Reference to the Future

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Elena Natalina

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ABSTRACT

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The thesis investigates the issue of speaker's and semantic reference to future objects. The conditions for each type of reference are developed by using some aspects of the descriptivist and causal theories of reference, and causal theory of knowledge. In the frameworks of the theories considered, a requirement of causal connection with the object the speaker refers to is suggested. Another requirement associated with successful act of referring is the ability of the speaker to form de re beliefs about the object in question. So, in determining the conditions for speaker's reference to future objects the possibility of having causal connection with and *de re* cognitive attitudes about future objects is discussed.

KISA ÖZET

Geleceğe Gönderme

Elena Natalina

Bu tezde gelecekteki nesnelere kişilerin ve terimlerin yaptıkları gönderme konuları incelenmektedir. Göndermenin her iki türünün koşulları betimsel ve nedensel gönderme kuramları ve nedensel bilgi kuramının temelinde geliştirilmiştir. Bu kuramların çerçevesinde kişinin gönderme yaptığı nesne ile arasında bir nedensellik bağının olması gerektiği önerilmektedir. Kişinin bir nesneye gönderme yapabilmesinin bir başka koşulu da, o nesneye yönelik *de re* düşüncelere sahip olmasıdır. Böylece, kişinin gelecekteki bir nesneye gönderme yapabilme koşulları geliştirilirken, kişinin söz konusu nesne ile arasında bir tür nedensellik bağlantısının olması ve bu nesne hakkında *de re* düşüncelere sahip olmasının olanaklılığı tartışılmaktadır.

ACKNOWLEDGEMENTS

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INTRODUCTION

In my thesis I would like to investigate the question of the possibility of reference to future objects. I am going to present the conditions for semantic and speaker's reference and see whether these conditions are met in our attempts to refer to future objects. It is important to clarify at the start the background assumption in this thesis: there should not be different conditions for referring to different categories of future objects – they should be the same for reference to people, artifacts, concepts, and so on. The discussion of reference to future objects represents a really interesting and controversial philosophical problem. Also, this question somehow received less attention in the related literature than it deserved.

The philosophical significance of the issue I am going to discuss in this thesis reveals itself in at least two areas. First of all, the issue has epistemic significance. The clarification of the conditions for referring to future objects would be useful for understanding the nature of epistemic relation in which we could stand with the future. For instance, a clear account of reference to future objects would facilitate the estimation of epistemic weight of our claims about the future. Thus, the possibility to successfully refer to at least some future objects is crucial for scientific purposes, namely, for developing theories, making sound predictions and the like. Second, since the discussion of future reference is closely related to the issues of openness of the future, determinism, and free-will, the topic also has ethical significance. Although these latter issues will not be covered in this thesis, the proper account of future reference may help to clarify to what extend the future is open or determined and whether or not individuals genuinely possess free will.

There are two opposing positions one may choose to take in regard to the question of my inquiry: we either can or cannot refer to entirely future objects. Let me present in brief the intuitions behind these two positions and some of the implications they have.

First, I shall focus on the latter option, namely, on the denial of the possibility to refer to future objects. This position is based on a certain form of the Causal Theory of Reference, which can be summarized as follows:

An utterance **U** of a proper name refers to an object **x** if and only if there is some causal-historical chain **C** such that:

i) **U** is the final member of **C**;

ii) The first member of **C** is an initial baptism of some name of **x**.

Given this theory and the assumption that there is no backward causation so that we can have direct causal contact with future objects, it may follow that there is no reference to entirely future objects.

The denial of this possibility seems to have the following implications. First, if one accepts Frege's principle of compositionality, namely, that the reference of a complex expression is entirely determined by the references of its constituents, then the sentences containing the terms for future objects do not refer. According to Frege, the reference of a sentence is its truth-value, so if this is also accepted, one may come to the conclusion that the sentences about future objects do not have any truth-value. The second implication may be that assuming that the terms we use to speak about the future fail to refer to any particular object, it can be said that we, in a way, do not talk about anything particular. In other words, we cannot have *de re*

singular thoughts about entirely future individuals[1]. These two implications seem to suggest that all the claims about the future are empty, free of any epistemic value. Another implication, which is less important for my current purposes, is the denial of 'tenseless' theories of time, according to which the future is as real as the past and the present[2]. Each of these implications, especially the first two, I think deserves careful consideration.

The opposite view, which states that we can refer to future individuals and the one I would like to develop, rests on different intuitions. It may be the case that the modified version of the causal theory of reference may provide the way to fix the referent for the terms that we use when we wish to talk about future objects. Another intuition is the denial of the second implication of the previous view, namely, the intuition that we can have *de re* singular thoughts about future objects. So my task would be to specify the conditions for referring to the future, preferably compatible with the assumption that there is no backwards causation. Thus, the first part of this project would be to show that even if we reject backwards causation, causal connection with some future objects is achievable. The second part of my project is to show that *de re* singular thoughts about future objects are possible.

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[1] G. Oppy, 1995
[2] R. Teichmann, 1991

CHAPTER 1: Semantic and Speaker's Reference

1.1 Introduction: the semantic/speaker's reference distinction

In this chapter I am going to focus on the speaker's reference – semantic reference distinction for singular terms. The latter is related to a term's success or failure to refer to an object, the former concerns the ability of a speaker to refer by using a term. Also, we can say that semantic reference is an abstract relationship between a term and an object (referent) whereas speaker reference is an act, something that people do. I will discuss how this distinction can be made within the frameworks of descriptivist view, namely, Frege's, Russell's, and also cluster theories on the one hand, and causal theory of reference, developed by Kripke, Evans and Donnellan on the other. Then, by making use of the accounts presented I will try to specify the conditions for each type of reference for future objects.

But first I shall clarify the notions of semantic and speaker's reference. Kripke, following Grice's distinction between "word meaning" and "utterer's meaning", firstly distinguished these two types of reference[3]. What words can mean is determined by the conventions of our language, together with speaker's intentions and various contextual features. Word meaning is a semantic notion. The notion of what the speaker meant by using words, on the other hand, is pragmatic. Speaker's meaning is derived from various specific intentions of the speaker, together with a number of general principles, applicable to all human languages regardless of their

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[3] Grice, 1968

special conventions[4]. The distinction can be illustrated by the following example: suppose that one burglar says to another, "The cops are around the corner." Here, what the words mean is clear: the police are around the corner. However, what the speaker might have meant in fact was "We cannot wait around collecting any more loot: Let's split!"[5]

According to Kripke, speaker's reference and semantic reference are the special cases of the Gricean notions of words' and utterer's meaning. Kripke defined these two types of reference as follows:

> If a speaker has a designator in his idiolect, certain conventions of his idiolect (given various facts about the world) determine the referent in the idiolect: that I call the semantic referent of the designator. ... we may tentatively define the speaker's referent of a designator to be that object which the speaker wishes to talk about, on a given occasion, and believes fulfills the conditions for being the semantic referent of the designator.[6]

Also I think that it is possible to represent the difference between semantic and speaker's reference by considering the mechanism of reference as a logical relationship R. Then, semantic reference would be a two-place relationship of the form R(x;y) where x is a term and y is the object x refers to. Speaker's reference, in turn, would be a three-place relationship of the form R(x;y;z) where x is a term, y is its referent, and z is a speaker. Naturally, the conditions for these two types of reference differ from each other.

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[4] Grice calls these principles "conversational maxims"

[5] This example is borrowed from Kripke, 1979

[6] Kripke, 1979 (pp.172-173)

1.2 The descriptivist account for the two types of reference

Now let me try to figure out what the conditions for each type of reference are within the framework of descriptivist theories of reference. I will inspect three major accounts, namely, Frege's theory, Russell's theory and the cluster theory of reference. Frege's account was the first that emphasized the distinction between meaning and reference for singular terms[7]. According to him, each singular term has sense, which fixes the referent. Frege defined the sense of an expression as the cognitive value of that expression, which encapsulates the way in which the reference is presented to a person (speaker). For him, senses are objective and thus can be shared by many people. For example, 'the teacher of Alexander the Great' may be a commonly shared sense of the singular term 'Aristotle'. Although Frege did not explicitly state it, the sense of a singular term has the form of a description.

Russell's account is in a way based on Frege's line of thought; but at the same time has some differences[8]. He distinguished ordinary proper names from "logically proper names"[9], and his description theory applies to the ordinary ones. They are treated as abbreviated descriptions; so for example, 'Einstein' may abbreviate 'the discoverer of the Theory of Relativity'. Also, Russell clarified the mechanism of reference fixing by introducing the notion of definite descriptions. In short, the definite description 'the F' denotes x if and only if 'F' applies to x and to nothing else; for example 'the author of *Naming and Necessity*' denotes Kripke, because 'author of *Naming and Necessity*' applies only to Kripke.

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[7] Frege, 1952

[8] Russell, 1967

[9] According to Russell, logically proper names stand in a relationship of utmost intimacy to their reference. They immediately and directly focus attention on an object and that is all they do.

Another kind of descriptivist theory is known as "cluster" theory of reference, the most influential exponents of which are Strawson and Searle[10]. According to this theory, a cluster of descriptions, which reflect various properties associated with the object, expresses the sense of a term. So, for example, the meaning of the term 'Aristotle' may be expressed by the following conjunction: 'pupil of Plato, born in Stagira, author of the Nichomachean Ethics, teacher of Alexander the Great, systematizer of syllogistic logic'. Not all of the descriptions in the cluster have to be definite in the Russellian sense. Actually, the main shortcoming of the cluster theory is the lack of a clearly stated principle of selection according to which a description is included to the cluster. This cluster determines the reference: the term refers to the object that most, but not necessarily all, of those descriptions denote. However, the account does not give any explicit criteria which description(s) should be counted as the most weighted one(s) in determining the referent.

So far I have considered the descriptivist view as an account of meaning and reference for the proper names. The summary of this view may be given in the form of two major claims:

(1)   Descriptions express the sense/meaning of a name; the name is synonymous with the descriptions;

(2)   The name refers to whatever is picked out by the associated descriptions.

If we ignore the shortcomings of the cluster theory related to the lack of specification criteria, the crude formulation of the condition for semantic reference,

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[10] Strawson, 1959; Searle, 1958

according to the descriptivist view, may be stated as follows: a term refers to an object if and only if the definite description or a cluster of descriptions, associated with the term, applies to this object and nothing else.

Now I will try to define the condition for speaker's reference. Although descriptivist theories do not explicitly distinguish between two types of reference, I think that the condition for speaker's reference can be inferred from them. Consider the passage from Strawson's "Individuals":

> ...it is no good using a name for a particular unless one knows who or what is referred to by the use of the name. A name is worthless without a backing of descriptions which can be produced on demand to explain the application.[11]

Thus, since the referent is determined by the description(s) the speaker associates with the term, the condition for speaker's reference seems to be that the competent speaker must know identifying facts about the referent. That is, the speaker must have some belief(s) about the bearer of any name s/he successfully uses that is true and would not be true of anything else.

