CONTRA BEALER'S *REDUCTIO* OF DIRECT REFERENCE THEORY

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Abstract

Bealer, in a 2004 paper, presents an argument that he takes to be a *reductio* of what he argues to be the most favourable interpretation of identity sentences available to direct reference theory. We argue that his argument fails. If the dummy mode-of-presentation operator Bealer introduces induces extensional contexts then the argument is a trivially valid *reductio*, since its only premise is identical to the conclusion. But it is untenable that the operator should be extensional. If the operator is intensional then the argument comes out invalid, and so there is no *reductio*. Either way, the advocates of direct reference theory are at liberty to reject Bealer's interpretation, since it is self-contradictory.

Introduction

In (2004) Bealer presents an argument that he takes to be a *reductio* of what he considers the most favourable interpretation of identity sentences available to direct reference theory. In this paper we wish to show why Bealer's argument is not quite the confutation he assumes it to be of how direct reference theory interprets identity sentences. Our critique of Bealer's argument should not be taken to be an indirect defence of direct reference theory, though. In fact, we agree that none of the several other interpretations of identity sentences Bealer attributes tentatively to direct reference theory is convincing.

Our objection to Bealer's argument is twofold. The first objection is this. Taken one way, the argument qualifies as a valid *reductio*, though one that contains a premise that the proponents of direct reference theory are free to reject as an adequate interpretation of their stance on identity sentences. Bealer's interpretation is presented as being a 'quite natural' (*id*., p. 590) way of spelling out the allegedly literal truth allegedly conveyed by a literal falsehood. But this 'quite natural' way is only make-believe, for it is itself a
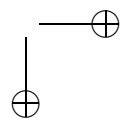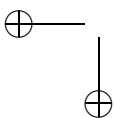
falsehood (because an inconsistency), hence cannot be the literal truth that is supposed to be made explicit (and so is far from being a 'quite natural' interpretation). Nobody, however, should be expected to accept a false (let alone inconsistent) proposition as an adequate interpretation of their position.

The *notation* Bealer deploys when formulating his *reductio* makes it seem as though there were substantial (i.e., propositional) differences where there are, in fact, only notational (i.e., sentential) ones. The trick of the *reductio* is namely that the notation of the premise representing the interpretation is designed to conceal the inconsistency that is evident from the notation of the conclusion. Had the notation in which the conclusion is couched been used in both places, it would have been obvious (*a*) that the conclusion is identical to one of the premises, (*b*) that the *reductio* is, therefore, trivially valid, and (*c*) that the relevant premise is inconsistent.

Therefore, Bealer's dialectic task is to make the proposition when occurring as premise appear attractive enough for the friends of direct reference to regard it as true, while in fact it is false. But the intended *reductio* of direct reference theory (as far as identity sentences go) fails as soon as the premise is, rightly, rejected as being false. The *reductio* fails not because it is logically flawed (for it is not), but because it is philosophically *irrelevant* to whatever may be the (best) direct-reference analysis of identity sentences.

The second objection is this. If the dummy mode-of-presentation operator Bealer introduces as part of the 'quite natural' interpretation induces referentially transparent contexts then the argument is a trivially valid *reductio*, since an inconsistent proposition is being substituted for itself. In case this is Bealer's argument then the first objection kicks in. Yet it is hard to believe that the operator would induce transparent contexts, for modes of presentation are obviously not extensional entities. If the operator induces referentially opaque contexts then the argument comes out invalid, and so there is no *reductio*. Bealer barely argues for the extensionality of the operator. The argument he does offer trades on running the semantic issue of the reference relation of directly referring terms together with the issue of the transparency or opacity of contexts. Though related, one issue is how and what supposedly directly referring terms refer to, another issue is what substitutions in what contexts go through and which do not. We sketch two notions of opacity. One notion is a logical one to do with co-referential terms not being validly substitutable in opaque contexts. The other is a pragmatic or epistemological one to do with a competent language-user rationally failing to assent to substitution of co-referential terms without loss of linguistic competence. We argue that the latter notion is the one needed for Bealer's *reductio*.

