

A Descriptivist Refutation of Kripke's Modal Argument and of Soames's Defence

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Abstract: This article systematically challenges Kripke's modal argument and Soames's defence of this argument by arguing that, just like descriptions, names can take narrow or wide scopes over modalities, and that there is a big difference between the wide scope reading and the narrow scope reading of a modal sentence with a name. Its final conclusions are that all of Kripke's and Soames's arguments are untenable due to some fallacies or mistakes; names are not "rigid designators"; if there were rigid designators, description(s) could be rigidified to refer fixedly to objects; so names cannot be distinguished in this way from the corresponding descriptions. A descriptivist account of names is still correct; and there is no justification for Kripke's theory of rigid designation and its consequences.

Keywords: modal argument, rigid designator, name, narrow scope, wide scope, rigid description, descriptivism, Kripke, Soames

TO DEFEAT DESCRIPTIVISM about names, and to prove his own thesis that names are rigid designators, while most descriptions are non-rigid designators, Kripke constructs three types of arguments: epistemic, semantic, and modal.¹ Although these arguments seem to have been accepted by many philosophers as sound, I still have serious and systematic objections to them. In this article I will focus only on Kripke's modal argument and Soames's defence of that argument, developing some challenges and refutations, and reaching a negative conclusion: all of these arguments are untenable.²

1. Criticism of Kripke's Intuitive Test for, and His Precise Definition of, Rigid Designators

Before examining Kripke's modal argument, let us examine his intuitive test for, and precise definition of, the notion of a rigid designator.

1 The arguments are named by Salmon (2005, pp. 23–31).

2 In order to escape unnecessary complication, I will not treat problems about empty proper names in this article. When a name is referred to, the name must be assumed to have a referent, i.e., not to be empty; when an object or a thing is referred to, the object or thing must be assumed to be real or actual, i.e., not to be fictional. So in this article, I will not use sentences such as 'if N exists, then N is the F'; instead, it simply use sentences like 'N is the F'.

Kripke's notion of a rigid designator is derived from such linguistic intuitions as the fact that we can talk about an actual individual in counterfactual ways, for example: Aristotle is such and such, but we believe that he might not have been such and such, instead, he might have been thus and so; he might not have done any of the things we commonly attribute to him. Even in such circumstances, we are still talking about the person who is called "Aristotle" in the actual world, saying something about *him*, not about any other man.

1.1 Intuitive tests for rigidity

Kripke presents two explanations of rigid designation: one is an intuitive test, the other a precise definition. First, let us look at his intuitive test:

We can say, for example, that the number of planets might have been a different number from the number it in fact is. For example, there might have been only seven planets. We can say that the inventor of bifocals might have been someone other than the man who *in fact* invented the bifocals. And it seems that we cannot say, though, that the square root of 81 might have been a different number from the number it in fact is, for that number just has to be 9. If we apply this *intuitive test* [emphasis added] to proper names, such as for example 'Richard Nixon', they would seem intuitively to come out to be rigid designators. (Kripke, 1993, pp. 175–176)

One of the intuitive theses I will maintain in these talks is that names are rigid designators. Certainly they seem to satisfy the intuitive test mentioned above:³ although someone other than the U.S. President in 1970 might have been the U.S. President in 1970 (e.g., Humphrey might have), no one other than Nixon might have been Nixon. (Kripke, 1981, p. 48)

The facts that 'the teacher of Alexander' is capable of scope distinctions in modal contexts and that it is not a rigid designator are both illustrated when one observes that the teacher of Alexander might not have taught Alexander (and, in such circumstances, would not have been the teacher of Alexander). On the other hand, it's not true that Aristotle might not have been Aristotle, although Aristotle might not have been *called* 'Aristotle', just as 2×2 might not have been *called* 'four' (. . .). Further, although under certain circumstances Aristotle would not have taught Alexander, these are not circumstances under which he would not have been Aristotle. (Kripke, 1981, p. 62n)

Thus, we have the following two intuitive tests for rigidity:

Intuitive Test I

- (i) A designator 'd' is non-rigid iff d might not have been d.
- (ii) A designator 'd' is rigid iff d cannot but have been d.

3 In the previous part of Lecture I, Kripke (1981, pp. 38–47) considers such a question by means of intuition: whether it is necessary or contingent that Nixon won the election of 1968? Obviously, Nixon might have lost the election, and then would not have been the US president in 1970; someone other than Nixon would have been the president; even though in such a counterfactual situation, we are still talking about the person *Nixon*, talking about the case that *he* was not the US president in 1970. So, 'Nixon' will rigidly refer to the person *Nixon*, but 'the US president in 1970' non-rigidly refers to him.

Intuitive Test II

- (iii) A designator 'd' is non-rigid iff something other than d might have been d.
- (iv) A designator 'd' is rigid iff nothing other than d might have been d.

Because of the similarity between Intuitive Test I and II, I will only focus on Intuitive Test I. In my view, this test is far from strict and precise, since a designator is always the designator of some object; so it ought to be revised as follows:

Intuitive Test I'

- (i') A designator 'd' is a non-rigid designator of an object o iff d might not have been d.
- (ii') A designator 'd' is a rigid designator of an object o iff d cannot but have been d.

I have a serious question about (i') and (ii'): in "d might not have been d" and "d cannot but have been d", what do the "d"s stand for? Are they the same or not? What do they mean? According to my understanding, there could be at least two different readings of them:

Firstly, there are *Sameness Readings*, which include a metaphysical reading and a semantic reading:

Metaphysical Reading: In the *definiencia* of (i') and (ii'), the two "d"s are the same, both representing an object. On this reading, "d might not have been d" is false, since it is not possible for any object d that it might not have been itself; while "d cannot but have been d" is true, since all it says is that the object d is self-identical. The problem is: how can this have anything to do with the naming and referring relation between a name and an object? More precisely, how can we jump from a metaphysical thesis that any object is necessarily self-identical to a thesis in the philosophy of language that a name is a rigid designator of an object?

Semantic Reading: In the *definiencia* of (i') and (ii'), the two "d"s are the same, both being names. Then, "d might not have been d" is false, since it contradicts the law of identity, which we have to follow in using names; "d cannot but have been d" is definitely true, since all it says is that a name must be self-identical. But now there is a similar problem: how can this have anything to do with the naming and referring relation between a name and an object? How can we jump from a logical thesis that any name must remain the same as itself to a thesis in the philosophy of language that a name is a rigid designator of an object?

Secondly, there are *Distinctness Readings*, which include the slight difference reading and the total difference reading:

Slight Difference Reading: This is also a metaphysical reading: in the *definiencia* of (i') and (ii'), we read the first "d" as a referential expression, which refers to the object d; but we read the second "d" as a predicate or a part of a predicate, which refers to a property or quality of the object d. So, "d might not have been d" means

that *the object* denoted by designator ‘d’ might not have the property of *being d*. This is a general strategy of Kripke and his successors: for example, let the *definiens* of (i’) be “the US president in 1970 might not have been the US president in 1970”. Here “the US president in 1970”, when used as a subject, denotes a particular person, namely *Nixon*, who was in fact the US president in 1970; when used as a predicate, it expresses an abstract quality, i.e., the property of *being the US president in 1970*. Under such a reading, an instance of (i’) is that “the US president in 1970” is a non-rigid designator of the person *Nixon* iff *Nixon* might not have been the US president in 1970. This is intuitively true, but there still is a problem: the left-hand side of (i’) concerns the relation between a description and an object (*Nixon*), while the right-hand side only concerns the modal status of the man *Nixon*, i.e., he might not have been the US president in 1970. Then, how is it possible to define the left by the right?

Moreover, according to the same approach, the right side of (ii’) “d cannot but have been d” no longer holds, since it should be read as: *the object* denoted by designator ‘d’ cannot but have had the property or quality of *being d*; but this can be false. For instance, in “Aristotle cannot but have been Aristotle”, when “Aristotle” is used as subject, it refers to a particular person, namely *Aristotle*; when used as predicate, it expresses some abstract property or quality of *being Aristotle* or embodied by *Aristotle*. Maybe we can explain the property or quality as: being the man who *Aristotle* is actually. Under such an explanation, even statements like “I might not have been myself” could be true, since it would say that I might have lacked some properties or states I actually have, or that I might have had some other properties or states that I actually do not have. Under such an interpretation, “Aristotle cannot but have been Aristotle” would be false.

Total Difference Reading: In the *definiens* of (i’) and (ii’), one of the two “d”s represent an object, while the other is the designator of that object. In my view, the case should be like this, since the left side of “iff” in (i’) and (ii’), as *definiendum*, concerns the naming or referring relation between a name and an object, the right side of “iff” in (i’) and (ii’), as *definiens*, also should involve the relation. Understood in this way, the right half of “iff” is false, since the object d might not have been named ‘d’; even if it was originally named ‘d’, we could re-name it if we wish, that is to say, ‘d’ could be replaced by another name.⁴

So, the following statements by Kripke are very puzzling:

4 The above analysis about Kripke’s intuitive tests for rigidity also holds for Soames’s definition of the intuitive test: “A singular term *t* is a rigid designator iff *the individual who is t could not have existed without being t, and no one who is not the individual who is t could have been t* is true; otherwise *t* is non-rigid.” (Soames, 2005, p. 399). The key problem is that what the “*t*”s stand for in the italic part of the definition. Do the “*t*”s stand for an object or a name? Soames has to make this clear. Once this is clear, I am sure that his definition does not hold again.

In these lectures, I will argue, intuitively, that proper names are rigid designators, for although the man (Nixon) might not have been the President, it is not the case that he might not have been Nixon (though he might not have been called 'Nixon'). (Kripke, 1981, p. 49)

Since rigid designation involves the reference relation between a name and an object, the metaphysical status of an object (e.g., that it cannot but have been itself, or that it is necessarily self-identical) is totally irrelevant to the rigidity of a name; what is really relevant is how we name and refer to the object. Kripke only emphasizes the former, while neglecting the latter completely. Moreover, a man is *Nixon* just because he has been called "Nixon"; if he had not been called "Nixon", but called "Skinner" from the very beginning, then, he was not *Nixon*, but *Skinner*. If some other man had been called "Nixon" from the very beginning, the man was *Nixon*, not someone other than *Nixon*. So the above citation from Kripke seems quite puzzling (at least to me).⁵

5 I think the following explanations by Soames fail to address the problem I raised above, namely, how to move from a metaphysical thesis to a claim in the philosophy of language. He argues:

In order to properly understand the thesis that 'Aristotle' is a rigid designator, one must clearly understand how the following two claims are reconciled:

- (i) The name 'Aristotle' is a rigid designator. Thus, for all possible states of the world *w*, the name 'Aristotle' refers to the same individual – the man *Aristotle* – in, or at, or with respect to *w*.
- (ii) It is not a necessary truth that *Aristotle* was named 'Aristotle'. Thus, it could have been the case that the name 'Aristotle' did not refer to *Aristotle*, which means that there is some world-state *w* such that the claim that the name 'Aristotle' did not refer to *Aristotle* is true in, or at, or with respect to *w*.

As Kripke would be the first to insist, these claims are both true. At first glance, this might seem puzzling because they might seem to be inconsistent. In fact, they are not.

[...]

