

Reply to Lawlor's 'Varieties of Coreference'

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The focus of Krista Lawlor's challenging paper is on cases of confused reference. By way of illustration, she asks us to suppose that 'Wally says of Udo, "He needs a haircut", and Zach, thinking to agree, but looking at another person, says, "he sure does"' (p. 4). Zach is confused, since he takes the person he is looking at to be the same as the person Wally was referring to. This might not be a semantic confusion, which is what I think Lawlor is after, but a straight confusion over the facts. For Zach's primary intention may be to refer to the same person as Wally or, alternatively, to the person he is looking at and he may mistakenly believe that these two people are the same. But let us suppose that Zach means to use 'he' *indifferently* as a pronoun anaphoric on Wally's original use of 'he' and as a pronoun that is deictic on the person he is looking at. We would then have a case of confused reference of the kind Lawlor has in mind.

I suppose it might be doubted whether a semantically competent speaker could use the pronoun in this way. For should he not decide on one use or the other? But consider a slightly different case. I am hosting a party and two of my guests shout, 'John is here', having a different person in mind. I hear the two utterances of 'John' as one utterance and respond by saying 'I hope he brought some wine', taking my use of 'he' to be anaphoric on what I take to be one utterance of the name. There is then confused reference, I assume, but no semantic incompetence.

Lawlor claims that in cases of confused coreference there is no actual coreference. But this is not altogether clear. For one possible view of the Zach-case is that Zach is referring both to Udo *and* to the person he is looking at. There would then be coreference between Zach's use of 'he' and Wally's. But although this is a possible view, it is not one that can plausibly be sustained. For surely Zach's use of the pronoun 'he', if it refers at all, refers to a single person. Indeed, if a use of the pronoun were capable of referring to more than one person,

then what is to stop Zach from using the pronoun to refer to Udo and to the person in front of him, knowing that they were not the same?

So let us grant that in cases of confused reference there is no actual coreference. Lawlor believes that this creates a problem for my view. For, as she writes (p. 4), 'Fine's *strict coreference* implies *coreference*. Zach's utterance internally corefers with Wally's but doesn't strictly corefer, because it doesn't corefer. So it's hard to see how to account for Confusion puzzles, if we start with strict coreference.' Her thought seems to be that in the confusion cases, there is a relationship akin to strict coreference - what she calls 'internal' coreference. But if it is not strict coreference then what, on my view, is it?

Now it turns out that I do give an answer to this question, which she then goes on to discuss. It is that in such cases, it is not a semantic requirement, but a *putative* semantic requirement, that the relevant uses of the pronouns corefer (SR, 126). The notion of being a semantic requirement is factive; if it is a semantic requirement that P then P. Two singular terms are taken to be strictly coreferential if it is a semantic requirement that they corefer.¹ Since the notion of being a semantic requirement is factive, the relation of strict coreference is likewise factive; strict coreference will imply coreference. And it is for this reason that the relation cannot be taken to be the relation of internal coreference.

However, the notion of a putative semantic requirement is not factive; it can be a putative semantic requirement that P even though P is not the case. Suppose we take two singular terms to be *putatively coreferential* if it is a putative semantic requirement that they corefer. Then the relation of putative coreference is likewise not factive; two terms can putatively corefer without coreferring. And so there is no obstacle - or, at least, not the same obstacle - to taking this relation to be the relation of internal coreference in cases of confused reference.