However, whether extensional/transparency-generating or intensional/opacity-generating, mode-of-presentation operators do not sit well with operands boasting directly referring terms. Despite Kaplan permitting the reference relation of directly referring terms to be mediated by modes of presentation (which must be of a non-Fregean kind, though), the latter are not part of the syntax or semantics of the former. Their semantics reduces to terms 'directly' picking out objects, with no mention of mediating entities in their syntax.[1] Says Kaplan:

> The semantical feature that *I* wish to highlight in calling an expression *directly referential* is not the *fact* that it designates the same object in every circumstance, but the *way* in which it designates an object in any circumstance. Such an expression is a *device of direct reference*. This does not imply that it has no conventionally fixed semantical rules which determine its referent in each context of use; quite the opposite. There are semantical rules which determine the referent in each context of use — but that is all. *The rules do not provide a complex which together with a circumstance of evaluation yields an object. They just provide an object.*
>
> (1989, p. 495.)

Yet Bealer's mode-of-presentation operator figures explicitly in the syntax. So, again, the proponents of direct reference theory would be entitled to maintain that Bealer's interpretation of how their theory accounts for identity sentences involving directly referring terms is irrelevant to their actual theory.

In the following we first present Bealer's *reductio* and then spell out our two objections in more detail, concluding that Bealer does not have much of a case, if indeed any, against how direct reference theory construes identity sentences.

1. *Bealer's* Reductio

Assume that in today's astronomy class you learnt that Hesperus is Phosphorus. Your notes contain the entry

$$\text{"Hesperus} = \text{Phosphorus"} \qquad (*)$$

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[1] See Martí (1995) for a discussion of various notions of *direct* reference.

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Enter direct reference theory. It holds that 'Hesperus' and 'Phosphorus' are two Kripke-style proper names that refer to one and the same individual: Venus. The theory also holds that the sentence (*) expresses a Russell-style singular proposition, the constituents of which are one occurrence of the identity relation and two occurrences of Venus alias Phosphorus alias Hesperus.

It remains an open question exactly what singular propositions are and how to model them in accordance with direct reference theory. Even if we join direct reference theory in representing singular propositions as (though perhaps without identifying them with) ordered n-tuples, it is not obvious exactly what are their elements or what is the order among them (*id.*, p. 584). This need not detain us here, though, so let us just assume that there is a singular proposition expressed by (*), consisting of the identity relation and two occurrences of the same individual. The individual bears at least three different names, 'Venus', 'Phosphorus', and 'Hesperus'. If singular propositions are represented as/identified with ordered n-tuples, the following eight formulae name or express the same singular proposition:

"<=, Venus, Venus>"
"<=, Phosphorus, Phosphorus>"
"<=, Hesperus, Hesperus>"
"<=, Venus, Phosphorus>"
"<=, Venus, Hesperus>"
"<=, Hesperus, Phosphorus>"
"<=, Hesperus, Venus>"
"<=, Phosphorus, Venus>".

Since the three names co-denote the object o and the sign '=' denotes = (i.e., the relation of identity between individuals), we identify the relevant singular proposition with (**):

$$<=, o, o> \qquad\qquad\qquad\qquad (**).$$

Bealer then raises the question:

How, if $a = b$, can the proposition that $a = a$ and the proposition that $a = b$ be different? (*Id.*, p. 575.)

Well, they just cannot, if $a = a$ and $a = b$ are the proposition that a is self-identical. (Remember that "the proposition that $a = a$", "the proposition that $a = b$", "the proposition that a is self-identical" and "the proposition that b

is self-identical" are but four *names* of the same proposition: they are not the proposition itself.) Yet what you learnt in astronomy class was certainly not that Venus, under whatever name or none, is self-identical. So (**) cannot be the right proposition to be matched off with (*). Yet the matching of (*) with (**) is entailed by the adoption of Kripkean names and Russellian propositions. As Russell observed long ago,

> [I]f... '*c*' is a name for Scott, then the proposition [expressed by "Scott is *c*"] will become simply a tautology. It is at once obvious that if '*c*' were 'Scott' itself, 'Scott is Scott' is just a tautology. But if you take any other name which is just a name for Scott, then if the name is being used *as* a name and not as a description, the proposition will still be a tautology.
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> (1953, p. 245.)

