

Why Rigidity?

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Introduction

According to Kripke, proper names in natural language are rigid designators. That is, a proper name that designates some object in our world, designates the same object in every possible world in which that object exists (*Naming and Necessity* (NN), pp. 48–9) and does not designate any different object in any other possible world (more on this last clause below). For example, the proper name ‘Plato’ is a rigid designator, since in a sentence describing a counterfactual situation, for instance,

Plato would not have been a philosopher had he died as a child.

it designates the same individual that it designates in sentences about the actual world, namely Plato.

The rigidity of proper names might seem to be a *contingent* fact about natural language: it might seem that a language in which names are *not* rigid designators should be possible. Indeed, the literature usually presents the claim that proper names are rigid as empirical, derived not from theory but from observation. Stanley, for instance, explicitly writes that the thesis that names are rigid is ‘an empirical claim about natural language’ (1997, p. 566). The question then arises: why are the proper names of *our* natural languages rigid? This question, which is never raised by Kripke, deserves some attention.

By contrast to Kripke, I will attempt in this chapter to derive rigidity, or something close to it, from more basic facts about our use of names. It will turn out that rigidity is a necessary property of names.

Attempts to derive rigidity from some more basic facts about language exist in the literature. Kaplan, for instance, has asked:

How could rigid designation not be based on some deeper semantic property like direct reference? It couldn’t be an accident that names were rigid and descriptions were not. (1989, p. 571)

As this paragraph indicates, Kaplan tried to derive rigidity from his idea of direct reference. I

tend to think, however, that his concept of direct reference is insufficiently clear. Yet examining it critically is a topic for a different work, so I shall not discuss here his attempted derivation.¹ I shall take a different route in this chapter.

The principle of the independence of reference

How do we use proper names in modal sentences? In ordinary language, names are used to describe possible situations mainly in sentences beginning or structured like, for instance, the following incomplete ones:

Socrates could have ...

Plato might have been ...

Aristotle could not have been ...

If Socrates had been ..., then Plato couldn't have ...

It could have been the case that Socrates, but not Plato ...

And so on.² That is, we refer to people and 'modally' predicate of them various things, namely, we express this ascription not by the copulas 'is', 'was', 'will be', etc., but by modal ones like 'might', 'could' and so on. Or we may modally deny them some properties; or again, we may modally ascribe these properties only conditionally; etc. And the reference of names used in the description of the possible situation is independent of what is said in the rest of the sentence containing them.

This idea, that the reference of a name is independent of what is said in the rest of the sentence in which it occurs (the principle of the independence of reference, or PIR), can be clarified and demonstrated as follows. Suppose someone intends to say that Aristotle might have been a physician instead of a philosopher. She starts saying that, but is interrupted after having said only 'Aristotle might have been'. Although failing to say anything about Aristotle, she did refer to him. The reference of 'Aristotle' is determined independently of what she intended to say about him. Similarly, if we did not hear clearly what a speaker has

¹ For a concise presentation of Kaplan's derivation and a survey of the literature on the relation between rigidity and direct reference, see section 2.1 of (LaPorte, 2006).

² For brevity's sake, I restrict my examples to names of people, and ignore names of animals, places, etc.; I do not think there is any significant modal distinction between all these uses.

said, yet did hear him say ‘Aristotle’, we may know to whom he referred: the referent is determined independently of those parts we failed to hear. Reference is even independent of the fact that we talk about what is merely possible and not actual, or vice versa: if one was interrupted after having said only ‘Aristotle ...’, or ‘Aristotle, as you all know ...’, then one has referred to Aristotle, while what one said does not determine whether the situation one intended to describe was actual or merely possible.

That is why I gave above *incomplete* sentences as examples: the reader knew who is mentioned in those partial sentences, although they specified no situation – actual, possible or impossible. This shows that the reference of a name occurring in any of those sentences is independent of the way the sentence containing it might be completed.

Here is a chess picture of the logic of discourse. We first take some chess pieces: this is reference by means of proper names, and in this way the identity of the particulars we talk about is determined. We then arrange these pieces on the board: this is the description of a situation, either actual or merely possible, which is specified by the rest of the sentence. The identity of the chess pieces we pick is independent of the way we later arrange them.

Why is the reference of names independent of what is said in the rest of the sentence containing them? The reason is that, first, unlike definite descriptions and demonstrative phrases, names have no descriptive content, which could relate them to other things mentioned in the sentence. Second, unlike pronouns and definite descriptions, names are not used as anaphors and therefore they cannot have their reference depend on the reference of other phrases in the sentence in the way the reference of anaphors does. And I don’t see any other way – with one possible exception soon to be discussed – in which the reference of a phrase might be dependent on other words or phrases in the same sentence. Of course, it cannot be ruled out that I have failed to notice some special construction which does generate such dependence. Yet this would not *refute* the principle but only show that it does not apply to all possible uses of names; and it is also likely that in such constructions names indeed would *not* be rigid.

