DIRECT REFERENCE, EMPTY NAMES, AND CHURCH'S TRANSLATION ARGUMENT

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ABSTRACT

The fundamental thesis common to all theories of direct reference is that the sole semantic function of a proper name is to refer to an individual. It is generally assumed that, together with the further thesis that sentences as used in appropriate contexts express propositions, this thesis entails that the contribution made by a proper name to the proposition expressed by any sentence where it occurs is the individual bearing the name. From this, it follows that empty names have nothing to contribute to propositions and then the view that sentences such as 'Vulcan is a planet' express "gappy" or somehow defective propositions seems to be virtually forced upon us.

I intend to challenge the first step in this reasoning. From the fact that the sole semantic function of a proper name is to refer to an individual, it does not follow that the individual referred to must occur in the proposition expressed. I will show that at least one alternative exists, fully compatible with direct reference. According to it, even empty names have something to contribute to propositions.

A comparison will be drawn between the resulting view of propositions and two of the best theories of empty names presently available, namely David Braun's influential Gappy (or Unfilled) Proposition View and the Metalinguistic View. I claim that the view I propose fares better than Braun's view with respect to at least two of the three main objections that can be raised against it. It also avoids the most serious difficulties confronting the Metalinguistic View.

The whole issue involves more than just empty names. The view difended here lends itself to some non-trivial developments reaching as far as the semantics of belief ascriptions.

§1. Intuitively, the fundamental thesis common to all theories of direct reference is that proper names have no descriptive content that is semantically relevant. A name refers directly, if it refers at all. A more precise phrasing of the fundamental thesis is the following:

[DIRECT REFERENCE FUNDAMENTAL THESIS] *The sole semantic function of a proper name is to refer to an individual.*

Let us assume that this is correct. It is important to distinguish it from some other theses which are not part of the doctrine of direct reference, even though a number of philosophers think that, once that doctrine is accepted, they are virtually forced upon us. The first of such further theses is little more than a definition.

[SEMANTIC VALUE] *The semantic value of a sentence, as used in an appropriate context, is what determines its truth value, together with how the world is, in the appropriate circumstances of evaluation. The semantic value of a sub-sentential clause is the contribution it gives to that of the sentences in which it occurs.*

The only substantial claim made by [SEMANTIC VALUE] is that, for every sentence, there exists a unique thing that determines the truth values the sentence has in the appropriate circumstances. Let us term *propositions* the semantic values of sentences, as used in the appropriate contexts, whatever such semantic values might turn out to be. An immediate corollary to [SEMANTIC VALUE] is the following:

[**COROLLARY 1**] *Two clauses, sentential as well as sub-sentential, are everywhere intersubstitutable* salva veritate *if and only if they have the same semantic value.*

This is in need of no elaborate proof, as it is enough to note that, for any two clauses, to have the same semantic value just *is* to give the same contribution to the truth values of the sentences that contain them. From this, we see that an equivalent form of the Fundamental Thesis is

[FUNDAMENTAL THESIS, SECOND FORM] *Co-referring names are everywhere intersubstitutable salva veritate,*

since, if all that there is to a proper name that is semantically relevant is that it refers to its bearer, then substituting one name for another cannot make any difference to the truth value of any sentence, provided that their referent is the same.[1]

It ought to be clear that [SEMANTIC VALUE] is independent from the Fundamental Thesis, if only because the latter is entirely consistent with the assumption that there is no unique thing on which the truth values depend that a sentence takes on in various circumstances. But it is often assumed that, from [SEMANTIC VALUE] and [THE FUNDAMENTAL THESIS] taken together, another thesis about a proper name's semantic value follows almost immediately:

[PROPER NAMES] *The semantic value of a proper name, i.e., its contribution to the propositions expressed by the sentences where it occurs, is the individual to which it refers.*

In a minute, I shall challenge the alleged entailment. Propositions containing one or more individuals among their components are called *singular*.

Clearly, from **[PROPER NAMES]** alone the following corollary follows:

[COROLLARY 2] *Empty names, i.e., names that do not refer to anything, have no semantic value – that is, they contribute nothing to the proposition expressed, if any, by a sentence where they occur.*[2]

We also have

[COROLLARY 3] *Empty names are everywhere intersubstitutable* salva veritate.