Since 'Hesperus', 'Phosphorus' are 'just' two names for *o*, 'Phosphorus' is semantically indistinguishable from 'Hesperus' and, as it were, evaporates during the transition from sentence to proposition. Any vocabulary that already boasts 'Hesperus' renders 'Phosphorus' redundant, and *vice versa*. (And a vocabulary containing 'Venus' makes both redundant.) But then, how is the direct reference theorist to conceptualize the non-trivial snippet of information that you picked up in astronomy class and could not have learnt either in linguistics or logic class?

Bealer investigates a series of options available to direct reference theory, turning them down one after the other. The last option is announced as being 'quite natural' and 'the most promising' one available to direct reference theory (*id.*, p. 590) — only to be buried seconds later as suffering from 'a fatal flaw' (*id.*, p. 591). The hoped-for benefit to be reaped from this option is that the following two claims should turn out to be compatible. (*a*) Yes, (**) is the trivially true proposition expressed both by "Hesperus = Hesperus" and "Hesperus = Phosphorus"; (*b*) but what you learnt in astronomy class was (**) under one mode of presentation though not under another.[2] This cohabitation strategy seeks to bring together under one hat a literal *falsehood* (namely, that the proposition that Hesperus is Hesperus is distinct from the proposition that Hesperus is Phosphorus) and a pragmatically conveyed *truth* (namely, that you may learn this one proposition under one presentation without learning it under another).[3]

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[2] See Richard (1990, pp. 136ff) for an elaboration of this point within the confines of direct reference theory.

[3] See Bealer (*id.*, §II).

How are we to express, in exact terms, this *truth* that is pragmatically conveyed in a way that is literally *false*? Bealer's answer, on behalf of direct reference theory, is this:

> Suppose that m is a mode of presentation similar to 'Hesperus = Hesperus' and m', a mode of presentation similar to 'Hesperus = Phosphorus'. The proposal is to . . . treat 'Under modes of presentation m and m', respectively,' as a kind of *sentential operator* $U_{m,m'}$ that operates on ordinary identity and nonidentity sentences. In conversation, then, when one utters ["the proposition that Hesperus = Hesperus and the proposition that Hesperus = Phosphorus are *not* identical"], which is literally false. . . , the true thing one would be saying conversationally would be:
>
> > Under modes of presentation m and m', respectively, the proposition that Hesperus = Hesperus and the proposition that Hesperus = Phosphorus are not identical. (*Id.*, p. 590.)

The introduction of modes of presentation is to no avail, however. Bealer's *reductio* is to the effect that the introduction of two different such presentations does not preserve from inconsistency the proposition that the proposition expressed by "Hesperus = Hesperus" is distinct from the proposition expressed by "Hesperus = Phosphorus". The *reductio*, in Bealer's own notation, is this:

(i) $U_{m,m'}([H = H] \neq [H = P])$

(ii) $\underline{q = [H = H] \land q = [H = P]}$

(iii) $U_{m,m'}(q \neq q).$

(i) is supposed to be the literal truth, "Under modes of presentation m and m', respectively, the proposition that Hesperus = Hesperus and the proposition that Hesperus = Phosphorus are not identical" conversationally conveyed by the literal falsehood, "The proposition that Hesperus = Hesperus is distinct from the proposition that Hesperus = Phosphorus". (ii) introduces 'q'; *via* substitution of 'q' for "$[H = H]$" and "$[H = P]$" in the context "$U_{m,m'}(\ldots)$", the inconsistency "$U_{m,m'}(q \neq q)$" ensues in (iii). The validity of the substitution presupposes that $U_{m,m'}$ be an extensional operator, and Bealer in effect introduces it as such (*id.*, p. 591, n. 29). Since we cannot blame the inference of (iii) either on the (tacit) rule of substitution or on the innocuous premise (ii), the culprit must be premise (i), which is therefore unmasked as being false.