... what speakers in *w* use *n* to refer to is crucial to determining which pairs of names and objects the two place relation ___ refers to ___ applies to with respect to *w*. *It is true with respect to w that name n refers to the object o iff speakers in w use n to refer to o*. Thus, what (ii) says is that there are world-states *w* such that the speakers in those world-states do not use 'Aristotle' to refer to *Aristotle*. This is compatible with the claim made by (i) – namely, that the name 'Aristotle', as we use it here and now in the actual world-state, refers to the man *Aristotle* when our words are taken as descriptions of any world-state whatsoever. (Soames, 2002, p. 318)

In my understanding, what Soames means is that we use the name 'Aristotle' to refer to the man we call 'Aristotle' in the actual world, albeit *he* might have been in various world-states, in which he even might not have been called 'Aristotle', all this has nothing to do with the rigidity of 'Aristotle'. Even if Soames's explanations are right, my challenge of Kripke's intuitive test still has to be answered: how to jump from a metaphysical thesis that an object cannot but have been itself to a claim in the philosophy of language that a designator is rigid of an object. Moreover, I'd like ask a question: if the man called 'Aristotle' now was not called 'Aristotle' by his parents in his birth in our world, rather than called 'Robert', is *he* still the person *Aristotle* rather than the person *Robert*?

Note that Soames writes names in italics, and objects (the referents of names) in non-italics in his publications. Conversely, I write names in non-italics, and objects (the referents of names) in italics. My usage is more usual than Soames's. In order to keep the unity of the distinction between use and mention of names in this article, I will change Soames's usage into mine even in the citations from him.

I conclude that Kripke's intuitive test for rigid designation does not work, since it involves an improper transition from a metaphysical thesis, that any object cannot but be self-identical, to a claim in the philosophy of language that a name is a rigid designator of an object. This transition depends on Kripke's philosophical intuition; he still owes us a strict philosophical argument of why names are rigid designators, but most descriptions are not.⁶ I think the truth is that Kripke's notion of rigid designator rests on a fundamental mistake, namely, a confusion of metaphysics with semantics. In Chen (2011) I have argued that most of his somewhat striking philosophical claims are based on an ambiguity in 'rigid designator': sometimes it is used as *the object* to which it refers, and sometimes it is used as *the designator* itself.

1.2 Precise definition of the notion of a rigid designator

However, apart from the intuitive tests, Kripke also gives several precise definitions of the notion of a rigid designator as follows:

D1 A term 'd' is a rigid designator of an object o iff d designates o in every possible world; otherwise, 'd' is a non-rigid designator of o.

Let's call something [i.e., a term] a rigid designator if in every possible world it designates the same object, a nonrigid or accidental designator if that is not the case. Of course we don't require that the objects exist in all possible worlds . . . A rigid designator of a necessary existent can be called strongly rigid. (Kripke, 1981, p. 48)

D2 A term 'd' is a rigid designator of an object o iff d designates o in every possible world where o exists and designates nothing in other possible worlds where o does not exist.

[W]hen I use the notion of a rigid designator, I do not imply that the object referred to necessarily exists. All I mean is that in any possible world where the object in question *does* exist, in any situation where the object *would* 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 and that the object in question so designated does not exist. (Kripke, 1993, p. 173)

6 In the preface of *Naming and Necessity*, Kripke (1981, p. 4) claims:

We must distinguish three distinct theses: (i) that identical objects are necessarily identical; (ii) that true identity statements between rigid designators are necessary; (iii) that identity statements between what we call 'names' in actual language are necessary. (i) and (ii) are (self-evident) theses of philosophical logic independent of natural language. They are related to each other, though (i) is about objects and (ii) is metalinguistic. ((ii) roughly 'follows' from (i), using substitution of rigid designators for universal quantifiers . . .)

This suggests that Kripke realizes that the metaphysical thesis (i) is distinct from the metalinguistic thesis (ii); further, he thinks that (ii) roughly follows from (i) through substitution of universal quantifiers by rigid designators. Since rigid designators have to be used in the deduction of (ii) from (i), so we must have an independent definition of rigid designation initially, and an independent argument of why names are rigid designators, rather than appealing to so-called philosophical intuition in order to jump from metaphysics to the philosophy of language.

Salmon (2005, p. 34) calls rigid designators defined by D1 “obstinately rigid designators”, or simply “obstinate designators”, but calls rigid designators defined by D2 “persistently rigid designators”, or simply “persistent designators”.

D3 A term ‘d’ is rigid designator of an object o iff d designates o in every possible world where o exists, and still designates o even in any possible world where o does not exist.

When I say that a designator is rigid, and designates the same thing in all possible worlds, I mean that, as used in *our* language, it stands for that thing, when *we* talk about counterfactual situations . . . I also don’t mean to imply that the thing designated exists in all possible worlds, just that the name refers rigidly to that thing. 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. (Kripke, 1981, pp. 77–78)

In the preface of *Naming and Necessity*, after distinguishing *de jure* rigidity and *de facto* rigidity, Kripke (1981, p. 21n) continues, “I say that a proper name rigidly designates its referent even when we speak of counterfactual situations where that referent would not have existed.”

The difference between these definitions is whether or not a rigid designator has its reference in a possible world where the object referred to does not exist. David Kaplan (1989, pp. 569–571) has reported that, in correspondence, Kripke explained that his attitude to this question is neutral; that is to say, he leaves open the question whether the name ‘Aristotle’ (for example) designates anything at all in worlds where Aristotle does not exist. If this is true, we can take the following definition of the notion of rigid designator as the “official” version of Kripke’s definition:

Precise Definition: A term ‘d’ is a rigid designator of an object o iff d designates o in every possible world where o exists, and d does not designates anything other than o in any possible world.

I will make two remarks about this “official” definition.

First, this definition is incompatible with the linguistic intuition from which Kripke’s notion of a rigid designator is derived.

Kripke argues that we can talk about an actual individual such as the man *Aristotle* counterfactually. Not only is it true of *Aristotle* that *he* might not have gone into pedagogy, so *he* might not have been the teacher of Alexander; it is also true that we use the term ‘Aristotle’ in such a way that, in thinking of a counterfactual situation in which *Aristotle* did not go into any of the fields and perform any of the achievements we commonly attribute to *him*, still we would describe that as a situation in which *Aristotle* did not do these things. This is our linguistic intuition about counterfactual talk, and this is the root of the rigidity of names.

Based on such an intuition about rigidity, the sentence “Aristotle might not have been such and such, but might have been thus and so” should be understood as (1):

(1) *Aristotle* is such that it is possible that *he* is not F . . . , but G, . . .

That is to say, in (1) the name ‘Aristotle’ should be analysed as taking a wide scope with respect to the modality “possibly”; in symbols, (1) should be reformulated as (2):

(2) $[a] \diamond (\neg Fa \ \& \ . . . \ \& \ Ga \ \& \ . . .)$

On the contrary, if we could talk about a fictional individual, such as *Hamlet*, in a counterfactual way, then it must be the case that the modality “possibly” itself has a wide scope, while the name *h* (short for ‘*Hamlet*’) has narrow scope, in symbols:

(3) $\diamond (\neg Fh \ \& \ . . . \ \& \ Gh \ \& \ . . .)$

Here, the difference between (2) and (3) is: in (2) we have *de re* modality, it is a counterfactual discourse about an particular individual, viz. *Aristotle*; while in (3) we have *de dicto* modality,⁷ that a statement is possibly true – there is no special requirement about whether the name ‘*h*’ refers to an actual individual or a fictional one. So, in *de dicto* modality, a name can refer either to a fictional individual or to an actual one. Obviously, there is a big difference between (2) and (3).

The precise definition of rigidity seems to take no particular position on whether the object referred to is real or fictional. The reason is that, even if a name lacks a referent in the actual world, it could still refer to its referent in those possible worlds where it has one, and still be a rigid designator. However, the linguistic intuition emphasized by Kripke relates only to counterfactual talk about actual individuals; if we are allowed to talk about *fictional* individuals *counterfactually*, we will find ourselves in conflict with his conception of a possible world. Because, in his opinion, there is only one real world, i.e., this world we are located in; all other possible worlds are just various possible or conceivable states of the actual world. For the same reason, Kripke insists that when we talk about an actual individual counterfactually, we are not talking about some other, possible or fictional, individual, but still talking about a real individual. He does not think the notions of

7 As early as the Middle Ages, European scholastic logicians distinguished *de dicto* and *de re* modalities. *De dicto* modalities concern sentences or statements in which a modality modifies a complete sentence or statement, for instance, $\diamond p$, $\diamond(Fa)$ (it is possible that *a* is F), $\square \forall x B(x)$. *De dicto* modality can involve purely imagined individuals as well as real ones. In *de dicto* cases, modality has a wide scope, while the names or descriptions have a narrow scope. Conversely, *de re* modality interpolates the modality in the middle of a sentence or statement, modifying the connection between the subject and the predicate of a sentence, such as $(\diamond F)a$ (*a* is possibly F), $\exists x \square B(x)$. *De re* modality claims that a real individual *possibly* or *necessarily* has some property; this claim presupposes the existence of the object being talked about. In *de re* cases, modality has a narrow scope, while the names or descriptions have a wide scope.

transworld individual and transworld identity are coherent; instead, he takes these notions to rest on misconceptions of possible worlds. So, as he sees it, rigid designators must refer to actual individuals. But this contradicts the precise definition of rigidity, which allows rigid designators to denote non-real-but-possible individuals.⁸

Second, even if we accept the precise definition of rigid designation, I still think that talk about rigid designation can be reduced to non-rigid names with wide scopes over modalities, i.e., to counterfactual discourse about *actual individuals* – which has nothing to do with what names the individuals have. I will give more details when I deal with Kripke's modal argument in next two sections.

Based on the precise definition above, Kripke claims that names are rigid designators; and that, with a few exceptions,⁹ most descriptions are non-rigid designators, which do not give the sense of names, and are not strictly synonymous with names, but happen to be used to fix the referents of names. Therefore, “giving the sense of a name” and “fixing the referent of a name” are totally different things.

2. Criticism of Kripke's Modal Argument and His Response to the Critics of the Argument

2.1 Criticism of Kripke's modal argument

Kripke's modal argument can be summarized as follows:

If descriptivism about names is correct, that is, a name is synonymous with one or a cluster of description(s), then, the name and the corresponding description(s) should have the same modal profile, i.e., play the same semantic role in modal contexts. A statement having the name as its subject and the description as its predicate should be necessarily true. For example, if 'Aristotle' is synonymous with 'the teacher of Alexander', the following statement should be necessarily true:

- (1) Aristotle is the teacher of Alexander.

Obviously, (1) might have been false. For we can imagine a situation in which Aristotle was never a teacher, and in particular was never the teacher of Alexander, and in which someone other than Aristotle was the teacher of Alexander. Even so, we are still talking about the man *Aristotle*, that *he* might not have been the teacher of Alexander; and 'Aristotle' still refers to *Aristotle*, while 'the teacher of Alexander' refers to someone else. Therefore, names and descriptions have different modal profiles or semantic roles. So descriptivism gets the modal facts wrong (see Kripke, 1981, pp. 61–63, 74–76).