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[1] "One way to point up the contrast between the strict Millian view and Fregean views involves – if we permit ourselves this jargon – the notion of propositional content. If a strict Millian view is correct, and the linguistic function of a proper name is completely exhausted by the fact that it names its bearer, it would appear that proper names of the same thing are everywhere interchangeable not only *salva veritate* but even *salva significatione*: the proposition expressed by a sentence should remain the same no matter what name of the object it uses. […] If Mill is completely right, not only should "Cicero was lazy" have the same *truth value* as "Tully was lazy", but the two sentences should express the same *proposition*, have the same content. Similarly "Cicero admired Tully", "Tully admired Cicero", "Cicero admired Cicero" and "Tully admired Tully" should be four ways of saying the same thing." (S. Kripke, *A Puzzle About Belief*, in A.Margalit (ed.), *Meaning and Use*, 239-83, Boston, Reidel, 1979).

[2] D.Braun draws this corollary directly from the Fundamental Thesis: "any view of empty names that can plausibly be said to be consistent with Direct Reference must say this [that empty names have no semantic value]" ("Empty Names", *Nous* 27:4 (1993), 449-469: 460).

Later on, I shall consider the problems posed by these corollaries. But first, I intend to examine what exactly the consequences of the Fundamental Thesis are with respect to the semantic values of proper names.

§ 2. A powerful metaphor has been used by philosophers ever since Frege to explain what sense and reference are. Of his own notion of the sense of an expression, Frege says that it is a *way of giving* the object which is the referent of that expression. This suggests that reference itself amounts to the giving of an object. Once we take away the notion of sense, as direct reference theorists claim we should, at least as far as proper names and similar devices are concerned, we seem to be left with the mere giving of their referents as the sole semantic function of proper names and the like. From this, it seems inevitable to conclude that the semantic value of a proper name is the object contributed to the proposition expressed by sentences where the name occurs. That is, it seems that, from the Fundamental Thesis together with [SEMANTIC VALUE], [PROPER NAMES] immediately follows.

So to conclude, however, is to fall prey to a mere metaphor. Properly speaking, proper names do not give us anything. The non-metaphoric substance of the notion of semantic value is entirely exhausted by Corollary 1, which says that any two clauses are intersubstitutable *salva veritate* everywhere if and only if they have the same semantic value. This is all that has to be taken into account in establishing what the semantic value of any particular expression amounts to.

Suppose that we are interested in knowing what the semantic value of each proper name is and suppose that, somehow, we already know for every sentence whether it is true or false. In view of Corollary 1, the first step must consist in checking which names are intersubstitutable *salva veritate* with which other names. Suppose that the given distribution of truth-values across sentences fully vindicates the across-the-board Millian,[3] who predicted on general grounds that it is the co-referential names that are so intersubstitutable. Can we now conclude that the individual referred to is *the* semantic value of a proper name? Of course not. All we can conclude is that the same value must be given to all intersubstitutable, i.e., co-referential, names. Intersubstitutability being an equivalence relation, many other candidates are available, among which the equivalence class itself

[3] By "across-the-board Millians", I mean those theorists who are prepared to extend the view put forward by Kripke in the quotation from "A Puzzle About Belief" in footnote 1, from simple sentences involving neither connectives nor operators and other sources of intensionality to all context, in particular those involving knowledge, belief, and epistemic modalities.

to which a given name belongs. Can we decide which among all candidates is *the* semantic value? It seems to me that we cannot, until other constraints are appealed to that single out some candidate uniquely. But where are such constraints to be found? Not in the notion of semantic value, if, as we have assumed, [SEMANTIC VALUE] gives us all that there is to it. Millians might have some *other* useful thesis to put forth. However, direct reference as such is not our topic. We are interested in examining what can be concluded from the Fundamental Thesis alone concerning the notion of semantic value for proper names. It then seems that we have no right to conclude that a proper name's semantic value just *is* its bearer.

Let us now experiment with the equivalence classes, modulo intersubstitutability, as semantic values of proper names.

[**PROPER NAMES, SECOND FORM**] *The semantic value of a proper name, i.e., its contribution to the propositions expressed by the sentences where it occurs, is the class of all names intersubstitutable with it.*

As a further assumption, not considered so far, but accepted by many Millians, let us assume the following:

[STRUCTURED PROPOSITIONS] *Propositions consist in ordered sequences of items serving as the semantic values of the components of sentences, as identified by syntax.*

This principle is sometimes motivated by intuitions concerning aboutness.[4] I do not endorse this motivation, which is in any case unnecessary, as it stands to reason to take what is expressed by a sentence to reflect somehow its syntactic form. This applies even to sentences where empty names occur, which are literally about nothing at all. Ordered sequences, of course, differ only in notation from tree structures.