Bealer goes on to heap scorn on (iii):

> But I really do not understand what this is supposed to be saying!
> ... What relevant action of ... $U_{m,m'}$ could possibly turn '$q \neq q$'
> into a true sentence ... ? I just do not get it. (*Id.*, p. 591.)

However, we need not rack our brains about how to make sense of "$U_{m,m'}$ $(q \neq q)$". (iii) *is* false, for sure, but so is (i), if (ii) is true; and (ii) is an unproblematic triviality given how direct reference theory construes names and propositions. Since (ii) is trivially true, (i) can be no other proposition than (iii), despite the fact that it is encoded in two syntactically different manners. From this it follows that (iii) means whatever (i) means, and Bealer just told us in the quotation above what (i) means. It also follows that (i), (ii), (iii) is a trivially valid argument in which the conclusion is identical to the first premise.

2. *First Objection*

What drives the *reductio* is the fact that Bealer uses two (in fact, three) pieces of notation for one and the same proposition: '$[H = H]$', '$[H = P]$' (and 'q'). But we are allowed, in logical syntax, to discard all redundant notation. So (i) can be rewritten in several manners, including:

(i.i)   "$U_m[H = H] \neq U_{m'}[H = H]$"
(i.ii)   "$U_m[P = P] \neq U_{m'}[P = P]$"
(i.iii)   "$U_m q \neq U_{m'} q$".
(i.iv)   "$U_m[o = o] \neq U_{m'}[o = o]$".

We find it more perspicuous if 'U_m', '$U_{m'}$' are prefixed directly to the sentences they operate on. (i.i) and (i.ii) render (ii) (which merely serves to introduce 'q' to blot out the notational difference between "$[H = H]$" and "$[H = P]$") superfluous. From (i.i), (i.i) follows: similarly for (i.ii), (i.iii), (i.iv), respectively. This fact is blurred in Bealer's argument by employing two different notational guises. The use of different notational guises for the same proposition is essential to Bealer's argument, however, because otherwise (i), (ii), (iii) would collapse into (i.i), (i.i) or (i.ii), (i.ii) or (i.iii), (i.iii) or (i.iv), (i.iv). Amidst such a collapse, nobody in their right mind would regard the first premise as true.

It is illustrative to rewrite Bealer's *reductio* using the same symbol, 'q', for (**), as in:

(i.iii) $U_m q \neq U_{m'} q$

(ii.i) $q = q \land q = q$

(iii.i) $U_m q \neq U_{m'} q$

Evidently, (i.iii) is self-contradictory, (i.iii) and (ii.i) are mutually incompat-
ible, and (iii.i) is identical to (i.iii). We may leave out (ii.i), since it is the
triviality that q is identical to itself. The identity between the premise (i.iii)
and the conclusion (iii.i) explains why the argument is trivially valid, being
an instance of self-implication.

It is revealing, therefore, that $U_{m,m'}$ is explicitly introduced as a *senten-
tial* operator rather than a propositional one. Its operands "$[H = H]$" and
"$[H = P]$" are distinct sentences (sentence types), so the inconsistency
"$U_{m,m'}[H = H] \neq [H = P]$" cannot be read off of the notation; (ii),
together with substitution, is needed to engender the explicit, or 'formal',
inconsistency "$U_{m,m'}(q \neq q)$". On the other hand, if $U_{m,m'}$ were replaced
by some *propositional* operator $U^*_{m,m'}$, the same operand would occur twice
over (once as governed by U^*_m and once by $U^*_{m'}$) and the 'relevant action'
of $U^*_{m,m'}$ would be immune to differences in notation. To be sure, the in-
consistency would not spring from the page, in case two different formulae
were employed. But once it was realised that the formulae co-denote, or co-
express, the same proposition, the inconsistency would be obvious, and (ii)
and substitution would not be needed.