The fact that names are different in these aspects from definite descriptions, demonstrative phrases, and pronouns is of course not contingent: we *consider* as names those singular terms that are not pronouns nor have their reference determined by the meaning of words that compose them in the way that the reference of definite descriptions and

demonstrative phrases is. Consequently, the PIR is not a contingent fact about names.³

Phrases that share some features both with names and with definite descriptions do exist, in the form of definite descriptions that have grown capital letters: ‘The United Nations’, ‘Central European University’, and so on. Apart from some special cases, the description here has to apply to the thing named, although it does not participate in determining the reference of the phrase. It seems that this standardized use of the capitalized description also prevents it from relating to other parts of the sentence in a way that might influence its reference. So it seems the PIR does hold even for this limiting case of names.

Notice that I have not claimed that the PIR applies *only* to names: other terms and phrases *may* have their reference depend on other words and phrases in the sentence, but it *need not* be so. This is indeed the case with many uses of pronouns, definite descriptions and demonstrative phrases. I shall return to this below.

Before proceeding with additional points, let us consider two objections that might be raised to the PIR. First, as I have maintained that the reference of a name is independent of what is said in the rest of the sentence containing it, its reference should be determinable independently of what is said by the rest of that sentence. But suppose someone says, ‘Zeno invented the Arrow Paradox’: the audience might know that he is talking about Zeno of Elea and not Zeno the Stoic precisely by relying on other parts of the utterance; in this case, by relying on the fact that the Arrow was mentioned, a paradox invented by Zeno of Elea. Accordingly, contrary to what the PIR claims, a name’s reference might be determined by what is said in the rest of the sentence containing it.

This objection, however, confuses a semantic point with an epistemic one; and although it correctly describes the epistemic point, it does not apply to the semantic one, in which we are interested here. The audience indeed may come to *know* to whom a speaker referred with a name or expression by reliance on the meaning of other parts of the sentence

³ I was once given the following example as an alleged case in which a name is used as an anaphor: ‘Josephine would marry only a man called “Ernest” who is tall and handsome. Ernest is a lucky man!’ I am not sure whether this sentence is acceptable, but even if it is, it shows that there is some special and probably exceptional use of names in which reference *is* dependent on what it said earlier in the sentence (as is the second occurrence of ‘Ernest’ in this example). Notice also that the reference of that anaphoric name would change across possible situations and that it will not be rigid, a fact that supports the derivation below of rigidity from the independence of reference.

uttered; this is the epistemic point. However, *it should be possible* to determine the reference of the name independently of this procedure; this is the semantic aspect of the independence of reference. After all, it is possible that the speaker made a mistake and ascribed the invention of the paradox to Zeno the Stoic. To ascertain whether he is right (Elea) or mistaken (the Stoic), it should be possible to determine to which Zeno he referred without reliance on what he said of him. And this is the idea expressed by the semantic principle of the independence of reference.

The second objection to the principle runs as follows. Suppose I *introduce* a name for a person, saying, for instance, ‘Let this baby be *John Smith*’. The reference of ‘John Smith’ is determined, in this case, by what is said in the part of the sentence preceding it, in apparent disagreement with the PIR. However, when such a sentence is used in a naming event, the name is only *mentioned* in the utterance; the naming speech act, if successful, makes a *future use* of the name possible. The form of the sentence should not mislead us into thinking that the name is used to refer in the specific utterance concerned: the sentence could be substituted in that context by ‘I name this baby “John Smith”’, where the mentioning is explicit. Yet even if one does not accept this response to the apparent counterexample, then we have here an exception to the PIR only in the special case in which a name is introduced into language with a specific reference.

Turning back to rigidity, if the PIR is accepted, then names can be shown to be rigid in the following sense. According to the principle, the reference of a name is determined independently of what is said in the rest of the sentence containing it. Consequently, if what is said by the rest of the sentence makes it necessary to consider a variety of possibilities in order to determine its truth-value, the reference of the name that the sentence contains is determined independently of these possibilities and is therefore the same for all. The name is therefore rigid.

In one place in NN, while critically discussing the alleged problem of transworld identity, Kripke comes close to explaining rigidity in a way similar to the way developed here. He writes:

We do not begin with worlds ... and then ask about criteria of transworld identification; on the contrary, we begin with the objects, which we *have*, and can identify, in the actual world. We can then ask whether certain things might have been

true of the objects. (NN, 53)

I believe this passage expresses the same aspect of modal discourse Kripke characterized earlier in his book (NN, 44) by claiming that possible worlds are stipulated. Now ‘beginning with the objects’ may be read as expressing figuratively the idea of the independence of the reference of names of what is said in the rest of the sentence. In this respect my derivation of rigidity may develop a line of thought found in NN.

Yet we should also note some differences. I have attempted to derive rigidity from a more general principle of the reference of names. Nothing of this sort is found in Kripke’s work, which argues ‘intuitively’ for the rigidity of proper names (NN, 49) by means of examples alone.

