth utterly dwarfs the historical source.

As Kripke says, much work is needed. Devitt ¹⁹ (1981a) offers a fairly well developed view that does qualify as a theory rather than only a picture.

However, here are a few objections that would apply to any version of the Causal-Historical Theory as described above.

Objections

We have been offered the notion of a causal-historical chain leading back in time from our present uses of the name to a ceremony in which an actual individual is named. But how, then, can the Causal-Historical Theorist accommodate empty names, names that have no actual bearers? Perhaps the best bet here is to exploit the fact that even empty names are introduced to the linguistic community at particular points in time, either through deliberate fiction or through error of one kind or another. From such an introduction, as Devitt (1981) and Donnellan (1974) point out, causal-historical chains begin spreading into the future just as if the name had been bestowed on an actual individual. So reference or "reference" to nonexistent is by causal-historical chain, but the chain's first link is the naming event itself rather than any putative doings of the nonexistent bearer.

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Of course, when a new user first learns a name from a predecessor in the historical chain, it can only be by the newbie's and the predecessor's sharing a psychologically salient backing of identifying descriptions. But as before, there is no reason to assume that that particular backing of descriptions fixes the name's sense. It is needed only to fix the reference. So long as the newbie has a correct identificatory fix on the predecessor's referent, the newbie can then freely use the name to refer to that person.

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about him, and the rumors got out of hand; or there might have been a very gradual loss of correct information and accretion of false attributions over the centuries. But in either of these cases, it seems that today the Bible is saying false things about the real person, Jonah.

It might be thought that *ambiguous* names — names borne by more than one person — pose a problem for the causal-historical view. This is no problem at all for description theories, because according to description theories, ambiguous names simply abbreviate different descriptions. (If anything, description theories make proper names *too richly* ambiguous.) But what if we endorse DR, and we deny that names have senses or descriptive connotations in any sense at all? The Causal-Historical Theory of referring has a straightforward answer to the question of ambiguous names: if a name is ambiguous, that is because more than one person has been given it. What disambiguates a particular use of such a name on a given occasion is — what else? — that use's causal-historical grounding, specifically the particular bearer whose naming ceremony initiated its etiology.

Kripke emphasizes that he has only sketched a picture; he does not have a worked-out theory. The trick will be to see how one can take that picture and make it into a real theory that resists serious objections. The only way to make a picture into a theory is to take it over literally, to treat it as if it were a theory and see how it needs to be refined. Kripke does just that, though he leaves the refinement to others.

Problems for the Causal-Historical Theory

The causal-historical theory has many merits, but it is not problem-free. The causal-historical view's key notion is that of the passing on of reference from one person to another. But not just any

such transfer will do. First, we must rule *out* the "naming after" phenomenon. My boyhood friend John Lewis acquired a sheepdog, and named it "Napoleon" after the emperor; he had the historical Napoleon explicitly in mind and wanted to name his dog after that famous person. "Naming after" is a link in a causal-historical chain: it is *only* because the emperor was named "Napoleon" that John Lewis named his dog that. But it is the wrong kind of link. To rule it *out*, Kripke requires that "[w]hen the name is 'passed from link to link', the receiver *of* the name must. . . intend when he learns it to use it with the same reference as the man from whom he heard it". This requirement was clearly not met by John Lewis, who was deliberately changing the referent from the emperor to the dog and meant his friends to be well aware *of* that.

Second, Kripke adduces the example of "Santa Claus." There may be a causal chain tracing our use *of* that name back to a certain historical saint, probably a real person who lived in eastern Europe centuries ago, but no one would say that when children use it they unwittingly refer to that saint; clearly they refer to the fictional Christmas character. But then, how does "Santa Claus" differ from "Jonah"? Why should we not say that there was a real Santa Claus, but that all the mythology about him is garishly false? Instead, of course, we say that there is no Santa Claus. We use the name "Santa Claus" as though it abbreviates a description. A similar example would be that *of* "Dracula." It is well known that the contemporary use *of* that name goes back to a real Transylvanian nobleman called "Vlad". But of course when we now say "Dracula" we mean the vampire created by Bram Stoker and portrayed by Bela Lugosi in the famous movie. .

Having merely raised the problem, Kripke does not try to patch his account in response, but moves on. Probably the most obvious feature to note is that "Santa Claus" and "Dracula" as we use those

names are associated with very powerful stereotypes, indeed cultural icons in the United States. Their social roles are so prominent they really have ossified into fictional descriptions, in a way that "Jonah" has not even among religious people. In a way, Jonah's iconic properties are side by side with his historical properties in the Old Testament, but as we might say, "Santa Claus" and "Dracula" are pure icons. And for the average American, the myth utterly dwarfs the historical source.

