SCOPE OR RIGIDNESS?
A CONTROVERSY BETWEEN KRIPKE AND DUMMETT.

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"El mundo era tan reciente, que muchas cosas carecían de nombre, y para mencionarlas había que señalarlas con el dedo."
G. García Márquez, Cien años de soledad.

Abstract
We analyse a controversy between Frege and Kripke on proper names. If in a first moment it seems that this discussion is a technical one on modal logic ("scope" or "rigidness"), finally we find a strong philosophical discussion on classical philosophical notions as "necessity", "a priori", "analiticity", "possible worlds", and so on. We consider that "two ways of thinking" are fighting.

INTRODUCTION
In the literature it is very common to distinguish two ways of "understanding" proper names: the traditional way (Frege, Russell, Wittgenstein,...) and the new one (Kripke, Donnellan, Putnam,...).¹ In this work we want to analyse this dispute by studying Dummett's arguments against Kripke's proposal.² The core of this discussion is Dummett’s opposition to the notion of rigidity since he regards it as an unintuitive

¹ See, for instance, Schwartz (1977).
² This controversy is developed in FPL1, FPL2, NN1 and NN2 (see references).
notion with respect to proper names. He thinks that the whole explanatory power of rigidity could be attained by means of another notion: the notion of scope. This will be our main issue. However, around this theme, other side discussions are raised. One of the most interesting, in our opinion, turns out about the distinction between metaphysical and epistemological fields. Although several Kripkean claims could make us think in a different way, there are several, already classics, accepted Kripkean theses. One of them is that names denote something because there is a causal chain of reference-preserving links leading back from their use to the object being involved in a "baptism". There is no room for cognitive aspects in the relation between name and bearer. Further, the definition of proper name as a rigid designator does not make any reference to cognitive notions, since metaphysical notions (possible worlds) are enough. Along with this, another claim could be that names do not have meaning. These are, roughly speaking, Kripke's basic ideas.

On the other hand, we will see that Dummett is defending a position just in the opposite direction since he considers the epistemic notion of sense as central on our understanding and use of proper names. Along our work we will present different arguments in order to justify Dummett's position because we also think that cognitive aspects have to be taken into account when trying to explain everyday behaviour of proper names. In this sense, Evans's ideas are very interesting. He is in between of these two positions. He thinks that traditional theories have ignored the central rôle of the notion of causality, but he stresses that they are right in thinking that the denotation of proper names "is fixed in a more or less complicated way by the associated bodies of information..."

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3 For instance, in Evans (1973), the author hints that Kripke could defend opposite ideas: "The only theorists who gain no comfort are those who, ignoring Kripke's explicit remarks to the contrary, supposed that the Causal Theory could provide them with a total non-intentional answer to the problem posed by names."

4 We prefer to say "could" because this issue is also controversial. If anything, what does meaning mean for Kripke? Further, the thesis of names as rigid designators and as meaningless can be independent. This is Linsky's proposal. See Linsky (1983).


6 He has in mind "Description Theorists".

7 Evans (1973), conclusion.
He criticises also the Causal Theory of Names because it has mislocated the causal relation: "the important causal relation lies between that item's states and doings and the speaker's body of information- not between the item's being dubbed with a name and the speaker's contemporary use of it."8

Although in this work we will not be concerned with causal aspects, we are in any case interested in remarking Evans’s ideas because in his picture cognitive notions, as intention, information, and (common) knowledge, are basic. In spite of our thinking that (common) belief ought to have taken over the rôle of (common) knowledge in that picture, the worthwhile idea is that Evans puts together aspects of the two different traditions mentioned above.

This paper is divided into five sections. In the first three we analyse the Dummett-Kripke polemics by focusing our attention on Dummett's proposal in terms of the notion of scope of modal operators, instead of the Kripkean notion of rigidity. The fourth section is concerned with a comparison of the temporal and modal frames. In the last one, we discuss the Kripkean thesis about the independence of the "a priori" and "necessary" notions.

1. DUMMET'S FIRST ARGUMENTS

In Dummett’s point of view it is assumed that Kripke raises a strong difference between proper names and definite descriptions. Although Dummett accepts that there are obvious differences between proper names and definite descriptions9, he disagrees with the way, and therefore with "the strong sense" of the difference proposed by Kripke. Kripke lays down and uses his flexible/rigid designator distinction. The definition of these notions leads us to an "analytical apparatus" made of possible worlds,10 and the analysis in terms of "possible worlds and flexible/rigid designators" helps Kripke to make basic distinctions between proper

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8 Evans (1973), pp. 204 (in Schwartz (1977)).
9 FPL2, p.128-129.
names and definite descriptions. But when problems appear, then the uniform "analytical apparatus" becomes contaminated by incorporating strange notions, one of which is the notion of scope. Such an explanation appealing to "scope" shows some weaknesses in the Kripkean apparatus, always from Dummet's point of view. Why? Let's analyse it by means of an example.

Let be "Atxaga" the name of the writer of a book having the following title: "Obabakoak". Then, we can say:

(1) Atxaga is the writer of Obabakoak

This is a typical Kripkean example where we use a definite description (The writer of Obabakoak) to fix the reference of a name (Atxaga). In this example "Atxaga" is a rigid designator, whereas "the writer of Obabakoak" is flexible. But if we want to spell out the difference between these two "names", we have to make it in terms of possible worlds. We can think, for instance, on this sentence:

(2) The writer of Obabakoak might not have been the writer of Obabakoak.

This is a sentence by means of which we express what could happen in another possible world (counterfactual situation).

Kripke takes two possible senses of (2) or, maybe better, two possible readings of the same sentence. According to the first one, we would say that (2) is true. In this case we consider a wide scope for the description "the writer of Obabakoak", namely the description lies outside the modal operator. In the other case, when (2) is false in every world, we regard the description as lying inside the modal operator.

Kripke says that the same considerations are not right when we are thinking on proper names. The curious thing is that when sentence (2) is

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11 We will suppose that the reader is familiar with several "classical" kripkean distinctions: rigid/flexible designators, to fix the reference/to give the meaning, a priori/a posteriori, necessary/contingent, epistemological necessity/metaphysical necessity.

12 Similar example in NN2, p. 62.
true, we are thinking that, whatever the counterfactual situation is, the
definite description is referring to the same object to which the description
is referring in the actual world. Kripke in this case does not use the "rigid
designator" characterisation, but rather the possibility of several different
readings of the same sentence, depending on "scope interpretation". If,
instead of considering (2), we analyse the sentence

(3) Atxaga might not have been the writer of Obabakoak,

Kripke, without any doubt, would accept it as true, but he would
not speak in terms of scope. In this case, he says that "Atxaga", as proper
name, is a rigid designator and, in some counterfactual situation, Atxaga,
for instance, could not have written any book, because, in that world, he is
working very hard as a farmer.