Bealer's argument is formally an impeccable *reductio*, albeit an extreme one
in which a self-contradictory proposition occurs both as premise and con-
clusion. We may well wonder, though, what the point might possibly be of
putting forward an argument of the form

$$\frac{A_1, \dots, A_n}{A_i}$$

for $1 \leq i \leq n$.

This question takes us to the dialectics that Bealer's argument is embedded
in. The first step of Bealer's argumentation is to convince the friends of
direct reference that premise (i) is the best formal interpretation of identity
sentences available to their theory. The second step is to show that (i) con-
joined with the remaining premises entails an inconsistency. The third, and
last, step is to reject (i) on the basis of this *reductio*, having as a consequence
that direct reference theory is left without a theory of identity sentences.

The problematic step is the first one, because we are supposed to embrace an inconsistency. The second step is trivial due to self-implication. The third step is automatic, as soon as we accept *reductio ad absurdum* as a valid manner of reasoning. So let us concentrate on the first step. As we noted above, Bealer attempts to make the premise look palatable by dressing it up in a notation that both conceals the inconsistency and appears to be an adequate translation into logical notation of a formulation in English of the allegedly best theory of identity sentences available to direct reference theory. Bealer deploys a different notation for the same proposition when figuring as conclusion because, as said above, the inconsistency now needs to be explicit.

However, the direct-reference camp can easily blunt the impact of the *reductio*. The formula, "$U_{m,m'}([H = H]) \neq [H = P])$" can be read in no other way but as equivalent to, "$U_{m,m'}([H = H]) \neq [H = H])$", on the direct-reference interpretation of 'H', 'P' as two names for the same individual. So the formula is inconsistent. But it is hard to take it seriously that the formula, so understood, could possibly be the literal *truth* conveyed by some literal *falsehood*. Therefore, the direct-reference camp has no reason to accept, "$U_{m,m'}([H = H]) \neq [H = P])$" as an adequate interpretation and formalization of their stance. In fact, its inconsistency gives them the strongest possible reason for *rejecting* it.

Bealer would have had a much stronger case against direct reference theory if the interpretation of true identity sentences that he attributes to the theory had been instead a consistent proposition which together with other consistent propositions issued in an inconsistency. This would have demonstrated that a set of tenets belonging to direct reference theory, whilst individually plausible, was inconsistent and that at least one of the tenets would have to go.

3. *Second Objection*

To preview our second objection: if $U_{m,m'}$ is construed as a sentential operator, it must generate opaque contexts; and, conversely, if $U_{m,m'}$ is supposed to generate transparent contexts, then it cannot be a sentential operator.

Bealer would like to treat $U_{m,m'}$ as being a sentential as well as an extensional operator. What our first objection demonstrates is that if $U_{m,m'}$ is viewed as operating on sentential arguments, then points made about the sentences it governs may be surreptitiously carried over to the propositions

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expressed or denoted by these sentences. This is, of course, both mislead-
ing and inappropriate. Yet Bealer's *reductio* trades heavily precisely on this
confusion between sentences (formulae) and propositions.

What about the purported extensionality of $U_{m,m'}$? Bealer is pretty much
content to merely assume his dummy operator to be extensional. What he
does offer by way of argument is condensed into a brief footnote:

> Does $U_{m,m'}$ generate a referentially opaque context? No, not ac-
> cording to direct reference theories: the reference of a proper name
> occurring in an otherwise opaque context is, strictly and literally,
> never opaque but instead is always 'direct'. (*Id.*, p. 591, n. 29.)

