ARE NECESSARY IDENTITIES EVER DISBELIEVED?*

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ABSTRACT *The purpose of this paper is to bring out, by means of a simple thought experiment involving demonstratives, a discrepancy between what is expressed and what is believed (which contradicts the Theory of Direct Reference), and to consider some consequences of this – most notably, whether we might hold, for example, that the ancients never believed that Hesperus is not Phosphorus.*

Keywords *Necessary identity, Beliefs, Indexicals, Proper names, Direct Reference Theory*

RESUMO *O objetivo deste artigo é apresentar, por meio de um experimento mental simples envolvendo demonstrativos, uma discrepância entre o que é expresso e o que se acredita (o que contradiz a Teoria da Referência Direta), e considerar algumas consequências disso – principalmente se podemos sustentar, por exemplo, que os antigos nunca acreditaram que Hesperus não é Phosphorus.*

Palavras-chave *identidade necessária, crenças, índices, nomes próprios, Teoria da Referência Direta.*

1. Introduction

The purpose of this paper is to bring out a discrepancy between what is expressed and what is believed, and to consider some consequences of this – most notably, whether we might hold, for example, that the ancients never believed that Hesperus is not Phosphorus.

My strategy is to devise, by means of demonstratives, a clear case in which somebody expresses something but (arguably) believes something different by making a (nonlinguistic) mistake about the proposition expressed. In such a case, the agent doesn't believe what she expresses, pace what we should expect direct reference theorists (and perhaps also cognitive externalists) to hold. Indeed, in such a case direct reference theorists (unlike Fregeans) have insuperable difficulties in explicating just *what* believers believe.

2. Multiplicity of Indexical Propositions

Ann raises her left hand at t. Thus, the proposition p, expressed by "Ann raises her left hand at t", is true. Ann had within her power, let us assume, to raise, instead, her right hand at t. Had she done so, the proposition p wouldn't have been true.

Imagine that an agent, call him Speaker, expresses a proposition, call it 'Tist', by first holding a pen in his left hand, saying, "This" (nodding to the pen), then bringing the pen behind his back, saying, "Is identical with", to his right hand, saying, "This" (with a nod).[1] Assuming that Speaker had in his back pocket another, exactly similar pen, he had (we may suppose) within his power to switch the pens behind his back. Had he done so, the proposition Tist would not have been true. Right?

No, the proposition Tist is a necessarily true proposition, and Speaker could not have acted in such a manner that this necessarily true proposition would not have been true. So, it wasn't within his power, after all, to switch the pens? Yes, it was: The solution is, of course, that had he switched the pens, he would not have expressed Tist by his "This ... is ... this" but another, false (and even necessarily false), proposition, call it 'Tisu'.

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1   This thought experiment is adapted from Kaplan, 1989, p. 514.

3. What is Expressed vs. What is Believed

Imagine that another person, call her Hearer, is present when Speaker expresses Tist by means of his demonstrative sentence "This ... is ... this" described above. Hearer thinks, incorrectly, that Speaker switches pens behind his back. Nevertheless, what Hearer hears is of course an expression of Tist. It is even the case that if Hearer utters, simultaneously with Speaker's "This ... is ... this", "That ... is ... that" (with appropriate demonstrations) she herself expresses Tist. (Or so at least holds, in my view plausibly, the proponent of the Theory of Direct Reference, aka the Millian Theory, according to which the semantic function of certain expressions – e.g., proper names, indexicals and demonstratives – is only to pick out an object (referent).)

Hearer *expresses* Tist but does she *disbelieve* it *when* she claims, "What Speaker and I expressed isn't true"?[2] No, I do not think so. What happens here is that Hearer makes a mistake about the demonstrations ("different pens are demonstrated") and, thus, about the proposition Speaker and she herself express, Hearer thinks a proposition of the sort of Tisu (introduced above) is expressed, and it is *this* proposition she disbelieves (instead of Tist). To put this another way: Imagine that Hearer asserts, sincerely, "That ... is *not* ...that". In spite of her asserting this, she does not *mentally* accept what this *in fact* expresses (viz., a necessarily false proposition) – and "mentally" is here crucial as to what she *believes*. She is just mistaken about what she expresses and asserts.