1.3 The causal theory account for the two types of reference

Let me now proceed to the account for semantic and speaker's reference given by the causal theory of reference. This theory was developed mainly by Kripke, Donnellan, and Evans, initially as a criticism of the descriptivist view. So before getting to the discussion of the account suggested by the causal theory, it is useful to understand the conceptual framework of this criticism from which the account actually follows. There are two aspects of the descriptivist view that the

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[11] Strawson, 1959, p.20

causal theory aims its criticism at. The main and initial disagreement between those two views is over the semantic content of proper names. Kripke's theory, in particular, is based on the criticism and rejection of the first claim of descriptivism, i.e. that descriptions express the sense/meaning of a name and therefore that the name is synonymous with the associated description(s). His and Donnellan's examples show that in many cases a description, associated with a name cannot be synonymous with the name, since it can be applicable to many objects or even to no object at all. The core issue here is the procedure of introducing a name, because that is when a name gets its semantic content. According to Kripke, descriptivist intuitions about the nature of this procedure make it something like the following:

> The picture is this. I want to name an object. I think of some way of describing it uniquely and then I go through, so to speak, a sort of mental ceremony: By "Cicero" I shall mean the man who denounced Catiline; and that's what the reference of "Cicero" will be.[12]

In such a procedure of introducing a name an essential component is a definite description of an object, which by default of the procedure, gives the semantic content, the meaning of a name. Kripke objects to the intuition on which the whole procedure is based, namely, the requirement to have in mind some descriptions that identify an object being named for all cases of name introducing. Actually, he claims that for most cases a name gains its meaning not in virtue of the description(s) associated, but in virtue of some acquaintance, special kind of connection between an object and a name-giver. Such criticism of the descriptivist account for semantic content of the proper names undermines the descriptivist account for reference. As it could be seen from the two major claims of the descriptivist view, definite descriptions are assigned two functions: they express a

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[12] Kripke, 1980, p. 285.

meaning of a proper name, and also determine the referent. Moreover, they play an important role in determining not only semantic reference, but also in determining conditions for speaker's reference in the way presented earlier in this chapter. So, if we can divide the descriptivist view into two interconnected parts, namely, the theory of meaning and the theory of reference, the criticism and objections brought by causal theorists to the former part, can be naturally extended to the latter. That would be the second aim of causal theories' criticism of descriptivist view.

As could be easily inferred, the most famous examples presented by causal theorists attack the condition for speaker's reference given by the descriptivist view; namely, they disagree with the idea that in order to refer to an object successfully a speaker must possess some identifying information about that object. In fact, these examples show that a speaker may have no definite description of an object in mind, or may associate with a name a definite description that picks out an object other the one than s/he intends to refer to and still be able to refer. For instance (an example by Kripke), an ordinary man in the street can refer to the physicist Feynman by using the name "Feynman" and say something true or false of him even though there is no description uniquely true of the physicist, which he can provide.

From these counter-examples causal theorists came to deny the entire idea of a reference-fixing mechanism proposed by the descriptivist account. In other words, they deny the second major claim of the descriptivist view, namely, that the name refers to whatever is picked out by the associated descriptions. According to the causal theory of reference, it is not the descriptions a speaker associates with a name that fix the referent. Rather, the basis of reference fixing is a certain causal contact a speaker has with an object. However, the role of descriptions in referring is not

totally dismissed by causal theory of reference; there is just a change in the focus. In the descriptivist view the referent is given by descriptions, in the causal theory the descriptions are determined by the referent. As Evans put it:

> ...item is not (in general) the satisfier of the body of information the possession by the speaker of which makes it true that he knows of the existence of the item; it is rather that item which is causally responsible for the speaker's possession of that body of information, or dominantly responsible if there is more than one.[13]

Donnellan in his paper "Proper Names and Identifying Descriptions" makes a similar point. He argues that although providing descriptions is often seen to be the best strategy to find out what the referent of a name is, it is not the case that only a backing of descriptions identifying the referent by its fitting them could serve to connect an object with a name. He illustrates his view on the role of descriptions in determining the referent by the following analogy:

> ... we can imagine the following games: In the first a player gives a set of descriptions and the other players try to find the object in the room that best fits them. This is analogous to the role of the set of identifying descriptions in the principle I object to. In the other game the player picks out some object in the room, tries to give descriptions that characterize it uniquely and the other players attempt to discover what object he described. In the second game the problem set for the other players (the audience in the analogue) is to find out what is being described, not what best fits the descriptions. Insofar as descriptions enter into determination of what the referent of a name is, I suggest that the second game is a better analogy[14].

Now let us see what kind of reference-fixing mechanism the causal theory of reference suggests instead of identifying descriptions. The core idea of this theory of

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[13] Evans, 1983, p. 278

[14] Donnellan, 1972, p. 377

reference is that a term refers to whatever is causally linked to it in a certain way, a way that does not require speakers to have identifying knowledge of the referent. The referent of a name, as presented by Kripke in "Naming and Necessity"[15], is fixed by the following procedure.

First, the name is introduced by ostension or, in some cases, by description at a formal or informal dubbing. The latter way of name-introducing deserves some more consideration. Kripke accepts that there are some cases of dubbing where it is impossible to literally point at the object being named, where there is no direct contact between the object and the dubber[16]. In such cases, there is no other way of fixing the referent than giving a description that specifies an object in question. However, reference fixing descriptions of this kind need not to be identifying in a sense required by descriptivist view. In fact, they may be indefinite or even wrong. They do not give the meaning of the name and cannot be synonymous with it. They do not determine but fix the referent at the dubbing[17].

The event of initial baptism is perceived by the dubber and probably others. Also, this is the causal action, since to perceive something is to be causally affected by it. As a result of this action, a witness to the dubbing will gain an ability to use the name to designate the object. Those who were not present at the dubbing acquire the semantic ability from the dubber and the witnesses of the dubbing. This acquisition is also a causal process. So, the referent of a name is determined by the

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[15] Kripke, 1980

[16] In endnote 9 to *Naming and Necessity*, Kripke gives an example of introducing the name for the planet Neptune (p. 292)

[17] I will discuss in more details the role of descriptions in reference-fixing later in this chapter.

appropriate causal chain which links the object, those at its dubbing and the present user of the term.

But the classical version of the causal theory of reference that I have just presented has a certain deficiency. It looks like the reference of a name is immutably fixed at a dubbing and therefore even simple reference change becomes impossible. Suppose for instance that a person adopts two sibling kittens, which look exactly like each other. S/he names them Mia and Blacky, and in order not to mix them up, s/he puts on them collars of different colors. But soon after that somebody change the collars and everyone starts to call Mia 'Blacky', and Blacky 'Mia'. So each time a person intends to refer to Mia, s/he fails since the name s/he uses actually refers to Blacky.

Evans in his article "The Causal Theory of Names" attempts to solve this problem by introducing the notion of multiple grounding[18]. The main idea of his account is that many subsequent uses of a name are relatively similar to the initial dubbing. They are similar in that they involve the application of the name to the object in a direct perceptual confrontation with it. Such uses of a name ground it in its referent just as effectively as does a dubbing. As a result it becomes multiply grounded, so that the dubbing does not bear all the burden of reference fixing. And in cases of reference change like in the example presented above, the name gets grounded in more than one object; so the name 'Mia' was originally grounded (at the dubbing) in the first kitten, but from then on is always grounded in the second kitten. This second kitten becomes the dominant source of a "dossier of information" a speaker associates with the name 'Mia', and the initial grounding in the first kitten

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[18] Evans, 1983

becomes insignificant in comparison with the numerous groundings in the second one. Thus, 'Mia' now refers to the kitten which was dubbed 'Blacky'.

Now let me consider the conditions for semantic and speaker's reference in the framework of the causal theory of reference. As I mentioned earlier, this theory was developed mainly as a response to the failure of the descriptivist view in the realm of speaker's reference. So it may seem that the causal theory of reference belongs to the area of pragmatics rather than semantics. However, I think that the conditions for semantic reference, that is, the criteria which determine when a term refers, can still be derived from this view. It may be formulated as follows: a term refers if there is a proper causal-historical chain between the first introduction of this term (dubbing) and its current usage. It is hard to give an explicit definition of what a proper causal-historical chain is, but crudely speaking, it is the one which consists of a reference borrowing series that obey various conventions of language[19].

If we consider again Kripke's definition of the two types of reference presented earlier in this chapter, we may see the connection between the conditions for semantic and speaker's reference. As was stated by him, the speaker's referent is an object which speaker believes fulfills the conditions for being a semantic referent of the term. To form such belief a speaker must be in a certain causal contact with the object in question. This contact may be direct, if an act of referring takes place at dubbing or grounding settings, or indirect, if this act is an instance of reference borrowing. In other words, an ability of a speaker to refer consists, mainly, in cognitive attitudes – beliefs, desires, hopes, and the like – prompted by perception of the object at its dubbing or by conversation about it. So it seems that the main

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[19] Gricean conversational maxims can be regarded as such conventions

condition for speaker's reference in this account is to have a proper causal connection with an object a speaker intends to refer to.

1.4 Interdependency between the two types of reference

So far I have presented the conditions for semantic and speaker's reference as given by the descriptivist and causal theories of reference. Now let me briefly consider the relationship of interdependency between two types of reference in the light of the theories discussed. Namely, I would like to answer the question of whether failure in semantic reference necessitates failure in speaker's reference; i.e. is it possible for speaker to refer successfully using a term that does not refer and vice versa. For descriptivist theories the answer seems to be clear: it cannot be the case that by using a term which does not refer, a successful speaker's reference is possible. A fulfillment of the condition for semantic reference plays a dominant role here; perhaps we can say that semantic reference determines speaker's reference in the descriptivist framework. Indeed, if the definite description or cluster of descriptions associated with the term does not pick out a unique object it is by default impossible for a speaker to hold some beliefs about the object s/he intends to refer to by using this term that are true and would not be true of anything else.

Let us look at now how the relationship between semantic and speaker's reference is seen by the proponents of the causal theory of reference. In his criticism of the descriptivist view, Donnellan provides the examples which show that by using a non-referring term a speaker can successfully refer. Moreover, Donnellan seems to believe that semantic reference is determined by speaker's reference and that the

former can be reduced to the latter[20]. Kripke, on the other hand, argues against such reductionism and stresses the importance of proper distinguishing between the two types of reference. This disagreement may require a separate extended discussion[21], which, however, seems to be outside the focus of my discourse. But I tend to agree with Kripke. In fact, given the conditions for semantic and speaker's reference in causal theories, it can be inferred that these two kinds of reference are quite independent from each other: there may be the cases where there is no proper causal-historical chain between a term and its referent (especially when a reference is fixed by description) but the special causal connection between the speaker and the object allows the former to refer successfully.