Dummett does not accept this two-way manner of explaining a
single phenomenon, namely a "name" referring to the same thing in this
world and in others. One way is enough, so why two ways? Dummett
sees two possibilities, and he chooses "the scope explanation way", instead
of Kripke's one: "the rigid/flexible explanation way". We will try to
explain and compare them.

In FPL1 Dummett equates an adscription of rigidity with a wide
scope reading, and goes on to equate flexibility with narrow scope. Once
the reduction of rigidity/flexibility in terms of scope is made, we can
eliminate the rigid/flexible designator apparatus which Dummett does not
like at all. Later we will also try to justify why.

2. KRIPKE'S ANSWER

In NN2, having in mind the reduction mentioned above and proposed by
Dummett in FPL1, Kripke answers in biting and sharp terms:

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13 We are not concerned with Kripke's distinction between strict and non strict rigid
designators. This distinction, very interesting in itself, has not relevance in the
context of this paper.
"It has been asserted that my own view itself reduces to a view about scope, that the doctrine of rigidity is the doctrine that natural language has a convention that a name, in the context of any sentence, should be read with a large scope including all modal operators. This latter idea is particularly wide of the mark; in terms of modal logic, it represents a technical error."\textsuperscript{14}

Why does Kripke speak about a technical error?

Let be these two sentences:

(4) Atxaga is fond of cows\textsuperscript{15}

(5) The writer of Obabakoak is fond of cows.

The argument proposed by Kripke takes into account sentences like (4) and (5) about which to talk of narrow/wide scope does not make sense, since they are sentences without modal operators (from now on, simple sentences),

"Neither contains modal or other operators, so there is no room for any scope distinctions"\textsuperscript{16}

In establishing his distinction between rigid and flexible designators, Kripke has in mind truth-conditions for all sentences, including sentences without modal operators, in counterfactual situations. For this reason, bearing in mind simple sentences, Kripke regards the rigid/flexible dichotomy as independent from scope problems.

Concerning examples (2) and (3), even though Kripke holds that sentences like (2) could be read in two different ways, he maintains that it is possible to bring out a contrast between rigid and flexible designators if we put these two sentences in the following form:

(6) It might have been the case that, Atxaga was not the writer of Obabakoak

\textsuperscript{14} In NN2, preface, p. 11.
\textsuperscript{15} Similar example in NN2, but about Aristotle.
\textsuperscript{16} In NN2, preface, p. 11.
(7) It might have been the case that, the writer of Obabakoak was not the writer of Obabakoak\textsuperscript{17}

(6) is true, whereas (7) is false, and the goal of Kripke is just to show that it is possible to contrast, under the "same conditions", the different behaviour of definite descriptions and proper names in modal contexts.

Further, Kripke gives examples to indicate that in (7) if we consider that the description "the writer of Obabakoak" has a wide scope (this would be possible, for instance, if in (7) we do not put a colon after "that"), then the situation would not be parallel to the cases in which we would use proper names or rigid designators instead of flexible designators.\textsuperscript{18} If we consider that "the writer of Obabakoak" has a wide scope (modal operators included in its scope), are we interpreting this description as a rigid designator? It seems that Dummett, in FPL1, intends to answer "yes". Kripke, as we have said above, refuses this interpretation and the example he has in mind is:

(8) Atxaga might not be (have been) Atxaga

(7) is true when we interpret that "the writer of Obabakoak" has a wide scope, whereas (8), where a rigid designator appears, is false. In this way Kripke, by analysing the different behaviour of rigid and flexible designators in modal contexts, where furthermore it makes sense to talk of "scope", shows us that "wide (narrow) scope" and "rigid (flexible) designator" are not equivalent notions.

3. DUMMETT COUNTERATTACKS.

\textsuperscript{17} Kripke proposes to put ",," after "that" to get a unique reading of this kind of sentences.
\textsuperscript{18} We sometimes identify "definite descriptions" and "flexible designators", in spite of our knowing that there are definite descriptions that are rigid designators. See Kripke's example of "the ratio of the circumference of a circle to its diameter", p. 60. Anyway, this is not a problem in this paper where we usually consider "flexible descriptions".
In FPL2, Dummet acknowledges his mistake when he identified wide/narrow scope to rigid/flexible designator. In fact, he makes "substantial changes" in several passages of FPL1. In spite of these corrections Dummett holds that:

"an explanation of the truth conditions of modalised sentences by appeal to rigid designation can always be replaced by one in terms of scope; that the notion of rigidity can itself be explained only by a prior understanding of the use of a term as having wide scope; and that the only phenomenon to be explained by a theory of either kind is the behaviour of modalised sentences, there being no legitimate relevant distinction between kinds of modal status independently perceived as attaching to non-modal sentences."

Dummett discusses these topics in detail in IFP. By analysing whether he reaches the goals above mentioned, we will try to show the core of Dummett's ideas. Such ideas will be compared to Kripke's ones.

The whole argumentation of Dummett is an attempt to prove that the rigid/flexible designator distinction does not respond to linguistic intuitions, as Kripke tries to justify, very weakly, in the preface to NN2. Dummett thinks that this distinction does function at a level of regimentation, more precisely at the level of semantic theory whose direct application is to the regimented language. We have to distinguish very well which is the field of application of our theoretical concepts, and, in this case, we should not mix natural language with regimented language, although the latter has been thought to study the former. In other words, Dummett attempts to show that the distinction between rigid and flexible designation is a semantic distinction for the formal language - first order modal logic - we use to analyse natural language and through which truth-values of sentences in that formal language are determined. Dummett tries to reach also these goals at this level, but out of a wide/narrow scope distinction. Hence, the problem Dummett is currently facing is whether his tools are as good as Kripke's.

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19 See preface in FPL2, p. xviii.
20 FPL2, p. xviii.
21 See Quine (1960), chapter V.
(9) Atxaga died in infancy

(10) Atxaga might have died in infancy

(11) The writer of Obabakoak died in infancy

(12) The writer of Obabakoak might have died in infancy

From Kripke's point of view (9) is false, (10) is true, (11) is false and (12) could be true or false, depending on the scope of the definite description and assuming (when "the writer of Obabakoak" has narrow scope) that it is impossible to write a book if one dies in infancy.

Contrary to Kripke's proposal, Dummett deals with a different formal language and different semantic tools. There are sentences of two 'forms':

- \( \phi(t) \)

- \([t] \phi(t)\)

The main difference between these two "forms" is that in the second one "t" stands outside the scope of any operators occurring in \( \phi(t) \), and therefore the semantic evaluation of both formulas is different if modal operators occur in \( \phi(t) \).