8 However, the problem is quite complicated, involving how to deal with so-called empty names in the framework of rigidity. Kripke has discussed this systematically in his John Locke Lectures “Designation and Existence” (1973, unpublished). I prefer to set the problem aside in this article.

9 Kripke acknowledges that some descriptions, especially those descriptions characterizing the essential properties of individuals or natural kinds, e.g., 'the square root of 81', and 'the element with the atomic number 97', are rigid designators.

This argument can be formulated more simply as follows:

- P1 If descriptivism is correct, then names and the corresponding descriptions should have the same modal profile, and a statement like (1) should be necessarily true.
- P2 Names and the corresponding descriptions have different modal profiles, and a statement like (1) is not necessarily true.
- C Descriptivism is wrong.

I agree with Kripke that (1) is not necessarily true. Perhaps, taking a step back, I would acknowledge that (1) has relative necessity: given the usual dictionary definition of ‘Aristotle’, (1) would be necessarily true *relative to the definition*. But the definition itself has experiential origins and contents: in most cases, such definitions are only summaries, generalizations, and refinements of previous epistemic achievements based on experience. Moreover, the meanings of words (including names and descriptions) are always in a process of growth and change.¹⁰

I will argue that Kripke’s modal argument is not conclusive. Applying his method to prove that “the inventor of bifocals is the first Postmaster General of the United States” also expresses the self-identity of an object (i.e., Benjamin Franklin),¹¹ I could also prove that “Aristotle is the teacher of Alexander” expresses the identity of an object with itself, because the statement just says that, “there is exactly one individual *a* who is *Aristotle*, and there is exactly one individual *y* who is *the teacher of Alexander*, such that $a=y$ and $\Box(a=y)$.” In symbols:

$$(2) \quad [a][\text{the } x: Fx]((a=\textit{Aristotle}) \ \& \ \exists!y((y=\text{the } x: Fx) \ \& \ (a=y) \ \& \ \Box(a=y)))$$

10 Susan Haack has argued persuasively that meaning grows, which means not only words getting new meaning, but also losing old ones, and new words being invented to express new concepts and discriminations. She claims generally:

A natural language is an organic, living thing. Over the long haul a language may, like Latin, give birth to several different, new languages, and eventually fall into desuetude and die. And all natural languages slowly – and sometimes not so slowly – shift, change, and adapt: borrowing words from other languages and from the specialized jargon of scientists, soldiers, sailors, lawyers, bureaucrats, etc.; turning once-live metaphors to new purposes or domesticating them as comfortable clichés; sporting new idioms, buzzwords, slang, and catchphrases. (Haack, 2009, p. 6)

I think the growth of meaning is much more significant than the recent philosophical mainstream acknowledges; but so far from being, as the radicals suppose, invariably a hindrance to rationality, it can contribute to the cognitive flexibility that rationality demands. (Haack, 2009, p. 8)

11 Kripke argues that, if we accept the notion of modality *de re* and Russell’s wide scope analysis of descriptions, the statement that the inventor of bifocals is the first Postmaster General of the United States will mean that “there is a man who both happened to have invented bifocals and happened to have been the first Postmaster General of the United States, and is necessarily self-identical. There is an object *x* such that *x* invented bifocals, and as a matter of contingent fact an object *y*, such that *y* is the first Postmaster General of the United States, and finally, it is necessary, that *x* is *y*. What are *x* and *y* here? Here, *x* and *y* are both Benjamin Franklin, and it can certainly be necessary that Benjamin Franklin is identical with himself” (Kripke, 1993, p. 166).

Here, the key is that names and descriptions both take wide scopes relative to the modal operator “necessarily”. We can extend this strategy to explain Kripke’s notion of rigid designation, and to solve his so-called counterexamples to descriptivism.

Kripke says that the following two sentences have different truth-conditions, or that they may have different truth-values:

- (3) Aristotle might not have been the teacher of Alexander. (*true*)
- (4) The teacher of Alexander might not have been the teacher of Alexander. (*false*)

So, we can conclude that names and descriptions have different modal profiles and semantic roles; descriptivism about names is wrong (see Kripke, 1981, p. 62).

I disagree. If the names and the descriptions in (3) and (4) both take wide scopes relative to the modal operators, then, (3) means (5), and (4) means (6):

- (5) There is exactly one person who is *Aristotle* such that it is possible that *he* was not the teacher of Alexander.
- (6) There is exactly one person who is *the teacher of Alexander* such that it is possible that *he* was not the teacher of Alexander.

In symbols, we have:

- (7) $[a]((a=\text{Aristotle}) \ \& \ \exists!y((y=\text{the } x: Gx) \ \& \ \diamond(a \neq y)))$
- (8) $[\text{the } x: Gx] \ \exists!y((y=\text{the } x: Gx) \ \& \ \diamond(y \neq \text{the } x: Gx))$

Both (7) and (8) are obviously true, so (3) and (4) have the same truth-value.

I think the reason why (3) is taken as possibly false and (4) as always true is that the name ‘Aristotle’ is always taken to refer to a particular person, namely, the man *Aristotle*; while the description ‘the teacher of Alexander’ is taken not to refer to a particular person, but to an abstract property or quality, which might be had by different objects in different worlds. However, this is not how we use definite descriptions. For instance, when we use the description ‘the first US president’, we usually use it to refer to the man *Washington*, viz. the person who was in fact the first US president, rather than to whoever might have been the first US president in other circumstances; when we use ‘the prover of the completeness theorem for normal modal logics’, we usually use it to refer to *Kripke*, rather than to someone else who might have given such a proof. From the referential perspective, descriptions can also be rigidified, and become “rigid designators”, as long as they are supplemented with an implicit qualification: “in the actual world (which I shall rephrase by ‘in @’)”. The reason why the qualification is not made explicitly is that we *always* talk in @, so there is no need to refer to @ all the time. When we talk counterfactually, we go outside the actual world and into some other possible

worlds, and then “in @” should be added: “the teacher of Alexander in @”. In this way the description is no less rigid than the name ‘Aristotle’; they both refer to the man *Aristotle* fixedly, invariably, rigidly.

I also think that all talk about rigid names and rigidified descriptions can be reduced to talk about non-rigid names and descriptions with wide scopes over modalities,¹² i.e., to counterfactual talk about actual objects. Rigidity is a metaphysical theory about the existence of objects, and has nothing to do with how they are named. Specifically, modal predicate logic is a metaphysical theory about the existence of objects, and has no direct relation to the philosophy of language, especially to a theory of names,¹³ just as first-order logic has no direct relation to the philosophy of language, or to a theory of names, although it has some application in these fields. Certainly, we could accomplish reference in counterfactual talk with pronouns and ostensive actions rather than with names:

This object is such and such in the actual world, but we can imagine that *it* might not have been such and such, but rather than thus and so.

Kripke (1981, pp. 10n, 28n) agrees with Kaplan that demonstratives like ‘this’, ‘that’, ‘I’, ‘you’, ‘it’ are all rigid designators. I have doubts about this. A demonstrative alone cannot achieve reference to an object; it can do this only if its use is accompanied by some ostensive actions of its users in a certain context. This means that reference is not the semantic function, but the pragmatic function of demonstratives. However, when we use a demonstrative plus some ostensive action (like pointing) to refer to one object in a certain context, we are referring to *the actual object in front of us*; we cannot refer to a nonexistent object ostensively. In counterfactual situations, we can use this name to denote an object, or use that name to denote it, or use a pronoun (without names) to denote it. So, actually names are unimportant in counterfactual talk, and need not play a key role in such talk.

12 As far as I know, this view was first presented by Michael Dummett (see Dummett, 1981, appendix to ch. 5, pp. 111–151, esp. pp. 127–128).

13 In my opinion, modal logic does not require Kripke’s notion of rigid designator; conversely, the latter is a philosophical extension of the former. I have three other reasons for this: (a) modal logic and its semantics have been established before Kripke gave out his notion of rigid designator. (b) I consent to Hintikka’s claim:

More generally, it is important to realize that if the criteria of cross-identification are specified, quantification into modal and intensional contexts makes perfect sense completely independently of what one may think of names and other singular terms, including their relation to the individuals they stand for. There is no need to assume any particular class of “rigid designators”. If a singular term “b” is a “rigid designator” as far as the given class of possible worlds is concerned, this can be expressed in the language by means of quantifiers as

(8) $(\exists x)\Box(b=x)$ (Hintikka and Sandu, 1995, p. 251)

(c) Arif Ahmed also argues that even if we do not mention rigid designators, but only mention the relevant objects themselves, we can still talk about those matters about which Kripke uses rigid designators to talk (see Ahmed, 2007, pp. 26–28).

In sum, when used as so-called rigid designators, names can be reduced to non-rigid designators with wide scopes relative to modalities; in other words, they can be reduced to counterfactual talk about actual individuals. Furthermore, even if there were rigid designators, most descriptions could be rigidified to refer to particular individuals in the actual world, and to refer to the same individual in all possible worlds. Thus, we cannot strictly distinguish names from the corresponding descriptions, and we have no reason to deny an interpretation of names as abbreviations of such descriptions. I conclude that Kripke has not defeated descriptivism about names; his modal argument fails.

2.2 Criticism of Kripke's response to the critics of the argument

In the preface of *Naming and Necessity* (1981), Kripke has responded to the claim that rigidity can be reduced to names and descriptions with wide scopes relative to modal operators. Even if we do not use modalities, he says, it can still be seen that names are rigid designators, and descriptions are non-rigid ones. Consider his examples:

(9) Aristotle was fond of dogs.

He explains that a proper understanding of (9) involves an understanding both of the (extensionally correct) conditions under which it is in fact true, and of the conditions under which a counterfactual course of history, resembling the actual course in some respects but not in others, would be correctly (partially) described by (9) (Kripke, 1981, p. 6).

Kripke continues by arguing that Russell would interpret (9) as something like:

(10) The last great philosopher of antiquity was fond of dogs.

The truth-condition of (9) is that the man *Aristotle* was fond of dogs. If we are conceiving counterfactual situations, someone other than *Aristotle* might have been the last great philosopher of antiquity, so the description in (10) might have fitted that man, and his properties (specially, whether or not he was fond of dogs) would determine the truth-value of (10). Thus, the truth-conditions of (10) differ from those of (9). Therefore, the name 'Aristotle' and the description 'the last great philosopher of antiquity' have different semantic roles: the former is rigid, while the latter is non-rigid.

I think there are two problems in this response of Kripke's:

(a) He emphasizes that the name 'Aristotle' always refers to the man *Aristotle* in the actual world, even if it is used in counterfactual talk; but he treats the description 'the last great philosopher of antiquity' not as referring to an actual object, only as referring to an abstract property or quality which could be taken by different objects in different possible worlds. (Note that Kripke almost always uses descriptions attributively.) But his treatment of the description is wrong. For in our language, the

description is *also* used to refer to an actual object, i.e., the person who satisfies it in the actual world, viz. the man *Aristotle*. So, (9) and (10) have the same truth-conditions. (b) Although there is no apparent modality in (9) or (10), when Kripke conceives a counterfactual situation in which someone other than *Aristotle* might have been the last great philosopher of antiquity, he is imagining a possible situation, which involves a modality implicitly. David Sosa (2001, p. 5) has already made this point clear:

We cannot glimpse alternative possible worlds through a telescope; our intuitions about what is true in other worlds are just intuitions about what might be true. To assess whether there is a possible world with respect to which “Aristotle is not a philosopher” is true we can only consider whether Aristotle might not have been a philosopher. There must be a logical relation between whether or not (as Kripke would put it) “Aristotle is fond of dogs” is true with respect to S and whether or not (as Kripke cannot put it) with respect to S, Aristotle is fond of dogs.