1.5 Conditions for semantic and speaker's reference revised

In the light of the issues discussed, I think it is plausible to give an outline of the conditions for semantic and speaker's reference that would unite the advantages of both the descriptivist and causal theory's accounts. At the same time such an outline would present a general framework for the reference conditions I will use throughout this thesis. In fact, an account which combines the features of both theories has been already suggested by Devitt and Sterelny[22]. They called it the "descriptive-causal" theory[23], and it is the theory of names and reference. According to their view, which points at some shortcomings of the causal theory[24], any name is associated, consciously or unconsciously, with a description in grounding. Thus, the

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[20] Salmon, 1994

[21] Such discussion can be found in Salmon's paper (1994), where also the significance of the distinction between two types of reference is questioned.

[22] Devitt and Sterelny, 1987

[23] ibid., p.65

[24] The major shortcomings of causal theory give rise to what Devitt and Sterelny call "the *qua-problem*", which is discussed in ibid., pp.63-4

descriptions gain importance that is greater than was thought by the proponents of causal theory. Devitt and Sterelny show that descriptions play a significant part in reference fixing and also in establishing the connection between the speaker and the object. At the same time Devitt and Sterelny agree with the causal theory on such issues as reference borrowing, multiple grounding, and other important features of a proper causal-historical chain (which they call "d-chain") that connects the first introduction of a name and its current usage and enables speaker to refer. That is why I think the condition for semantic reference can be obtained from a modified (or loosened) version of that condition given by the descriptivist account; and the condition for the speaker's reference can be borrowed from the causal account. Let me represent the conditions for both types of reference in the form of two theses:

> **(1)** A singular term refers semantically if there is a unique object that is determined by the description associated (consciously or unconsciously) with this term at the act of initial dubbing.

> **(2)** A speaker is able to refer if there is a proper causal connection between him/her and the object s/he intends to refer to.

1.6 Applicability of the conditions for each type of reference to the cases of referring to the future

The examples and argumentation used in the theories presented were built on cases of referring to present objects. The authors do not provide any explicit suggestions that these conditions can be applied to the reference to future objects. And this is the question I would like to investigate further in this chapter.

But first let me stress that the speaker's reference – semantic reference distinction is perfectly valid for the cases of referring to future objects, so we can speak of different conditions for these two types of reference. Also, before proceeding to the discussion of those conditions, I would like to clarify my position concerning the question of the existence of future objects. One may say that no matter what are the conditions for a term or a speaker to refer to a future object – proper causal-historical chain, causal connection, or fulfilling the definite description – the reference is impossible simply because the object in question does not exist. But future objects do not exist only if existence is taken in the temporal sense. However, there is also the atemporal understanding of existence, which allows past- and future-tense quantification. This is the sense of existence I adopt here, and in this sense we can say that future objects exist.

Now let us see under what conditions a term can successfully refer to a future object. First we shall consider how the name for a future object is introduced. For obvious reasons, it cannot be done by ostension. So it seems that the only way of introducing the name for a future object is through the use of a certain description, or a cluster of descriptions. Does this mean that the condition for semantic reference to future objects can be directly borrowed from descriptivist theories? As it was stated above, the condition for a term to refer requires the description(s), associated with that term to apply to an object it denotes and to nothing else. The key concept here is the uniqueness of an object picked out by the related descriptions. In my opinion, due to lack of variety in ways of fixing the referent when we first introduce a name for a future object we are quite precise in providing description(s) which can be applied to only one object. For example, a person may talk about her yet unborn first child whom she is going to name 'Uzay'. The term 'Uzay' here fulfills the condition

for successful semantic reference, since the definition associated with this term can be applied only to one object, namely, her future first-born.

Although the descriptivist view can provide a more or less trouble-free condition for semantic reference to future objects, the application of the condition for speaker's reference, borrowed from this view, is quite problematic for the future objects case. As I have specified earlier in this chapter, the condition for speaker's reference is that the competent speaker must know identifying facts about the referent. Despite Kripke's and Donnellan's examples that show the inadequacy of this condition[25], there is another problem that comes out when one tries to adopt it in particular for an act of referring to future objects. This problem is the problem of "backward" causation. Under the descriptivist condition for speaker's reference there is an assumption that some facts about an object to which s/he is referring cause his/her true beliefs about that object. But, as Goldman argues in his paper "A Causal Theory of Knowing"[26], if we presuppose that we can know facts about future, then we must accept that these known facts cause our beliefs about future objects. And that is to accept "backward" causation.

Having these problems in mind, can we then adopt causal theories' condition for speaker's reference, which says that in order to refer successfully a speaker should have a causal connection with an object s/he aims to refer to? It depends on what kind of causal connection we may possibly have with future objects. Certainly, this connection should not involve "backward" causation; i.e. contain a requirement for a speaker to have beliefs about a future object that are directly or indirectly

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[25] To remind, these examples were considering the cases where the speaker held false or even had no identifying beliefs about an object to which s/he successfully refered.

[26] Goldman, 1967

caused by the object itself. In my opinion such causal connection is possible. A detailed analysis of causal connection with future objects will be the subject of the next chapter.

There is another issue that, I think, is closely related to the discussion of the conditions for speaker's reference to future objects. As I have pointed out, a name for a future object may be introduced only with the help of description(s). It is not so difficult to formulate the description(s) that semantically refer to future objects. However, there is a pragmatic issue that provides an additional condition for successful speaker's reference. Donnellan distinguished between two types of use of definite descriptions: attributive and referential use[27]. In the former, a speaker states that somebody or something is so-and-so; here, it is not important who or what fits the description. In the referential use, a speaker uses the description to enable his/her audience to pick out whom or what s/he is talking about and states something about this person or thing. I see no reason to state that the referential/attributive distinction does not apply to cases of speaking of future objects. So, in order for a speaker to refer to a future object, s/he must use the corresponding description referentially.

There is a common view, which I find plausible, that the referential/attributive distinction is closely related to the *de re/de dicto* distinction[28]. For example, Salmon in his paper "The Good, the Bad, and the Ugly" expresses this view as follows:

> ...Donnellan alternatively characterizes the referential/attributive distinction in terms of what a speaker asserts (states, says) and the *de re/de dicto* distinction. He does not use the actual

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[27] Donnellan, 1966

[28] There are, however, objections to this view, for example in Kripke's article "Speaker's Reference and Semantic Reference" (1979)

terms 'de re' and 'de dicto', nor any other arcane terminology for the latter distinction, but he clearly appeals to it[29].

To explain the connection between these two distinctions let me briefly focus on the latter. The notions of *de re* and *de dicto* are used to distinguish between two categories of cognitive attitudes. A cognitive attitude (e.g. belief, knowledge, or desire) is *de re* if it is about a particular object. A *de dicto* cognitive attitude concerns the truth-value of a certain proposition. So we can say that in the attributive use of desription a speaker asserts *de dicto* that something or somebody is such-and-such, whereas in the referential use s/he asserts *de re* of a particular object that it is such-and-such.

It is reasonable to suggest that a *de re* assertion must be based on some *de re* beliefs a speaker has about a person or thing s/he is talking about. This consideration correlates the possibility of having *de re* beliefs about an object with the possibility to refer to it. So, one can conclude that we can refer to future objects if and only if we can have *de re* beliefs about them. The question of whether we can or cannot have *de re* beliefs about future objects will be discussed in detail in chapter 3.

1.7 Conclusion

So far I have discussed the semantic/speaker's reference distinction, which reflects semantic and pragmatic aspects of referring. An extensive discussion that continues for several decades I think shows the significance of this distinction for philosophy of language. Further, I have presented the conditions for each type of reference within the frameworks of two rival approaches, the descriptivist and causal (direct) theories of reference. Then I tried to apply these conditions to the case of

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[29] Salmon, 1994, p. 13

referring to future objects, which was not explicitly considered by any of the theories presented. I have shown that the condition for semantic reference to future objects can be effectively borrowed even from the presently less popular descriptivist view. An adaptation of the conditions for speaker's reference to the case of referring to the future turned out to be a more complicated matter. At this point, it seems that there are two main requirements for a successful speaker's reference to future objects: a speaker's causal connection with, and his/her ability to have *de re* beliefs about, future objects. Clarification of these two conditions calls for use of such tools as a theory of causal connection and the *de re/de dicto* distinction (in particular, the criteria for *de re* cognitive attitudes). Such detailed clarification of the conditions for speaker's reference to future objects will be the subject of the next two chapters.

CHAPTER 2: Causal Connections

2.1 Introduction

In this chapter I am going to focus on the first of the two conditions for reference to the future that were specified in the previous chapter. Namely, I will talk about the causal connection between the speaker and a future object. The discussion will include clarification of the notion of causal connectedness, i.e. what does it mean to say that two entities are causally connected; the question of the possibility of causal connections with future; and finally the outline of the conditions that have to be met for realisation of the causal connection between the speaker and a future object s/he refers to.

As you can recall from the first chapter, the idea of a causal connection, or a causal-historical chain between a speaker and the object s/he refers to, as a necessary condition for successful speaker's reference was proposed by developers and proponents of the causal theory of proper names (and reference)[30]. But the notion of causal connectedness in philosophy of language has theoretical backup coming from epistemology and theories of causation. That is why such issues as the possibility of having (causal) knowledge of the future, reality of the future, causal determinedness of future events, and the problem of backward causation become relevant in discussing the possibility of causal connection between the speaker and future objects. For clarification and discussion of these issues I will use the account presented in Alvin Goldman's article "A Causal Theory of Knowing"[31].

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[30] In particular, by Kripke (1972) and Evans (1983)

[31] Goldman, 1967

2.2 The notion of causal connection in the causal theory of reference

But let us first call to mind the reason for introducing the notion of causal connection in the causal theory of reference. The supporters of this theory opposed the idea that the referent of a name is determined simply by something's or somebody's *fitting* the body of information associated with that name. Such a formulation of reference-fixing omits the fact that the object to which a speaker refers stands in a certain causal relation to a speaker: namely, directly or indirectly, the object is causally responsible for the body of information a speaker associates with the name of this object. So both Kripke and Evans suggest that it is incongruous to explain the phenomenon of referring solely on the basis of fitting, without imposing any requirement for the presence of a causal connection between speaker and object. As Evans put it:

> ... the absurdity resides in the absence of any causal relation between the item concerned and the speaker. ... The absurdity in supposing that the denotation of our contemporary use of the name "Aristotle" could be some unknown (n. b.) item whose doings are causally isolated from our body of information is strictly parallel to the absurdity in supposing that one might be seeing something one has no causal contact with solely upon the ground that there is a splendid match between object and visual impression.[32]

However, Kripke and Evans differ in their way of locating the causal relation between speaker and object. Evans' notion of causal connection, which I find more plausible, stresses the fact that the causal relation lies between the object's "states and doings" and the speaker's body of information[33]. On the other hand, Kripke's notion of causal-historical chain locates the causal relation between object's

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[32] Evans, 1983, p. 277
[33] ibid.

involvement in a name-gaining transaction and the speaker's current use of this name.

But neither account of causal connection can be applied to the case of future objects as it is. Even if we accept that future objects are real and exist in an atemporal sense, to say that a future object causes our present beliefs about it is to admit backward causation. Therefore, there is a need to modify the notion of causal connection to accommodate the relation between present speakers and future objects.