On this account, Dummett proposes to formalize "the writer of Obabakoak" by "t", and the semantics of "t" is such that its denotation - in every world in which "t" has denotation - has written Obabakoak. Bearing in mind that "Atxaga is the writer of Obabakoak" we can formalise (9) and (11) as D(t). This sentence is false not only in the actual world w, but also in every world, since it is impossible to write a book and to die in infancy. Accordingly, \( \Diamond D(t) \) is false in w.

The sentence (10) can be formalized by means of two formulas: \( \Diamond D(t) \) and \([t] \Diamond D(t)\). Dummett eliminates the former, for he adopts Kripke's view, regarding (10) as unambiguously true in w. So Dummett is appealing to the mechanism of wide scope.

\[22 \text{ We have preferred the notation proposed by Linsky to Dummett's notation. We think it is simpler and clear enough. See Linsky (1983)} \]
The sentence (12) admits also two formalizations, ◊D(t) and [t]◊D(t). Hence, as it is the case in Kripke's view, it can be interpreted as true (second case) and as false (first case).

Even though Dummett remarks that sentence (10) has a different potential interpretation, with respect to truth evaluation of these four sentences his proposal finally coincides with Kripke's. Anyway, there are several interesting differences between both approaches when we think about truth-evaluation of sentences (9) and (11) not in w, but rather in other worlds or counterfactual situations. If we consider a counterfactual situation w' where the individual who in fact wrote Obabakoak died in infancy, but where an other individual writes this book (who would be the referent of "t" in w'), then, from Dummett's view, the formalization of (9), D(t), is evaluated as false, whereas by Kripke's "semantics" (9) is evaluated as true.

To sum up, we can say that from both points of views the evaluation with respect to w of the four sentences, as simple ones or with modal operators, coincides, whereas divergences occur when we evaluate simple sentences with respect to counterfactual situations.

We have seen that there are differences between the two proposals when we evaluate simple sentences according to them. It is a difficult issue to justify why we prefer one of them or by means of which criteria we could make a choice. Kripke talks of "linguistic intuitions", but it is not very clear what he means by this expression. On the other hand, Dummett carries the relation between "Atxaga" and "the writer of Obabakoak" in the actual world to other worlds, when he formalizes these two expressions by "t". Of course, we think that these decisions express what intuitions Dummett is defending.

Kripke would answer by saying that "Atxaga is the writer of Obabakoak"23 is not expressing a metaphysically necessary proposition, namely true in every world, but rather something epistemologically necessary. That means, "something known a priori", provided that the

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23 We are assuming that the only thing we know about Atxaga is precisely that he was the writer of Obabakoak. In this way our example would be comparable to Dummett's examples of St. Anne (FPL2) and Deutero-Isaiah (IFP).
description is in fact used to fix the reference of "Atxaga". This argument should have been different if we had chosen another "property" of Atxaga, an essential one. In this case we would not be able to separate the property from Atxaga in any world. But this is not the case of "being the writer of Obabakoak". Hence, Kripke would refuse to accept Dummett's proposal, because it would break not only the rigid/flexible dichotomy, but also other Kripkean distinctions: a priori/necessary, essential/accidental. We think that Dummett's critique tries to show that the "linguistic intuitions" mentioned by Kripke in favour of his known dichotomy, are finally notions as controversial as "essential properties" or as the distinction established by Kripke between "a priori and necessary". Finally there are no linguistic intuitions, but philosophical intuitions.

Dummett, inspired by Kaplan's *dthat*, defines a new demonstrative: *dthis*. "Dthis" is such that it is prefixed to a term, and "leaves the denotation of the term, in any possible world, unaffected, but serves to signal that the term is to be construed as lying outside the scope of any modal operator". We showed that "Atxaga died in infancy" has different evaluation in counterfactual situations (where the individual who in fact wrote Obabakoak died in infancy, but where another individual writes this book) depending on the theory we accept. If we consider "dthis (the writer of Obabakoak) died in infancy" and "dthat (the writer of Obabakoak) died in infancy", then the former is in the counterfactual situation false and the latter true, just as "Atxaga died in infancy". Now, if we consider "dthis (the writer of Obabakoak) might have died in infancy" and "dthat (the writer of Obabakoak) might have died in infancy", both are true.

We have two tools, *dthat* and *dthis*, by means of which we formalize some linguistic phenomena, and these two tools diverge insofar as we are concerned with simple sentences in counterfactual situations. The question that is immediately raised is the following one: Are there linguistic intuitions to distinguish between these two demonstratives? Dummett answers "no", and this fact gives us an idea about Dummett's thinking on possible worlds theory as an "analytical apparatus". Roughly speaking, in his opinion "possible worlds" are not related to linguistic intuitions, at least insofar as our understanding of simple sentences with

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24 See IFP, p. 583.
proper names is concerned. As we will see, from his point of view, possible worlds semantics does not capture linguistic intuitions, at least when alethetic modalities are concerned. It seems that Kripke is telling us that in order to understand a simple sentence we have to grasp the notion of rigidity, and hence the truth-value of this sentence in other worlds or counterfactual situations. This is the only way on which we can understand Kripke's expression "linguistic intuitions", and this is just the point where the divergences between Dummett and Kripke's views begin. Dummett does not think that our linguistic understanding of simple sentences implies to grasp possible worlds, rigidity and so on. Unlike what is assumed in Kripke's approach, Dummett claims that sense plays a central role in our understanding of linguistic items.\footnote{On this issue, see the interesting distinction between grade-one-understanding and grade-two-understanding made by Dummett in IFP, appendix 3.}

We agree with Dummett on this point. Under Kripke's proposal there are no linguistic intuitions, but rather "philosophical-logical intuitions". At the level of formalization and semantics, both proposals work well, and when they diverge, we have to make decisions on philosophical issues. We will come back to this problem in the last part of this paper.

In the next section we will analyse another argument proposed by Dummett against Kripke.