Against the claim that rigidity can be reduced to names and descriptions with wide scopes over modalities, Kripke gives another pair of examples:

- (11) It might have been the case that Aristotle was not a philosopher.
 (12) It might have been the case that the last great philosopher of antiquity was not a philosopher.

In symbols, (11) and (12) can be rewritten as:

- (11') $\diamond(a=Aristotle \ \& \ a \text{ was not } F)$
 (12') $\diamond([\text{the } x: Fx] \text{ was not } F)$

This involves no names or descriptions with wide scopes over the modality “might”; in both statements the name and the description have a narrow scope.

Obviously, (11') expresses a truth, while (12') expresses a falsehood – in fact, a contradiction. Therefore, names and descriptions have different modal profiles; and this cannot be explained away by reference to the scopes of the modal operators (see Kripke, 1981, pp. 12–13).

I disagree again. Kripke emphasizes repeatedly that, when talking counterfactually, we speak *in our own world* and *in our own language*; for example, when we say “Aristotle might not have been such and such”, we still talk about the man we call “Aristotle” in the actual world. For the same reason, I would like to say that when we talk about ‘the last great philosopher of antiquity’, we also focus on the man who satisfies the description *in the actual world*; our linguistic community acknowledges that *he* is just the man *Aristotle*, rather than anyone who *might* have satisfied the description. Thus, we should make the qualification “in @” explicitly and turn (12) into (12''):

- (12'') It might have been the case that the last great philosopher of antiquity in @ was not a philosopher.

This means that we take both the name 'Aristotle' in (11) and the description 'the last great philosopher of antiquity' in (12) to have a wide scope over the modality "might"; in symbols, we have:

(11'') [a](a=Aristotle & \diamond (a is not F))

(12''') [the x: Fx] $\exists!$ y((y=the x: Fx) & \diamond \neg (y is F))

Clearly, (12''') expresses a truth, exactly as (11'') does. Just as a father in the actual world might not have been a father, since it is imaginable that he did not marry, or had no baby after marriage, so the last great philosopher of antiquity in @ might not have been a philosopher. Otherwise, a father in the actual world had to be a father, or the last great philosopher of antiquity in @ had to be a philosopher. Clearly, the two sentences are false.

I think this suffices to show that both Kripke's modal argument and his responses to the critics of this argument fail.

2.3 Narrow or wide scopes of names relative to modalities

Obviously, in my refutation of the modal argument presented above, an implicit premise is that, just like descriptions, names can take narrow or wide scopes relative to modal operators. But some scholars do not accept this claim,¹⁴ and I

14 For example, one referee of the earlier version of this article gives his comments as follows:

The author tries to accommodate modal data of Kripke's argument within descriptivism by exploiting scope ambiguity but he seems to ignore the reply Kripke has already made to this old descriptivist strategy (whose main defender is Dummett). The modal argument starts from pre-theoretical data, i.e., we know that (1) is false but (2) is true (in (2) "the teacher . . ." has been substituted for the second occurrence of the name in (1)):

(1) Aristotle might not have been Aristotle (false)

(2) Aristotle might not have been the teacher of Alexander (true)

Since (1) and (2) have different truth-conditions, Kripke concludes that "Aristotle" is not semantically equivalent to its alleged synonymous definite description "the teacher of Alexander". This is the first step of Kripke's modal argument.

The author replies that truth-conditions (1) and (2) diverge because Kripke focuses on an interpretation of (2) in which the definite description takes narrow scope over the modal operator ("Tx" abbreviates: "x is a teacher of Alexander"):

(2)* Possibly ([the x: Tx] Aristotle is not identical to x) (true)

The author complains that if we give an interpretation of (2) in which the description takes wide scope over modality, we obtain a false statement semantically equivalent to (1):

(2)** [the x: Tx] Possibly (Aristotle is not identical to x) (false)

Now it doesn't suffice to point out a false "wide scope" interpretation to save descriptivism. The descriptivist has to overcome the last step of Kripke's argument: it is a pre-theoretical fact that (1) has one and only one reading in natural languages – names don't give raise to scope ambiguities in modal context – while (2) is syntactically ambiguous, giving raise to (at least) two readings, i.e., 2* and 2**. Since definite descriptions, unlike names, create scope ambiguities in modal context, definite descriptions and names are not synonymous, descriptivism is false. End of the argument.

Strangely, the author omits this crucial step of Kripke's modal argument and he never mentions the so-called "wide-scope strategy" that Dummett adopts to circumvent the "too many readings" objection.

myself have not yet offered any argument for it. So, in this sub-section, I argue for the claim.

As is well-known, in order to solve a problem about the law of excluded middle, Russell distinguishes between two different kinds of occurrence of the description “the ϕ ” relative to the operator “not” in a proposition like “The ϕ is not ψ ” (see Russell, 1920, pp. 179–180):

- (13) primary occurrence (wide scope):

$$[\iota x\phi(x)] (\neg\psi(\iota x\phi(x))) = (\exists c)((\forall x)(\phi x \leftrightarrow x=c) \wedge \neg\psi c)$$
- (14) secondary occurrence (narrow scope):

$$\neg[\iota x\phi(x)] (\psi(\iota x\phi(x))) = \neg(\exists c)((\forall x)(\phi x \leftrightarrow x=c) \wedge \psi c)$$

Since Russell also thinks that names are disguised or abbreviated descriptions, I infer that he would agree with, or at least not oppose, the claim that names could have either narrow or wide scopes relative to some operators (though he did not assert this clearly).

Dummett argues that the phenomenon of rigidity that Kripke attributes to names amounts to the *questionable* view that in natural language names always take wide scopes relative to modalities:

Kripke’s doctrine that proper names are rigid designators and definite descriptions non-rigid ones thus provides a mechanism which both has the same effect as scope distinctions and must be explained in terms of them. We could get the same effect by viewing proper names, in natural language, as subject to the convention that they always take wide scope . . . Kripke’s account makes the difference between [names and definite descriptions] seem greater than it is by appealing to different mechanisms to explain comparable phenomena, and *by arbitrarily ruling out the use of proper names with narrow scope to yield a distinct sense from the wide-scope reading*, save by using a distinct modal operator. (Dummett, 1981, p. 128; emphasis added)

David Sosa makes a similar assertion. He claims that both names and descriptions can take either narrow or wide scopes relative to modalities. On one reading, a

The widescopist replies the following: names are not ordinary definite descriptions, still they are special descriptions. Ordinary descriptions are “free” to take wide vs. narrow scope in modal context, names are descriptions with mandatory wide scope over modal operator, i.e., descriptions that always take wide scope in virtue of their conventional meaning. So the fact that the author distinguishes various scope readings of names is not consistent with the widescopist strategy adopted all along the paper. Even widescopists (like Dummett) concede that names create no syntactical ambiguity in modal context, (3) and (4) say the same thing:

- (3) Aristotle is such that it could have been F.
 (4) It could have been the case that Aristotle is F.

This is not theory but pre-theoretical data recognized by both camps (i.e., direct referentialists and descriptivists). If the author wants to convince us that, after all, names create scope ambiguity in modal context, he can’t stipulate it: he must bring more data from natural languages independently of the theory favoured.

Subsection 2.3 of this article provides a reply to the referee’s above comments.

sentence with a name and/or a description is false; but on another reading, it is true. He emphasizes:

[T]here are, in fact, ways of using proper names to indicate that they should take narrow scope. One might say, "you know, if it hadn't been for Plato, Aristotle would never have become *Aristotle*." By stressing the second use of the name, we indicate that we intend the description replacing it to take narrow scope . . . What one has said is that if it hadn't been for Plato, the person who was in fact the last great philosopher of antiquity might not have become last among the great philosophers of antiquity, which may be true. It is unusual that the sentence "Aristotle might not have been Aristotle" has a sense in which it is true; but it does. (Sosa, 2001, p. 23)

I agree. However, Dummett and Sosa do not provide any convincing argument for their claim that, like definite descriptions, names also admit of distinct narrow and wide readings; Sosa still takes most proper names as rigid designators. I will try to compensate for their omissions in the following.

Consider sentences (15) and (16):

- (15) Aristotle might not have been a philosopher.
 (16) Hamlet might have been a detective.

According to my intuition, (15) admits a wide scope reading:

- (15') Aristotle is such that it is possible that *he* was not a philosopher.

In symbols, (15') can be reformulated as:

- (15'') $[a](a=Aristotle \ \&\Diamond\neg(a \text{ was } P))$

From (15''), by existential generalization, we can obtain:

- (15''') $(\exists x)(x=Aristotle \ \&\Diamond\neg(x \text{ was } P))$

But (16) only admits a narrow scope reading:

- (16') It is possible that Hamlet was a detective.

In symbols, (16') can be reformulated as:

- (16'') $\Diamond(h \text{ was } D)$

From (16''), we cannot use existential generalization to infer:

- (16''') $(\exists x)\Diamond(x \text{ was } D)$

Remember that Hamlet is a fictional character created by Shakespeare. It is true that Hamlet might have been a detective, but from this we cannot infer that (in the actual world) there is an entity who might have been a detective. That is to say, it is possible that (16) is true but (16''') is false. However, from (16'') we can get:

- (16''''') $\Diamond(\exists x)(x \text{ was } D)$

This means that it is possible that there was an entity who was a detective.

Right away, I believe, I can conclude that, at least in some sentences of natural language, some names (e.g., ‘Aristotle’) can take a wide scope over modalities, but some names (e.g., ‘Hamlet’) can only take a narrow scope over modalities. Usually, relative to modalities, the names of actual objects can take a wide scope, but the names of fictional characters (one kind of empty names) can only take a narrow scope. From a sentence containing a wide-scope name we can infer an existential generalization; for instance, from “a is such that it is possible that a is F” we can infer that $(\exists x)\diamond(x \text{ is } F)$ [quantifying out]. But, from a sentence with a narrow-scope name we cannot infer an existential generalization, but we can only infer a modal proposition containing an inserted existential proposition; for example, from “it is necessary that b is G”, we cannot infer that $(\exists x)\square(x \text{ is } G)$, but we can only infer that $\square(\exists x)(x \text{ is } G)$ [quantifying in].

If we have a modal sentence containing a name, such as “McX might have been H”, and do not know whether ‘McX’ is a name of an actual person or of a fictional character, then, the safest way for us is to interpret ‘McX’ with a narrow scope as follows:

(17) It might have been the case that McX was H.

rather than with a wide scope:

(18) McX is such that he might have been H.

For from (17) we cannot get “ $(\exists x)\diamond(x \text{ is } H)$ ”, but we can only get a weaker assertion, viz. “ $\diamond(\exists x)(x \text{ is } H)$ ”; but from (18), we can get “ $(\exists x)\diamond(x \text{ is } H)$ ”, which is possibly false!