As Kripke says, much work is needed. Devitt ¹⁹ (1981a) offers a fairly well developed view that does qualify as a theory rather than only a picture.

However, here are a few objections that would apply to any version of the Causal-Historical Theory as described above.

Objections

We have been offered the notion of a causal-historical chain leading back in time from our present uses of the name to a ceremony in which an actual individual is named. But how, then, can the Causal-Historical Theorist accommodate empty names, names that have no actual bearers? Perhaps the best bet here is to exploit the fact that even empty names are introduced to the linguistic community at particular points in time, either through deliberate fiction or through error of one kind or another. From such an introduction, as Devitt (1981) and Donnellan (1974) point out, causal-historical chains begin spreading into the future just as if the name had been bestowed on an actual individual. So reference or "reference" to nonexistent is by causal-historical chain, but the chain's first link is the naming event itself rather than any putative doings of the nonexistent bearer.

Second, Evans, as we have seen, points out that names can change their reference unbeknownst, through mishap or error, but the Causal-Historical Theory as presented so far cannot allow for that. According to Evans, the name "Madagascar" originally named, not the great African island, but a portion of the mainland; the change was ultimately due to a misunderstanding of Marco Polo's. Or:

Two babies are born, and their mothers bestow names upon them. A nurse inadvertently switches them and the error is never discovered. It will henceforth undeniably be the case that the man universally known as "Jack" is so called because a woman dubbed some other baby with the name.

We do not want to be forced to say that our use of "Madagascar" still designates part of the mainland, or that "Jack" continues to refer to the other former baby rather than to the man everyone calls "Jack".

In reply, Devitt²⁰ suggests a move to *multiple grounding*. A naming ceremony, he says, is only one kind of occasion that can ground an appropriate historical chain; other perceptual encounters can serve also. Instead of there being just the single linear causal chain that goes back from one's utterance to the original naming ceremony, the structure is mangrove-like: the utterance proceeds also out of further historical chains that are grounded in later stages of the bearer itself. Once our use of "Madagascar" has a large preponderance of its groundings in the island rather than the mainland region, it thereby comes to designate the island; once our use of "Jack" is heavily grounded in many people's perceptual encounters with the man called that, those groundings will overmaster the chain that began with the naming ceremony.

Third, we can misidentify the object of a naming ceremony. Suppose I am seeking a new pet from the Animal Shelter. I have visited the Shelter several times and noticed an appealing grey tabby; I decide to adopt her. On my next visit I prepare to name her. The attendant brings out a tabby of similar appearance and I believe her to be the same one I intend to adopt. I say, "Here we are again, then, puddy-tat; your name is now 'Liz', after the composer Elizabeth Poston, and I'll see you again after you've had all your shots" (tactfully I do not mention the mandatory neutering). The attendant takes the cat away again. But unbeknownst to me it was the wrong cat, not my intended pet. The attendant notices the mistake, without telling me, recovers the right cat, and gives her shots (etc.). I pick her up and take her home, naturally calling her "Liz" ever thereafter.

The problem is of course that my cat was not given that name in any ceremony. The imposter was given it, even if I had no right to name her. Yet surely my own cat is the bearer of "Liz," not just after subsequent multiple groundings have been established, but even just after the naming ceremony I did perform. (It would be different if I had taken the imposter home and continued to call *her* "Liz.") The multiple-grounding strategy does not seem to help here. Rather, what matters is which cat I *had in mind* and believed I was naming in the ceremony. Devitt²¹ speaks of "abilities to designate," construing these as mental states of a certain sophisticated type. If so, then repair of the Causal-Historical Theory on this point will require a significant foray into the philosophy of mind.

Finally, people can be *categorically* mistaken in their beliefs about referents. Evans cites E. K. Chambers' *Arthur of Britain* as asserting that

King Arthur had a son Anir "whom legend has perhaps confused with his burial place." A speaker in the grip of the latter confusion might say "Anir must be a green and lovely spot"; the Causal-Historical Theory would interpret that sentence as saying that a human being (Arthur's son) was a green and lovely spot. Less dramatically, one might mistake a person for an institution or vice versa. Or one might mistake a shadow for a live human being and give it a name. In none of these cases is it plausible to say that subsequent uses of the name in question really refer to the categorically erroneous item.