4. MODALLY AND TEMPORALLY RIGID/FLEXIBLE DESIGNATORS

A different attack on modally rigid/flexible designator distinction is made by comparing the \textit{modal frame} with the \textit{temporal frame}. Dummett singles out three kinds of temporal terms: flexible (where Thatcher is, where I am), rigid (Here, now, Thatcherabouts) and neutral designators. For the sake of explaining the way these terms work in language, we have to analyse the behaviour of these terms depending on two parameters, utterance time and evaluation time. Dummett attempts to compare these two parameters with the actual world and the evaluation world in modal contexts.
Temporally rigid and flexible designators depend on the time of utterance and the time of evaluation (they are utterance-evaluation time dependent), whereas temporal neutral ones, once introduced, are independent of any time parameter. Further, flexible designators are evaluation time dependent, whereas rigid designators are independent, namely once their reference has been fixed (depending on utterance time) they are rigid with respect to evaluation time.\footnote{For instance, "it is noisy where I'm" and "it is noisy here" have the same truth value if they are uttered at the same time (by the same person). "It will be noisy where I'm" and "it will be noisy here" could have different truth values, in the case that tomorrow I'll be in a place different to this one. So, "where I'm" and "here" are different, because the former is flexible with respect to evaluation time, whereas the latter is rigid. See IFP, p.586.}

On the other hand, as Kripke tries to show, in modal frames once the reference of a proper name has been fixed by a flexible designator in the actual world, the reference is the same in every world. For this reason we can speak of proper names as modal rigid designators. It might be possible also to fix the reference of a name by means of a temporally flexible designator. Dummett proposes the following example:\footnote{IFP, p. 587.}

(13) Charlie is the hurricane approaching the coast of Florida

"The hurricane approaching the coast of Florida" is a temporally flexible designator, so its reference changes depending on evaluation time, whereas the reference of Charlie, once fixed, is independent of evaluation-utterance time. In other words, Charlie is a temporally neutral designator.

Kripke, in a modal frame, argues along the same lines, but his conclusion is that the name whose reference has been fixed by means of a definite description is a rigid designator, not something as a modally neutral designator. Moreover he says that the reference of the name is not linked in other counterfactual situations to the condition described by the definite description.

The temporal frame allows to Dummett to give an example by means of which he can show how it is possible to fix the reference of a term without inheriting any kind of indexicality, a property owned by
temporally flexible designators as well as by temporally rigid designators. On the other hand, when Kripke considers similar cases in a modal frame, he does not speak about modally neutral names, but rather about rigidity, as though world in this frame were as time in a temporal frame. There is a big difference between "Atxaga" and "here". The last one is rigid, but relative to utterance time. Could we say this about Atxaga? Is the actual world equivalent to this moment? Baptisms as that of "Charlie" show that new terms so introduced are neither temporally rigid nor flexible designators.

Dummett thinks that it is right, in temporal frames, to distinguish between rigid and flexible designators, because there are linguistic intuitions to support it in this way. There are terms that are unambiguously temporally rigid (now, here) or flexible designators. But the situation is different at all with respect to modal frames where Kripke puts forward his theory on proper names. In modal frames it seems that rigid terms inherit some indexicality from flexible designators, since "they have in all worlds the referent of the flexible designator in actual world". On the force of the examples analysed in the previous section, Dummett thinks that linguistic intuitions are justifying that under Kripke's distinction there are always scope distinctions, and that it is not necessary for a term to be always modally rigid or flexible. It seems that Dummett wants to regard all proper names as modally neutral. There is no room for rigidity in modal frames, because of the status of the actual world. Loosely speaking, we think that Dummett is saying what follows: The rigid/flexible distinction makes sense in a temporal frame and there are linguistic intuitions to justify it, but in trying to move these ideas to a modal frame (this is Kripke's intention) we are fleeing from linguistic intuitions and imposing to language notions coming from a regimented language as though they were linguistic. The notion of rigidity makes sense (we mean "intuitive sense") in contexts with genuine indexicality, but this is not the situation with respect to the actual world.

"For one thing, the present moment is only one moment among many, the place where I am now is only one place among many, and I am
only one person among many; but the actual world is not just one world among many, as it is clear that Kripke would agree."

From our point of view, Dummett thinks that the introduction of rigidity in modal contexts leads Kripke to propose several philosophical notions (for instance, essential properties, metaphysical/epistemological necessity) which, from Dummett's view, are neither distinct nor clear.

"My own belief is that there is no clear notion of essential properties to be attained, and that of metaphysical/epistemological necessity is in even worse condition"29

If we have some doubts on these philosophical notions, we can also have the same doubts on rigidity in modal contexts. This would be Dummett's message.

Kaplan makes worthy comments on "flexible/rigid designators" terminology. Kaplan's theory explains the behaviour of indexicals as well as of ordinary proper names, and we can see, at the level of formal semantics, how it is possible to propose a theory with several indexes, where the world notion plays a similar rôle as the time notion.

Kaplan puts forward two intensional notions to set down the semantics of indexicals and proper names. On the one hand, we have to take "the character" which is the semantic level where, depending on contexts, we obtain the referents of indexicals, proper names, and, in general, of all directly referential terms. So in this approach proper names are directly referential terms, although they are different from indexicals in that they are not context-sensitive. We can say that the application of semantic rules of character level to sentences has, so to speak, as fruit a proposition,30 and in a proposition, in so far as directly referential terms are concerned, we have the objects that are referents of these terms. In the case of directly referential terms, "the relation between the linguistic expression and the referent is not mediated by the corresponding propositional

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29 IFP, p. 598.
30 Kaplan's compares his propositions with Strawson's statements.
component."  Otherwise, when other kinds of terms appear, we obtain a complex that can be evaluated in different ways, depending on circumstances, by means of "content semantic rules". Kaplan's claim is that directly referential terms, proper names among them, are independent of circumstances. In other words, he claims that they are rigid designators. There are also other terms, different from directly referential ones, that are rigid designators, but in this case we can talk of some dependence on circumstances, even though this dependence has the form of a constant function. Of course, there are character independent terms and terms dependent on circumstances (but not in a constant way). For instance, "the writer of Obabakoak". To sum up, using Kaplan's theoretical frame we can situate the different kinds of terms posed by Dummett in the following manner:

<table>
<thead>
<tr>
<th>Dummett</th>
<th>Kaplan</th>
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<tbody>
<tr>
<td>a- Temporally rigid</td>
<td>Directly referential</td>
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<tr>
<td>(here, now....)</td>
<td></td>
</tr>
<tr>
<td>b- Temporally flexible</td>
<td>Circumstances-time dependent</td>
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<tr>
<td>(where Atxaga is)</td>
<td></td>
</tr>
<tr>
<td>c- Temporally neutral</td>
<td>Circumstances-world dependent</td>
</tr>
<tr>
<td>(the writer of Obabakoak)</td>
<td></td>
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</tbody>
</table>

Several comments must be made about this relationship. Indexicals are context-sensitive, but, once their reference has been determined in a context, they are rigid designators. In this sense, Dummett and Kaplan agree, if we accept that Dummett's utterance time is just Kaplan's time of context. We also have to suppose that Kripke and Kaplan use the same notion of rigid designator. Kaplan takes a rigid designator as a term that denotes the same object in every circumstance, whether it exists or not. From Kaplan's point of view Kripke's distinction between strongly and not

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32 In Kaplan's circumstances are included Kripke's counterfactual situations and also Dummett's evaluation time.
33 In Kaplan (1989) a distinction between "utterance" and "sentence-in-a-context" is made. We will forget it in this discussion.
strongly rigid designators does not make sense, because character rules determine the reference of directly referential terms, regardless of circumstances, i.e. whether in these circumstances the referent exists or not. In other worlds, the referent is "previously" determined. If we accept that Dummett would agree with Kaplan on this, the part "a" in the classification will be right. Of course, Kaplan's frame is more general, because many kinds of indexicals are included, not only temporal ones. Dummett's utterance time would be one of the parameters in Kaplan's contexts, but there are others. Kaplan also talks of agent, world and position.

