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of reference**

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## Triangulation and the Causal Theory of Reference<sup>1</sup>

### INTRODUCTION

In *Naming and Necessity* (1972), Kripke proposes a causal theory of reference according to which the referent of a name is the object originally baptized with that name in an initial “dubbing ceremony”. Any later use of the name refers to that original object if and only if the later use stands in an appropriate causal relation to that first use. For this causal relation to hold, according to Kripke, the name borrower should *intend* to use the name to refer to the same thing as the thing lender referred to with the name. Evans (1985), however, advances a plausible objection that merely intending to use a name to refer to the same thing as the lender was referring to does not explain important cases of referent change. Marco Polo, Evans suggests, intended to use the name “Madagascar” to refer to the same thing to which Solly, the man from whom he first heard the name “Madagascar”, referred by using that name. Later borrowers have also intended to use the name to refer to the same thing as the lender was referring to by using that name. But our current use of “Madagascar” refers to a different thing (namely, the African island) than that to which Solly was referring (namely, a portion of the African mainland).

The point here is not to evaluate Evans’s own solution, but rather to acknowledge that his objection reveals a missing element in the causal theory of reference: namely, the *fixing* requirement. In what follows, I first say a little more about Kripke’s intention requirement and the problem of referent change; second, I introduce Davidson’s

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triangulation thesis; finally, I try to show how triangulation can be embedded in the causal theory of reference, thereby satisfying the fixing requirement and hence solving the problem of referent change. To do this, I need to examine Kroon's use of a similar triangulation strategy in his epistemic warrant theory of reference.

### 1. KRIPKE'S INTENTION REQUIREMENT AND THE PROBLEM OF REFERENT CHANGE

Suppose that I have a dog and I call him "Einstein", perhaps because he shows some signs of intelligence beyond that of an ordinary dog. Is it a consequence of Kripke's causal theory of reference that my use of the name "Einstein" in fact refers to the famous physicist? Of course, there is no such consequence, and what allows Kripke's theory to avoid this implausible conclusion is the *intention requirement*:

An initial "baptism" takes place. Here the object may be named by ostension, or the reference of the name may be fixed by a description. When the name is "passed from link to link", the receiver of the name must, I think, *intend* when he learns it to use it with the same reference as the man from whom he heard it. (Kripke 1972: 96; emphasis added)

I do not refer to Einstein by my use of "Einstein" in the above scenario since I do not intend to use "Einstein" with the same referent as the person from whom I borrowed this word; as a consequence, the causal chain between my use and the initial baptism is broken and my usage does not refer to the person initially baptized with the name. However, embedding this requirement within the causal theory of reference leaves us with another problem, the *problem of referent change*, whose discovery is attributed to Evans:

In the case of "Madagascar" a hearsay report of Malay or Arab sailors misunderstood by Marco Polo [...] has had the effect of transferring a corrupt form of the name of a portion of the African mainland to the great African Island. (I. Taylor, *Names and Their History*, 1898, quoted in Evans 1985: 11)

Marco Polo hears the name "Madagascar" from Solly, a native. He certainly *intends* to use "Madagascar" with the same referent as Solly but mistakenly takes the referent of "Madagascar" to be the African island rather than a portion of the African mainland. All the later users of the name respect the intention requirement and hence, according to the causal theory of reference, the current use of the name should refer to a portion of the African mainland — yet it is accepted that the current use of the name refers to the African island. This is the problem of referent change. My claim here is that the missing element in the causal theory of reference is the fixing requirement, according to which the borrower should fix her intended referent in accordance with the lender's intended referent via a process of triangulation, just as Davidson proposes for the determination of the content of thought. The same strategy is adopted by Kroon in his epistemic warrant theory of reference. Below, I set

out Davidson's proposals for using the triangulation thesis in the determination of the common cause of thought, and then, via an examination of Kroon's epistemic warrant theory of reference, I embed triangulation into the causal theory of reference in order to show how the common referent of the borrower's and the lender's use of a name can be determined, and thereby satisfy the fixing requirement.