Another difference between what Kripke says in the quoted passage and the approach developed here is that only according to the former do ‘we begin with the objects, which we *have*, and can identify, in the actual world’. On the view developed here we may ‘begin’ with objects that do not really exist, objects which we do not have in the actual world. We shall see some examples of this below, where I shall also note some further related differences.

Lastly, in the quoted passage Kripke is trying to explain rigidity, but I shall eventually suggest the PIR as an *improvement* on the rigidity claim. So far, the PIR has been used to support and derive the rigidity of proper names. However, I shall now turn to difficulties in the accepted conception of rigidity. These difficulties might lead us to consider the PIR as expressing more accurately than the concept of rigidity the facts about names that the latter was meant to capture.

<a>Rigidity vis-à-vis independence of reference applied to other aspects of name use

In this section I will show that describing by means of the concept of rigidity the principles governing the reference of names and other referring expressions involves several layers of contingency, which is unexplained by theory – contingency which disappears once we adopt the PIR.

Let us consider the following sentence:

- (1) If Abraham hadn’t met Sarah, Isaac wouldn’t have been born.

Here we describe a possible situation in which Isaac would not have existed. All the same, the name 'Isaac' in (0) clearly designates Isaac. This reference is straightforward according to the PIR: the designation of 'Isaac' is independent of what is said in the rest of the sentence; in particular, it is independent of whether its designatum would have existed in the situation specified by the rest of the sentence. 'Isaac' may therefore designate, when used in (0), the same person whom it often designates when used to talk about the actual world, namely the second patriarch.

On the other hand, according to the rigidity claim, the question of the designation of 'Isaac' in (0) is still unsettled. The question is the following. When we use a name to talk about a possible situation in which the person that the name designates when used to talk about the actual world does not exist, whom does the name designate, if it still designates at all? Kripke's definition of rigidity in NN leaves this question unanswered:

A designator rigidly designates a certain object if it designates that object wherever the object exists. (48–9)

Nothing is said on what, if anything, is designated when talking about possible situations in which the object does not exist. At that stage of his thought Kripke was at least occasionally inclined to define rigidity so that in worlds where the object does not exist the name does not designate anything:

When I use the notion of rigid designator ... all I mean is that in any possible world where the object in question *does* exist ... we use the designator in question to designate that object. In a situation where the object does not exist, then we should say that the designator has no referent. (1971, p. 173)

However, as is made clear by what he writes in NN, he was also occasionally inclined to think that even in such situations the name might designate the same object. On page 78 Kripke gives the following example: 'If you say "suppose Hitler had never been born" then "Hitler" refers here, still rigidly, to something that would not exist in the counterfactual situation described.' This example of course necessitated changing in NN the explanation of

rigidity I just quoted from the 1971 paper.

This example and the change of definition demonstrate that the idea of rigidity of names does not naturally dictate how they should function when talking about possible situations in which what they otherwise name does not exist. And from the NN example we see that Kripke came to think that proper names are not only rigid, but form a sub-class of rigid designators. Indeed, in a seminar delivered much later at the Hebrew University in Jerusalem (in April 2000), he elaborated the concept of rigidity as follows. A designator, he defined, ‘is *strictly* rigid if and only if there is an *a* such that it designates *a* in *all* possible worlds’ – including, as he explicitly said there, worlds in which *a* does not exist. And names in natural language, he maintained, are *strictly* rigid.⁴

We see that in order to capture the semantics of proper names in natural language, we need to distinguish several kinds of rigidity. Moreover, Kripke does not explain *why* proper names should be *strictly* rigid and not form a different sub-class of rigid designators. He presents their being strictly rigid as an unexplained empirical fact about natural language, a fact which is not necessitated by their rigidity, let alone by their being names. The theory of the rigidity of proper names contains several unexplained layers of contingency.

By contrast, as we saw above, this ‘strict rigidity’ of proper names is derived a priori from the PIR. So we have here a reason for preferring the characterization of the behavior of names by means of the idea of the independence of reference over its characterization by means of the concept of rigidity.

Let us also examine proper names of a different kind: names of fictional characters. They not only turn out to be ‘rigid’, but they also show, *pace* Kripke, that we do not have to ‘begin with the objects, which we *have*, and can identify, in the actual world’. We may say, for instance:

- (2) If Sherlock Holmes had existed, some unsolved crime mysteries in Victorian Britain would have been solved.

Here we ‘begin’ with a merely possible entity, taken from the world of Conan Doyle’s

⁴ Strictly rigid designators were earlier called *obstinately rigid designators* by Salmon (1981, p. 34).

novels, a character that does not exist and whom we cannot consequently identify in the actual world, and then say something about what could have happened.⁵ In the contemplated counterfactual situation, the name designates the same detective it designates when talking of the world of Doyle's novels, so it presumably exhibits some kind of rigidity. That it behaves in this way is again on the rigidity approach a contingent fact empirically observed, while it is derivable from the PIR.