With respect to the terms in the second group, Dummett's temporally flexible terms, there are some problems. Dummett introduces in the same group "where I am" and "where Mrs Thatcher is" as flexible designators. These two examples are slightly different, because the first one has a directly referential component "I", which gives a "context-sensitive" character to the first name. Anyway, we have to understand Dummett's utterance time and evaluation time as equivalent to Kaplan's context time and circumstances time, respectively.

In the third group, we have an example of a term that, according to Dummett, is temporally neutral, but, from Kripke's view, is modally flexible. In Kaplan's terminology, insofar as it is flexible, we should say that it is circumstance-sensitive: not dependent on the time of circumstance, but rather on the world of circumstance. But why do we include "world" and "time" into the circumstances? We have to bear in mind that intensional operators (temporal and modal operators for instance) operate on contents (propositions, since, in this case, we are thinking about sentences), and therefore we have to put the evaluation time and world into the circumstance on which we evaluate contents. Otherwise, it would make no sense to have temporal or modal operators.

With respect to proper names (Kripke's rigid designators), as far as they are directly referential, Kaplan's theory works in a similar way as with indexicals.

Against Dummett, Kaplan deals with time and worlds in a very symmetric way. He even makes some proposal to treat "location" in a
There are several indexicals by means of which, in a given context, we can make the content of a sentence eternal (by means of "now"), or perfect (by means of "actually"). On eternal and perfect contents it is vacuous to consider intensional operators. Further, Kaplan distinguishes the world of context and the world of circumstances, in the same way as he singles out time of context from time of circumstance. So, in his system, any world can be a context world, but if we are analysing the behaviour of proper names in natural language, then apart from (our) actual world, could any other world be a context world?

Kaplan certainly would answer yes, because he thinks, for instance, that "actually" makes the same function as "now". H. Deutsch\textsuperscript{36} also attempts to point out some parallelism between the behaviour of rigid designators in a temporal frame and in a modal frame. He shows that it is necessary to take rigid designators as relative to a frame of reference or point of view, temporal as well as modal. To attain this goal he proposes several changes in Kaplan's formal system. Deutsch makes a comparison between temporal and modal frames, and shows that, in so far as existential sentences are concerned, we have to bear in mind more than one world. For this reason, any of these worlds can be regarded as a context-world, and "world" becomes an indexical among others, and our world a world among others too.

As remarked above, Dummett does not accept the idea of taking the "actual world" as an indexical, and we think that Kripke sometimes is defending the same position:

"So, we do not begin with worlds (which are supposed somehow to be real, and whose qualities, but not whose objects, are perceptible to us), and then ask about transworld identification; on the contrary, we begin with the objects, which we have, and can identify, in the actual world."\textsuperscript{37}

\textsuperscript{35} Kaplan (1989a), footnote 28.
\textsuperscript{36} See Deutsch (1989). Mainly his examples of "Hitler" and "Cassius Clay-Muhammad Ali".
\textsuperscript{37} NN2, p. 53.
Dummett, we think, would agree with Kaplan and Kripke's ideas about rigid designators, insofar as modal operators are not concerned. Clearly Dummett, as Frege himself, does like neither an analytical apparatus of possible worlds, nor other notions around it, such as metaphysical necessity. He chooses a different route, in terms of "scope", in order to explain sentences with modal operators, fleeing from those notions. Anyway, the discussion between Dummett and Kripke must not be circumscribed to technical problems regarding modal systems, because, taking into account that technical questions can be solved in both ways, as has been rightly noted by Horsten (1992), this discussion is more general, as far as it is a discussion on several philosophical notions currently accepted. Dummett does not accept that for making a theory of proper names we have to make proposals on essential properties and on the difference between "a priori" and "necessary". The latter distinction, which Kaplan also accepts, is one of the most controversial from Dummett's point of view. In the next section we will be concerned with it.

5. A PRIORI/NECESSARY

The relationship among notions such as analyticity, necessity and aprioricity has been and is (and will be) a controversial issue in philosophy. Among Kripke's ideas on this issue the most controversial, at least from our point of view, is that a sentence known a priori may express a contingent statement. It is known that Kripke also advocates for the fact that necessary statements can be expressed by sentences of which truth is laid down a posteriori. Thereby, "a priori" and "necessary" are independent notions. We think, in agreement with Dummett, that in the philosophical tradition a priori has been a notion stronger than necessary.

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38 We will forget other general issues. For instance, those referring to Frege's notion of sense.
39 Dummett's ideas on "possible worlds" can be studied in FPL2, ch. 9: Indirect Reference. Dummett attempts again to justify that tense logic, with possible worlds semantics, is a modal logic that is adequate to linguistic intuitions. His opinion with respect to other "modal logics" (logic of knowledge and logic of belief) is not the same.
40 See Kripke (1971) and NN.
It has been accepted that when we know something in an "a priori" way, then it is necessary. Mathematics has been a model of knowledge a priori, and Leibniz already thought that mathematical statements are true in all possible worlds. Kant also regards mathematics as a domain of a priori knowledge, although synthetic. On the contrary, Kripke proposes many examples of a priori sentences that are contingent. Among them, we will take those examples where a definite description is used to fix the reference of a name.

Kripke thinks that it has been a mistake in philosophy to lay down the equivalence between a priori and necessity as though it were a definitional matter. His thesis is that the notion of a priori concerns to epistemology as necessary concerns to metaphysics, and therefore the relation between both concepts is far from being obvious. He makes some comments on the case of "the Goldbach conjecture" to show how difficult can be the subject of aprioricity and necessity, telling us:

"More important than any particular example of something which is alleged to be necessary and not a priori or a priori and not necessary, is to see that the notions are different, ...".

Several pages later Kripke writes:

"... I shall consistently use the term "a priori" in the text so as to make statements whose truth follows from a reference-fixing "definition" a priori."