2.3 Goldman's causal theory of knowledge

As I said earlier, the notion of causal connection is not unique to philosophy of language. Related accounts can be found in epistemology. For example, Goldman in his article "A Causal Theory of Knowing" proposed a causal connection between the fact p and a person S's believing p as a replacement of the traditional analysis of "S knows that p", which maintains that knowledge is justified true belief. In other words, it cannot be said that I know that Paris is the capital of France if there is no causal connection between the fact that Paris is the capital of France and my belief that it is so.

Goldman outlined several kinds of such causal connections. The simplest one is perceptual causal connection, which gives rise to knowledge by perception. According to Goldman, the relevant causal processes that connect the presence of an object with S's belief that there is such an object, let's say, in front of him/her, should be the subject of description for the special sciences, not for philosophy. He

assumes that perceptual knowledge of external facts is non-inferential, although the scope of such knowledge may be left indeterminate[34].

Another kind of causal connection consists of those that are utilized in memory. As Goldman puts it:

> Remembering, like perception, must be regarded as a causal process. *S* remembers *p* at time *t* only if *S*'s believing *p* at an earlier time is a cause of his believing *p* at *t*[35].

As in the case of perception, the process of remembering should be described in details by the sciences other than philosophy. However, these causal processes may be easily identified simply by exemplifying what Goldman calls 'paradigm cases' of remembering. Such causal connections between earlier and later beliefs are necessary elements in memory. So merely believing that p at t_0 and at t_1 does not entail that a person remembers that p. Situations when a person comes to believe something at t_0, then forgets it and then relearns or is reminded of this fact at t_1 are not cases of remembering precisely because of the lack of causal connection between these two beliefs.

In addition to memory and perception, Goldman specified another type of causal process that gives rise to a significant part of knowledge an ordinary person has. This process is inference, where a belief of a particular proposition is caused by a person's believing some other propositions[36]. Let me illustrate it with an example. Suppose I see a friend drinking at the bar. I also know that my friend is a responsible and cautious person, who never drives when drunk, and if she intends to take alcohol, she usually leaves her car at home. I correctly conclude that she does not have her

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[34] Goldman, 1967, pp. 359-60

[35] Ibid., p. 360

[36] The set of these other beliefs may include earlier, or "background" beliefs as well as those caused by perception at that moment.

car tonight. Here my belief is based on my perception of her drinking and the background beliefs I have about her. And thus my belief gets causally connected to the fact that my friend's car is not there tonight. In Goldman's terminology, there is a continuous causal chain connecting the fact itself with my belief of this fact; the existence of such a chain enables us to claim that I know that fact. Defects in causal chain rule out labelling my belief as knowledge, even if it is true.

Consider the following scenario for the example just given. Suppose that unbeknownst to me my friend has come to the bar in her car and was not intending to drink much, but because she got mad at her boyfriend's behaviour, she decided to have a drink to relax. I see it and on the basis of the inference described in the previous paragraph come to the conclusion that her car is not there. But unbeknown to both of us, five minutes after she has left it her car has been evacuated by traffic police due to wrong parking. So her car indeed is not there, somewhere around the bar. However, unlike in the former scenario, here there is no causal connection between this fact and my belief, since her drinking, which I observed and from which make the further inference, was not caused by the fact that she does not have her car tonight.

The last kind of causal connections can be observed in cases of acquiring knowledge (or beliefs) based on testimony. This process can be causally analyzed as follows. Fact p causes person T to believe p, let's say, by perception. T's belief of p causes his asserting p. T's asserting p causes S by auditary perception to believe that T is asserting p. S infers that T believes p, and from this s/he consequently infers that p is a fact. All these transactions represent a causal connection between p and S's believing that p.

It is important to notice that Goldman suggested his causal account of

knowledge as a solution to the Gettier problem which the traditional account failed to solve. However, later on counter examples that represented the Gettier's cases for Goldman's account were developed. But the success of Goldman's theory in solving an epistemic problem is an issue for a separate discussion, which goes beyond the purposes of this thesis. Whether Goldman's theory is epistemologically successful or not, his account of causal connection is worth adopting. Let me explain why.

The four kinds of causal connections outlined by Goldman can hold between cognitive attitudes, such as believing, and also between facts and events. According to the causal theory of knowing, a causal connection between the fact and the person's belief of that fact is a necessary condition. Evans puts the similar requirement in his causal theory of reference. In the act of referring, a causal connection holds between an object and the speaker's usage of the term. Moreover, according to this approach, for semantic reference a causal connection must exist between an object and the term itself.

2.4 Causal connection with future objects

Now let us examine what kind of causal connections can be established with future facts, events, and objects. First, it would be plausible to look at what Goldman's account suggests for such cases. An important advantage of this account is in the proposed nature of causal connection. It does not presuppose backward causation, since it is not required for a belief to be directly caused by the fact it is about. As Goldman puts it:

The analysis requires that there be a causal *connection* between p and S's belief, not necessarily that p be a *cause* of S's belief. p and S's belief of p can also be causally connected in a way that

yields knowledge if both *p* and *S*'s belief of p have a *common* cause[37].

The idea can be illustrated as follows. Suppose that the municipality of a city wants to build a new road, which is going to connect two busy districts. It is an approved project, all necessary planning, designing, agreements and all other relevant actions have been undertaken. A person, a resident of the city, learns about this project and asserts that the new road will ease the traffic in the neighbourhood. His/her belief expressed by this assertion is causally connected in an appropriate way to the beliefs about intentions and actions of the city administration, various background beliefs about success in the implementation of the municipality's former projects and the like, plus the inferences s/he made about how the new road would affect the state of traffic.

Despite the fact that none of these background beliefs were directly *caused* by the object of the assertion, i.e., the new road that was not built yet by that time, an asserter's belief, according to Goldman's theory, can be still classified as knowledge. That is because this belief and the object in question (the new road) have the common cause, namely, the decision and actions carried out by the city administration. And that is how the causal connection with the future objects, events, or states of affairs is established.

2.5 The causal theories of reference modified

I do not see any reason for the impossibility to apply such a model of causal connectedness to the theory of reference. The key issue here that allows us to accommodate cases concerning the future without appealing to backward causation is that the causal connection with the object can be established even in the absence of

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[37] Goldman, 1967, p. 364

direct causal influence of an object on the speaker's beliefs. This is reached by introducing the notion of the common cause.

In fact Goldman's account of causal connections does not contradict that of proponents of causal theory of the proper names, in particular, Evans's account. Once again, the basis of our causal connection with any object is the fact that this object stands in a certain causal relation with the body of our information about this object. So, on the one hand, assuming that objects' existence is atemporal, we can say that any kind of object can be in this way responsible for our beliefs concerning an object's actual causes. But on the other hand, these beliefs need not be formed as a result of our direct causal interaction with the object. In other words, using the notion of causal chain, an object and any our belief about it need not constitute the same link in a causal chain, which, to my mind, requires co-existence of the object and our belief in the temporal sense of existence. Moreover, the object has not necessarily been located at the end (or, perhaps, at the beginning) of a causal chain.

This last point needs some clarification. In describing the notion of a causal-historical chain, Evans and Kripke locate the object of reference (and the act of dubbing, in Kripke's version) at the starting point of this chain. This starting point is the chronological start of the causal-historical chain. The chain of causal connections, suggested by Goldman for future events, in its chronological start has not the event itself but the event(s) that constitute its cause. Further, the chain chronologically divides into two separate directions: one leads to the event and the other to a person's belief about it. But both directions are the parts of the same chain, and this is precisely why our beliefs can be causally connected to future events without the involvement of backward causation.

Usually our beliefs and assertions about future objects are based on beliefs

about or even direct perception of some causes of their emergence. For instance, in the example given above, the citizen's belief about the new road (the future object) is based on his/her awareness of the municipality's project (which is the cause of the object's emergence). So that is why I think that Goldman's model of causal connection via common cause can be a successful candidate for a causal-historical chain that connects speaker's current usage of the name and the future object s/he refers to.

Goldman's theory of causal connection with the future is worth adopting for one more reason. When applied in epistemology, it can account for the so-called Gettier cases[38]. A theory of speaker's reference may be also tested in scenarios similar to Gettier cases. Let me clarify the analogy. In epistemology, Gettier cases were developed as counter-examples to the traditional account that claims that knowledge is a justified true belief. In these cases a belief held by a person is true and justified, but despite that fact it cannot be regarded as knowledge. The analogous cases for the theory of reference would be ones in which the conditions for speaker's reference are not violated but a speaker would still fail to refer. However, there is no traditional account for speaker's reference to future object. In fact, there is even no universally agreed upon account for speaker's reference in general. So the best I can do is to look at the proposals for such an account (i.e. for speaker's reference in general) made by Kripke and its improved version by Evans.

Kripke's conditions for speaker's reference can be derived from his tentative definition of speaker's referent in "Speaker's Reference and Semantic Reference" as follows:

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[38] The second scenario of the example about my friend drinking at the bar with her car evacuated unbeknownst to us is a typical Gettier's case.

A speaker S refers to an object x by using term d if and only if **(i)** x is the object S wishes/intends to talk about; and **(ii)** S believes that x fulfils the conditions for being the semantic referent[39] of d.

Now let me present a scenario in which these conditions are observed but still it cannot be said that a speaker referred successfully, i.e. to present a Gettier problem for Kripke's account. Suppose, for instance, that in the previous case the municipality which issued a project for the new road was announced as corrupt and as a result of this they were forced to resign and a new municipality was formed. The members of the new municipality abandoned all the projects of the old one, and made and carried out their own project of the new road between the same two districts of the city[40].

A citizen is somehow unaware of these administrative changes, and continues to make the assertions about the new road. Can we say in this case that s/he still is able to refer to the new road? S/he intends to refer to the new road connecting such-and-such districts and s/he believes that this object fulfils the conditions for being the semantic reference for the term "the new road". But still one may say that a speaker does not refer to an actual new road, since s/he has no ideas about the changes in municipality.

Such ambiguity about the success of the speaker to refer shows that Kripke's account needs modification. His first condition is not precise enough, and the second one, as stated by Kripke, loosens the bond between speaker's and semantic reference, since in this account it does not matter whether an object actually fulfils the

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[39] In the same article, Kripke states that the conditions for semantic reference are determined by specific conventions of the speaker's idiolect

[40] The example of this kind I owe to Ali Karatay.

conditions for being the semantic referent of a term used by speaker. To my mind, it departs from the spirit of his version of the causal theory where the notions of speaker's and semantic reference are interconnected.