## 2. DAVIDSON'S TRIANGULATION THESIS

According to Davidson's externalist semantics, what determines the content of a thought (or an intentional state) is what *typically causes* that thought (Davidson 1991). For example, what determines the content of a chair-belief, i.e., a belief about a certain chair, is that particular chair which typically causes that belief. The determination of such a cause, according to Davidson, cannot be achieved only by considering a single person, since an individual stands in many causal relations with many objects and events in her environment. Davidson poses the problem and presents his solution as follows:

The cause is doubly indeterminate: with respect to width, and with respect to distance. The first ambiguity concerns how much of the total cause of a belief is relevant to content. The brief answer is that it is the part or aspect of the total cause that typically causes relevantly similar responses. What makes the responses relevantly similar in turn is the fact that others find those responses similar [...] The second problem has to do with the ambiguity of the relevant stimulus, whether it is proximal (at the skin, say) or distal. What makes the distal stimulus the relevant determiner of content is again its social character, it is the cause that is shared. (Davidson 1997: 130)

In other words, to determine the relevant cause, firstly it should be determined which of the many lines of causation which extend out from the person in a given direction is the relevant line, and secondly it should be determined where on this relevant line the relevant cause is located. According to Davidson, for both of these determinations to be accomplished, another person is needed: this is because it is the second person who identifies the *similarity* between the first person's similar responses in different situations in which the relevant cause obtains. The exact location of the stimulus is then determined by the intersection of the lines which extend out from each of the persons in the direction of the stimulus:

It is a form of triangulation: one line goes from us [i.e., the second person] in the direction of the table [i.e., the relevant stimulus], one line goes from the child [i.e., the first person] in the direction of the table, and the third line goes from us to the child. Where the lines from the child to table and from us to table converge, "the" stimulus is located. (Davidson 1992: 119)

Thus the second person has two roles: first, providing a standard of similarity for the first person's responses by *consciously correlating* the responses of the first person with objects and events in the first person's world,<sup>2</sup> and, second, participating in

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<sup>2</sup> It is the second person who acknowledges that the first person is behaving sufficiently simi-

identifying (for the first person) the stimulus to which the first person is reacting. For the second role to be played, the two persons need to *know* that they have the same object in their minds, since it might be the case that they are having similar reactions to different stimuli. According to Davidson, the only way to know this is through linguistic communication with each other.

Through such linguistic communication, the first person comes to know what she and the second person believe in common regarding the stimulus. What is believed in common constitutes the content of the first person's thought, and thereby the content of her thought is determined. It might be objected here that appealing to linguistic communication in order to determine the content of thought leads to a vicious circularity, since linguistic communication itself (at least for Davidson) depends on knowing the contents of each other's thoughts. I have argued elsewhere (Sedaghat 2013: 54-57) that this is not the case, and to avoid such circularity, in triangulation cases in which the communicators belong to the same linguistic community, the two persons need only use their words in a manner that is sufficiently similar to the way others in that linguistic community use them. In this way the communicators can know each other's thought-contents through each other's uses of words. In sum, to be able to fix the content of her thought as the same as the second person's, the first person should try to assimilate the uses of the corresponding word (the word which corresponds to her thought whose content is to be determined) to the second person's (or to that of the linguistic community to which the second person belongs). The more the first person succeeds in such assimilation (which results in better linguistic communication), the more similar is her thought-content to those of others (and hence the greater the degree to which her thought-content is determined). So the criterion that must be met to ensure that you have the right (i.e., the same as someone else's) thought-content in each situation is that you be able to linguistically communicate with others regarding what you take to be the cause of your thought, and this communication cannot be effected unless you use the relevant word in a manner that is sufficiently like others' in that linguistic community.

### 3. EMBEDDING TRIANGULATION IN THE CAUSAL THEORY OF REFERENCE

Devitt (1999: 79-81, 90-93) proposes that we should adopt a hybrid theory of reference according to which, in addition to causal contact with the object, certain descriptions also make a contribution to the process of reference determination. In other words, there are reference-determining descriptions whose rebuttal entails reference failure. This conclusion is proposed as a solution to the *qua* problem, which is that in the dubbing ceremony the name giver will encounter an indeterminacy in ref-

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larly in similar situations in which the stimulus exists. The first person is incapable of recognizing this by herself.

erence determination, since the object to which the name giver stands in a causal relation itself falls under different types. For example, Aristotle falls at once under the types *animal*, *human being*, *philosopher*, etc. To escape such indeterminacy, Devitt proposes that the name giver should intend to use the name to refer to that thing *qua* a certain type. For example, Aristotle's parents intended to name their child "Aristotle" under the type *human being*.