I shall now examine the use of definite descriptions in modal contexts. Unlike names, definite descriptions, in virtue of their descriptive content, may allude to what is said in other parts of the sentence, in which case their reference may be partly determined by what is said there. Consider, for instance, the sentence

- (3) If elections had been postponed, the person who would then have been prime minister would have faced an impossible situation.

The definite description 'the person who would then have been prime minister' in the consequent refers to a person who would have been prime minister in the situation specified in the antecedent, so its reference is partly determined by what is said there.

However, as noted above, the definite description *need not* contain material that mentions what is said in the rest of the sentence, in which case its reference would be independent of that, and it would exhibit the same rigid behavior as names do. This can be seen in the following example:

⁵ Kripke argued that, 'granted that there is no Sherlock Holmes, one cannot say of any possible person that he *would have been* Sherlock Holmes, had he existed' (NN, p. 158; 2011, p. 59; 1973, Lecture 2). I find his argument there invalid (Ben-Yami, 2010), but justifying my position would constitute too large a digression given the aims of this chapter. Since Kripke's position on fictional characters is far from being generally accepted, I believe it is worth considering here the consequences of a plausible alternative position for the rigidity claim. Similarly, Kripke argued that fictional characters *do* exist in our world, but as some kind of abstract objects (2011, pp. 62ff.; 1973). Again, the fact that this view is far from being generally accepted and that it would take too much space to discuss it here allows me, I believe, to examine the consequences for the rigidity claim of a more plausible position that I adopt without argument, namely that Sherlock Holmes simply *never* existed. But of course, if some do accept Kripke's views of fictional characters, this should make them reject my last example.

- (4) The prime minister wouldn't have been elected had his opponent been a better rhetorician.

The phrase 'the prime minister' refers to someone who in the situation described would not have been the prime minister, namely the actual prime minister. Its reference in the merely possible situation is identical to its reference in the actual world, and it should therefore be classified as rigid. (The same applies to demonstrative phrases.)

Kripke himself was 'tentatively inclined' to reject the view that definite descriptions are sometimes rigid (1971, p. 176, n. 11). He thought that any such alleged rigid use could be handled 'by Russell's notion of scope' (NN, pp. 59–60, n. 22), presumably by analyzing definite descriptions as quantified constructions. But if, unlike Russell and together with Frege and Strawson, we do consider such descriptions to be singular terms occurring in the logical argument position, then the notion of scope cannot be applied to them. On this view of definite descriptions, the former example *is* a case of what Kripke should regard as their rigid use.

Why is the definite description in sentence (0) used rigidly? From the fact that proper names are rigid it does not follow that any definite description should be. We again have on Kripke's approach an unexplained empirically observed fact about natural language; yet another layer of contingency. By contrast, this fact can again be derived from the PIR: in the case when the reference of a definite description does not depend on what is said in the rest of the sentence, the description will exhibit the same rigid behavior as names do, namely, its reference will be constant across different circumstances of evaluation.

I will conclude this section by examining the application of the PIR to terms of a different kind, which Kripke also claimed are rigid: terms of natural kinds and phenomena. Kripke's examples were 'gold', 'heat', 'light', 'molecular motion', 'pain', 'my being in such and such a brain state', and 'yellowness' (NN, pp. 128, 136, 139, 148; 1971, p. 189). Presumably he would agree that names of biological types are also rigid, since in his discussion of their meaning he does not distinguish these from the former cases. We can therefore assume, with the literature, that 'tiger', 'feline', etc. are supposed to be rigid as well.

What this rigidity could amount to has puzzled the literature. Since the tigers and the pieces of gold that exist in our world need not have existed in all possible situations, and

since there might have existed some tigers and pieces of gold that do not actually exist, the reference of ‘tigers’ and ‘gold’ is not the same across possibilities. In face of this problem, Donnellan (1983) suggested that a rigid general term designates a kind, and that this stays the same across possibilities. Yet Donnellan’s suggestion empties the notion of the rigidity of general terms of any content, for if we adopt it *all* general terms will turn out to be rigid.⁶ Devitt and Sterelny (1999, pp. 85–6, 312) have suggested that natural kind terms have what they called rigid *application*, namely, if such a term applies to an object in the actual world then it applies to that object in every possible world in which it exists. But this is unacceptable. A queen bee is presumably a natural kind, but whether a bee develops into a queen depends on what it is fed; thus, a queen bee need not have been a queen bee, and the term ‘queen bee’ does not apply to it across possibilities. Similarly, due to radioactive decay, a piece of matter can change from being predominantly one kind of stuff to being predominantly a different kind of stuff, in which case a natural kind term does not apply to it any longer. Consequently, natural kind terms need not have rigid application. Kripke’s claim that some general terms are rigid thus seems either empty of content or wrong.