We can sense this kind of interconnectedness from Kripke's account of reference-fixing presented in "Naming and Necessity". In that work Kripke did not distinguish between two types of reference but it is plausible to conclude that he was proposing the conditions for semantic reference. To remind the reader, he suggested that the referent of a proper name is fixed by a causal-historical chain. But the links of that chain are nothing else but acts of using the name, i.e. acts of speaker's reference. Therefore, within the framework of Kripke's version of causal theory of proper names, it is hard to think that the conditions for speaker's and semantic reference are independent of each other. So inevitably the conditions for one kind of reference are put forward in terms of the conditions for the other, and fulfilling by the object the conditions for being semantic referent of a term speaker is using should be included in the conditions for speaker's reference. In other words, if the conditions for both types of reference are that interdependent, the failure of a term used by the speaker to refer semantically should have a negative effect on the success of speaker's reference. That is why I think Kripke's analysis in some cases can yield ambiguous results in determining whether the reference is successful or not.

Evans, unlike Kripke, puts a quite clear distinction between conditions for each type of reference. Moreover, he saw no reason for rejecting the descriptivist theory for the semantic reference, i.e. the claim that semantic referent of a name is given by the description or the set of descriptions. According to Evans, descriptions fix the referent of a name by explaining its role in existential, identity and opaque contexts. As he put it:

The theory is by no means committed to the thesis that every user of the name must be in possession of the description...[41]

So the criticism of the descriptivist view by the proponents of the causal theory, including Kripke, is actually aimed at the descriptivist account for speaker's reference, and all the examples given by Donnellan and Kripke in fact reveal the shortcomings of that particular part of the descriptivist theory of reference. I believe that this contribution by Evans adds a significant degree of clarity and strength to the causal theory of reference.

After making this distinction, Evans suggested conditions for speaker's reference, which are not formulated in terms of conditions for semantic reference. His conditions do not contradict, but rather modify Kripke's account. They may be stated as follows:

A speaker S refers to an object x by using term d if and only if **(i)** S knows/believes that there is such-and-such item in the world (x) and intends to refer to it; and **(ii)** x is the item that is causally responsible for S's possession of the body of information about x, and not necessarily the satisfier of that body of information.[42]

Evans' analysis of speaker's reference emphasises the existence of a causal connection between the speaker and the object s/he refers to as a condition for referring. This requirement makes analysis resistant to Gettier-type cases to a certain extent. It would definitely yield non-ambiguous conclusions concerning the success of a speaker in referring to past and present objects. For example, if in the case presented above, the new municipality would actually complete the project by the time a speaker makes an assertion about the new road, s/he would fail to refer,

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[41] Evans, 1983, p. 272
[42] Evans, 1983, p. 278

according to Evans' analysis, since the road constructed by the new municipality is not the item which is causally responsible for the speaker's body of information about it.

However, if we assume that reference to future objects is possible, Evans' analysis should be clarified a bit more in order to avoid misinterpretation. To describe the causal connection between speaker and object of reference he used the notion of causal responsibility. It is this notion that can be subjected to some misinterpretation. So let us look at what it means exactly to say that an object is causally responsible for the body of information the speaker possesses about it.

From the context of Evans' article one may conclude that to be causally responsible means simply to be a cause of something. In this light the second condition of Evans' analysis may be interpreted as a requirement for an object of reference to be the cause of the body of information the speaker has. Such an interpretation of the notion of causal responsibility will make the analysis applicable to the case of referring to the future only if we assume backward causation. As I specified earlier, this is a very problematic assumption, which I would like to avoid in my account for reference to the future.

But if we treat Evans' account with the principle of charity, the notion of causal responsibility can have a different interpretation. We may say, that 'x is causally responsible for the body of information S possesses about it' means 'There is a causal connection between x and S's beliefs about it'. And with such an interpretation, Evans' account can be easily adjusted to the cases of reference to future objects. The only thing we need to do is to incorporate Goldman's notion of causal connection into Evans' analysis of speaker's reference. So here are modified and improved conditions for speaker's reference:

A speaker *S* refers to an object *x* by using term *d* if and only if **(i)** *S* knows/believes that there is such-and-such item in the world (*x*) and intends to refer to it; and **(ii)** *x* is the object that is causally connected (via perception, memory, inference, testimony, or the common cause) with the body of information about *x*, possessed by *S* and not necessarily the satisfier of that body of information.

This modification enables the analysis to be applicable for the cases of referring to the future and also allows dealing with Gettier cases concerning the future objects. Let me turn back to the case of the inadequately known municipality change, but this time, suppose that the new road is only a project, that is, a future object. A citizen makes an assertion about it. Is s/he able to refer to the new road?

According to the modified analysis, the answer is "No", since the assertion of the citizen and the emergence of the new road do not have a common cause. In other words, the object and the body of information about this object possessed by the speaker are not causally connected, and therefore the second condition for speaker's reference is not fulfilled.

2.6 Clarifiacation of the new conditions for speaker's reference

However, even this modified version of the analysis of speaker's reference needs to be clarified a bit more. In particular, the first condition as it stands deserves some discussion. In my opinion, there are three questions that can be raised regarding **(i)**. First, in the context of this condition do we have to make a clear-cut distinction between two cognitive attitudes of a speaker, namely, knowing and believing, and how it can change the requirements for successful referring? Second, if the speaker believes (or knows) that the object is "such-and-such" does that mean

that the description of an object s/he possesses is an identifying one? And third, if we say that the object "is", what sense of existence should be used in this condition? As I will attempt to show in the following sections, satisfactory answers to these questions are especially important if we want the analysis to be applicable for the cases of speaker's reference to future objects.

Let me start from the third question. As I have specified in the first chapter, existence of an object may be considered in two senses: temporal and atemporal The atemporal sense of existence is employed when we wish to quantify over any kind of objects: present, future, or past. For instance, in the sentence "There is an object x, such that x used to divide Berlin in two parts", the term 'is' is used in the atemporal sense, and in this sense x exists. The temporal sense of existence is used in the contexts where one wants to bind the existence of an object to a particular period of time. The examples, where this sense is employed can be brought from common conversations; such are the statements "The Berlin Wall does not exist any more" or "A spaceship that will be able to carry people to Mars, does not exist yet". However, it would be misleading to think that in the temporal sense existence is considered as a property of an object – whether existence is a property or not, and if so then of what order is a completely different discussion, which I do not wish to into at the moment. The temporal sense of existence can also be reflected in quantification where time is a variable, such as "It is not the case that there is an object x, such that x is a spaceship that can carry people to Mars at t_1", where t_1 is the present day.

People do not limit the subject of their talk to the presently existing objects. They often intend to refer to the objects that have ceased to exist in the temporal sense. That is why the term 'is' in the first condition should be used not in the

temporal, but atemporal sense of existence. Used in this sense, it makes the condition valid for reference to all kind of objects: past, future, and perhaps even fictional.

Evans' original and modified version of conditions for speaker's reference seems not establish the connection with conditions for semantic reference at first glance. However, such connection can be established if we analyse carefully the condition **(i)**. The crucial point here is a requirement for the speaker to know/believe that the object s/he intends to refer to is "such-and-such". Let me now try to answer the second question concerning the analysis, i.e. what is this "such-and-such" a speaker knows/believes about the object? In the article, Evans meant by this phrase a cluster, or dossier of information concerning the object of reference. This dossier is obtained by a speaker through information-gathering transactions and causal interactions with some item or other[43]. The important point here is that the dossier consists of beliefs the speaker has about the object in question and these beliefs are causally connected to it.

But to possess such a dossier means, in my opinion, to possess information which helps the speaker to distinguish the object from other items. In other words, having in mind the speaker's intention to refer to something particular, we can say that the dossier is what the speaker *believes* to be an identifying description of the object of reference. This may not be the case for ostensive scenarios of referring, or at initial ostensive dubbing, but whenever the semantic reference of a term is fixed by description and the causal interactions are not limited to (or even exclude) perception, I think that the presence of some identifying information about an object in the speaker's idiolect plays an important role in a successful act of reference. This

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[43] Evans, 1983, p. 278

becomes even more crucial when we are talking about referring to future objects, i.e. cases where descriptions are the only way to fix the semantic referent.

I would like to stress that the considerations made above do not get us back to the descriptivist view. The requirement for a speaker is not to possess correctly identifying description and perhaps be able to state it clearly. On the basis of causal connection with an object the speaker formulates a description which, according to him/her identifies that object, but it may well not be a definite description when taken independently of this causal interaction. The important thing is that in the act of speaker's reference it is not the description that determines the referent but the causal connection between the object and what is taken by the speaker to be an identifying description.

This leads us to answer the first question concerning the conditions for speaker's reference, which now can be reformulated as follows: what kind of epistemic attitude must a speaker have about the identifying powers of the description(s) s/he possesses about the object? Does s/he have to know that the object is such-and-such, or merely believe, even falsely, that it is so? Let us look at the cases of knowing and holding totally false beliefs that can be considered as the extremes of the scale of epistemic attitudes of a speaker. Knowing seems to be a too strong requirement, because that means that a speaker's body of information about an object s/he is referring to must consist of justified true beliefs only. Various examples show that despite the falsity of some beliefs taken by a speaker as identifying s/he is still able to refer.

On the other hand, if the dossier of information consists only of false beliefs, or descriptions that identify something else, it is most probably due to numerous failures in establishing causal connections with the object. The total

misidentification of the object indicates the lack of causal connectedness, and improper causal connection makes speaker's reference impossible. Suppose that perception of a person is distorted so that s/he sees illusions (perceives surrounding objects very differently from their actual look) and on the basis of these distorted perceptions believes that the creature s/he sees looks like an alien, whereas it is her/his neighbour. Next day s/he says to somebody else "The Alien came again yesterday and borrowed some CDs". In this situation the failure of a speaker to refer is clear. His/her dossier of information about the neighbour consists of entirely false beliefs, and these beliefs are the products of improper causal connection with the object (due to perceptual distortions). Analogous cases can be generated for each type of causal connection. To sum up, it seems that it is hardly possible to possess a dossier consisting entirely or dominantly of false beliefs about the object without violating the condition for proper causal connection between these beliefs and the object.

However, as Evans demonstrated in his example of identical twins[44], the false beliefs that can emerge in such cases are not about the object, but rather about some aspects of our interaction with that object. So we can conclude that if a proper causal connection exists between a speaker and the object of his/her reference, the beliefs that s/he had formed about it are dominantly true ones. Yet, at some point of the causal interaction, a speaker can run into false conclusions, or some minor part of his/her dossier may be false. That is why the requirement for speaker to know that the object is such-and-such is too strong, and it is enough to say that s/he should simply believe, on rational grounds, that the object is such-and-such. In general, I

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[44] Evans, 1983, p. 278. This example was given to explain the notion of dominance in the source of information about the object. The similar example about two sibling kittens was presented in the first chapter.

think that false beliefs, which can be accepted in the dossier, should not contradict the major body of correct information about the object. For instance, if a person correctly believes that a movie "A", directed by X, with such-and-such actors involved, and which is forbidden to show in many countries with conservative culture, mistakenly comes to believe that it is also forbidden in Turkey, this latter belief in his dossier, despite its falsity, would not prevent him from referring successfully to the movie. Any further analysis of this cognitive attitude, i.e. questioning justifiedness or truth value of the speaker's beliefs, seems to me unnecessary, since the requirement of causal connectedness secures the relevance of these beliefs for the purpose of referring.