Devitt and Sterelny²² (1987) call this the "*qua-problem*." They concede that the celebrant at a naming ceremony, or other person responsible for any of a name's groundings, must not be categorically mistaken and must indeed intend to refer to something of the appropriate category. This is a mild concession to Descriptivism.

There are more objections. The majority position seems to be that Kripke initially overreacted to the Descriptivist picture. He was right to insist that causal historical chains of some kind are required for referring and that descriptions do not do nearly as much work as Russell or even Searle thought they did; but (as critics, including Kripke himself, maintain) there still are some descriptive conditions as well. The trick is to move back in the direction of Descriptivism without going so far as even Searle's weak Descriptivist doctrine. But that does not leave much room in which to maneuver.

Let us now sum up Kripke's notion of rigid designation. Kripke's argument is based mainly on a distinction between what he calls *rigid* and *non-rigid or accidental* designators. A rigid designator is one which designates *the same object in all possible worlds*; i.e., if it designates a certain object in the *actual* world then it designates the *same* object in all

other possible worlds in which the object exists at all (it being conceivable that there are some possible worlds in which the object does not exist). A non-rigid designator, on the other hand, is one which does not designate the same object in all possible worlds; i.e., there are possible worlds in which the designator designates objects that are different from what it designates in the actual world. 'The square root of 4' is a rigid designator for it designates the same object, namely, the number 2 (supposing that a number is an object), in all possible worlds; but 'the President of the USA in 1970' is a non-rigid designator for it does not designate the same individual in all possible worlds: it designates Richard Nixon in the actual world, but that is only due to the actual outcome of the relevant Presidential election, and the result of the election need not have been what it actually was; the result of the election might have been different and a different man might have been elected, in which case 'the President of the USA in 1970' would have designated that other man.

In terms of this distinction between rigid and non-rigid designators, we can now formulate Kripke's basic argument against the theory that proper names have sense as well as reference. The following is the formulation of the argument.

If a proper name has a sense then the reference of the proper name is determined by its sense, i.e., there is associated with a proper name a certain condition, whatever that condition may be, and an object is designated by the name *if and only if* it satisfies that condition. If this is how the reference of a proper name is determined then a proper name cannot be a rigid designator; at least it cannot *in general* be a rigid designator. For, there is no guarantee that the object which satisfies the condition associated with the proper name in the actual world would also satisfy it in all other possible worlds. It may well be that some other

object satisfies the condition in another world. In fact, *if* the reference of a proper name is determined by its sense, it will be a non-rigid designator and behave exactly like 'the President of the USA in 1970'. But a proper name *is* a rigid designator. Therefore, a proper name does not have any sense.

But how can we show that a proper name is a rigid designator? Kripke's argument for this is quite straightforward. A proper name must be a rigid designator for; otherwise, we could not make counterfactual assertions by their help, as we can actually do. In order to assert that the man who was actually the President of the USA in 1970, by virtue of having won the relevant election, might not have been the President, for it was just a contingent matter of fact that he won the election, we can use the *name* of the person and say 'Nixon might not have been the President of the USA in 1970'. This counterfactual could not mean what it means unless the proper name 'Nixon' designated the same individual in both the actual world, in which he is the President, and the possible world, in which he is not.

Now let us consider briefly whether Kripke's argument really amounts to a refutation of the sense theory of proper names. There is no doubt that the argument is valid in the sense that *if* the premises are all true *then* the conclusion is also true. So, the question is whether the premises of the argument are all true.

The first premise of the argument is: if the proper name has a sense, then there is associated with every proper name a certain condition such that the proper name designates an object if and only if the object satisfies the condition. I think that this premise is true. In order to see that it is, it is necessary clearly to distinguish two significantly different ways in which one may maintain that a proper name is

associated with a condition. One may maintain that a proper name is associated with a condition in that the condition only *fixes the reference* of the name. Again, one may maintain that a proper name is associated with a condition not only in that the condition fixes the reference of the name, but also in that the fulfillment of the condition by the object is strictly *entailed* by its being designated by the name, so that the fulfillment of the condition is *logically* necessary and sufficient for the object's being designated by the name. This distinction would be clear from the following example. One may maintain that the condition involved in the description 'the length of the standard metre bar in Paris' is associated with the designator 'One metre', but *only* by way of determining its reference, and that is why it is logically possible that the length designated by 'One metre' would cease to satisfy the condition—it would cease to satisfy the condition in the logically possible event of the metre bar changing in its length, and would still continue to be designated by the same designator. (Perhaps, under the changed circumstances, we shall use a different condition for fixing the reference of the designator, e.g., the length which is equal to 39.37 inches.) Now, I think that it should be clear that one who wants to maintain that a proper name has *sense* must maintain that some condition or the other is associated with every proper name not in the first but in the second manner. For, if the condition is to constitute the sense or *meaning* of the name, the relation between the condition and the name must be more intimate than what a mere fixing of the reference would demand. There must, in fact, be a *logical connection* between the two.