If, as Soames says, widescopists maintain that the occurrences of names in modal talk should be analysed as “wide-scope occurrences”, and they do not accept that names can take narrow scopes in modal constructions, then, they will have to face a very serious result: they cannot express *de dicto* modality with a name, and also cannot have *de dicto* knowledge or belief with a name. Consider these examples:

(19) It is possible that Pat is a professor.

(20) I believe that Pat is not a scientist.

If the name ‘Pat’ only takes wide scope over the modality “possible”, then (19) and (20) respectively means that, *of* an actual object called “Pat”, it is possible that *she* is a professor (*de re* modality), and I know that *she* is not a scientist (*de re* knowledge). Then, it is impossible for widescopists to have a *de dicto* modal proposition with a name, and to have a pure *de dicto* belief containing a name. This result is absolutely ridiculous, because it disregards the well-established distinction between *de re* and *de dicto* belief or knowledge. I do not think widescopists, as

descriptivists, are so stupid; at least I am not such a person, although I am still some kind of descriptivist. Actually, I am developing a new kind of descriptivism – social-historic causal descriptivism.

I will return to this topic when I discuss Donnellan tests and the “too many readings” objection in subsection 3.3 below.

3. Criticism of Soames's Defense of the Modal Argument

In 1998, Soames published a paper¹⁵ in which he gave two series of arguments, one to rebut the wide-scope analysis against Kripke's modal argument, and another to rebut the rigidified description analysis against this argument. In what follows, I will show that these arguments do not work.

3.1 Soames's arguments against the wide-scope analysis do not work

As I have shown above, so-called rigid designators are just non-rigid names taking wide scopes over modalities. Even if names were really rigid designators, descriptions with the same scopes could be rigidified to fixedly refer to the actual individuals who satisfy the descriptions. So there is no need to introduce so-called rigid designators to interpret counterfactuals; names and descriptions cannot be distinguished by means of the notion of rigid designator. In fact, we can still regard proper names as abbreviations of the corresponding descriptions. A descriptivist account of names is still possible and correct.

I think descriptivism has a lot of advantages:

- (a) It can explain quite well why, when *a* and *b* are both proper names, “*a=b*” can convey new semantic content that “*a=a*” cannot.
- (b) It also can explain the difference between the following belief-ascriptions:
 - (1) Bill believes that Phosphorus is Phosphorus.
 - (2) Bill believes that Hesperus is Phosphorus.

Here, the referents of two names ‘Hesperus’ and ‘Phosphorus’ are the same, but their senses (given by descriptions) are not. If Bill did not know this, he would still believe that “Phosphorus is Phosphorus” on logical grounds, without believing that “Hesperus is Phosphorus”; so (3) is true, while (4) may be false.

- (c) It can give a quite reasonable interpretation of some empty names, e.g., the names of fictional characters: their referents are *constructed* by their senses.

15 Soames (1998). After slight revision and some expansion, this article has become ch. 2 of his *Beyond Rigidity* (Soames, 2002).

These “empty” names are not absolutely empty, precisely speaking, they refer to fictional characters relative to some fictions.

But Soames does not accept descriptivism or the descriptivist refutation of rigidity. First he constructs a basic argument against the wide-scope analysis, of which I make somewhat of a paraphrase as follows.

The Basic Argument

According to the wide-scope analysis, the proposition semantically expressed by the sentence *if n is F, then something is both F and G* is the proposition semantically expressed by the sentence *if the G is F, then something is both F and G*. This gives us premise 1 of our argument.

P1. The proposition that if n is F, then something is both F and G = the proposition that if the G is F, then something is both F and G.

Next we add premise 2.

P2. The proposition that if the G is F, then something is both F and G is a necessary truth $\Box[[\text{the } x: Gx] Fx \supset \exists y(Fy \ \& \ Gy)]$.

Clearly, C ought to follow from P1 and P2.

C. The proposition that if n is F, then something is both F and G is a necessary truth $\Box[(Fn \supset \exists y(Fy \ \& \ Gy))]$

However, on the wide-scope analysis, it does not follow, since, according to the analysis, C is just C’:

C’. The G is such that the proposition that if it is F, then something is both F and G is a necessary truth. $[\text{the } x: Gx] \Box[(Fx \supset \exists y(Fy \ \& \ Gy))]$

The problem for the wide-scope analysis is that whereas the argument from P1 and P2 is clearly valid, the analysis wrongly characterizes it as invalid. According to the analysis, both P1 and P2 are true, while C (i.e., C’) may be false (when F and G are unrelated and the property expressed by G is not an essential property of the thing to which G actually applies) (see Soames, 2002, pp. 29–30).

I have three comments on Soames’s basic argument. First, there are some reasons to conclude that the basic argument is invalid; C *cannot* be derived from P1 and P2.

(a) Soames does not show why P1 is true. His conception of proposition seems to be what we usually accept: propositions are semantically expressed by sentences; they are both bearers of truth-values and objects of attitudes, such as believing and asserting. Then, what does it mean to assert the equality of two propositions in P1? The two sides of the equals sign in P1 are clearly not the same, since one has a name while another has a description; even if the sense of the name is given by the

description, when we say the two propositions are the same, what is the criterion of sameness of propositions? Do we mean that they are equivalent in truth-value or do we mean something else? These questions are essential, and not so easy to answer. Quine argues that it is not possible to establish the conditions of identity of meanings, intensions and propositions. He maintains that “there is no entity without identity” (Quine, 1981, p. 102), so he refuses to accept meanings, intensions and propositions as kinds of entity (see Quine, 1960, pp. 191–231). Soames should not put these questions aside and just claim that proposition p equals proposition q , viz. P1: first, he has to explain what P1 means clearly; and second, he has to prove why P1 is true.

(b) Even if supposing that two propositions are equal with each other, we cannot generally assert that they are interchangeable *salva veritate* in modal contexts. As is well known, two co-referential names or descriptions are not generally interchangeable in such contexts; otherwise, we could derive a false conclusion from true premises. To cite Quine's famous example, from “the number of planets=9” and “9 is necessarily greater than 7”, we cannot derive “the number of planets is necessarily greater than 7” (see Quine, 1953, pp. 143–144). For the names x and y to be interchangeable *salva veritate*, we need not only that $x=y$, but also that $\Box(x=y)$. Thus, in order to infer C, P1 has to be replaced by P1':

P1' \Box (the proposition that if n is F, then there exists something which is both F and G=the proposition that if the G is F, then there exists something which is both F and G)

That is to say, C does not follow from P1 and P2, but only from P1' and P2.

Second, P1 has an implicit premise that the sense of the name 'n' is given by the description 'the G', in symbols, $n=\text{the } G$, which is the real first premise of the basic argument, from which P1 is derived. Even Soames himself acknowledges this:

If the semantic content of the name n is given by the description *the G*, then the proposition semantically expressed by $n \text{ is } F$ is the proposition expressed by *(the x: Gx) Fx*. . . Similarly, the proposition semantically expressed by *(necessarily) John believes that n is F* is the proposition expressed by *(necessarily) John believes that [(the x: Gx) Fx]*. However, the propositions semantically expressed by *necessarily n is F* and *necessarily if n is F, then something is both F and G* are the propositions expressed by *(the x: Gx) necessarily [Fx]* and *(the x: Gx) necessarily [Fx \supset $\exists y(Fy \ \& \ Gy)]$* . (Soames, 2002, pp. 27–28; underlining added)

So, the real structure of the basic argument may be this:

P1'' $n=\text{the } G$
 P2. The proposition that if the G is F, then something is both F and G is a necessary truth.

From P2 and P1'', replacing n by the G, we derive conclusion C:

C. The proposition that if n is F, then something is both F and G is a necessary truth.

P2 involves a modality, “□”. As I said above, for the names to be interchangeable *salva veritate* in modal contexts, identity between them should be strengthened to necessary identity, so P1'' must be replaced by P1''':

P1''' □ (n=the G)

Since according to P1''', n and the G are necessarily identical, that is, if the name ‘n’ is a so-called rigid designator, so is the description ‘the G’, and *vice versa*. In modal contexts, two rigid designators are certainly interchangeable *salva veritate*. Only the argument consisting of P1''', P2 and C is valid. This shows that Soames’s basic argument is invalid: C cannot be derived just from P1 and P2.

Third, claim C is not equivalent to claim C'. Since “n=the G” is an implicit premise of the basic argument, the name ‘n’ and the description ‘the G’ should have the same modal scope: if ‘n’ takes a wide scope over a modality, so does ‘the G’; if ‘n’ takes a narrow scope, so does ‘the G’. It is impossible that ‘n’ takes a narrow scope in claim C while ‘the G’ takes a wide scope in C', as claimed in Soames’s basic argument.

Moreover, supposing names are rigid designators, as Kripke and Soames assert; then, according to Dummett’s, Sosa’s and my explanations, names have to take wide scopes over modalities. Under such a supposition, the name ‘n’ in claim C is a rigid designator, and it takes a wide scope over the modal operator; in accordance with the symbolization of C', C should be re-written as:

C'' [n]□[(Fn ⊃ ∃y(Fy & Gy))]

Just as C' does not follow from P1 and P2, neither does C'', but C'' follows from P1''' and P2. This shows once again that Soames’s basic argument is invalid.

Soames holds a quite strong idea which has a substantial role in his refutation of the wide-scope analysis against Kripke’s modal argument:

... the wide-scope analysis that is the target of these arguments states something more than the claim that names are semantically equivalent to descriptions that may take wide scope in modal constructions. Rather, *it states that names are semantically equivalent to descriptions that must take wide scope in modal constructions* (. . .). The view is not that a modal sentence containing a name is ambiguous, with one reading in which the associated descriptions takes wide scope over modal operator and another reading in which it does not. Rather, *the analysis asserts that such a sentence is unambiguous, having only the reading in which the description takes wide scope*. This feature of the analysis is needed to account for certain obvious difference between the behaviour of names and ordinary descriptions in modal constructions. (Soames, 2002, p. 28; emphasis added)

One of the anonymous referees of the earlier version of this article holds a viewpoint very similar to Soames’s. In his opinion, the widescopists assume that ordinary descriptions are “free” to take wide or narrow scopes in modal contexts, but names are descriptions with *mandatory* wide scopes over modal operators.

Then, he argues, in natural languages, a sentence with a name has one and only one reading, viz. the wide scope reading, while a sentence with a description is syntactically ambiguous. Since descriptions, unlike names, create scope ambiguities in modal contexts, descriptions and names are not synonymous, and thus descriptivism is false (see note 16).

In my judgement, the interpretations of widescopism by Soames and by the referee are both wrong. Perhaps *some* widescopists hold that names are descriptions with *mandatory* wide scope over modalities, but not *all* widescopists hold such a strong position. For example, Dummett thinks that *if* names were rigid designators, *then* rigid names could be explained as the descriptions with wide scopes over modalities. This does not mean that he really thinks that names are rigid designators, and that they should be always treated as the descriptions with wide scopes over modalities. On the contrary, he asserts that, just like descriptions, names can have either narrow or wide scopes in modal contexts; only by arbitrarily ruling out the use of proper names with narrow scopes does Kripke achieve his doctrine of rigidity. Sosa claims that like descriptions, names can take either narrow or wide scopes in modal talk. I have tried my best, in subsection 2.3 above, to justify the claims that names can have either narrow or wide scopes relative to modalities, and *not* all names always take wide scopes in modal constructions.