Why, then, does Lawlor object to this account? She has three objections in all. As far as I can see, two of these objections are not to the account as such but to certain consequences of the account, given the rest of my theory. Thus I had suggested that when putative semantic requirements could not be met, there would be a tendency for them to be replaced by requirements that could be met and that, in the case of confused reference, 'failed reference to two ordinary objects' would be replaced by 'successful reference to some sort of amalgam of these objects' (p. 126) I had also claimed that one could be expected to know

¹ Lawlor represents me as wishing to introduce a 'new primitive semantic relation' of strict coreference (p. 2). But, for me, strict coreference is not a semantic primitive but is to be defined in terms of the notion of a semantic requirement. Indeed, names, in contrast to variables, do not require the introduction of a new primitive semantic relation between terms.

the semantic requirements by which one's language is governed (SR, 60-65). But Lawlor argues that the amalgam view will make false predictions and that the 'transparency' claim will not hold in the presence of confused reference. I believe that both of her arguments can be answered. But no matter, since there is no reason why someone who accepts the proposed account of internal coreference need accept these other parts of my view. Thus even if they accepted that there was a putative semantic requirement in these cases, they could deny that it was to be replaced, when it could not be met, by a backup requirement that could be met and, even if they granted that a backup requirement was operative in these cases, they could deny that it took the form of reference to an amalgam.

Her third, and principal, objection is that I cannot provide an adequate answer to the question *What is a putative semantic requirement of coreference?*. For 'we can't get an account of merely supposing or thinking that coreference obtains if we start with the primitive notion of *strict coreference* in thought. For again, strict coreference entails coreference, and so is the wrong place to start in seeking to make sense of merely supposed coreference, which does not' (p. 6). Her thought seems to be that I cannot explain the putative semantic requirement of coreference in terms of thinking that coreference obtains, as I should, since thinking that coreference obtains will require my having a strictly coreferential thought, which would again require actual coreference.²

It is true that I did not say much about putative coreference in the monograph and so let me say a little more right now. We should note first that my account of putative coreference is in terms of the general notion of a putative semantic requirement; for two terms putatively to corefer is for there to be a putative semantic requirement that they corefer. Using '[]' for the operator 'it is a putative semantic requirement that', the definition of putative coreference is:

$$D1. s \approx_{[]} t =_{df} [](s \approx t)$$

This means that any further elucidation of the notion of putative coreference should proceed by way of the operator '[]'.

So how should we explain the notion of a putative semantic requirement? We might take it to be a further primitive. But I am inclined to explain it in terms of the notion of a genuine semantic requirement; for P to be a putative semantic requirement is for it to be taken to be a genuine semantic requirement. Using '□' for 'it is semantically required that' and 'T' for 'it is taken to be the case that', the proposed definition is:

² I myself would prefer to talk of *co-representation* in the case of thought and of *co-reference* in the case of language.

$$D2. []P =_{df} T\Box P.$$

Combining this with the previous definition, we arrive at the following account of putative coreference:

$$D3. s \approx_{[]} t =_{df} T\Box(s \approx t).$$

Two terms putatively corefer if it is taken to be a semantic requirement that they corefer. Alternatively, given that we define strict coreference by:

$$D4. s \approx_{\Box} t =_{df} \Box(s \approx t),$$

putative coreference may be defined by:

$$D5. s \approx_{[]} t =_{df} T(s \approx_{\Box} t).$$

Two terms putatively corefer if they are taken strictly to corefer.

This definition is in the spirit of Lawlor's informal characterization of internal coreference as *supposed* coreference. But the supposition is taken to be not merely one of coreference, which is too weak, but of semantically enjoined coreference. We also see that the definition evades her objection. For even though the thought (or 'taking') that is involved in two terms being putatively coreferential is one of strict coreference, the thought itself is not 'strictly coreferential'. Indeed, the idea of a strictly coreferential thought is not even involved in the definition. Finally, the resulting notion seems to be capable of doing everything she requires of internal coreference—or, if it is not, then I do not see where the problem lies.

Lawlor's discussion raises a larger issue. Corresponding to the factive notion of a semantic requirement is the nonfactive notion of a putative semantic requirement; and, likewise, corresponding to the factive relation of strict coreference is the nonfactive relation of putative coreference. But if, like me, one is inclined to take some notion of semantic requirement as a semantic primitive, then which should it be? The factive or a nonfactive notion? And if, like Lawlor, one is inclined to take some relation of internal coreference as a primitive semantic relation, then which should it be?³ The factive or the nonfactive relation? (Similar issues arise elsewhere in philosophy).