There is a final remark I would like to make concerning the cognitive attitude of a speaker with regard to the body of information about the object, which enables him/her to refer to it. As Evans put it:

> I think we can say that *in general* a speaker intends to refer to the item that is the dominant source of his associated body of information.[45]

The object of his/her reference is a particular item that s/he believes to be such-and-such. The cognitive attitudes (in this case, beliefs) of a speaker play an important part in the successful act of referring – they help the speaker to distinguish an object s/he wants to refer to and draw the attention of the audience to that particular object. That seems to put an additional requirement on the speaker's cognitive attitudes about the object of her reference, namely, that they should be *de re*. This requirement may be another condition for speaker's reference and I am going to discuss it in details in the following chapter.

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[45] Evans, 1983, p. 279

CHAPTER 3: *De Re* Beliefs about Future Objects

3.1 Introduction: the *de re/de* dicto distinction

In this chapter I am going to suggest another condition for speaker's reference to future objects. First, I will briefly summarize the core of the *de re/de dicto* distinction. Then, I would like discuss the relevance of the *de re/de dicto* distinction to the question of reference to future objects. I will argue that it is possible to have *de re* cognitive attitudes about future objects. Finally, I will try to show that having have *de re* cognitive attitudes about the object a speaker wishes to refer to should be added to the set of conditions for speaker's reference.

The notions of *de re* and *de dicto* are used to distinguish between two categories of cognitive attitudes[46]. A cognitive attitude (e.g. belief, knowledge, or desire) is *de re* if it is about a particular object. A *de re* belief statement can be represented as follows:

(1) S believes about **x** that it is F

Here, S stands for a person (believer), **x** – for a particular object, and F – for some property that object has. A *de dicto* cognitive attitude concerns the truth-value of a certain proposition. General form of *de dicto* belief (a belief that a certain proposition is true) therefore would be:

(2) S believes $\ulcorner \alpha$ is $\varphi \urcorner$

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[46] I support the view that the de re/de dicto distinction is valid for all kinds of cognitive attitudes.

where α is a variable that ranges over singular terms. It is important to notice, that changing α with any co-referential term may alter the truth value of (2), whereas for the truth value of (1) it does not matter what term is used to specify **x**. For instance, if S believes about Paris that it is a beautiful city, his belief may be properly expressed by the sentence "S believes about the capital of France that it is a beautiful city". On the other hand, if S while looking at the photographs made by a person completely unknown to her comes to the conclusion the guy who took those pictures is a brilliant photographer, her *de dicto* belief can be expressed correctly only using the description 'the guy who took those pictures'. We cannot substitute for this description any co-referential term. For example, if we say that she believes that Steinberg (let it be the name of the person who took the pictures) is a brilliant photographer, our report of her belief will not be correct.

3.2 Speaker's reference and the *de re/de dicto* distinction

Now let us see how this distinction is related to the question of speaker's reference to future objects. There are two aspects in which the relevance of the *de re/de dicto* distinction to the successful speaker's reference can be considered. The first aspect is the relatedness of this distinction to the distinction between attributive and referential uses of definite descriptions. (The connection between the latter distinction and reference to future objects will be clarified in the next paragraph.) The second concerns the role of *de re* thoughts in constructing causal-historical chains that fix the referent.

3.2.1 The referential/attributive distinction

In the earlier chapters I suggested that definite descriptions play a crucial role in fixing the referent of the terms denoting future objects. Descriptions can be used to fix the semantic referent: since we can not literally point at these objects and fix the referent by ostension, the use of descriptions is the only way to specify the future object for which a name is introduced. But the semantic reference is not the only area in which descriptions play their part. In fact, while referring to future objects in everyday life, rather that using proper names, people mostly employ definite descriptions. For instance, when we talk about not yet built, and therefore unnamed spacecraft, we may use the term "The first spaceship that will carry human beings to Mars".

So we generally use definite descriptions to refer to future objects. However, as was proposed by Donnellan[47], definite descriptions have two uses: attributive and referential. In the former, a speaker states that somebody or something is so-and-so; here, a speaker does not have anything or anybody particular in mind, s/he just uses the property of being so-and-so to pick out whoever fits the description. In the referential use, a speaker uses the description to enable his/her audience to pick out whom or what s/he is talking about and states something about this person or thing. As Donnellan puts it:

> In the first case [attributive use] the definite description might be said to occur essentially, for the speaker wishes to assert something about whatever or whoever fits that description; but in the referential use the definite descriptions is merely one tool for doing a certain job – calling attention to a person or thing – and in general any other device for doing the same job,

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[47] "Reference and Definite Descriptions", 1966

another description or a name, would do as well. In the attributive use, the attribute ob being so-and-so is all that important, while it is not in the referential use.[48]

At first glance, it seems very plausible to connect Donnellan's distinction between referential and attributive uses of definite descriptions and the *de re/de dicto* distinction. Despite the fact that the first distinction concerns the use of descriptions, and the second – the nature of cognitive attitudes, both distinctions are based on the same intuitive criterion. This criterion may be loosely formulated as having or not having somebody/something particular in mind. Again, there is an extensive discussion for and against such association between two distinctions. Let me here present Kripke's example, which, had he achieved his goal of showing that it is possible to have *de re* attitudes expressed with the attributive use of definite descriptions, would surely prove the irrelevance of such association. Consider the sentence:

(3) Smith's murderer, whoever he may be, is known to the police, but they are not saying.

(Or, more explicitly: The police know concerning Smith's murderer, whoever he is, that he committed the murder; but they're not saying who he is)[49].

According to Kripke, the description "Smith's murderer" here is used attributively, but is *de re*. However, there is a certain ambiguity in this example; namely, as was stated by Griffiths in "Reference, *De Re* Belief and Rigidity", the confusion between belief-report and the belief reported[50]. (3) is a belief-report, it

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[48] Donnellan, 1966, pp. 146-147
[49] Kripke, 1979, p. 166

[50] For detailed discussion of the importance of this distinction, see Griffiths, 1986, pp. 686-687

partially reports the police's belief concerning the identity of Smith's murderer, which is *de re*. An assertion of this belief would make use of any term that singles out the murderer referentially. But the asserter of (3) has a *de dicto* belief about Smith's murderer and uses the term "Smith's murderer" in this belief-report attributively. As Griffiths put it:

> Such a report (a *de dicto* report of a *de re* belief) will indeed standardly arise when the reporter believes that a certain person has a *de re* belief about some thing, x, but does not himself have any *de re* beliefs about x.[51]

Considered in this light, Kripke's example does not provide a conclusive argument against the association between referential and attributive uses of definite descriptions and the *de re/de dicto* distinction. An example that would do this job should contain both speaker's *de re* attitude about some object and an attributive use of a term, referring to that object.

However, despite the fact that the descriptions seem to be the only tools for fixing the semantic reference in introducing the terms for future objects and as I mentioned earlier, in many cases the terms for future objects we use are in fact the descriptions, it may be argued that when we talk about future objects descriptions always occur essentially. In other words, it can be said that in such cases descriptions cannot be used referentially, that they are always used attributively[52]. But the rationale on which I developed this thesis is that phenomenon of referring to future objects should not be essentially different from referring to other categories of

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[51] ibid, p.688.

[52] In fact, this also can represent a serious threat to the significance of the semantic/speaker's reference distinction for the cases of referring to future objects since this distinction was firstly proposed by Kripke as an alternative explanation of the phenomenon described by Donnellan.

objects, and therefore, all semantic distinctions which hold for reference in general, should be valid for reference to future. Let me now present an example that supports this rationale.

Suppose that a person one morning notices a massive construction that has just started in front of his house. He exclaims in anger: "In a few months that goddamn apartment-building they are going to raise here will block the view from my windows completely!" Assume that the construction the speaker observes is in fact the construction of a multi-storey car-parking, and not of an apartment-building. The term speaker uses, "the apartment-building they are going to raise here" does not have a referent, but nevertheless the speaker refers successfully. That is so because in this example the conditions proposed for speaker's reference are met: there is a common cause of speaker's beliefs about the future object and the emergence of that object, i.e. the beginning of construction works. Also, the beliefs of the speaker are *de re*, i.e. they are about the product of this particular construction. This example on the one hand represents an instance of referential use of a definite description for future object and on the other hand shows that semantic/speaker's reference distinction is valid for the cases of referring to future objects.

3.2.2 De re thoughts and causal connection

There is another way in which we can consider the relation between having *de re* cognitive attitudes about some object and our ability to refer to it. Let us turn back to the notion of causal-historical chain. Recall Evans' modified version of the causal theory of reference and his remarks about the structure of causal chains. He argued that what is passed along the links is not merely the name of the object, but the body of information about it. We obtain this body of information through various

causal interactions with the object, so that our beliefs about that object, which constitute the body of information, are grounded in it. The very nature of our causal connections with an object makes our beliefs about this object, resulting from such connections, *de re*. So, I think it would be plausible to propose that a causal chain, which connects the current use of a name with its bearer, mostly represents the transmission of *de re* thoughts about the object in question.[53]

These considerations correlate the ability to form *de re* cognitive attitudes about an object with the possibility to refer to it. So, one can conclude that a speaker can refer to future objects only if we can have *de re* beliefs/knowledge about them. That is why I would like to investigate whether or not it is possible to have *de re* beliefs about future objects.

3.3 Three accounts of the *de re/de dicto* distinction

There are three accounts I want to discuss which might answer this question. First, I shall consider the test, proposed by K. Donnellan, which was designed to check whether a certain belief is *de re* or not. In his paper "The Contingent A Priori and Rigid Designators" Donnellan presents an example which seems to show that we cannot have *de re* beliefs about entirely future individuals. I would like to argue, that there can be *de re* beliefs about future individuals that can pass Donnellan's test. Second, I will present and evaluate E. Sosa's account which suggests the conditions under which *de dicto* beliefs can be reduced to *de re* beliefs and advocates context dependency of the *de re/de dicto* distinction. His account, in some trivial sense, which I will explain later, allows the possibility of having *de re* beliefs about future

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[53] The more detailed discussion of the role of *de re* beliefs in constructing causal chains can be found in McKay, 1994.

objects. Finally, I would like to focus on I. Inan's account of the *de re/de dicto* distinction, which is context/interest independent, and explore the possibility of having *de re* beliefs about future objects under this account. But let me start we a brief presentation of each of three accounts.