Let us return to the basic argument expounded by Soames. In my reconstruction, its real structure is like this:

P1''' $\square (n=\text{the } G)$

P2. The proposition that if the G is F, then something is both F and G is a necessary truth.

C. The proposition that if n is F, then something is both F and G is a necessary truth.

I call it “new basic argument” (hereafter “NBA” for short). In Soames’s view, widescopists admit that the description ‘the G’ in P2 has a narrow scope while the name ‘n’ in C has to be substituted as the G with a wide scope. Then, ‘n’ and ‘the G’ will have different scopes separately in P2 and C. In my opinion, this result is ridiculous, for widescopists also hold that the sense of the name ‘n’ is given by the description ‘the G’, i.e., $n=\text{the } G$, so it is impossible for ‘n’ and ‘the G’ to have different scopes in modal contexts; ‘n’ and ‘the G’ should always have the same scope over modalities: If ‘the G’ has a narrow scope, so has ‘n’; if ‘the G’ has a wide scope, so has ‘n’, and vice versa. Then, NBA will be always valid, regardless of whether ‘n’ and ‘the G’ both have either a narrow or a wide scope in P2 and C. Let us consider two cases.

Case 1: ‘the G’ and ‘n’ both have a narrow scope in P2 and C. Then, NBA will be like this:

- P1''' $\Box (n = \text{the } G)$
 P2 $\Box [(\text{the } x: Gx)Fx \supset \exists y(Fy \ \& \ Gy)]$
 C $\Box [(Fn \supset \exists y(Fy \ \& \ Gy))]$

Since it is true that $\Box(n = \text{the } G)$, 'n' and 'the G' are inter-substitutable in modal constructions. So, replacing 'the G' by 'n' in P2, we get C; or replacing 'n' by 'the G' in C, we get C''': $\Box [(\text{the } x: Gx)Fx \supset \exists y(Fy \ \& \ Gy)]$, which is exactly P2. So C always follows from P1''' and P2, and NBA is valid.

Case 2: 'the G' and 'n' both have a wide scope in P2 and C. Then, NBA will be like this:

- P1''' $\Box (n = \text{the } G)$
 P2 $[\text{the } x: Gx] \Box [Fx \supset \exists y(Fy \ \& \ Gy)]$
 C $[n] \Box [(Fn \supset \exists y(Fy \ \& \ Gy))]$

Since it is true that $\Box(n = \text{the } G)$, 'n' and 'the G' are inter-substitutable in modal contexts. So, replacing 'the G' by 'n' in P2, we get C; or replacing 'n' by 'the G' in C, we get C''': $[\text{the } x: Gx] \Box [Fx \supset \exists y(Fy \ \& \ Gy)]$, which is exactly P2. So C always follows from P1''' and P2, and NBA is valid as well.

Therefore, Soames cannot use his basic argument to save Kripke's modal argument from the wide-scope analysis. His first attempt fails.

Soames's second argument against the wide-scope analysis is this:

Argument 2

- P1 Bill asserted that if n exists, then n is F.
 P2 It is a necessary truth that if n exists, then n is F.
 C Bill asserted a necessary truth.

Soames stipulates that in P1 F is an essential property of the bearer of the name 'n', that is, the bearer of 'n' necessarily has F. So P2 is certainly true; moreover, C follows logically from P1 and P2.

Soames supposes further that the bearer of 'n' is the unique object with the property expressed by G, that speakers associate the non-rigid description 'the G' with 'n', and that there is no necessary connection between the properties expressed by 'G' and 'F'. If, as the wide-scope analysis claims, the sense of the name 'n' is given by the description 'the G', and 'the G' has a wide scope over a modality, then, Argument 2 should be formulated as:

- P1' Bill asserted $[\text{that: } n \text{ exists} \supset Fn]$
 P2' $[\text{the } x: Gx] \Box [x \text{ exists} \supset Fx]$
 C' $\exists p [\text{Bill asserted } p \text{ and } p \text{ is a necessary truth}]$

However, P2' does not assert the proposition that Bill asserted, i.e., that if n exists, then n is F, is a necessary truth, rather than the necessity of that which is

expressed by the open formula ($x \text{ exists} \supset Fx$), relative to an assignment of the variable 'x' of the unique object which actually has the property expressed by the G. So C' cannot be derived from $P1'$ and $P2'$. It shows that the wide-scope analysis can transform an intuitively valid argument (from $P1$ and $P2$ to C) into an invalid one (from $P1'$ and $P2'$ to C'). Therefore, the wide-scope analysis is incorrect (see Soames, 2002, pp. 37–38).

My comment on argument 2 is that, when refuting Kripke's modal argument, we do not consider all occurrences of names and descriptions as having wide scopes over modalities, with no occurrences in a narrow scope. Actually, as I have shown above, names can take narrow scopes in modal constructions. We cannot ensure that names in narrow scopes still refer to actual objects, not fictional ones. Since rigid designation only involves the objects that exist in the actual world, names in narrow scopes are not necessarily rigid designators. When we maintain the wide-scope analysis, what we assert is that when a name 'n' is used as a so-called rigid designator, its occurrences should be analysed with a wide scope; since the corresponding description 'the G' expresses its sense, the occurrences of 'the G' should also be analysed with a wide scope. That is to say, in modal contexts, 'n' and 'the G' should be analysed with the same scopes relative to modal operators: if one has a narrow or wide scope, so has the other. The problem with argument 2 is that 'n' has different modal scope with that 'the G' has (usually, we take "assert", "know" and "believe" as special modalities, i.e., epistemic modalities): 'n' has a narrow scope in $P1$, while 'the G' has a wide scope in $P2$. If 'the G' also has a narrow scope in $P2$, like 'n' in $P1$, then the argument from $P1$ and $P2$ to C is valid:

$P1'$ Bill asserted [that: $n \text{ exists} \supset Fn$]
 $P2''$ \Box [the x : Gx][$x \text{ exists} \supset Fx$]
 C' $\exists p$ [Bill asserted p and p is a necessary truth]

If 'n' has a wide scope in $P1$, like 'the G' in $P2'$, then the argument from $P1$ and $P2$ to C is invalid:

$P1''$ [n]Bill asserted [that: $n \text{ exists} \supset Fn$]
 $P2'$ [the x : Gx] \Box [$x \text{ exists} \supset Fx$]
 C' $\exists p$ [Bill asserted p and p is a necessary truth]

Thus, widescopists like me do not need to always interpret the argument from $P1$ and $P2$ to C as invalid; on the contrary, they may analyse it as valid. Therefore, Soames's argument 2 also fails.¹⁶

16 When talking about argument 2, Soames (2002, p. 324) writes, "It may be noted that the wide-scope analysis, as I have stated it, does not require the descriptions associated with occurrence of n in $P1$ to take narrow scope. If both are given wide scope over the propositional attitude verb, then, it could be argued, $P1$ and $P2$ may both be true while logically entailing C . Thus the wide-scope analysis allows a reading in

Additionally, Soames gives a third argument:

Argument 3

Let us consider two theses.

- T1. Necessarily, if Bill asserts (believes) that *n* is *F*, and *n* is *F*, then Bill asserts (believes) something true.
 T2¹⁷. Necessarily, if Bill asserts (believes) that *n* is *F*, and everything Bill asserts (believes) is true, then *n* is *F*.

Intuitively, theses T1 and T2 seem to express obvious truisms. But Soames thinks that according to the wide-scope analysis, T1 and T2 are symbolized differently as:

- T1'. [the *x*: Gx]□[(Bill asserts/believes [that: ([the *y*: Gy] Fy) & Fx] ⊃ ∃*p*[(Bill asserts/believes *p*) & *p* is true])]
 T2'. [the *x*: Gx]□[(Bill asserts/believes [that: [the *y*: Gy] Fy] & (∀*p*)[(Bill asserts/believes *p*) ⊃ *p* is true]) ⊃ Fx]

Soames argues that such symbolizations run into two problems: (a) T1' and T2' assert respectively that there is a unique individual in the actual world that has the property expressed by 'G', but that assertion is not entailed by T1 or T2, in which the proper names can denote an individual who does not exist in the actual world, such as some individual in Bill's fancy, or some other fictional individual he knows; in other words, the names in T1 and T2 can be empty. (b) There exist counterexamples to T1' and T2', where the description 'the G' is a non-rigid designator. But T1 and T2 are obvious truths of English. So the wide-scope analysis of proper names is incorrect (see Soames, 2002, pp. 38–39).

I do not believe argument 3 works; its main problem is that Soames treats the name 'n' and the description 'the G' with different modal scopes: in the intuitive

which the argument from P1 and P2 to C is sound. However, it also allows a reading of P1 in which both occurrences of *n* take small scope – surely the natural reading according to the analysis. When P1 is read in this way, the argument from P1 and P2 to C is wrongly characterized as invalid; there simply is no semantic interpretation of this sequence of English sentences in which they are understood in this way. Strictly speaking, the wide-scope analysis allows for a number of other readings of P1 as well. In principle, one occurrence of *n* can take wide scope relative to the propositional attitude verb while the other takes small scope relative to that verb; and when either occurrence takes small scope relative to the attitude verb, it can take wide or narrow scope relative to the conditional operator in the complement clause. Thus the analysis takes P1 to be many ways ambiguous (on all but one of which the argument from P1 and P2 to C is characterized as invalid). Surely the English sentence is not multiply ambiguous in this way (and the argument itself is not invalid on a multitude of different semantic interpretations)."

Obviously, Soames has recognized that names and descriptions both could take either narrow or wide scopes over modalities at the same time, but he seems to dislike the "too many readings" and the ambiguities of relevant sentences they produce, so he allows a name and the corresponding description to have different scopes relative to modalities.

¹⁷ In Soames (2002), 'T1' is numbered '4' and 'T2' is numbered '5'. In order to avoid unnecessary confusion in the numbering of examples, I have changed the numbering to T1 and T2 in this article.

interpretations of T1 and T2, 'n' has a narrow scope, which means that 'n' could denote an individual who does not exist but which Bill believes exists, i.e., 'n' could be a name of a fictional character; but in the symbolizations, 'the G' has a wide scope, which means that there must be a unique actual object which satisfies 'the G'. If so, can the sense of 'n' still be given by 'the G', and can 'n' still be synonymous and co-referential with 'the G'? My answer is directly "No", because T1 and T2 are both modalities *de dicto*, in which the name 'n' takes a narrow scope relative to modalities. If the name 'n' is defined as the description 'the G', then 'the G' ought to take a narrow scope too. So, when symbolizing T1 as T1', and T2 as T2', Soames is wrong. Actually, T1 and T2 should be symbolized respectively as T1'' and T2'':

$$T1'' \square [[(\text{Bill asserts/believes that } F_n) \ \& \ F_n] \supset \exists p [(\text{Bill asserts/believes } p) \ \& \ p \text{ is true}]]$$

$$T2'' \square [[(\text{Bill asserts/believes that } F_n) \ \& \ (\forall p)[(\text{Bill asserts/believes } p) \supset p \text{ is true}]] \supset F_n]$$

Even if we replace the name 'n' in T1'' and T2'' by 'the G', we will have:

$$T1''' \square [[(\text{Bill asserts/believes that } ([\text{the } x: Gx] F_x)) \ \& \ ([\text{the } x: Gx] F_x)] \supset \exists p [(\text{Bill asserts/believes } p) \ \& \ p \text{ is true}]]$$

$$T2''' \square [[(\text{Bill asserts/believes that } ([\text{the } x: Gx] F_x)) \ \& \ (\forall p)[(\text{Bill asserts/believes } p) \supset p \text{ is true}]] \supset ([\text{the } x: Gx] F_x)]$$

Obviously, T1'', T2'', T1''' and T2''' are all true, just like T1 and T2, in which both 'n' and 'the G' take narrow scopes relative to modal operators.