In sum, Hearer does hear and express Tist and does claim, "That's not true", but nevertheless (in so claiming) does not disbelieve this trivially, necessarily true identity proposition. Note that I am *not* appealing to anything like "nobody has contradictory beliefs". The case just presented does not turn on rejection of the well-known consequence of Millianism that somebody may believe that p and also believe that not-p (when the expression of p contains directly referential devices such as demonstratives, indexicals and proper names).[3]

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2   By 'disbelieves p' I mean "believes that not p".
3   Interestingly, developing Russell's (1905) well-known "paradox" about George IV and Sir Walter Scott, Alonzo Church (1988) has come, on logical grounds alone, to a parallel surprising conclusion involving quantifiers:
   For every x and y, if x=y, then George IV does not believe that x≠y.
or, formally,
   $\forall xy(x=y \rightarrow \sim Bx \neq y)$,
where 'Bp' means "George IV believes that p". (Equivalently, "For every x and y, if George IV believes that x≠y, then x≠y", or, "$\forall xy(Bx \neq y \rightarrow x \neq y)$".)
The argument for this is simple: By an application of Leibniz's Law, we have
   $\forall xy(\sim Bx \neq x \ \& \ x=y \rightarrow \sim Bx \neq y)$,
and the conclusion "$\forall xy(x=y \rightarrow \sim Bx \neq y)$" follows directly from this and the (apparently) extremely plausible
   $\forall x \sim Bx \neq x$,

Is this just the hackneyed distinction between "semantic meaning" and "speaker meaning"? No, Hearer is just mistaken about the proposition her "That ... is ... that" expresses – being a Kaplan-style direct reference theorist herself (as we may assume), she hasn't, here or anywhere, a deviant "speaker meaning" for expressions like "That ... is ... that" or "This ... is ... this" (as used with appropriate demonstrations): The *content* of such an expression, she says, is a function from circumstances (possible worlds) to truth values, and its *character* is a function from contexts to contents (Kaplan, 1989, pp. 500-6). We might even say that it is just because Hearer believes that her "That ... is ... that" does not express Tist that she does not here disbelieve Tist.

That Hearer does not disbelieve Tist but believes something else suggests some questions:

> (i) Is the falsity of the proposition Tist *conceivable*? (See Gendler & Hawthorne, eds., 2002.)
> (ii) Is its falsity even *imaginable* – in trying to imagine its falsity, is one bound to imagine some other proposition? (See Kripke, 1980, pp. 102-5, 108-9, 112-5, 126-7, 131-5, 141-4; Yablo, 2006.)
> (iii) Real communication presupposes that the parties involved use the expressions with the same *understanding* – so, do Hearer and Speaker really *communicate* with each other in connection with Speaker's "This ... is ... this"?
> (iv) Disagreement between A and B of the truth of something means that A believes something (some proposition) that B disbelieves – thus, do Speaker and Hearer *disagree* in connection with Tist?[4]

4. Direct Reference Theory

Direct reference theorists (i.e., Millians) have great, or, I believe, insuperable difficulties in explicating what is here the proposition believed by Hearer. Because we can just as well suppose that in our main case Speaker does not have any other pen at his disposal when he does his "This ... is ... this" trick, the proposition believed by Hearer cannot be, for example, a Russell-Kaplan singular proposition: there simply isn't a second pen that could serve as a component in such a proposition.[5]

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or, "For every x, George IV does not believe that x≠x".

4   Let there be another hearer, Believer, who believes, correctly, that Speaker did not switch any pens. Do Hearer and Believer disagree, that is, is there a proposition (about the pen(s?)) one of them believes whereas the other disbelieves? Do they communicate with "That ... is ... that"?