The discussion above may shed light on the confusions involved. I have derived the rigidity claim for proper names from the PIR, and also showed that this principle can explain more aspects of the behavior of proper names as well as of definite description than can the rigidity claim. Turning to general terms, all words and phrases considered by Kripke do not have a descriptive content that may allude to other parts of the sentence containing them. Their meaning, like that of names and unlike that of definite descriptions, should therefore be independent of what is said in the rest of the sentence containing them. Since they are general terms, however, this should apply to their *meaning* and not to their reference or extension: their extension may vary between possible situations, but not their meaning. Moreover, the principle applies not only to natural kind terms but to other general terms as well. Accordingly, if we see the rigidity claim as an unclear expression of the PIR, then applying this principle, with appropriate changes, to general terms shows in what sense their behavior is similar to that of proper names and why they seemed rigid to Kripke.

To review the discussion so far, we have seen that the claim that names are rigid is

⁶ See (LaPorte, 2000) for an attempt to overcome this problem, and (Schwartz, 2002) for criticism.

derivable from the principle that the reference of names is independent of what is said in the rest of the sentence containing them. We also saw that one can derive from this principle additional facts about the use of names, definite descriptions, and general terms, which are unexplained by the rigidity claim. The PIR is thus more general than the rigidity claim. In the next section I shall show that the rigidity claim, as formalized by Kripke, involves a difficulty that should make us modify it and consider it as more limited in scope than often thought, while this difficulty does not face the PIR.

A problem with rigidity

Names obviously do not always have the same reference: ‘Zeno’, for instance, is used to name both Zeno the Stoic and Zeno of Elea. And the name ‘Zeno’ used in a modal sentence to name Zeno the Stoic (‘Zeno would have remained a merchant had he not visited Athens’) has a different reference from the same name used to name Zeno of Elea in a non-modal sentence (‘Zeno invented the Arrow Paradox’). So if we apply the accepted definition of rigidity literally – a term is a rigid designator if in every possible world, the actual one included, it designates the same object (NN, p. 48) – it follows that proper names are not rigid: the proper name ‘Zeno’ may designate different people when used to talk about the actual world and a merely possible situation, as the example demonstrates.

Yet one is bound to feel that this apparent refutation of the rigidity of proper names obviously gets something wrong, although it does seem effective against the application of the concept of rigidity as literally formulated by Kripke and the subsequent literature. Accordingly, we must conclude that the standard, Kripkean definition of rigidity is insufficiently clear; we need to patch it up somehow in order to express correctly what was originally meant by the idea and avoid this apparent difficulty. So what does it mean, that names are rigid?

Kripke was aware of this difficulty when he wrote the Preface to NN. He first suggested:

For language as we have it, we could speak of names as having a unique referent if we adopted a terminology ... according to which uses of phonetically the same sounds to

name distinct objects count as distinct names.⁷ (NN, pp. 7–8)

This ‘homonyms’ response is indeed the first one I have usually encountered when raising the above-mentioned difficulty.

However, this move trivializes the claim of rigidity: according to it names would be rigid *no matter how they are used*. To see this, consider a language in which the reference of a name in any specific utterance is arbitrarily determined, independently of any other use of the same name in any other utterance. If, following Kripke’s suggestion, we considered two phonetically or orthographically identical words as being the same name only if they had the same reference, then in this language Kripkean names would still be rigid. So Kripke’s suggested terminology seems to empty the claim that names are rigid of any content. If we wish that claim to say something significant about names, it seems the concept of rigidity should be saved in some other way.

Kripke of course did not think that a mere change of terminology would overcome the difficulty. He goes on to claim that, however we treat such ‘homonymous’ names when we talk about the truth conditions of a sentence, it must first be fixed who the names it contains name (NN, pp. 8–9). But at least *prima facie*, this does not answer our difficulty: the reference of ‘Zeno’ in a modal sentence can be fixed in several different ways, and in each case it differs from the reference of the name in some non-modal sentences; so the definition of rigidity still does not apply. Nor does Kripke show how his claim solves our difficulty: he immediately proceeds to assert that once it is fixed which proposition a sentence expresses, it would, on Russell’s account of names, fail to conform to the rule of rigidity – as if the issue of what rigidity means has already been settled. So it might seem we cannot find in Kripke’s response an answer to our difficulty. We shall reconsider these passages of the Preface later, but first let us discuss some other attempts to resolve the difficulty.

One certainly can overcome the problem – in theory rather than practice – by, say, adding indices to names, distinguishing ‘Zeno₁’ from ‘Zeno₂’, and stipulating that the former will be used to refer in all contexts only to Zeno the Stoic, the latter only to Zeno of Elea. In this way the modified proper names will be rigid according to Kripke’s definition. But the rigidity of the *modified* proper names does not explain in what sense *ordinary* proper names

⁷ See Kaplan (1977, p. 562) for a similar suggestion.

are rigid, while Kripke's claim was about the latter. And the stipulation would make the modified names rigid, no matter how ordinary names are used. Moreover, stipulations can be introduced in a variety of ways: we could also stipulate that 'Zeno₁' names only Zeno of Elea in non-modal contexts and only Zeno the Stoic in modal ones, and in this way render our modified names *non-rigid*. So the theoretical availability of stipulations is neither here nor there when we consider the rigidity of names in natural language.