Developing Devitt's solution to the *qua* problem, Kroon (1985, 2011) widens the range of permissible reference-determining descriptions in his epistemic warrant theory of reference. According to his theory, the introduction of a term *t* to refer to an object (or natural kind) *O* for the members of a community *P* has epistemic warrant if and only if:

- (1) members of *P* have an interest in *O* that, all things being equal (including the satisfaction of (2)), makes it reasonable to have a referential practice of referring to *O* by a special term like *t*; and
- (2) they have the relevant kind of epistemic access to *O*, that is, have the ability not only to determine that there is such a thing as *O* but also to engage in the pursuit of justified beliefs about *O*.

The first point here is that for Kroon, unlike Devitt, the process of reference determination is a social one through which the introduction, by the members of a linguistic community, of a term to refer to a certain object acquires epistemic warrant. In other words, it is not the case that an individual acquires such warrant and that it is then transmitted by others; rather, the social nature of reference determination makes it a gradual process, and hence no sharp distinction can be made between the reference-determining and reference-borrowing phases. The reason for such socialization, according to Kroon, lies in the second condition quoted above, since the satisfaction of (2) is needed for (1) to be satisfied and thereby for the relevant epistemic warrant to be provided. Two requirements, however, are included in (2), and both must be satisfied for (2) to be satisfied overall.

The first requirement is the requirement of objectivity of referent, according to which the members of *P* should recognize that there is such a thing as *O* to which the term *t* is to refer. But this requirement is not satisfied unless the members of *P* come to have common beliefs regarding that thing, and such common beliefs will not obtain unless the members of *P* have similar epistemic access to that thing. This is why the second requirement, namely the requirement of common beliefs, is included in (2). I replace "justified" with "common" because requiring the members of *P* to have *justified* beliefs seems too demanding. It is, I think, enough simply to require that they have certain beliefs about *O* in common. (Another reason for such a weakening of the account is to bring it closer to Davidson's triangulation thesis, which requires coming to have common, but not necessarily justified, beliefs.) Coming to have beliefs in common with each other regarding a certain thing guarantees in turn the sat-

isfaction of the requirement of objectivity of referent, for unless there is something to which all the members of P have similar epistemic access, there is insufficient consensus among them as regards what is believed about that thing. In contrast to Devitt's proposal, however, the range of reference-determining descriptions is here widened so as to cover all beliefs about that thing which are shared in that linguistic community, including the *qua*-belief (the belief which says *qua* what that thing is commonly considered).

In what follows, I try to show that Kroon has employed a similar triangulation strategy in his epistemic warrant theory of reference. In fact, I try to show that the requirements of objectivity of referent and common beliefs, as deployed in Kroon's theory, are similar to those deployed in Davidson's. Recall that Davidson's second person (where for Davidson the second person is the representative of her linguistic community) also has two main roles: first, providing a standard of similarity of the first person's responses by consciously correlating the responses of the first person with objects and events in the first person's world (which results in part in recognizing that there is such a thing as a stimulus to which the first person is reacting similarly), and second, participating in identifying (for the first person) the stimulus to which the first person is reacting. (As Davidson says, the only way to effect this identification is through linguistic communication; this linguistic communication is needed to come to have beliefs in common with each other regarding that thing.)

So, two philosophical problems (content determination and referent determination) for two philosophers (Davidson and Kroon) appear to be met by a similar solution: triangulating with the linguistic community to satisfy the requirements of objectivity and common beliefs. If this is so, the same thing can be said regarding Kroon's theory: the criterion that must be met to ensure that you have the correct (i.e., the same as others') intended referent in each situation is that you should be able to linguistically communicate with others regarding what you take as the referent of your term. This communication in turn will not hold unless you use the term in a manner sufficiently like others in that linguistic community. In this way, Kroon's theory of reference satisfies the fixing requirement, and hence his theory can explain cases of referent change. If Marco Polo was required not only to intend to use "Madagascar" to refer to the same thing to which Solly, the man from whom he heard "Madagascar", referred with that name, but also to use the term in a manner sufficiently like others in that linguistic community, he would not have made the mistake of taking the African island to be the referent of his term. For usage guides you as to in which situations and in combination with which other terms a term can be applied, and this (at least to an extent) prevents you from such gross mistakes.<sup>3</sup>

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<sup>3</sup> It might be helpful here to compare my solution with that of Devitt, and especially with that of Evans, who originally proposed the problem of referent change and tried to solve it.