Consider now a simple sentence such as 'Cicero is bald', which is assumed by some Millians to express the singular proposition <Cicero, Baldness>. This of course will not do for our little experiment. Instead of the individual Cicero, we must set the first member of the pair to be the set of proper names that Cicero bears – suppose that, in the language under scrutiny, they are 'Cicero', 'Tully', and 'Marcus'. Similarly for the other component: instead of the property of baldness, we

[4] As in David Braun [1993], p. 461.

put the set of all predicates referring to that property. Suppose that, in the same language, only ‘is bald’ is available. We thus have a proposition of a new kind:

<{‘Cicero’, ‘Tully’, ‘Marcus’}, {‘is bald’}>.

Clearly, the entity occupying the first place in the ordered pair is to be thought of neither as what the sentence is about nor as the entity bearing the property of being bald. There is something else, therefore, that needs to be changed, once the components of the proposition have been changed, since it no longer makes sense to take the condition for the truth of the proposition expressed by ‘Cicero is bald’ to be that the first member in the ordered pair has the property expressed by the predicate. But in any case this condition was never part of the Millian doctrine. Note that even such a staunch Millian as David Braun feels entirely at ease with taking the proposition expressed by ‘Bush is tall’ to be the pair <{Bush}, Being tall>, and of course he is careful to avoid saying that it is true iff Bush’s singleton is tall – similarly for ‘Vulcan is a planet’, as we shall see in a while.[5] Note, incidentally, that the truth condition for Fregean propositions is quite different anyway. ‘Cicero is bald’ expresses something like <the sense of ‘Cicero’, the sense of ‘being bald’>, which is true if and only if the concept of being bald applies to the *Bedeutung* presented by the first member of the pair, i.e. by the sense of ‘Cicero’.

How are we to state the truth condition for our new proposition? What is crucial is that the relevant T-sentence

‘Cicero is bald’ is true iff Cicero is bald

holds true, where of course the occurrence of ‘Cicero’ on the right hand side, properly speaking, is the translation into the meta-language of the occurrence within quotes of the name on the left, and similarly for ‘is bald’. Any condition yielding this result will do.

Two possibilities immediately come to mind. The first is something along the following lines: <{‘Cicero’, ‘Tully’, ‘Marcus’}, {‘is bald’}> is true iff the referent of any name in the first set bears the property referred to by what is in the second set. The second rule eschews talk about objects altogether and only involves words, without even mentioning their reference. In the case at hand, it states that the proposition is true iff the translation of what is obtained by concatenating any

[5] Braun [1993].

member of the first set with any member of the second is a true sentence in the metalanguage. This of course gives us the expected result, i.e. the T-sentence above. There is nothing here that the Millian could object to. Nowhere do senses come into the picture.

Of course, it remains to be seen if the condition sketched above can be phrased in such a way that it takes care of all sentences – firstly of those in standard first order languages and then, hopefully, even of those containing connectives or other sources of intensionality, in particular those involving knowledge, belief, and epistemic modalities. In this paper I shall only attempt to state the notion of proposition and the rule sketched above in the restricted area of propositions expressed by simple sentences, including those where empty names occur.

Let *P(n)* be any simple subject-predicate sentence, *n* a proper name. Let the proposition expressed be the pair, <{*m* | *m* is everywhere intersubstitutable *s.v.* with *n*} , {*Q* | *Q* is everywhere intersubstitutable *s.v.* with *P*}>. If we also assume the Fundamental Thesis of direct reference, in the form suggested by Kripke[6]:

[FUNDAMENTAL THESIS, SECOND FORM] *Co-referring names are everywhere intersubstitutable* salva veritate,

that proposition turns out to be the same as this:

$$< \{m \mid m \text{ is co-referential with } n\} , \{Q \mid Q \text{ co-referential with } P\} >.$$

Let '//' abbreviate 'is everywhere intersubstitutable *s.v.* with'. Let $Q \frown m$ be the result of concatenating *Q* and *m*. Let us now give the rule. A proposition of the form

$$< \{m \mid m \,//n \} , \{Q \mid Q \,//P \} >$$

is true iff the translation into the metalanguage of $Q \frown m$ (*Q* being any representative of the second class in the pair, *m* any representative of the first) is a true sentence (of the metalanguage). It has to be proved that the result is independent of which representatives of the equivalence classes involved are chosen, but this is straightforward, since for any two names in the first class, *m* and *m'*, $Q \frown m$

[6] See footnote 1.

and $Q \cap m'$ have the same truth value, *m* and *m'* being intersubstitutable, and the same holds for their respective translations. Similarly for the *Q*'s.