3.3.1 Donnellan's Test

In his famous paper "The Contingent *A Priori* and Rigid Designators" Donnellan denies the possibility of contingent a priori knowledge and proposes a test to show this impossibility. He makes use of Kaplan's "Newman 1" example[54], in which the referent of the proper name "Newman 1" is supposed to be fixed by the definite description "the first child to be born in the 21st century". Donnellan suggests the following scenario:

> Let us now imagine that just after midnight on New Century's Eve a child is born who is firmly established to be the first born of the century. He is baptized "John"... Now it seems to me that it would be outrageous to say that some twenty-five years or so before his birth, we knew that John would be the first child born in the 21st century.[55]

From this example he extracts the test for distinguishing a *de re* propositional attitude from a *de dicto* one. One version of this test says that if someone, S, refers to a person using some name, "N" and there is a belief or a piece of knowledge[56] that S would express by saying "N is φ", this belief of S can be counted as truly *de re*, only if S, while meeting that person later on, is able to say truthfully (using the

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[54] See Kaplan, 1969

[55] Donnellan, 1979, p. 53

[56] Donnellan was primarily concerned with de re knowledge, but I think that his test could be extended to other cognitive attitudes, such as beliefs.

second pronoun), "I believed/knew that you were ϕ"[57]. Donnellan further concludes that the "Newman 1" case fails this test[58]. So, it can be implied that in some cases we cannot have *de re* thoughts about entirely future individuals.

3.3.2 Sosa's Relativism

E. Sosa in his article "Propositional Attitudes *De Dicto* and *De Re*" presents an account which specifies the conditions under which *de re* beliefs can be reduced to *de dicto* beliefs. He states it as follows:

> S believes about x that it is F (believes x to be F) if and only if there is a singular term α such that S believes ⌜α is F⌝, where α both denotes x and is a distinguished term[59].

Sosa stresses that what counts as a distinguished term is "a wholly pragmatic matter"[60]. It is a relative notion, some indication of the type of a singular term (name, description, or indicator) under which S believes x to be F, that must be supplied by the context[61]. To illustrate the context dependency of the *de re/de dicto* distinction and to clarify the notion of a distinguished term, Sosa provides several examples. Let me present one of them.

Imagine a military officer who returns to his division after consulting with higher authority and says to the shortest man: "Shorty, they want you to go first." But in fact the desire expressed by the higher authority was that the shortest man should go first, i.e., it was a *de dicto* desire, strictly speaking. However, this

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[57] Donnellan, 1979, p. 55

[58] Ibid., and pp. 56-57

[59] Sosa, 1970, p. 890

[60] Ibid.

[61] Ibid., p. 891

particular context, and the existence of a shortest man, suffices for exportation, namely, enables us "to move 'the shortest man' outside the scope of the psychological modality" and thus makes it possible to conclude that it is true of the shortest man that the authority desires him to go first, which is a *de re* desire[62]. Here, 'the shortest man' is a distinguished term; that is why in this context a *de re* attitude can be can be exported from a *de dicto* attitude.

3.3.3 Inan's Account

In his PhD thesis[63] I. Inan develops an account for distinguishing between *de re* and *de dicto* cognitive attitudes which is based on the sound assumption that experiencing (directly or indirectly) the particular object may be a sufficient but not necessary condition for forming *de re* attitudes about that object. He argues that there is a need for another criterion for the *de re/de dicto* distinction: the experience condition for *de re* attitudes seems to be too strict. Inan also suggests that beliefs of the form 'α is F' can be classified into three types. The first type is nearly analytic (n-analytic) beliefs, an example of which would be the belief "the youngest chess-player, participating in the competition is a chess-player". The second type of *de dicto* beliefs are the beliefs inferred from n-analytic beliefs and some general statements; they are called "g-inferential". So, for instance, if one believes that all chess-players are smart and if s/he combines this with the n-analytic belief "the youngest chess-player participating in the competition is a chess-player", s/he can easily infer that the youngest chess-player participating in the competition is smart, and this would be not an n-analytic, but a g-inferential belief. And finally, there is a type of *de dicto* beliefs that are neither n-analytic, nor g-inferential, such as "the

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[62] Sosa, 1970, p. 890

[63] Inan, 1997

murderer of Smith hit the victim from the back". On the basis of this classification, Inan proposes the following principle:

P1: If S knows that α is F, and 'α is F' is neither n-analytic, nor g-inferential, and α exists[64], then S has a *de re* belief about α that it is F[65].

3.4 *De re* beliefs about future objects

Now let me consider in details whether each of the three accounts presented would allow *de re* beliefs about future objects. I shall start with Donnellan's test.

First of all, I would like to give my general evaluation of this test. It is important to notice, that Donnellan's main purpose was to show that stipulations of the sort made in the "Newman 1" case do not give rise to any knowledge. The test was designed to prove that in such cases we cannot have *de re* knowledge about the object in question. And in the Newman example it seems to work. Also, in my opinion, it is based on an intuitively right way of distinguishing between *de re* and *de dicto* cognitive attitudes. But what is significant for my purposes is whether or not we can extend the result it arrives at in the case of Newman to all kinds of future objects. In other words, can we conclude that *de re* beliefs about all future objects are impossible?

It seems to me that the answer is "No". Donnellan himself mentioned the "looseness" of his test, pointing at the fact that in two examples of the same kind the test yields different results[66]. Let us see then whether it is possible to generate

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[64] Here, "exists" is used in the a-temporal sense

[65] Inan, 1997, p. 101

[66] For example, see footnote 22 on p. 60

examples about future objects that can pass the test. First, I would like to consider a case concerning a future artifact.

Here, an Oppy-type example[67] may be enlightening. For instance, take a construction project of a shopping center "Best Buy". Given plans, technical drawings, and other parts of that project we can easily possess quite a bit of knowledge about the yet un-constructed Best Buy, such as the number of stores it will have, its location, some particular features of its decoration, and so on. Are those pieces of knowledge *de re*? I suppose that they are: when construction is completed, even if the name of this shopping center is changed, we can still correctly say that we knew about this center that it would have such and such properties.

My second example concerns another future object. Suppose that four fellows decide to create a music band, but they are not yet playing together. They are still discussing some organizational questions, planning what equipment to buy, how to name the band, and so on. Strictly speaking, the band does not exist yet[68], so it can be considered to be a future object. Some other friend of those future band members may well have a number of beliefs about yet unborn band. For instance, s/he may quite rationally believe that the band will have a big success; that it is going to be liked by people who are into rock music, etc. Let us see, whether this belief can pass Donnellan's test. Let's imagine that after some time the band had its first live act and gathered great success; so, the question is that: is that other friend able or not to say to the members of the band "I believed (or, perhaps, even knew) that you (as a band) were going to have big success."? I think that there is nothing outrageous in this; therefore it shows that his/her belief about the band was *de re*.

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[67] See Oppy, 1995, p. 86

[68] Here I mean in the temporal sense of existence.

These examples seem to show that even if one accepts Donnellan's test as valid, there is the possibility to form *de re* beliefs about future objects. Perhaps, it even can be argued that the possibility to form *de re* knowledge about future objects is limited, but it still exists. However, it is more a question of epistemology, which deserves a separate discussion that would be beyond the scope of this paper.

Now let me turn to Sosa's account. As I said earlier, this is a relativist position with respect to the *de re/de dicto* distinction: whether a cognitive attitude can be regarded as *de re* or not depends on context. It is the context of speech or thought that enables one to decide whether α in the belief 'α is F' is a distinguished term or not thus assigning to that belief either *de re* or *de dicto* value. There are also no constraints concerning the usage of distinguished terms for future objects. Due to the claimed context sensitivity of cognitive attitudes, the "Newman 1" case failure on Donnellan's test would receive a different explanation under Sosa's account. The explanation would be based on the phenomenon of the shift in the context. In order to illustrate this phenomenon let me present here Sosa's example of "The Metropolis Pyromaniac".

In this case, there is a prominent citizen of Metropolis who suffers from pyromania, who, under various disguises, had set a series of fire. The police always distinguished his works from the fires set by the other arsonist in the town, due to some peculiar features. So he became known as "The Metropolis Pyromaniac". After his latest fire, the chief of the police is asked by press whether anyone is suspected, and the chief answers affirmatively, since he recognizes the work of The Metropolis Pyromaniac. However, when the wife of the Pyromaniac asks her

husband whether anyone suspects him, he replies negatively. Sosa's account entails that there is no incoherence here – ambiguity is caused by the shift in the context:

> What the wife is interested in knowing is whether anyone else believes "α is arsonist" where α denotes her husband *and* would enable the believer, without much difficulty, to identify him as a prominent citizen... The chief, on the other hand, is pleased that they are not completely in the dark, and he emphasizes this by reporting that someone is suspected of having set the fire. (They don't just suspect that someone set the fire; at least they know "The Pyromaniac, and not any of his fellow arsonists, did it".)

So, both the chief and the wife of the pyromaniac possess *de re* thoughts about the same person, and in fact the belief of the chief does not really provide evidence against the truth of the belief of the wife. Both have a distinguished term for The Metropolis Pyromaniac, but not the same one. What the Pyromaniac's wife is actually expressing by saying that her husband is not suspected is the belief that he is not known to the police under the description of a prominent citizen. However, if we apply Donnellan's test to this example, it would yield that the police chief's suspicion is not *de re*. Here, I am inclined to disagree with the result of the test, because, strictly speaking, a particular person, The Pyromaniac, is suspected, although the identifying description of that person, held by the police is different from that possessed by the wife of The Pyromaniac.

It also seems to me that a parallel may be drawn between this case and the "Newman 1" example. Under Sosa's account, the "Newman 1" case may receive the following interpretation. In the context of naming the first child to be born in the 21st century before the turn of the century, "Newman 1" is a distinguished term under which the stipulators of this name can believe various things about that child. But when the context shifts to that of conversation with John, the stipulators' claims that

they had *de re* beliefs about John sound false, simply because they did not believe these things under a distinguished term "John" which is more relevant to a given context.

These considerations seem to lead to the conclusion that perhaps Donnellan's test is too loose to be used as a criterion for *de re* beliefs. On the other hand, Sosa's account blurs the difference between *de re* and *de dicto* attitudes. Although it does not directly deny the *de re/de dicto* distinction, under this account it is very hard to specify when such reduction is unacceptable. Thus, on these grounds one may conclude that the *de re/de dicto* distinction is philosophically empty[69], which I believe to be wrong. That is why Sosa's account seems not to be a good candidate for the *de re/de dicto* distinction analysis.

Now I would like to consider the possibility of *de re* beliefs about future objects in the framework of Inan's account. As opposed to the previous two, this account sets quite straightforward, context-independent criteria for the *de re/de dicto* distinction.

Let me first focus on interpretation of the "Newman 1" example. Given the definition of n-analytic belief, "Newman 1 is the first child to be born in the 21st century " is no different from the belief "the youngest chess-player participating in the competition is a chess-player", and therefore, cannot be a *de re* belief. Another possible belief that may seem to be about Newman, for example, "Newman 1 will be non-blonde" – a belief which is based on the fact that the number of natural blondes is decreasing, and therefore, all children of the next century will be non-blondes – will also be labeled as *de dicto*, since it belongs to the g-inferential type of beliefs.

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[69] In fact, Quine arrives at such conclusion in his article "Intensions Revisited" (1979, p. 273)

Perhaps, given the example's scenario, all possible beliefs concerning Newman 1 will be either n-analytic, or g-inferential. Again, as for Donnellan's test, one should question whether this is a general trend for future objects.