Let us now consider the second premise of Kripke's argument in our formulation: if the reference of a name is determined by its sense, if, that is, a name designates an object if and only if it satisfies a certain condition, then it cannot be a rigid designator. This premise is really doubtful, especially in view of certain things which Kripke himself has

said. As Kripke has pointed out, some designators which are of this kind *are* rigid designators, e.g., 'the square root of 4'. It is not the case that this designator stands for one number in the actual world and a different number in another possible world. The square root of 4 is 2 in all possible worlds. One, may, however, argue at this point that 'the square root of 4' could be a rigid designator in spite of the fact that its sense determines its reference because the sense consists of a property which is *essential* to the number it designates; but, for the first thing, 'the square root of 4' is not really a proper name, and, for the next, what it designates is not one of those things which are usually supposed to be designated by proper names — persons, things, and places — and it is extremely doubtful whether *they* can be said to have any essential properties. (Recall the well-known philosophical theory that no proposition about a particular — it is only a particular which can be designated by a proper name — can be necessary, that all such propositions are contingently true, if true at all.) But this way out of the difficulty is not open to Kripke himself, because he has not only maintained but has actually argued at length that particular persons and things, typical bearers of proper names, can be said to have essential properties. To quote two of his own examples, the property of being born to the parents to whom he is in fact born is an essential property of Nixon, and the property of being made of the block of wood of which it is actually made is an essential property of a wooden table.

However, we can pursue this line a little more in defence of Kripke. What is important, it may be said, is *not* whether things designated by proper names have essences, but whether these essences play any role in the designation of objects by proper names. It can be argued that they do not. In the first place, Locke may indeed be right in 'maintaining that these *real* essences of things, as these essences have to be, are not in general knowable, and, as such, cannot

be used by those who use proper names. In the second place, even if these essences *are* knowable, it is not by their help that the reference of the proper names is, or need be, determined. What *may* be said to be necessary for (successful) use of proper names is that we should have a means of identifying the objects they are intended to refer to; i.e., we should be in a position to tell *which* objects they are supposed to be names of. But this can be done by the help of *accidental* characteristics: the description which may be used for the purpose of fixing the reference of a proper name need not be *necessarily* satisfied by what the name designates. (We may consider again, at this point, the relation between Nixon and 'the President of the USA in 1970', or the relation between one meter and 'the length of the standard meter bar in Paris'.)

But we are not sure whether it would constitute a defense a Kripke's second premise in our formulation, viz., that if the reference of a name is determined by its sense then it cannot be a rigid designator. This seems to be the line to take if what we want to prove is that a proper name does not have any sense at all. For if it is not the essential property which determines the reference of the name for its users then it is not the essential property which constitutes its sense. But this indeed is a strange, if not an absurd, draw!

This uncertainty over the second premise of the argument which we have attributed to Kripke surely weakens it. We should, nevertheless, take a look at the third premise of the argument: a proper is a rigid designator. This premise has an intrinsic interest of its own, although, if there is anything wrong with the second premise, it would not save Kripke's argument.

I think that being a rigid designator *is* an essential characteristic of a proper name, and that laying emphasis on this and showing its

various important implications are Kripke's major contribution to the subject, even if his argument to refute the sense theory of proper name does not succeed. But Prof. P. K. Sen²³ believes that the basic insight behind the principle that proper names are rigid designators was formulated by John Stuart Mill. At one place, Mill tells us that a proper name is a name of the *thing itself*. Prof. Sen take this to mean that the proper name designates the object which it designates *irrespective* of the properties it may or may not have, *whether or not* it satisfies a certain description, or condition. If, thus, the proper name stands for the thing itself, *independently of all those considerations*, then there is no reason why the proper name should not be a rigid designator. To strengthen this point, we may note that we are, in any case, in need of rigid designators. If we do not have such designators, we shall never be able to say *significantly* that this or that object satisfies or fails to satisfy, such and such conditions, or that this or that object might not have satisfied such and such conditions, or that it satisfies the conditions only contingently, at all. And what could such a designator, a designator which refers to the thing itself, cutting through, so to say, all descriptive trappings, be, if it is not a proper name? The counterfactuals to which Kripke calls our attention do show that we have in proper names such designators as we need. Another basic insight into the nature of proper names was captured quite early by Russell, and is now developed in great detail by David Kaplan in the context of demonstratives in his brilliant (unpublished) monograph 'Demonstratives'. It is that a proper name refers to its referent *directly*, and not via any characteristics. I think that the idea that a designator stands for the object directly and that it stands for the object itself are strictly logically equivalent with each other: a designator stands for the object itself *if and only if* it refers to it directly.