³ Angel Pillinos is someone who - in an unpublished paper, 'Coreference and Meaning' - has also argued for taking the nonfactive relation to be primitive.

I believe that there are a number of considerations that favor the factive option. As we have seen, we may define the nonfactive notion or relation in terms of its factive counterpart. For a putative semantic requirement is one that is taken to be a genuine semantic requirement and putative coreference obtains when strict coreference is taken to obtain. But can we define the factive notion or relation in terms of its nonfactive counterpart? The obvious definition is that a genuine semantic requirement is a putative semantic requirement that obtains ($\Box P =_{df} (\Box (JP \ \& \ P))$) and that strict coreference is a case of putative coreference in which there is actual coreference ($s \approx_{\Box} t =_{df} (s \approx_{\lceil \rfloor} t \ \& \ s \approx t)$). But it is not clear that these definitions are correct (and nor is it clear what might be put in their place).

For take the previous case in which two of my guests shout ‘John is here’; and let us suppose that they use different names (in the sense of having different causal origins) but that, by some strange happenstance, they refer to the very same person. In such a case, it may plausibly be taken to be a putative requirement that my use of ‘he’ should be coreferential with each of my guests’ uses of ‘John’; and presumably my use of ‘he’ is actually coreferential with their uses of ‘John’. However, it is not a semantic requirement that my use of ‘he’ should be coreferential with each of their uses of ‘John’. For there is a general semantic error involved in taking an anaphor to be coreferential with two different names, even when they happen to be coreferential and homophonic; and the existence such an error is not compatible with the satisfaction of *genuine* semantic requirements.

So it looks as if the nonfactive notion or relation can be defined in terms of the factive counterparts, though not vice versa. The factive counterparts also seem to have greater explanatory power. Take a normal case of anaphor - as when ‘he’, say, is anaphoric on the name ‘John’. We would like to explain the fact that the anaphor refers to a particular object on the basis of an internal relation of coreference between the terms and the fact that the antecedent refers to the object; the reference is thereby ‘transferred’ from antecedent to anaphor. We can readily do this using the factive relation. For given that ‘he’ is strictly coreferential with ‘John’, it will follow that ‘he’ will refer to whatever ‘John’ refers to. But we can offer no such explanation in taking the nonfactive notion as primitive. For in cases of confused reference, the antecedent term may refer to a given object and the anaphor may stand in an internal relation of coreference to the anaphor without thereby referring to the object.

Let me conclude by discussing one other criticism Lawlor makes of my view. She writes (p. 3), ‘Fine’s candidate for the cognitive significance of an utterance or thought is a coordinated proposition,’ where

cognitive significance is here taken to be ‘that semantic property, sensitivity to which explains our differential treatment of utterances’. ‘But’, she continues ‘it seems that when Udo thinks ‘Cicero is Cicero’, *the manner in which an equivalence relation treats the two occurrences of the individual Cicero in the proposition that is the object of the belief* is not what’s on Udo’s mind’—which she assumes it would have to be if the cognitive significance of the thought were to be the coordinated proposition.

However, this is not the right way to think of the role of coordinated propositions within my account. As I mention on p. 59 of SR, ‘in saying that ‘Cicero = Cicero’ expresses the positively coordinated proposition that $c = c$, what I am saying is that it is a semantic requirement that the sentence signifies an identity proposition whose subject and object positions are both occupied by the object c .’ Thus the coordinated proposition serves to represent the content of the semantic requirement, not the content signified by the sentence itself. Likewise, when Udo thinks ‘Cicero is Cicero’, the content signified by his thought is simply the identity proposition. But this content is signified in a particular way—the subject and object of the thought are represented as the same—and there is no need for him, in thinking of the content in this way, to think *that* the content is signified in this way.