Should we say that if the name 'Zeno' is used in a modal sentence with the same *meaning* it has in a non-modal one, it then has the same reference, and that *that* is what is meant by rigidity? This is the way Fitch – the only author apart from Kripke of whom I am aware who discusses this difficulty – tries to overcome the problem (2004, pp. 43–6). Our examples of different uses of the name 'Zeno' above, which apparently demonstrated that the name is not rigid, would not be, according to Fitch, uses of the name with the same meaning, and therefore they are merely apparent counterexamples. Yet the talk of the meaning of proper names cannot help us here, as will become evident once we consider what this meaning could be.

First, if we identify the meaning of a proper name with its referent, we will again be arguing in a circle: names are rigid, i.e. the same name refers to the same individual in modal and non-modal sentences, because we count names as the same only if they refer to the same individual in modal and non-modal contexts. As we saw above, this definition empties the rigidity claim of any content.

On the other hand, if what one had in mind in talking about the meaning of a proper name were some kind of description, or perhaps a vaguely bound cluster of differently weighted descriptions, then this would commit one to a version of the description theory of names. This option is of course unavailable to Kripke, who is not only the most renowned critic of the description theory, but in fact uses the very idea of rigidity to argue against that theory (NN, Preface and Lecture I). Moreover, the description theory of names is indeed highly problematic: those of us who find Kripke and Donnellan's arguments from ignorance and error⁸ sound (NN, pp. 80–7; Donnellan 1972) should of course reject it.⁹ Finally, I am not

⁸ I use Devitt and Sterelny's term for the argument (1999); Salmon (1981) calls it the *semantic* argument.

⁹ I think there are also other important considerations against the description theory, which I intend to develop in a separate work.

acquainted with any other conception of the meaning of a proper name that could help Kripke answer this difficulty. Accordingly, appealing to the meaning of a proper name does not look like a promising way of saving the original idea of rigidity.¹⁰

Would it help if we substituted for the meaning of a proper name Kripke's idea that a name's reference is determined by a communication chain beginning with the introduction of the name in a naming event (NN, Lecture II)?¹¹ A name's being rigid would then mean that it refers, in modal and non-modal contexts alike, to the referent to whom the chain to which it is appropriately related leads. This attempt would be in agreement with a footnote Kripke added to his suggestion to individuate names according to their reference: 'two totally distinct "historical chains"', he writes, 'that by sheer accident assign phonetically the same name to the same man should probably count as creating distinct names despite the identity of referents' (NN, p. 8). But this attempt, I think, would run into similar difficulties. The name 'Zeno' belongs to several communication chains: one leading to Zeno the Stoic, another to Zeno of Elea, and many additional ones leading to other people named 'Zeno'. Moreover, a person using 'Zeno' in a specific utterance to refer to the Stoic philosopher might do that in a context in which some other Zeno has also been discussed, and perhaps he was reminded of Zeno the Stoic precisely because of that other Zeno, so his current use of the name is also related to the chain that leads to the other Zeno. The question consequently arises, when such a person says, 'Zeno would have remained a merchant had he not visited Athens', as to what determines to which of these chains this token of 'Zeno' is related? If the chain is determined by identity of reference, then this again would make names rigid no matter how they are used, so this cannot be what the rigidity claim amounts to. Neither can Kripke determine the chain by the description one would give of the named person, because that would endow names with descriptive meaning, an option he rejects. And I am unaware of any other option of

¹⁰ Yet it is worth noting that if one does adhere to a description theory of names, then one can coherently reformulate the idea of rigidity by relying on the meaning of the name as expressed by the description associated with it – an approach unavailable to those who reject the theory. Whether that could save the claim that names are rigid will then depend on the soundness of Kripke's modal argument against description theories of proper names.

¹¹ Almog has powerfully argued that the communication chain cannot be taken as belonging to semantics, but that its role is pre-semantic (1984). If that is so then the communication chain obviously cannot be substituted for the *meaning* of a name, as suggested in the text. For the sake of argument I ignore this difficulty in this chapter.

determining a communication chain that could save the rigidity claim. So I do not think reliance on communication chains can help Kripke here.

In view of the difficulty of identifying the *meaning* of a name with an appropriate description, should we perhaps allot the description only the more modest role of *fixing the reference* of the name, and classify two tokens of phonetically or orthographically the same expression as being of the same name just in case their reference is fixed in the same way? This would not do either, for the following reasons.