What Kripke bears in mind, in that moment, is Wittgenstein's example of "one meter is the length of S at t". However it would be better for us to take into account another well-known example: "Neptune is the cause of the perturbations in the orbit of Uranus". We can sum up Kripke's thesis by saying that this sentence is knowable a priori since we fix the reference of Neptune by means of the description above, but the

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41 We will not be concerned with analytical/synthetic dichotomy. Kripke takes analytical, although stipulatively, as necessary and a priori. See NN2, p.39, footnote 21.
42 NN2, p.38.
43 NN2, footnote 26.
44 NN2, footnote 33.
statement expressed by this sentence is not necessary because "Leverrier could well have believed that if Neptune had been knocked off its course one million years earlier, it would have caused no such perturbations and even that some other object might have caused the perturbations in its place."\textsuperscript{45}

In the last part of his work there is a generalization of these ideas from proper names to other kinds of names, namely natural kinds, natural phenomenon and so on.

In this paper we will focus on two attacks of Kripke's claims about the possibility of sentences a priori and contingent. The first attack comes from K.S. Donnellan.\textsuperscript{46} We are interested in studying it because he poses a worthwhile distinction which allows us to introduce the second criticism, Dummett's one.

Donnellan's argument has the following structure:

- Donnellan distinguishes between "to know that something (what a sentence says) is true" and "to know the truth of something". This distinction makes sense, for instance, if we think on a person who does not have any idea about mathematics, but who knows that Pitagoras' theorem is true. This person knows something about one sentence in mathematics, but (s)he does not know any mathematics. His (her) knowledge is a metaknowledge or knowledge about mathematical language, but (s)he does not know any truth of mathematics.

- Donnellan thinks that when we introduce a name by a description (we can focus our attention on Neptune) the knowledge (if there is knowledge) that Kripke is attaching to this "stipulation" is of the kind "to know the truth of something" (in Neptune case, it would be a knowledge of an astronomical phenomenon). Donnellan is assuming that if there is knowledge as a result of the stipulation concerning Neptune, it ought to be knowledge de re, knowledge about a planet.

\textsuperscript{45} NN2, footnote 33.
\textsuperscript{46} Donnellan (1977).
- Donnellan shows that, by stipulations such as that concerning Neptune, we do not attain any knowledge de re. He does it, in a weak way, by showing, as if it were a test, that the knowledge acquired by Leverrier does not hold two "principles" for knowledge de re. For instance, Donnellan considers that Leverrier is unable to say about a concrete planet: "this planet is the cause...". This fact shows that it is not a knowledge de re.

On the other hand, Dummett analyses the following example: The year I A.D. is the year of Christ's birth.\textsuperscript{47} This sentence is again, from Kripke's point of view, a sentence known a priori and which expresses a contingent fact because Christ might have been born in a different year. Dummett tries to show that it is no so easy to dissociate epistemic considerations from the necessary/contingent distinction. We can imagine two persons who hear our sentence, but who are in a different "epistemic state". The first one (A) is aware of the principle of the dating system, but (s)he is ignorant of what year (s)he is living in, whereas the other (B) knows in what year (s)he is living.

If A hears the sentence, (s)he will know a priori that I A.D is the year of Christ's birth, but (s)he does not know when Christ was born. In Donnellan's terminology, we would say that A is unable to say of one year, "this one is Christ's birth year". We can suppose that he has in front of (her)him every year, and that (s)he has to choose one among them. (S)He could not. (S)He knows no fact about the world (about Christ), either necessary or contingent. When B hears the stipulation, then (s)he is able to say about one year, "this year is Christ's birth year", and hence we can speak about the necessity or contingency of this fact. This is the way proposed by Kripke. By means of this example we can see that it is not possible in every case to speak about an a priori sentence and the contingency/necessity of the fact expressed by it, because maybe there is no such fact. The possibility of speaking about facts depends on epistemic considerations, and hence the dissociation is not made.

\textsuperscript{47} FPL2, 122-123. This example is different to Neptune's one. We are not sure whether Dummett's considerations are valid with respect to Neptune's case, but, anyway, the example is very similar to Kripke's one about "the standard metre rod".
Donnellan attempts to show that by this kind of stipulations we do not get any knowledge, apart from linguistic matters. On the other hand, Dummett argues that depending on epistemic matters, we can say that the stipulation expresses a fact, which could be contingent or necessary; thereby, here we do not separate the epistemological field from the metaphysical one, in spite of Kripke's attempt to do it.

Dummett is interested in this result, we think, for the following reason. Whereas Kripke separates metaphysical and epistemological questions, defining by the way proper names as rigid designators in terms of metaphysical notions (possible worlds, actual world), Dummett, in the opposite way, regards proper names linked to epistemic matters, since the notion of sense is central to his conception of knowledge, and, as Frege claims, sense is an epistemic (cognitive) notion. Dummett's idea is to show that these kinds of stipulations are not enough to grasp a fact of which we can talk as contingent or necessary. Epistemic matters are always interfering.

We have seen that the stipulations taken by Kripke as aprioristic sentences might not express contingent facts. When a stipulation expresses a contingent fact, then, following Dummett's arguments, epistemic matters are concerned in. Despite this, Kripke's claim makes sense since we can say of Christ that he could be born in another year, or of Neptune that it were not the cause of the perturbations of Uranus. The problem is that Kripke is jumping from modalities de dicto to modalities de re, in arguing as though the modality of re were concerned when we analyse the necessity of the stipulation. Donnellan and Dummett have clearly seen this problem, in the sense that when Kripke is telling us that he is analysing the a priori and necessary character of a sentence, he really is concerned with the a priori character of a sentence, and, on the other hand, with the necessary or contingent properties of an object. But we know that in order

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48 There are disagreements between Frege and Dummett's views concerning their sense notions. Anyway, the cognitive character of sense is accepted by both. About these disagreements see Dummett (1978): The Social Character of Meaning. Dummett sometimes rejects Frege's sense since, despite Frege's claims about the objectivity of sense, his notion has some risk of becoming subjective, and consequently language can become a set of ideolects.
to make the distinction de dicto/de re, we have to take into account scope matters.

Recapitulating Dummett's argument we can say:

- First, Kripkean stipulations express facts, about which we could say if they are contingent or not, depending on epistemic states. Thereby, Kripke does not separate metaphysical matters from epistemological ones.

- Second, Kripke does not analyse whether a fact is contingent, but rather he analyses whether an object has a contingent property. Hence beyond rigidness, he is incorporating scope questions.

We agree with Dummett's ideas at least in one sense since, insofar as we are concerned with the use of proper names, epistemic aspects are dealt.

Horsten\textsuperscript{49} treats this issue from a different and more technical point of view. Our goal is to show that epistemic aspects (and Fregean sense is an epistemic notion) are relevant when we analyse contingent truths. We think that Horsten's main goal is not this one, even though there are obvious bridges between his treatment and the ideas in our paper.