On the other hand, if the name 'n' and the description 'the G' in T1 and T2 both take wide scopes over modalities, and we replace 'n' by 'the G', then T1 and T2 should be symbolized as:

$$T1'''' [\text{the } x: Gx] \square [[(\text{Bill asserts/believes that } ([\text{the } x: Gx] F_x)) \ \& \ ([\text{the } x: Gx] F_x)] \supset \exists p [(\text{Bill asserts/believes } p) \ \& \ p \text{ is true}]]$$

$$T2'''' [\text{the } x: Gx] \square [[(\text{Bill asserts/believes that } ([\text{the } x: Gx] F_x)) \ \& \ (\forall p)[(\text{Bill asserts/believes } p) \supset p \text{ is true}]] \supset ([\text{the } x: Gx] F_x)]$$

Obviously, T1'''' and T2'''' are both true. So, Soames's analysis of argument 3 is wrong; the argument fails again.

3.2 Soames's arguments against rigidified description analysis do not work

Soames also considers another proposed descriptivist refutation of Kripke's modal argument, which first rigidifies the descriptions rather than questioning whether or not names are rigid designators, and then takes names as being synonymous with rigidified descriptions. The concrete strategy is to introduce an operator "*actually*", interpreted as follows:

Syntactically, *actually* combines with a sentence or formula to form a more complex sentence or formula. Semantically, *actually* is an indexical, like ‘I’, ‘now’ and ‘here’. As such, its content – that which it contributes to propositions expressed by sentences containing it – varies from one context of utterance to another. (Soames, 2002, p. 40)

For fixing the referent of a description, I earlier introduced the sign “@” to rigidify a description, e.g., using “the teacher of Alexander in @” to rigidly denote *the teacher of Alexander in the actual world*, namely, the man *Aristotle*. However, there are at least two basic differences between my “@” and Soames’s “*actually*”:

First, I use “@” to rigidly designate this world we are located in, viz. the real world, while “*actually*” is indexical – its referent varies from world to world. For example, if the speaker is in the fictional world of one of Conan Doyle’s novels, then the *actual* world is the world in the novel; Soames symbolizes such an “actual world” by “A_w”. I do not agree with such a policy. As Kripke says, there is only one real world, i.e., the actual world in which we are living; other “possible worlds” are only various possible states or conceivable situations of the actual world. It would be better to call them “possible states (histories) of the actual world”, or “total ways which the actual world might have been”, or more simply, “counterfactual situations” (see Kripke, 1981, pp. 15–20). Thus, in Kripke’s view, among various possible worlds, the actual world is special. I accept Kripke’s conception of possible worlds, and only let “@” designate this world in which we are living. So ‘the F in @’ refers to the unique individual in @ which satisfies F; moreover, it always refers to that individual in all possible worlds. In this sense, ‘the F in @’ would be a rigidified description, if there were any rigid designators.

Second, Soames’s *Actually*-operator could be used to modify a sentence, as “*Actually* S”: “whenever S is a true sentence, *Actually* S is a necessary truth”. Moreover, the operator can rigidify a description:

[W]henever a definite description *the x: Fx* denotes an individual *o* in the actual world, the rigidified description *the x: actually Fx* denotes *o* in all possible worlds in which *o* exists (and never denotes anything else). (Soames, 2002, p. 40)

On the contrary, my “@” is not a sentential operator, and cannot be used to modify a sentence; it is just an adverb of place, which can make a description floating in various possible worlds rigid, and then make the description designate the unique individual satisfying the description in the actual world, and designate that individual in all possible worlds. From the perspective of reference a rigidified description, such as ‘the teacher of Alexander in @’, always refers to the same individual as the name ‘Aristotle’ does. So names are always co-referential with the corresponding rigidified descriptions; they have the same modal profile and semantic role.

Soames has stated a few problems for the treatment of names as descriptions rigidified by “*actually*” (see Soames, 2002, pp. 41–42), and also constructed an argument supposedly showing that such an attempt to refute Kripke’s modal argument does not work:

- P1. It is possible to believe that Aristotle was a philosopher without believing anything about the actual world A_w – that is, about the way the universe really is (the property it really instantiates). In particular, there are worlds W^* in which agents believe that Aristotle was a philosopher, without believing of A_w that anything was F in it, and hence without believing of A_w that the unique thing that was F in it was a philosopher.
- P2. Necessarily, one believes that the actual F was a philosopher iff one believes of the actual world, A_w , that the unique thing that was F in it was a philosopher.
- C1. It is not the case that, necessarily, one believes that Aristotle was a philosopher iff one believes that the actual F was a philosopher.
- P3. If the content of ‘Aristotle’, as used in a context C , were identical with the content of ‘the actual F ’, as used in C , then (i) the contents of (propositions expressed by) *Aristotle was G* and *The actual F was G* in C would be the same; (ii) the propositions expressed by α *believes that Aristotle was G* and α *believes that the actual F was G* , in C , would be necessarily equivalent; and (iii) C1 would be false.
- C2. The content of ‘Aristotle’, as used in a context, is not the same as the content of ‘the actual F ’ as used in that context. (Soames, 2002, pp. 43–44)

That is to say, from premises P1 and P2 we can infer C1; from C1 together with P3, we can further infer C2.

However, I have three objections to this argument:

First, the argument is circular. P1 says that one might have had a certain belief about the object denoted by a name (e.g., ‘Aristotle’), but might not have had the same belief about the object denoted by a rigidified description (e.g., ‘the actual teacher of Alexander’), so P1 presupposes that ‘Aristotle’ might not be synonymous and co-referential with ‘the actual teacher of Alexander’. From P1 and P2, Soames concludes C1, viz. it is not the case that necessarily one has the same belief about the object(s) designated separately by the name and by the description. Obviously, the argument includes the very claim to be proved into its premises, so it commits the fallacy of begging the question.

Second, P1 is not true. Just as the name ‘Aristotle’ (‘a’ for short) rigidly refers to the man *Aristotle*, the rigidified description ‘the actual teacher of Alexander’ (‘the G ’ for short) also rigidly refers to the man who satisfies the description in all possible worlds. Moreover, in our language and in our world, ‘Aristotle’ and ‘the actual teacher of Alexander’ refer to the same person, i.e., the man *Aristotle*; and in

any other possible world they still refer to *Aristotle*. So, it is impossible for us to have a certain belief about the object designated by ‘a’, and not to have that belief about the object designated by ‘the G’; this has nothing to do with whether or not ‘a’ and ‘the G’ have their referents in relevant possible worlds – if ‘a’ has a referent in those worlds, so does ‘the G’; if ‘the G’ has a referent, so does ‘a’. Generally speaking, from the following three assumptions, (i) a name is a rigid designator, which refers to the same individual in all possible worlds (belief-worlds are one kind of possible worlds); (ii) a rigidified description also refers to the same individual in all possible worlds; and (iii) the name is strictly synonymous with the rigidified description, we have to infer that the name and the description(s) always have the same referent, that is, they are co-referential, so it is impossible for us to have different and non-coherent beliefs about the same object designated separately by the name and by the description.

Third, the argument involves so many elements that it (perhaps unnecessarily) over-complicates the problem. The elements involved include at least: the *alethic* modalities “necessary” and “possible”; the epistemic modality “believe/assert”; names as rigid designators; descriptions as rigid designators; the claim that names are synonymous with rigidified descriptions. Even Kripke himself has to acknowledge that, in the context of belief-ascriptions, the claim that names are rigid designators would be puzzling, although he maintains that the puzzle also applies to descriptivism (see Kripke, 1979). Since Soames’s argument involves so many elements, what can it show us? Even if the conclusions of his argument are right, since there are three premises plus at least five other elements, which premise or element should we deny? There is no good reason given why we should deny that names are synonymous with rigidified descriptions, rather than one of the other seven constituents.

3.3 “Donnellan tests” and the “too many readings” objection

Soames mentions “Donnellan tests”. Consider the following sentences:

- (3) Ralph believes that *t* is a spy.
- (4) Ralph believes that (the *x*: *actually* Fx) is a spy.

Here, in (3) ‘*t*’ is a proper name; in (4) ‘the *x*: *actually* Fx ’ is a rigidified description.

According to Soames’s exposition, Donnellan thinks that, from (3), perhaps, together with the premise “there is such a person as *t*”, we can infer (5) and (5’) in which “H” for “human being”, “*r*” for “Ralph”, “ $B(r, Sx)$ ” for “*r* believes *x* is a spy”:

- (5) There is someone *x* such that Ralph believes that *x* is a spy.
- (5’) $(\exists x)(Hx \& B(r, Sx))$

But that is not the case for (4); that is, from (4) we cannot infer (6) and (6’):

- (6) There is exactly someone x such that it uniquely satisfies the description 'the x : *actually* Fx ' and Ralph believes that x is a spy.
 (6') $(\exists!x)(Fx \& B(r, Sx))$

So, Soames asserts, since the *actually*-rigidified descriptions standardly proposed as candidates for giving the semantic content of names often fail Donnellan's tests, we can conclude that these proposals are incorrect, that is to say, names are different from *actually*-rigidified descriptions (see Soames, 2002, pp. 42–43).

I will not go into what exactly Donnellan (1979, pp. 54–55) says about (3) and (4), but will give my own interpretation of them. I think that, since the description 'the x : *actually* Fx ' in (4) fixedly refers to the individual who satisfies the description 'the F ' in the actual world, there is only one interpretation of (4): the description 'the x : *actually* Fx ' is analysed with a wide scope over the epistemic modality "believe":

- (7) [the x : *actually* Fx] Ralph believes that (the x : *actually* Fx) is a spy.

This says, *of* the actual individual denoted by the description 'the x : *actually* Fx ', that Ralph believes that *he* is a spy. Obviously, from (7) we can infer the existential claim, (6').

In contrast, (3) has two interpretations:

First, the name 't' is analysed with a wide scope over the modality "believe", that is, 't' refers to an actual individual:

- (8) t is such that Ralph believes that *he* is a spy.

This says, *of* the actual individual designated by the name 't', that Ralph believes that *he* is a spy. Clearly, from (8) we can infer the existential claim (5').