Devitt acknowledges the importance of this problem (1999: 75-76) and tries to solve it by appealing to the idea of multiple grounding. The idea is that a name can be grounded in something at

#### 4. CONCLUSION

As noted at the beginning of the present paper, even with the intention requirement embedded in it, the causal theory of reference cannot deal with the problem of referent change. Therefore, I have proposed that an additional requirement, namely the fixing requirement, should be added to the causal theory of reference: the name borrower should fix her intended referent for that name in accordance with the lender's, or more precisely, with that of the linguistic community to which the lender belongs. This fixing guarantees that the borrower does not take a mistaken referent as her intended referent.

One way to satisfy such a requirement is by triangulating with others in that linguistic community to determine the common referent. I have argued that Kroon, in a parallel with Davidson's triangulation thesis, proposes two requirements which must be satisfied for such determination to be effected: the requirement of objectivity and the requirement of common beliefs. As in Davidson's proposal for how to fix the

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the initial dubbing, but for some time onwards it can still be grounded in another thing, which leads to referent change. Thus there is a period of confusion before the new referent becomes well established. In this period, the name *partially* designates each of its old and new referents. The oddity of partial reference aside, the notion of grounding in his account is a purely causal notion, which leaves us with the problem of the indeterminacy of referent. Devitt identified this problem in his discussion of the *qua* problem but does not succeed in overcoming it, for the two reasons given above: firstly, he has limited himself to *qua* descriptions as the only referent-determining descriptions; secondly and more importantly, he does not allow society to enter his account of reference determination.

Evans, on the other hand, gives a similar account of reference determination to the one proposed here and, accordingly, addresses the problem of referent change. The account is as follows:

X is the referent of "NN" if and only if:

- (1) There is a community in which "NN" is used to refer to X;
- (2) It is common knowledge that "NN" is so used;
- (3) The reference in (1) relies on the knowledge in (2) and not on the knowledge that X satisfies some predicates embedded in "NN". (Adapted from Evans 1985)

The crucial difference between my account and Evans's, however, is that in Evans's account the requirement of "using »NN« to refer to X" is satisfied only if X is the dominant source of information which the people of the community associate with "NN" — or, more precisely, only if X plays a dominant causal role in their acquisition of those beliefs (the referent of our current uses of "Madagascar" is the African island because what we know currently about Madagascar is causally related to the African island and not to a portion of the African mainland). This leaves us again with the problem of the indeterminacy of referent because the notion of "using »NN« to refer to X" here too is only a causal and not a causal-epistemic notion. I have tried to overcome this problem by incorporating society into my account and giving a constitutive role to it in reference-determination through linguistic communication in order to fill the epistemic gap. Evans has also incorporated society into his account but has not given a substantial role to it in reference determination. That is why his theory of reference determination, despite the fact that (in contrast with Devitt's) it takes society into account, still suffers from the problem of the indeterminacy of referent. My solution, at least in this regard, is an advance.



common content of thought, Kroon claims that in order to fix the common referent with others, the borrower should make sure that she has beliefs in common with the lender regarding the referent of the borrowed name. What enables them to have such beliefs in common, again like in Davidson's theory, is simply that the borrower has the ability to linguistically communicate with the lender using that name. The greater the extent to which the borrower can linguistically communicate with the lender using that name, the more fully satisfied is the fixing requirement, and thus the closer is the convergence between the borrower's intended referent and that of the lender. Thus, to correctly borrow a word, it is not enough that one simply intends to use that word with the same referent as the lender; one must also be able to linguistically communicate with the lender using that word.<sup>4</sup>

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<sup>4</sup> Here it might be objected that the problem of referent change is a reference-borrowing problem whereas Kroon's theory of reference is addressed at the problem of reference determination. The objection does not hold, at least for our reading of Kroon's theory of reference, since on our reading there is no sharp distinction between the reference-determination and reference-borrowing processes. In other words, for Kroon, it is no longer the case that the referent is first determined and afterwards borrowed. Instead, the referent is determined in the act of being borrowed by linguistic users. In other words, the fixing requirement itself is to link these two processes to each other and thereby make referent-change phenomena more flexible.