We cannot demand, for this classification of names, identity of the descriptions that speakers supply or would supply for fixing the reference, for even the same speaker might supply different descriptions on different occasions: ‘The inventor of the Arrow Paradox’, ‘The inventor of the Achilles Paradox’, ‘Parmenides’s most famous follower’ and other descriptions may be equally forthcoming, and on this approach would bring about an undesirable multiplicity of names. Neither can we classify names by the cluster of the descriptions available to the speaker, for this would result in different people using different names, even when all use ‘Zeno’ to refer to Zeno of Elea. And if we counted two ways of fixing the reference as the same just in case they yielded the same referent, then again we are classifying names according to identity of reference, and names would turn out rigid no matter how they are used. So neither can the way reference is fixed help us here.

All the responses discussed above to our difficulty, which were shown to be unsatisfactory, are either found in the literature or were given to me by professional philosophers. They therefore show, I believe, that even if this difficulty can be satisfactorily settled, the concept of rigidity as currently used is in need of clarification.

Let us try a different approach to the problem. The problem arose when we compared the uses of the same name across different sentences and tried to see in what sense the name is then rigid. We can call this type of rigidity *inter-sentential rigidity*. We failed to find an acceptable sense of ‘same name’ in which names are inter-sententially rigid. However, we may try instead to introduce a notion of a name *token* being rigid, *token rigidity*.

The attempt to ascribe rigidity to name tokens would go as follows. When determining the truth-value of a modal utterance containing a name, the truth-value of the utterance should be evaluated in every (relevant) possibility, and in each such evaluation the name designates the same object, which is also the object it designates in the actual world. This is a non-trivial property of the modal discourse, which is independent of the use across

utterances of name tokens, and therefore does not involve any problematic need to classify token names into name types.

Although this is an important observation on modal discourse, it is problematic as an interpretation of *all that was meant* by rigidity. First, several passages of NN strongly support the claim that Kripke thought rigidity is inter-sentential and characterizes not only name tokens. Consider, for instance, the following:

When I hear the name ‘Hitler’, I do get an illusory ‘gut feeling’ that it’s sort of analytic that that man was evil. But really, probably not. Hitler might have spent all his days in quiet in Linz. In that case we would not say that then this man would not have been Hitler, for we use the name ‘Hitler’ just as the name of that man, even in describing other possible worlds. (This is the notion which I called a rigid designator in the previous talk.) (NN, p. 75)

The talk of use here suggests recurrent use, and not only the occurrence of one token in one sentence; and it is hard to see how to make sense of this passage when only one token is being considered. Accordingly, Kripke was probably thinking of rigidity not only as token rigidity. Moreover, Kripke maintained that the idea of rigidity makes sense also when applied to sentences containing *no* modal or other operator, such as ‘Aristotle was fond of dogs’ (NN, pp. 6–12). The attempt to clarify rigidity by applying it to name tokens in modal contexts alone would thus make it more limited in meaning than was intended by Kripke.

Let us reconsider Kripke’s remarks on rigidity in the Preface to NN to see whether he succeeded in conferring on rigidity any additional meaning. On pages 6–12 of the Preface Kripke contrasts, in order to clarify the idea of rigidity, the following two sentences:

- (5) Aristotle was fond of dogs.
- (6) The last great philosopher of antiquity was fond of dogs.¹²

A proper understanding of (5) and (6), he writes, involves an understanding both of the conditions under which they are in fact true, and of the conditions under which a

¹² For the sake of argument I pretend that Aristotle was the last great philosopher of antiquity.

counterfactual course of history would be correctly described by them. The rigidity thesis, he continues, is simply that (0) correctly describes a counterfactual situation just in case *the same man* who should be fond of dogs in order for (0) to be *in fact* true, namely Aristotle, would have been fond of dogs in that counterfactual situation. By contrast, for a counterfactual course of history to make (0) true, *a different man* than the one who should be fond of dogs to make (0) in fact true might have had to be fond of dogs.

The way the designation of the proper name in (0) is determined is indeed different from the way the designation of the definite description in (0) is – this is Kripke’s claim that names are not implicit definite descriptions, which I am not contesting. The question is: in what sense might the reference of the subject term of (0) change while that of (0) remains constant as regards counterfactual situations? Once the reading of both sentences is determined, as Kripke assumes on pages 8–10, both make a claim about the actual world and both are about Aristotle. To change the referent of the definite description of (0), we need to change the context in which that referent is determined. Namely, to use Kaplan’s terms, we need to consider not only different circumstances of evaluation but *different contexts of utterance*. Only in such different contexts might ‘the last great philosopher of antiquity’ stand for a person different from Aristotle.

However, once we change the context of utterance, the referent of ‘Aristotle’ might also change; and this is so on any theory of how the reference of names is determined, Kripke’s own communication-chain picture included. To convince ourselves of that, consider how we would set about verifying (0) in that case. Someone asserts in our presence, ‘Aristotle was fond of dogs’. We first have to find out which Aristotle he is talking about: we have to fix the intended reading of (0); this is granted by Kripke (NN, p. 9). We therefore find out to which communication chain the speaker is related; for instance, he met the name ‘Aristotle’ in a specific introductory book entitled *Aristotle*, and he now uses the name intending to refer to the same person to whom the author of that book referred. In the actual world, this communication chain leads back to Aristotle; but in a different context of utterance it might lead to a different person, and then the referent of ‘Aristotle’ in (0) would be different from its actual referent.