Second, if the name 't' has a narrow scope relative to "believe", then (3) does not necessarily mean that Ralph believes, *of* an actual individual, that *he* is a spy, since the name 't' could denote a fictional character in Ralph's fancy, just as Soames himself says. From (3), so interpreted, we cannot infer an existential claim like (5) or (5'). But if we insist that even in belief-ascriptions any name is still a so-called rigid designator, then there is only one interpretation of (3), viz. (8). Thus, from (7) or (8) we can infer an existential claim (6') or (5'). Therefore, whether or not an existential claim (5) or (5') could be inferred from (3) depends on our choice of the two meanings of (3): Ralph has a belief about an actual individual; or, Ralph has a belief about a fictional individual. In other words, (3) is ambiguous; it could be interpreted in two ways. Such an interpretation of (3) seems quite intuitive, and quite understandable.

Here, I would like to reply to the "too many readings" objection mentioned by one referee of the earlier version of this article and by Soames. Certainly, as Russell argues, definite descriptions can take a wide scope (primary occurrence) or a narrow

scope (secondary occurrence) relative to some operators (e.g., “not”); I argue that names can also have either narrow or wide scopes over modalities. So, any modal sentence with a name or a description will have at least two readings. For example:

(9) Holmes might not have been a detective.

This modal sentence has at least two interpretations:

(9′) Holmes is such that it is possible that he was not a detective.

(9′′) It is possible that Holmes was not a detective.

As I said before, from (9′) we can get an existential generalization $(\exists x)\diamond(\neg Dx)$, but from (9′′) we can't get $(\exists x)\diamond(\neg Dx)$, but we can only get another modal sentence $\diamond(\exists x)(\neg Dx)$. In my intuition, from (9) itself we cannot get $(\exists x)\diamond(\neg Dx)$, but we can only get $\diamond(\exists x)(\neg Dx)$. So, as an explication of (9), (9′) is wrong, but (9′′) is correct. Hence, (9′) and (9′′) are not equivalent with each other.

Does our strategy of interpretation lead to too many readings of modal sentences with a name or with a description? In one sense, yes; but in another more essential sense, no. It is not that we deliberately design many readings for these sentences; they *have* many different readings. If we do not give different readings to them, we shall be definitely wrong. Similarly, for the following sentences in natural language, if we do not give them different interpretations, but cling to one single understanding, we shall appear to be quite confused:

(10) The bank was washed away by the flood.

(10a) The financial institution was washed away by the flood.

(10b) The edge of the river was washed away by the flood.

(11) He gave her cat food.

(11a) He gave cat food to her.

(11b) He gave her cat some food.

(12) I don't like flying planes.

(12a) I don't like planes that fly.

(12b) I don't like to fly planes.

(13) Visiting relatives can be very boring.

(13a) It can be very boring to visit relatives.

(13b) Relatives who are visiting can be very boring.

These ambiguous sentences certainly have different meanings, so we have to give them different readings. Likewise, a modal sentence containing a name or a description has different meanings, so we have to give it different readings. When we give different interpretations to a modal sentence with a name or a description, we just do what we should do and must do; we do not do too many!

4. Concluding Remarks

I would like to outline the major arguments and conclusions of this article as follows.

1. The intuitive tests for rigidity given by Kripke do not work. The test is like this:

- (i') A designator 'd' is non-rigid iff d might not have been d.
- (ii') A designator 'd' is rigid iff d cannot but have been d.

I have argued about the test that, (a) the left side of "iff" should be complemented as "a designator 'd' is non-rigid of an object o", because a designator should be the designator of some object. (b) there are four different readings of the right side of "iff" in (i') and (ii)', i.e., a metaphysical reading, a semantic reading, a slight difference reading, a total difference reading; each reading has to face some serious problems. So I conclude that Kripke's intuitive tests for rigidity do not work, since they involve at least an improper transition from a metaphysical thesis that any object cannot but have been self-identical to a claim in the philosophy of language that a name is a rigid designator of an object. This transition depends on Kripke's philosophical intuition; he still owes us a strict philosophical argument of why names are rigid designators.

2. The precise definition of the notion of rigid designator given by Kripke has some serious problems. The definition is like this:

A term 'd' is a rigid designator of an object o iff d designates o in every possible world where o exists, and does not designate anything other than o in any possible world.

I have argued that the definition is incompatible with Kripke's linguistic intuition from which his notion of a rigid designator is derived. According to his linguistic intuitions, a rigid designator 'd' must refer to an actual object o, although o is such and such in the actual world, but we can imagine that *it* might not have been such and such, rather than thus and so. Even in such a counterfactual situation, we are still saying something about o, not about someone else. In my view, the precise definition of rigidity takes no particular position on whether the object designated by a term is actual or fictional: even if a term lacks a referent in the actual world, it could still refer to its referent in those possible worlds where it has a referent, and still be a rigid designator. So the precise definition of rigidity conflicts with the linguistic intuitions from which the notion of rigid designator is derived. Furthermore, even if we accept the precise definition of rigid designation, the talk about rigid designation could be reduced to counterfactual discourse about *actual individuals* – which has nothing to do with what names the individuals have.

3. Kripke's modal argument is not sound. The argument can be formulated as follows:

- P1 If descriptivism is correct, then a name 'n' and the corresponding description 'the G' should have the same modal profile, and a statement with 'n' as its subject and 'the G' as its predicate should be necessarily true.
- P2 The name 'n' has a different modal profile from that which 'the G' has, and the statement with 'n' as its subject and with 'the G' as its predicate is not necessarily true.
- C Descriptivism is wrong.

I have argued that so-called rigid designators can be reduced to non-rigid names with a wide scope in modal contexts. Furthermore, supposing there really were rigid designators, definite descriptions could be rigidified to refer to some particular individuals in the actual world, and to refer to the same individuals in all possible worlds. Thus, we still cannot strictly distinguish a name from the corresponding description(s), and we have no reason to deny an interpretation of a name as the abbreviation of such description(s). So, Kripke has not defeated descriptivism, and his modal argument fails.

4. Kripke's response to the wide-scope critics of his modal argument also fails. He argues that, even if not using modality, we can still distinguish a name 'n' and a corresponding description 'the G' apart: 'n' is rigid designator of an object while 'the G' is not. For example:

- (1) Aristotle was fond of dogs.
- (2) The last great philosopher of antiquity was fond of dogs.

By Kripke's analysis, (1) and (2) have different truth-conditions; the contribution the name 'Aristotle' makes to (1) is different from that the description 'the last great philosopher of antiquity' makes to (2).

I have argued that there are at least two problems in the response above: (a) Kripke emphasizes that the name 'Aristotle' always refers to the man *Aristotle* in the actual worlds, even if it is used in counterfactual talk; but he takes the description 'the last great philosopher of antiquity' not to refer to an actual object, but to refer to an abstract property or quality which could be had by different objects in different possible worlds. If the description is also used to refer to an actual object, the person who satisfies it in the actual world is just the man *Aristotle*, so it also rigidly refers to *Aristotle*. Therefore, (1) and (2) have the same truth-condition. (b) Although there seems to be no modality in (1) and (2), when Kripke conceives a counterfactual situation – that someone other than *Aristotle* might have been the last great philosopher of antiquity – he is imagining a possible situation, which involves modalities.

5. Soames's defence of Kripke's modal argument against the wide-scope analysis and the rigidified description analysis is not successful, due to some mistakes: after supposing that a name 'n' is equal with a description 'the G' with a wide scope over a modality, or supposing a name 'n' is defined to be synonymous with a rigidified description 'the G', i.e., $n = \text{the G}$, he still takes 'n' and 'the G' as having different modal scopes, and thinks that people can have different beliefs about the object separately designated by 'n' and by 'the G'. This kind of situation cannot happen; therefore, Soames's defence of the modal argument does not work.¹⁸

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References

- AHMED, A. (2007) *Saul Kripke*. London: Continuum.
 CHEN, B. (2011) "Proper Names, Contingency A Priori, and Necessity A Posteriori." *History and Philosophy of Logic* 32(2): 119–138.

18 Stanley (1997), Nelson (2002), and especially Sosa (2001), also develop some kind of descriptivist refutation of Kripke's theory of rigid designation. There are some similarities between my article and especially Sosa (2001), e.g., narrow scope-wide scope analysis, but there are also many differences between my position and arguments and Sosa's, e.g., I maintain that proper names are not rigid designators, but Sosa accepts that proper names are rigid designators, or at least that most proper names are rigid. Obviously, it is beyond the limit of this article to make clear what similarities and differences there are between Stanley (1997), Sosa (2001), Nelson (2002), and my article, and to respond to Everett (2005).

- DONNELLAN, K. S. (1979) "The Contingency *A Priori* and Rigid Designator." In P. A. French et al. (eds), *Contemporary Perspectives in the Philosophy of Language*, pp. 45–60. Minneapolis: University of Minnesota Press.
- DUMMETT, M. (1981) "Appendix to Chap. 5: Note on an Attempted Refutation of Frege." In M. Dummett, *Frege: Philosophy of Language*, 2nd edn., pp. 110–151. New York: Harper & Row.
- EVERETT, A. (2005) "Recent Defenses of Descriptivism." *Mind & Language* 20(1): 103–139.
- HAACK, S. (2009) "The Growth of Meaning and the Limits of Formalism: Pragmatist Perspectives on Science and Law." *Análisis Filosófico* 29(1): 5–29.
- HINTIKKA, J. and SANDU, G. (1995) "The Fallacies of the New Theory of Reference." *Syntheses* 104: 245–283.
- KAPLAN, D. (1989) "Afterthoughts." In J. Almog, J. Perry and H. Wettstein (eds), *Themes from Kaplan*, pp. 565–614. Oxford: Oxford University Press.
- KRIPKE, S. (1979) "A Puzzle about Belief." In A. Margalit (ed.), *Meaning and Use*, pp. 382–409. Boston, MA: Reidel.
- KRIPKE, S. (1981) *Naming and Necessity*, paperback edn. Oxford: Blackwell Publishing.
- KRIPKE, S. (1993) "Identity and Necessity." In A. W. Moore (ed.), *Meaning and Reference*, pp. 162–191. New York: Oxford University Press.
- NELSON, M. (2002) "Descriptivism Defended." *Nous* 36(3): 408–436.
- QUINE, W. V. (1953) *From A Logical Point of View*. Cambridge, MA: Harvard University Press.
- QUINE, W. V. (1960) *Word and Object*. Cambridge, MA: MIT Press.
- QUINE, W. V. (1981) *Theories and Things*. Cambridge, MA: Harvard University Press.
- RUSSELL, B. (1920) *Introduction to Mathematical Philosophy*, 2nd edn. London: George Allen & Unwin, Ltd.
- SALMON, N. (2005) *Reference and Essence*, 2nd edn. Amherst, New York: Prometheus Books.
- SOAMES, S. (1998) "The Modal Argument: Wide Scope and Rigidified Descriptions." *Nous* 32(1): 1–22.
- SOAMES, S. (2002) *Beyond Rigidity: The Unfinished Semantic Agenda of Naming and Necessity*. New York: Oxford University Press.
- SOAMES, S. (2005) "Reference and Existence." In F. Jackson and M. Smith (eds), *The Oxford Handbook of Contemporary Philosophy*, pp. 397–426. Oxford: Oxford University Press.
- SOSA, D. (2001) "Rigidity in the Scope of Russell's Theory." *Nous* 35(1): 1–38.
- STANLEY, J. (1997) "Names and Rigid Designation." In B. Hale and C. Wright (eds), *A Companion to the Philosophy of Language*, pp. 555–585. Oxford: Blackwell.