This argument is weak. It confuses the semantic issue of the reference rela-
tion of directly referring terms with the pragmatic and epistemological issue
of a language-user's command of a term as it occurs in this or that sort of
context. The opposite of being *direct* is being *mediated*, not: being *opaque*;
the opposite of being *opaque* is being *transparent*, not: being *direct*. The ref-
erence relation of a directly referring term is not torn between being opaque
or being direct, for it is obviously the latter, since for want of alternative
referents reference shift is not an option. What is an option is that, while a
directly referring term's reference relation remains unscathed, a language-
user may lose track of what the term's referent is. This is the notion of
opacity that suits Bealer's purposes, as we show below.

In general, there are various ways of construing the opacity of contexts.
There are Frege-like approaches according to which opacity-inducing op-
erators shift the reference of expressions occurring within their scope. This
is a logical or semantic notion of opacity. Obviously, this notion is not an
option for the proponents of direct reference theory and, therefore, would
be futile had Bealer invoked it in his critique. On the other hand, linguistic
contexts are sometimes treated as being opaque in case a competent speaker
of a given language declines to accept a substitution of co-referential terms
in such contexts, because he fails to realize that they are co-referential. This
is a pragmatic or epistemological notion of opacity, pivoted as it is on the
speaker's assent to or dissent from substitution. If Bealer's argument is to
bear on direct reference theory, this is the notion of opacity he wants. This
notion does not require reference shift on the part of expressions occurring
in the contexts governed by this sort of opacity-generating operators. So
this notion of opacity is open to the proponents of direct reference theory.
It just points to something fairly simple, namely that a competent speaker
of a given language need not be in a position to 'see behind' the term and

grasp what the term refers to in some particular kind(s) of context. A term can be directly referring, while at the same time some contexts may generate opacity in this pragmatic and epistemological sense.

Of course, the advocate of direct reference theory deciding to adopt this notion of opacity has to explain how it is possible that a speaker of a given language may at the same time qualify as competent and be entitled to dissent from the substitution of co-referential terms within such contexts. Here is a sketch of a possible answer available to direct reference theory. By 'being a competent speaker with respect to 'Hesperus'' is meant that the speaker grasps the 'disquotational' sentence "'Hesperus' refers to Hesperus".[4] Similarly, we have such disquotational sentences at our disposal for all proper names, and we may admit that a speaker is competent as soon as he grasps and accepts them as guiding his usage of the relevant proper names.

It is important to realize that the speaker may, without infringing his competence with respect to 'Hesperus', fail to grasp the sentence "'Hesperus' refers to Phosphorus". The reason is because "'Hesperus' refers to Phosphorus" is not *homophonic*. What we need are homophonic disquotational sentences because such sentences embed the semantic conventions regulating a given name without assuming that the speaker knows, for example, all names synonymous with it. (For the sake of argument, 'Hesperus' is treated as being synonymous with 'Phosphorus'). In this sense the speaker is imperfect in a vast number of cases. Had the speaker been perfect, mastering all the synonyms of a name he does master, he could not master "'Hesperus' refers to Hesperus" without, *ipso facto*, mastering "'Hesperus' refers to Phosphorus".[5] The sentence "'Hesperus' refers to Hesperus" captures, in the meta-language, the piece of information the speaker has about the object-language name 'Hesperus'. What we claim is that the speaker is competent, as soon as he is capable of applying disquotation; that is, he must know that the name referred to by the left-hand term "Hesperus" refers to the object referred to by the right-hand term 'Hesperus'. He need not know that the former refers to the object referred to by the term 'Phosphorus'. Put differently, you may be competent (knowing that 'a' refers to a) without being perfect (not knowing that 'b' denotes a, for any 'b' co-referential, or even synonymous, with 'a'). Just for the record, it follows from linguistic competence being couched in terms of homophonic disquotational sentences that

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[4] Disquotational sentences of this kind are deployed in McDowell (1977).

[5] Perfect speakers are theoretical idealizations of a sort; therefore, they can be also labelled 'ideal speakers'. See Zouhar (2010) for an attempt to motivate and develop a more elaborate notion of a perfect (i.e., ideal) speaker.

the inverse case — mastering "'b' refers to a" without mastering "'a' refers to a" — is not compatible with possessing linguistic competence with respect to 'a'.