5   This may be compared to the case with a very skillful pickpocket standing behind Speaker. When Speaker is about to bring the pen from one hand to another, the pickpocket replaces that pen with another without Speaker noticing it. Then, I gather, by his "This ... is ... this" Speaker expresses the necessarily false Tisu while believing the necessarily true Tist. Direct reference theorists do not have in this case any trouble with identifying the relevant propositions.

Could it be that the proposition believed should be understood in something like a Fregean manner – after all, Frege did relate his notion of a *Gedanke* to "cognitive significance" and it would, accordingly, be fitting to resort to Fregean *Gedanken* when we are dealing with what is believed, even if we didn't do so when we are dealing with what is expressed? Such an approach would mean something like a two-theory account of content: Millian for what is expressed, Fregean for what is believed.

Something like this appears to be attempted in (some versions of) *two-dimensional semantics*. According to David Chalmers (2002, 609), an expression's *epistemic intension* "pick[s] out a thought or concept's extension across the space of *epistemic* possibilities". As a "quick illustration", Chalmers (*ibid.*) gives the following:

> [F]or my concept *water*, the epistemic intension picks out H_2O in our world (the Earth world), and XYZ in a Twin Earth world. This reflects the fact that if I accept that my actual world is like the Twin Earth world (i.e., if I accept that the liquid in the oceans is and has always been XYZ), I should accept that water is XYZ.

I have no truck for this sort of view, for it seems clearly impossible that thinking of XYZ could ever be thinking of water (even though there may be cases in which a subject expresses something about water while believing it not to be about water). As applied to the main thought experiment in the present paper, the two-dimensionalist would say, I gather, that in (or with respect to) the "Two-Pen World" – i.e., the world Hearer mistakes for the actual world – Hearer expresses a falsehood by her utterance "That ... is ... that": this falsehood is just the epistemic intension of her utterance. Again, to my mind this is erroneous because there are no worlds in which what Hearer *does* express by "That ... is ... that" is false (no more than there are worlds such that water is not H_2O, cf. Note 6 below). Perhaps a more transparent way to bring home my main claim about expression and disbelief is as follows: It is not true of the proposition Hearer expresses by "That ... is ... that" that she disbelieves *it*. It is irrelevant to this fact that Hearer might disbelieve some *other* proposition in some other circumstances. In any case, my concern in this paper is not what Hearer, for example, believes or disbelieves, but to argue for the surprising claim that necessarily true identities are never disbelieved.

5. Externalism

Another implication of the present case concerns a doctrine that has been propelled by the Direct Reference Theory, viz., *externalism*, or (roughly) the

view that content is dependent on the environments of speakers in such a way that speakers and thinkers are not in general the best authorities about what they say or think (or believe). It seems to me that externalists sometimes move too quickly from *linguistic* or *semantic* externalism to *cognitive* or *mental* externalism: due to various externalities (with respect to their minds), speakers are not always the best judges of what they in fact express, thus (it is inferred), they are not always in a position to determine what they think or believe, either. The present case (as far as it goes) shows that even though even linguistically fully competent speakers may, indeed, fail to know what they express (linguistic externalism), they need not by any means believe what they in fact (assertively) express (i.e., cognitive externalism does not follow).

6. Extension to Proper Names: The Ancients Didn't Believe that Hesperus is not Phosphorus?

Speaker expresses a true proposition, call it 'Eisf', by the following: "This (nodding to a pen in his left hand), let's call it 'Es' ... is identical with (moving the pen behind his back) ... this (nodding to the same pen in his right hand), let's call it 'Fos'". Hearer is still present, with the same attitude as earlier: "Speaker has two pens and he switched them." Accordingly, it seems that by "Es is identical with Fos" Hearer expresses Eisf but doesn't disbelieve it when she claims, "That's not true". (Proper names are, in respects relevant to the Theory of Direct Reference and externalism, similar to indexicals, including demonstratives.)