I propose the following case. Suppose that a couple decides to have a baby by using some methods of external conception. An egg and a spermatozoon are taken from parents and placed in some special equipment, so that external conception could be made. Let's imagine that genetics would develop so much that one could figure out many properties of the yet unborn child given the genetic make-up of both parents. So by observing the cells of the parents and interaction of their genes combined with knowledge of this advanced genetics, a scientist may rationally form a number of beliefs about the future baby, which will develop out of this particular egg and spermatozoon. These beliefs would be neither n-analytic, nor g-inferential, since they would be grounded in empirical study of genes and their behavior. Thus, we can conclude that these beliefs of a scientist about a particular future individual can be accepted as *de re*.

One may object that the knowledge of genetics represents a set of general statements, and therefore, the beliefs of the scientist about the future child will be g-inferential. But then I do not see how Leverrier's belief about the yet undiscovered planet or Holmes's belief about the unidentified murderer[70] is different. Let us consider, for instance, Leverrier's belief that there is a planet, which is next to Uranus in order of distance to the sun that causes, or contributes to, the perturbations in the orbit of Uranus. This belief is based on some observation of the perturbations, and hence is not n-analytic. But it seems that mere observation of the perturbations

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[70] Two famous examples discussed in Inan's work

in Uranus' orbit would not be enough for Leverrier to come to such a conclusion. It was not a pure guess that the cause of the perturbations is another planet, and not for example, a comet, or a near-by black hole. Most probably, Leverrier had to combine the observed patterns of the perturbations with his general knowledge of the laws of physics and astronomy in order to hypothesize that it is a planet and not something else that causes the phenomenon. So does the scientist in my example: s/he observes two particular sets of genes and the particular patterns of their interaction, evaluates his/her observations in the framework of advanced genetics and on that basis concludes something about the yet unborn child.

It may be that the definition of g-inferential beliefs presents too strict a requirement for *de re* attitudes. Perhaps, it is even impossible to entirely exclude appealing to general statements from our strategy of forming any kind of beliefs. For even in interpreting our most basic perceptual experience (i.e. to form a belief about an object in front of us) we must be equipped with at least minimal knowledge about the world. The rationale that underlies Inan's account of *de re* cognitive attitudes, namely, that they should be based on some direct or indirect experience of an object rather than on analytic knowledge or some hasty generalizations is correct. But I think that there is a need for differentiation in the notion of general statements. I believe that statements like "All chess-players are smart" and "Most astronomic objects, that cause such-and-such perturbations in the orbits of near-by planets are planets" or "All organisms that have such-and-such features are viruses" have different epistemic status. That is why inferences made from statements like the latter two should be allowed in forming *de re* beliefs. This condition becomes even more crucial when we want to allow *de re* beliefs about the object with which we do not have direct contact, like future objects. So my general conclusion is that Inan's

account, with some revision of the definition of g-inferential, is compatible with the possibility of having *de re* beliefs about future individuals.

3.5 Conclusion: final set of conditions for speaker's reference

So far I have considered three different accounts of the *de re/de dicto* distinction, which I believe to be representative of the entire discussion in this area of philosophy of language. Donnellan's test is based on the condition of "knowing who/what" for *de re* attitudes; Sosa's account makes the *de re/de dicto* distinction context/interest- relative, and therefore reduces its semantic and epistemic significance; Inan's theory presents an alternative position which is aimed to escape the shortcomings of the first two views.

Donnellan's and Inan's accounts initially deny *de re* beliefs about future individuals in a canonical case of "Newman 1". Still, from this result one cannot conclude that *de re* attitudes about future objects are impossible in general: the examples considered seem to refute such a conclusion. Sosa's account has no special considerations for beliefs about the future; his notion of a distinguished term is equally applicable to future objects. In addition, his approach seems to suggest an explanation of how an attitude may fail on Donnellan's test and still be a *de re* attitude.

Thus, none of the accounts offer arguments in favor of impossibility of having *de re* beliefs about future objects. However, two of them (Donnellan's and Inan's) present the conditions which limit the cases of *de re* attitudes, i.e., there can be future objects, about which no *de re* attitudes can be formed

Such a conclusion implies that speaker's reference to future objects, even to entirely future individuals, is possible. Moreover, it is possible not in exceptional cases but rather in general, since the future objects about which we cannot form *de re* beliefs seem to me to be quite rare. So here is what a final set of conditions for speaker's reference to future objects should be like:

A speaker S refers to an object x by using term d if and only if **(i)** S believes *de re* that there is such-and-such item in the world (x) and intends to refer to it; and **(ii)** x is the object that is causally connected (via perception, memory, inference, testimony, or the common cause) with the body of information about x, possessed by S and not necessarily the satisfier of that body of information.

CONCLUSION

So far I have considered the conditions for semantic and speaker's reference to future objects. Two types of reference were discussed within the framework of a view which combines the descriptivist and the causal theories of reference. Since there seems to be no way of fixing the semantic referent for a term denoting a future object other than providing a definite description, the condition for semantic reference to future objects can be stated as follows:

A singular term d introduced for a future object refers if there is (in the atemporal sense of existence) an object x that a description associated with that term picks out uniquely.

However, as for other categories of objects, semantic reference does not entail speaker's reference for future objects. In one of the examples presented in this thesis I considered the situation in which by using a non-referring term the speaker refers successfully in virtue of a special causal connection between him and the future object. So the conditions for the two types of reference should be different. I proposed two main requirements for the successful speaker's reference to the future. First, the body of information a speaker possesses about the future object s/he intends to refer to should be causally connected to this object, and second, the beliefs, that constitute this body of information, should be *de re*.

In order to argue that a speaker can refer to future objects I showed that there is a possibility of having a causal connection with and *de re* cognitive attitudes about the objects of this category. For that I presented the existing accounts of causal

connection and *de re/de dicto* distinction which seem to incorporate such a possibility.

Goldman's causal account of knowledge suggests the possibility of causal connection of our beliefs concerning future events to these events. This account does not presuppose backward causation; causal connection in such cases is realized via the common cause of our beliefs and the events. Although Goldman's examples concern beliefs about future events, the same can be said of our beliefs about future objects; the causal connection between our beliefs and the object in question exists if our beliefs and the emergence of this object have a common cause. Combined with Evans' version of the causal theory of speaker's reference, where the essential condition for the successful act of referring is the presence of a causal connection between the body of information a speaker possesses about the object s/he wishes to refer to and that object, Goldman's account allows reference to future objects if the condition of common cause is met.

I suggested that the second condition for speaker's reference to future objects should be the possession of *de re* beliefs about these objects by the speaker. This suggestion rests on the intuition that in the speaker's reference there is an intention to refer to something particular. The body of information a speaker possesses about that object which is causally connected to it and allows the speaker to individuate the object may include some false beliefs, but what seems to be important here is that even if some of the speaker's beliefs are false, they are about something or somebody particular. In other words, these beliefs are *de re*. At this point the possibility of speaker's reference to a future object may be threatened by the claim that it is unattainable to have *de re* cognitive attitudes about future objects. To see whether

this claim has any weight, I have considered three different accounts of the *de re/de dicto* distinction and argued that there are cases in which it is possible to form *de re* beliefs about future objects under the constraints of each account.

So far it seems that the goal of this thesis, namely, to show that it is possible for a speaker to refer to future objects, is achieved. The conditions for speaker's reference presented in this thesis limit the future objects to which we can refer to those with which we have causal connection and about which we can hold *de re* beliefs.

REFERENCES

Devitt, M., & Sterelny, K. (1987). *Language and Reality*. Cambridge: A Bradford Book.

Donnellan, K. S. (1966). Reference and Definite Descriptions. *Philosophical Review, 75*, 281-304.

Donnellan, K. S. (1972). Proper Names and Identifying Descriptions. In D. Davidson & G. Harman (Eds.), *Semantics of Natural Language* (pp. 356-379). Dordrecht: Reidel.

Donnellan, K. S. (1974). Speaking of Nothing. *The Philosophical Review, 83*, 3-31.

Donnellan, K. S. (1979a). The Contingent A Priori and Rigid Designators. In P. A. French, T. E. Uehling, Jr & H. K. Wettstein (Eds.), *Contemporary Perspectives in the Philosophy of Language* (pp. 45-60). Minneapolis: University of Minnesota Press.

Evans, G. (1983). The Causal Theory of Names. *Proceedings of the Aristotelian Society, 47*, 187-208.

Frege, G. (1952). *Translations from the Philosophical Writings of Gottlob Frege* (P. Geach, Black, M., Trans.). Oxford: Blackwell.

Goldman, A. I. (1967). A Causal Theory of Knowing. *The Journal of Philosophy, 64*(12), 357-372.

Grice, H. P. (1975). Logic and Conversation. In P. Cole & J. L. Morgan (Eds.), *Syntax and Semantics* (Vol. 3, pp. 41-58). New York: Academic Press.

Griffiths, D. A. (1986). Reference, De Re Belief and Rigidity. *The Canadian Journal of Philosophy, 16*(4), 667-692.

Inan, H. I. (1997). *Inostensible Terms: Epistemological and Semantical Issues in the Theory of Reference.* Doctoral dissertation, University of California, Santa Barbara.

Kaplan, D. (1969). Quantifying In. *Synthese, 19*, 178-214.

Kripke, S. A. (1972). Naming and Necessity. In D. Davidson & G. Harman (Eds.), *Semantics of Natural Language* (pp. 253-355). Dordrecht: Reidel.

Kripke, S. A. (1979). Speaker's Reference and Semantic Reference. In P. A. French, T. E. Uehling, Jr & H. K. Wettstein (Eds.), *Contemporary Perspectives in the Philosophy of Language* (pp. 6-27). Minneapolis: University of Minnesota Press.

McKay, T. (1994). Names, Causal Chains, and de re Beliefs. *Philosophical Perspectives, 8*(Logic and Language).

Oppy, G. (1995). On an Argument about Reference to Future Individuals. *Philosophical Quarterly, 45*(178), 84-87.

Quine, W. V. (1979). Intensions Revisited. In P. A. French, T. E. Uehling, Jr & H. K. Wettstein (Eds.), *Contemporary Perspectives in the Philosophy of Language* (pp. 268-274). Minneapolis: University of Minnesota Press.

Russell, B. (1967). *The Problems of Philosophy*. London: Oxford Paperbacks.

Salmon, N. (1998). Nonexistence. *Nous, 32*(3), 277-319.

Salmon, N. (2004). The Good, the Bad, and the Ugly. In M. Reimer & A. Bezuidenhout (Eds.), *Descriptions and Beyond*: Oxford University Press.

Searle, J. R. (1958). Proper Names. *Mind, 67*, 166-173.

Sosa, E. (1970). Propositional attitude de Dicto and De Re. *The Journal of Philosophy, 67*(21), 883-896.

Strawson, P. F. (1959). *Individuals: An Essay in Descriptive Metaphysics*. London: Methuen.

Teichmann, R. (1991). Future Individuals. *Philosophical Quarterly, 41*(163), 194-211.