It might be objected that the recourse to homophonic disquotational sentences trivializes the notion of linguistic competence. It does not, though. First of all, homophonic disquotational sentences indicate, *inter alia*, also the kind of relation the term named on the left-hand side bears to the object named on the right-hand side. The term 'Hesperus' is presented as *referring to* the object Hesperus. So it seems that the speaker, in mastering "'Hesperus' refers to Hesperus", knows also that he knows that 'Hesperus' is a proper name and knows also what kind of semantic relation is involved. This notion of linguistic competence is compatible with direct reference theory and tallies neatly with the notion of opacity that it would be reasonable for Bealer to attribute to the theory when setting up his *reductio*.

Back to Bealer's mode-of-presentation operator. Here is a simple argument for viewing the sentential operator $U_{m,m'}$ as opacity-generating. A standard criterion enables us to decide whether an operator generates opaque contexts or not: an operator generates opaque contexts, provided it does not enable substitution of co-referential terms within these contexts *salva veritate*. And it is usually assumed that a competent speaker of a given language is qualified to decide whether substitution along these lines is valid. Modes of presentation are used here to capture a speaker's perspective on a given sentence. So, let us imagine a competent speaker and ask whether it is possible for him to dissent from replacing 'Phosphorus' for an occurrence of 'Hesperus' in the sentence

"U_m (Hesperus = Hesperus)"

where U_m is a sentential operator capturing a particular perspective of the speaker on the sentence "Hesperus = Hesperus". Now assume the speaker to be competent with respect both to 'Hesperus' and 'Phosphorus'; this assumption means that he is capable of using these terms in various utterances in various contexts and of understanding others' utterances in various contexts as well. Yet we may consistently assume that he is not willing to assent to the suggested substitution, because his assent would require more than mere linguistic knowledge of the relevant semantic conventions. The additional requirement is that the speaker should possess enough astronomic knowledge to know that Hesperus is Phosphorus. This means that while assenting to the sentence

"U_m (Hesperus = Hesperus)"

he may dissent from the sentence

"$U_{m'}$ (Hesperus = Phosphorus)".

While the direct reference theorist may rationally defend this position, he needs to provide a persuasive epistemology of natural language in order to provide a *modus vivendi* allowing directly referring terms to co-exist with at least some contexts being opaque. We are just trying to demonstrate here that one should carefully distinguish the referential relation between terms and objects from speakers' knowledge of the referential relations of such terms. Bealer's argument for the opacity of $U_{m,m'}$, on the other hand, ignores this difference, which is why we deem his argument for treating $U_{m,m'}$ as generating referentially transparent contexts dubious.

Thus, it is reasonable to regard U_m, as well as $U_{m,m'}$, as opacity-generating operators, provided they govern sentences. The reason is that it is *possible* for a speaker to dissent from substituting co-referential terms within the contexts prefixed by U_m. For U_m directs the speaker's attention to the words occurring after this operator rather than to their meaning or reference.

Now, things would be different had U_m, and $U_{m,m'}$, instead directed the speaker's attention to the meanings or references of the words occurring within the scope of the operator. Given that 'Hesperus' and 'Phosphorus' refer to the same object, o, it would be impossible for the speaker to reject substituting one term for the other within the contexts governed by U_m so construed, because the terms are semantically indistinguishable. The speaker would be in the same epistemic position when faced with the proposition

U_m (Hesperus = Hesperus)

as when faced with the proposition

U_m (Hesperus = Phosphorus).

The language-user would view U_m as applying to the singular proposition $<=, o, o >$, which involves the identity relation and two occurrences of the same object.

Of course, this would mean that U_m would no longer be a sentential operator but a propositional one, i.e. the operator U_m^* introduced in the previous section. Hence, in order to accommodate transparency as required

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by Bealer's *reductio*, one has to treat the mode-of-presentation operators as propositional. On the other hand, if such operators are to be sentential, as is also required by Bealer's *reductio*, they need to generate opacity in order to be relevantly different from their propositional counterparts, which generate transparency.