Now, it can be argued that, by the same token, the ancients never disbelieved the proposition that Hesperus is Phosphorus. Imagine a very sophisticated (and cautious) ancient direct reference theorist who reasons as follows (let's pretend that he spoke English):

> I believe that what we in this Greek community refer to by 'Hesperus' is not the same as what we refer to by 'Phosphorus'. If, however, it is in fact the case that I am wrong about this, then, as against to what I believe, "Hesperus is Phosphorus" (as we use it) *expresses* a necessarily true proposition, call it 'Hisp'. Be this as it may, I most certainly don't presently *disbelieve* Hisp but disbelieve some other proposition in connection with "Hesperus is Phosphorus". I might even say that it is just because I believe that "Hesperus is Phosphorus" does not express Hisp, I do not disbelieve Hisp.[6]

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6   An anonymous referee of this journal suggested, (i), that worries raised in this paper could be answered by applying Robert Stalnaker's well-known diagonalization approach (or, in general, the so-called two-dimensional semantics, cf. Section 4 above), according to which it is a contingent fact that an utterance of the sentence "Hesperus is Phosphorus" – or the sentence itself – is necessarily true, and, (ii), that on this approach "it

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would have seemed much less troublesome that the Hearer disbelieves the necessarily true proposition she actually expressed".

As for (ii), as I indicated in Section 3, I am not appealing to the (alleged) troublesomeness of "believing the impossible", such as the negation of what is necessarily true. (What is more, I do not in fact regard "believing the impossible" as problematic in connection with directly referential devices.)

As for (i), in a typical presentation of the (alleged) contingency, one is invited to imagine some other possible world, let's call it Mars-world, in which Mars appears in mornings where Venus actually appears, and in which thinkers, while referring by 'Hesperus' to Venus and by 'Phosphorus' to Mars, are in exactly similar epistemic position as are users of 'Hesperus' and 'Phosphorus' in the actual world (Stalnaker, 1978; 1987, pp. 123-7; 2006, p. 295). However, there are strong reasons to deny this alleged contingency, or at least regard it as irrelevant. One may, of course, say that the Mars-world utterance is "the same" as the actual utterance, or even that the same sentence is used actually and counterfactually, *if* one classifies utterances and sentences equiformally, i.e., orthographically or phonologically (cf. Stalnaker, 1987, p. 126: "If Daniels were to utter the *sounds* he is uttering in a possible world compatible with O'Leary's beliefs, what would the content of those sounds be?"; my emphasis). However, the Mars-world name 'Phosphorus', referring to Mars, is not *our* name 'Phosphorus': our name refers to Venus even with respect to Mars-world. Equiform names of different things – and thereby also sentences containing these names – must be regarded as semantically distinct (see, for instance, Kripke, 1980, p. 8; Kaplan, 1989, p. 562; Bealer, 2002, p. 100n34). Accordingly, both 'Phosphorus' and "Hesperus is Phosphorus" as used in Mars-world are semantically distinct from our 'Phosphorus' and "Hesperus is Phosphorus". An utterance of the pattern "Hesperus is Phosphorus" in Mars-world is not an utterance of what is semantically our sentence "Hesperus is Phosphorus"; the Mars-world name 'Phosphorus' refers to Mars and not to Venus, and the Mars-world sentence "Hesperus is Phosphorus" is about both Venus and Mars and is thus irrelevant to the modal status of our "Hesperus is Phosphorus", which is only about Venus. This appears to be Kripke's (1980, p. 109n51) position as well:

"Recall that we describe the situation in our language, not the language that the people in that situation would have used. Hence, we must use the terms 'Hesperus' and 'Phosphorus' with the same reference as in the actual world. The fact that people in that situation might or might not have used these names for different planets is irrelevant."

(See also ibid., pp. 7-10 and pp. 102-5, and cf. Maunu, 2018.)

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