Kripke is concerned also with the other side of the relation between a priori and necessary: it is possible to express something as necessary, and to be known a posteriori. We can imagine this situation: Let us suppose that Atxaga is an old writer, only known because he is the author of an old book "Obabakoak". On the other hand, there is another writer, whose name is Irazu, who is the writer of the book "Two brothers". A literature graduate student is working about these two authors, and the main result of his dissertation is just that "Atxaga is Irazu", i.e. the same person is the author of both books. Kripke would add that the sentence "Atxaga is Irazu" is necessarily true, because it is necessary of anything that it is identical with itself.

We want to analyse how, by a discovery, the use of these proper names undergoes several changes. How does Kripke explain this

\textsuperscript{49} See Horsten (1992).
phenomenon? His strategy is to avoid any mention of epistemic aspects. For this reason, taking into account that "Atxaga" and "Irazu" are rigid designators, it is a consequence of the identity between the objects named by both names that this identity is necessary. This fact allows Kripke to confirm his thesis about the "independence" of the epistemologically a priori and metaphysically necessary, because a posteriori and necessary are also compatible. Kripke maintains that if \( a=b \), then necessarily \( (a=b) \),\(^{50}\) whether or not \( a=b \) is established a priori or a posteriori.\(^{51}\) The problem is with the antecedent of this conditional. We can interpret it metaphysically or epistemologically. \( a=b \) can be, this is Kripke's way, an expression to say: "Both a and b refer (we guess, in this world) to the same thing". Of course, if a rigid designator is what it is, then the consequent is obvious. From the definition of rigidity, the previous theorem is evident. But to say this is not very useful for understanding everyday behaviour of proper names. It is more interesting to consider that many times the relevant thing is not \( a=b \), but rather know \( (a=b) \), or better, believe \( (a=b) \). When we say "useful", we mean that these other "identities" are more determinant on our use of proper names and their relation with their referents. Kripke thinks that identities laid down by science are associated with necessity, because he thinks that to know by science \( (a=b) \), implies \( a=b \), and this implies necessarily \( (a=b) \). But this is not very clear when we take into account softer sciences or other kind of beliefs, such as those considered in our example. Another dissertation could pull down the result "Atxaga is Irazu". We think that in everyday life, our use of proper names is closer to our example than to other typical and structurally analogous examples, such as "Hesperus=Phosphorus". Identity sentences, or, perhaps better, our beliefs on identity propositions (jointly with other things) configurate the structure of our world, which undergoes changes when other identities are laid down. There are very well established identities but, from our point of view, this is not the common case. The notion of counterfactual situation, in Kripke's sense, is not very interesting with respect to the use of proper names, because, even though in some well established aspects we can say how a counterfactual situation would be, in the general case counterfactual

\(^{50}\) About this theorem, there is a very interesting discussion in Körner (1976), see Wiggins (1976) and Hacking (1976). We have to remark that Wiggins as well as Hacking are sceptical about possible worlds and rigid/flexible designators.

\(^{51}\) \( a \) and \( b \) are rigid designators.
situations themselves are considered as dependent on epistemic states. For instance, before establishing that "Atxaga is Irazu" and analysing modal sentences with these names, we, even assuming Kripke's point of view, would accept the sentence "Atxaga might not be Irazu" as true, and the acceptance of this sentence has an influence on our use of these proper names. In a different moment, after a dissertation and when the result is vox populi, the opposite consequence would be right. Our conclusion is that epistemic counterfactual situations, and not counterfactual situations, are important when we want to analyse our use of proper names in modal contexts. In this sense, we agree with Frege and Dummett since we regard epistemic matters very important insofar as we are concerned with proper names.

Coming back to the "a priori-contingent" discussion, another example posed by Dummett is about the sentence "I am here". Kripke would accept this sentence as expressing an a priori knowledge of a contingent fact. Dummett, versus Kripke's claim, thinks that it is possible to say "I am here" without knowing where I am. Then either I would not express any knowledge, according to Donnellan, or, if I was ready to accept that I was expressing some knowledge a priori, I would not express any fact about which I could say that it is necessary or contingent. One person could say: you are expressing the fact that you are at the place where you are, and this is a fact either necessary or contingent. But what knowledge?, what fact? I might ask e.g.: Where are you? If the answer is "where I am", then Donnellan would say: this is a linguistic matter, nothing more. Dummett, from our point of view, would say that we cannot evaluate it in other counterfactual situations, since which are these counterfactual situations?

Kaplan agrees with Kripke: "I am here (now)" is valid in every context, whereas it is not true in every (counterfactual) circumstance. Kaplan takes "logically true" as "a priori". We are not going to discuss this equivalence, although it is far from being an obvious one. To set down the logically true nature of this sentence, Kaplan includes among contexts only

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52 FPL2, p. 122.
proper contexts, namely those \(<w,x,p,t>\) such that in the world \(w\), \(x\) is located at \(p\) at time \(t\).

We have again seen that one of the biggest differences between Kripke and Dummett's views is that Dummett is always introducing epistemic aspects when he is concerned with proper names. One of the main Frege's theses underlies this introduction: any proper name has a sense, and sense is an epistemic notion.

**CONCLUSIONS**

We have made a pursuit of Dummett-Kripke's discussion in three steps. In the first one Dummett, under Kripke's criticism, tries to solve his own technical error. However Dummett asserts that his critique is not about technical matters. He shows how it is possible to explain the same phenomenon by "scope considerations", and, by the way, he tries to eliminate differences between the behaviour of proper names and that of definite descriptions in modal contexts. Anyway there is a difference that Dummett cannot eliminate (Examples (7) and (8)).\(^{54}\) Dummett considers that this difference is motivated by the presence of verbs such as "be" and "become", since after these verbs definite descriptions become predicates that stand for properties that can be acquired.\(^{55}\) We cannot say the same about proper names.\(^{56}\) In spite of this, Dummett thinks that the two rival "theories" agree in evaluating truth-conditions of these sentences. Kripke uses the different truth conditions of (7) and (8) to propose the rigid/flexible distinction, whereas Dummett confirms his criteria without making any mention on rigidity.

Linsky interprets\(^{57}\) that Dummett concedes "all" to Kripke:

"We are now in a position to understand the grain of truth in Kripke's doctrine of proper names as rigid designators...We may

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\(^{54}\) In (7) we have to read the description with wide scope.

\(^{55}\) This idea comes from Geach (1962).

\(^{56}\) FPL2, pp. 131-132; IFP, pp. 599-600.