The lesson is simple. $U_{m,m'}$, in its capacity as opacity-generating operator, cannot be used by Bealer to develop his *reductio*. His *reductio* requires substituting co-referential terms — in particular, terms referring to propositions — *salva veritate*. However, the opacity-generating operators cannot guarantee the *salva veritate* clause, so Bealer's argument comes out invalid.

Therefore, Bealer can be nailed to a dilemma. If his dummy operator $U_{m,m'}$ governs transparent contexts then his argument comes out a trivially valid *reductio* attributing an inconsistent interpretation of identity sentences to direct reference theory that the theory has every reason to reject. If $U_{m,m'}$ governs opaque contexts then the substitution that the *reductio* requires does not go through, hence his argument comes out invalid, hence is no *reductio* of how direct reference theory analyses identity sentences. The dilemma for Bealer is, first, that his *reductio* requires modes of presentation, yet modes of presentation are orthogonal to direct reference; and, second, that his *reductio* requires $U_{m,m'}$ to generate transparency, yet a mode-of-presentation operator ought obviously to generate opacity for co-referential terms. Bealer's *reductio* compels him to choose the two less plausible horns, so his $U_{m,m'}$ is, as it were, doubly implausible. The upshot is that Bealer does not have much of a case, or any at all, against direct reference theory.

Conclusion

Above we presented two objections to Bealer's argument. If the first objection applies, Bealer's argument turns out to be a trivially valid *reductio* whose conclusion is identical to its only premise and, therefore, incapable of refuting the premise. If the second objection applies, Bealer's argument turns out to be invalid and, therefore, cannot sustain a *reductio*.

Whichever objection applies, it would seem that Bealer, in effect, sets up a straw man and sets him ablaze instead of tackling direct reference theory head-on. This impression is confirmed by Bealer's introduction of the mode-of-presentation operator $U_{m,m'}$ that figures in the syntax of the premise designed to reproduce Bealer's interpretation of how direct reference theory analyses identity sentences. The very idea, though, of having modes of presentation, in whatever shape or form, be part and parcel of the syntax and

semantics of direct reference theory is barely coherent. The theory does not necessarily eschew modes of presentation, but *direct* reference does not get analysed in terms of them.

We see Bealer's *reductio*, and the use he makes of it, as a provocation rather than as an actual confutation of direct reference theory's (best) theory of identity sentences. This is not to say that the provocation would not be appropriate, though: it is. Direct reference theory does owe itself and the rest of the community of analytic philosophy of language a spelt-out theory of such sentences that suffers none of the drawbacks Bealer rightly points out in (2004).

The most important step in that direction would consist in developing a full-fledged theory of sentential meaning to explain how the atoms (such as Venus and the identity relation, or the King of France and baldness) that directly referring terms pick out cooperate so as to form molecules like sentential meanings. However, the problem of how several atoms form one compound is nothing other than Russell's old problem of propositional unity, which is fundamentally the problem of the logic and semantics of *predication*, as when predicating identity of Hesperus and Phosphorus or baldness of the King of France.[6] So what is hampering the progress of direct reference theory would seem to be not least its lack of a satisfactory theory of predication, hence of propositions or sentential meaning in general.[7,8]

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[6] As Davidson rightly states, "Clearly, what the problem of predication is concerned with is none other than an example of what is often called the unity of the proposition." (2005, p. 87.) See (*ibid*., Chs. 4–5) for discussion of predication and propositional unity. For an anti-Russellian, pro-Frege-Churchian account of predication, see Duží *et al.* (2010, pp. 190–200).

[7] Those advocates of direct reference that embrace propositions at all tend to construe them in terms of ordered n-tuples. See Bealer (1998, pp. 4–10) or Jespersen (2003) for a critique of propositions as mere set-theoretic sequences. See Pelham and Urquhart (1991) for a critique of the widespread, but erronous, sequence-based interpretation of Russellian propositions and an alternative interpretation.

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