I want to conclude my discussion of the thesis that the proper

name is a rigid designator by saying that it seems to me that this thesis *and* the thesis that it does not have any sense both follow from the *same* basic characteristic, viz., that the proper name stands for the object itself, or, equivalently, that it refers to the object directly. It is not the case that either of these theses is a consequence of the other; in particular, it is difficult to maintain, for reasons we have already discussed, that a proper name's being a rigid designator is a consequence of its not having sense.

Thus, I do not think that what seems to be Kripke's argument against the sense theory of proper names succeeds. But the argument involves a number of ideas which are fundamental to the very notion of a proper name. The roots of all these ideas are to be found, however, in Mill's and Russell's work. The most original part of Kripke's contribution to the subject is the one in which he shows the far-reaching consequences of the fact that a proper name, is a rigid designator.

I should now like to make a few remarks on some contemporary treatments of Russell's and Frege's views of proper names. To begin with Russell, it is now customary to treat Russell's theory of proper names as a *sense theory*, and nearly to obliterate the distinction between his theory and Frege's. But this, no doubt, is a mistake. We can say at most that Russell had two theories, one for ordinary proper names, and another for what he calls 'logically proper names; and that, according to him, the ordinary proper names have sense, though the logically proper names do not. But even this is, in my opinion, misleading. For it is quite clear that what Russell really wants to maintain is that the ordinary proper names are not *genuine* proper names at all, that they are abbreviations of *definite descriptions*. And what is most important is that he maintains this *on the ground* that

ordinary proper names have sense. In fact, if we want to be quite faithful to the philosopher himself, we should say that this too is not an accurate account of his view of the matter. For Russell *does* reject the Fregean theory of sense. It is, therefore, unfair to attribute a sense theory of name to Russell and to bracket him with Frege. Surely, Russell says that the ordinary proper name has *descriptive content*, but what he means by this is only that it can be *expanded into a description*; and that is a very different matter.

Turning now to Frege, people seem to be quite certain nowadays that Frege's view of the sense of a proper name is exactly the same as that of Strawson and Searle that, according to him, the sense of a proper name can be given in terms of a *disjunction* of properties.

References

1. Marcus, Ruth Barcan: 1961, "Modalities in Intentional Language; *Syntheses*, 13 pp. 309-310.
2. Ibid : p. 309.
1. Ibid pp. 308-309.
2. Ibid pp. 311
3. Salmon, N 1981 *Reference and Essence*, Princeton, NJ Princeton University Press(1982, pp. 4),
4. Kripke, Saul ;*Naming and Necessity* Cambridge, Mass: Havard University Press. P.48.
6. Kripke, Saul., Semantical considerations on modal logic, *Acta Philosophica Fennica*, 16,83-94 p.66.
8. Ibid p.21 n 21.
9. Quine. W.,1943 Notes on existence and Necessity, *Journal on Philosophy*. 40, 113-27.
10. Evans, Gareth 1982: *The Varieties of Reference*. Oxford:Clarendon Press, Chapter 6 & 7.
11. Strawson, P.F., 1959: *Individuals*. London: Methuen, pp.151.
12. Ibid 1980, p. 78.
13. Evans, G. 1973, "The Causal Theory of Name". *Proceedings of the Aristotelian Society*. Suppl. Vol. 47 : 187-208.
14. Salmon N.U. 1982, *Reference and Essence*, Oxford, Basil Blackwell, pp. 26-27
15. Linsky, L. 1977 *Names and Descriptions*. Chicago: University of Chicago Press, p.109.
16. David Kaplan, "Dthat" in *The Philosophy of Language*, ed. A.P. Martinich, pp. 316-329.
17. Ibid., p321.
18. Ibid., p.324.

19. Devitt, M. (1981) *Designation*, New York: Columbia University Press.
20. Devitt, M., (1981) *Designation* , New York: Columbia University Press, p.150.
21. Ibid., sec 5.
22. Devitt, M. and Sterelny, K. (1987) *Language and Reality: An Introduction to the Philosophy of Language*, Cambridge: MIT Press
23. Sen ,P. K. "Some Recent Researches on Names"