Notice that I am *not* confusing here (i) a *modal* assertion made in the actual world about a possible situation and (ii) an assertion that might have been made in that possible situation about that situation (this is a confusion Kripke rightly warned against (NN, p. 77)).

Rather, we are considering what the name in the non-modal sentence (0) would have designated had its context of utterance been different, as it *has to be* in order for the reference of *the definite description* of (0) to change the way Kripke wishes it to change. And the name might then have also designated a different person.

It is easy to see that we shall have similar variability of reference with context of utterance for any available account of the reference of names. Accordingly, no acceptable sense of rigidity can be extracted from considering these examples.

I therefore suspect that the only sense of the rigidity claim that can be maintained is the token-rigidity in modal sentences we considered above, which I claimed is a particular case of the PIR. We could not save any additional sense of that claim, although it seems Kripke did mean it as implying more than just token rigidity.

To conclude, the PIR is more general in scope than Kripke's rigidity claim and can explain more linguistic phenomena than can the latter. It is also justified by considerations on the nature of names. Moreover, the rigidity claim, as understood by the literature, is unclear between inter-sentential and token rigidity, of which only the latter can be maintained; and Kripke's claim to demonstrate the phenomenon of rigidity in non-modal assertions cannot be maintained. The work that the concept of rigidity was meant to do is done better by the idea that the reference of names is independent of what is said in the rest of the sentence containing them.¹³

¹³ This chapter has profited from comments made by Kripke on a talk delivered at a conference held in Haifa in 1999, and from attending Kripke's seminar given at the Hebrew University during the second semester of the academic year 1999–2000. I am also indebted to: Michael Devitt, Peter Hacker, John Hyman, Ran Lanzet, Josep Macià, Genoveva Marti, François Recanati, Zoltan Szabo, and Zsófia Zvolenszky for comments on earlier drafts; to discussions in several forums in which I presented material leading to this chapter; and to my students in seminars I gave at the Central European University in Budapest.

The research leading to these results has received funding from the European Commission's Seventh Framework Programme FP7/2007-2013 under grant agreement no. FP7-238128.

References

- Almog, Joseph (1984) Semantical Anthropology. *Midwest Studies in Philosophy IX*: 479–89.
- Ben-Yami, Hanoch (2010) Could Sherlock Holmes Have Existed? *Croatian Journal of Philosophy* 10: 175–81.
- Devitt, Michael and Kim Sterelny (1999) *Language and Reality: An Introduction to the Philosophy of Language*, 2nd edn. Cambridge, MA: MIT Press.
- Donnellan, Keith (1972) Proper Names and Identifying Descriptions. In D. Davidson and G. Harman (eds) *The Semantics of Natural Language*. Dordrecht: Reidel.
- Donnellan, K. (1983) Kripke and Putnam on Natural Kind Terms. In C. Ginet (ed.) *Knowledge and Mind: Philosophical Essays*. Oxford: Oxford University Press, 88–104.
- Fitch, G.W. (2004) *Saul Kripke*. Chesham: Acumen.
- Kaplan, David (1977) Demonstratives. In Joseph Almog, John Perry and Howard Wettstein (eds) 1989. *Themes from Kaplan*. Oxford: Oxford University Press, 481–563.
- Kaplan, David (1989) Afterthoughts. In Joseph Almog, John Perry and Howard Wettstein (eds) *Themes from Kaplan*. Oxford: Oxford University Press, 565–614.
- Kripke, S. (1971) Identity and Necessity. Reprinted in A.W. Moore (ed.) 1993. *Meaning and Reference*. Oxford: Oxford University Press, 162–91.
- Kripke, S. (1973) Reference and Existence, unpublished typescript, The John Locke Lectures, Oxford .
- Kripke, S. (1980) *Naming and Necessity*. Oxford: Blackwell.
- Kripke, S. (2011) Vacuous Names and Fictional Entities. In his *Philosophical Troubles: Collected Papers, vol. I*. Oxford: Oxford University Press.
- LaPorte, J. (2000) Rigidity and Kind. *Philosophical Studies* 97: 293–316.
- LaPorte, J. (2006) Rigid Designators. In Edward N. Zalta (ed.), *The Stanford Encyclopaedia of Philosophy*. <http://plato.stanford.edu/entries/rigid-designators/>.
- Salmon, N. (1981) *Reference and Essence*. Princeton, NJ: Princeton University Press.
- Schwartz, S. (2002) Kinds, General Terms, and Rigidity: A Reply to LaPorte. *Philosophical Studies* 109: 265–77.
- Stanley, J. (1997) Names and Rigid Designation. In B. Hale and C. Wright (eds) *A Companion to the Philosophy of Language*. Oxford: Blackwell, 555–85.