\(^{57}\) Linsky (1983), pp. 128-134
intelligibly say that the mother of Mary might never have become a parent,...; but we cannot say that St. Anne might not have been St. Anne,..."\(^{58}\)

Dummett thinks that Kripke, by remarking the difference between (7) and (8), has seen one difference between proper names and definite descriptions that had been put forward before by Geach (regarding the verb "be") and by Dummett himself (regarding the verb "become"). Linsky, by saying that "Dummett concedes all to Kripke", is disregarding other Dummettian claims concerning this subject. Apart from this, Linsky makes interesting comments on the discussion Kripke/Dummett. The most important one, in our opinion, is that Dummett apparently regards as a Fregean right possibility that the sense of a proper name can be that of a definite description. Linsky is convinced by Kripke's arguments against this possibility, and therefore, under Linsky's interpretation of Dummett's views, Kripke would be refuting Frege's theory. Linsky concludes that, in this aspect, Dummett's interpretation of Frege is wrong. "The sense of a proper name is never the sense of a definite description" would be Linsky's interpretation. Linsky accepts that proper names are rigid and he also accepts other Kripkean distinctions, but he thinks that these ideas are compatible with Frege's main theses. We have three interpretations of Frege. On the one hand, we have seen Linsky's interpretation. Dummett asserts that sometimes the sense of a proper name could be that of a definite description\(^{59}\). Kripke interprets Frege's ideas as though the sense of a proper name always were that of a description, confusing "to fix the reference" and "to give the meaning". Dummett says "sometimes", Kripke "always", Linsky "never". Who is wrong?

Our own idea about these disagreements on Frege's proposal is that Kripke's interpretation is wrong. His interpretation is a generalization out of several examples,\(^{60}\) but if we do not accept this interpretation, why is Dummett so worried about Kripke's interesting distinctions? Why do

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\(^{58}\) FPL2, p. 131. These sentences are similar to (7) and (8).

\(^{59}\) St. Anne (FPL2) and Deutero-Isaiah (IFP) are persons about which we only know that St. Anne is the mother of Mary, and Deutero-Isaiah is the author of the prophecy. Probably, these cases are examples of expressions with the same sense.

\(^{60}\) Kripke (1979), Note 3. Kripke acknowledges that his interpretation of Frege rests really on a few examples.
Fregeans, such as Linsky himself, accept several Kripkean distinctions, whereas Dummett does not?

In a second step, we have shown that Dummett is attacking the whole kripkean analytical apparatus. In this sense we disagree with Linsky who says that the whole of Dummett's strategy is ill-conceived because his attempt would be to defend that a proper name can acquire as its sense the sense of a description. It is true that Dummett sometimes appears to think that Kripke is attacking some core ideas of Frege's; however, at the same time, he tells us that Kripke's interpretation of Frege is wrong. In the present paper we are not concerned with interpretation problems, and we believe that the most interesting and controversial aspect of Dummett's critique is not his possible defence of Frege against Kripke, but rather his attack to "one way of thinking", actually very popular, about proper names. This is, we guess, Dummett's main goal. For this reason we have analysed the relation between temporal and modal rigid designators, and Dummett's claim on this is that there has been a transfer of analytical, but intuitive, tools from the temporal frame to the modal one, where intuition is lost. Dummett also thinks that this transfer has been carried out towards epistemic and belief contexts where the semantics of possible worlds is currently a useful analytical tool.\(^\text{61}\) In relation with this we want to remark that logics of knowledge and belief have undergone an interesting development. Many of the aspects that justify Dummett's scepticism on these logics have been solved by introducing more sophisticated tools into the semantics of these logics, using always as basic notion that of possible worlds, or else that of epistemic and doxastic states.\(^\text{62}\) Taking into account these last improvements, Dummett's scepticism, no doubt, would become weaker.

In the last part of our paper we have analysed the Kripkean attempt to separate epistemological matters from metaphysical ones. We think that this sharp distinction depends very much on the rigid/flexible designators distinction. To discuss and to refuse the former is one indirect way to refuse the latter. This is the point with which Dummett is mainly

\(^\text{61}\) In Kripke (1979), the author makes interesting distinctions between contexts of belief and context of necessity.

\(^\text{62}\) See for instance everything concerning the problem of omniscience.
concerned. Our goal has been to show that, insofar as the use of proper names is concerned, it is not possible to eliminate epistemological aspects. Kripke defines rigid designators in terms of possible worlds, without considering any epistemological aspect. We think that this definition is not very useful, even though it can be sound. In this sense, Frege's characterisation of the sense of proper names as something cognitive and as something by means of which we can determine the reference is closer to our everyday use of proper names. We know that the notion of sense is very far from being clear, but the way of research opened by it is closer to our everyday use of proper names than the Kripkean proposal. We also know that Kripke's contribution is a necessary reference when we speak about proper names. His arguments and his distinctions are supposed to be mandatory for everybody working on these subjects. Anyway, this does not mean that he is right. We have tried to show that the intuitive character of his proposal, as well as its utility when we want to analyse simple sentences with proper names, are at least controversial. When we understand a simple sentence, do we need to think about the reference of a proper name in other counterfactual situations?

As we have remarked above, Kripke, by trying to separate epistemic notions from metaphysical ones, poses a picture by which it is laid down a causal relation between a name and its bearer. We think that the causal theory of proper names is just a project, and that nothing becomes clearer by the use of notions such as baptism. Anyway, to account for the causal relation name-bearer is something necessary for any theory of proper names. Nothing of this is encountered in Dummett's proposal. Epistemic aspects and causal relation have to be two fundamental grounds for any theory of proper names.

ACKNOWLEDGES

63 We have seen several disagreements between Linsky and Dummett. On the other hand, Kaplan relates Frege's sense with his notion of content (function from possible worlds to truth values). Our guess is that Dummett would not accept this relation, because he distinguishes between sense, meaning and intension. Dummett's intension would be closer to Kaplan's content than the notion of sense is to it.
64 See introduction.
I would like to thank the Basque Government because my stay at CSLI (Stanford University) was supported by a grant of that institution. The research in this paper has also been partially supported by a grant of the Basque Government (PGV9225).

I would like to thank J. Perry as director of CSLI (Center for the Study of Language and Information). I am grateful to D. Israel who was my sponsor there. I want to thank also X. Arrazola, I. Gómez, K. Korta, J.M. Larrazabal, F. Migura, L. Sánchez, and V. Sánchez de Zavala for some helpful comments and discussions on this topic. Thanks also to the two anonymous referees. Of course, the whole responsibility is mine.

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Note. We will use several abbreviations to distinguish the first and second editions of "Frege. Philosophy of Language (FPL)" and "Naming and Necessity (NN)". We will use FPL1, FPL2 for Dummett (1973) and Dummett (1981), and NN1, NN2 for Kripke (1972) and Kripke (1980). We refer to Dummett (1981a) by IFP.