One may or may not accept the semantic theory outlined here, but in any case what we have established so far is that the Fundamental Thesis does not entail [Proper Names], since candidates exist for the role of a proper name's semantic value, other than the referent itself, that are fully compatible with Millianism.

§ 3. Empty names. Empty names are those that have no referents. Some sentences at least in which empty names occur seem to be definitely either true or false – e.g., 'Either Vulcan exists or it does not' is true. We have already seen that, from [PROPER NAMES], it immediately follows that empty names have no semantic value – i.e., have nothing to contribute to the proposition expressed, if any, by a sentence where they occur. Also, any one of them is intersubstitutable with any other *salva veritate*.

This raises a number of problems. First and foremost, if we assume [STRUCTURED PROPOSITIONS], we have that a sentence such as 'Vulcan exists' ought to express an ordered sequences of items, each of which is the semantic value of the corresponding component in the sentence's syntax. 'Vulcan' is among the sentence's syntactic components. If it has no semantic value, there is no way of completing the sequence as required, and no proposition is expressed. Since the proposition expressed by a sentence is what determines its truth-value, how can 'Vulcan exists' have any truth value at all? If we do not assume [STRUCTURED PROPOSITIONS], we still have the problem of explaining which proposition, if any, is expressed by 'Vulcan exists' and how it differs from what is expressed by 'Hamlet exists'. Intuitively, they do not express the same thing.

Second, propositions were defined as the semantic values of sentences, in their contexts of use. Sentences can be used in many contexts. One can utter them to make assertions, but one can also use them, with no assertive intention, as components of more complex sentences which *are* asserted – as, e.g., in 'LeVerrier believed that Vulcan existed'. Even though this occurrence of 'Vulcan existed' is not asserted, it does have a truth-value, which is the same as that of the belief ascribed to LeVerrier by the whole, asserted, sentence. LeVerrier's belief was in fact false but, if there is no proposition for the subordinate clause 'Vulcan existed' to express, it is difficult to see how this can be so. Also, it is difficult to see how 'LeVerrier believed that Vulcan existed' can ascribe any belief

at all to LeVerrier. (Note that we are *not* assuming here that the logical form of a belief ascription is anything like *Rab – a* being the believer, *b* the proposition believed and *R* the relation between them.) Even without assuming [STRUCTURED PROPOSITIONS], we still have the problem of explaining how 'LeVerrier believed that Vulcan existed' and 'LeVerrier believed that Hamlet existed' can differ in truth-value. Intuitively, they are quite different.

The solutions presently available to these problems are relatively few in number. In this paper I shall only consider two of them – the Gappy (or Unfilled) Proposition View, due to Kaplan and Braun, and the Metalinguistic View.[7] It has been claimed that the former is the only one compatible with Millianism. In the end I shall challenge this claim. But, first, I shall present it and consider some of the objections it raises. The latter faces even more formidable objections, but has something in common with the view I shall put forward later on. It is therefore advisable to examine it too.

Consider first the Gappy Proposition View. It claims that empty names have no semantic value but still "allows sentences containing empty names to express semantical objects that (at the very least) strongly resemble propositions".[8] It also comprises [STRUCTURED PROPOSITIONS], based on intuitions concerning aboutness. According to [STRUCTURED PROPOSITIONS], a proposition consists of a structure, corresponding to the syntactic structure of the sentence expressing it, along with individuals and relations. The structure is an entity that might be compared with a scaffolding or a tree. Individuals and relations, which are the referents of the relevant items in the sentence, occupy positions in the scaffolding, i.e. decorate parts of the tree. The propositions expressed by 'Reagan is taller than Bush' and 'Bush is taller than Reagan' have the same structure and only differ in so far as Bush and Reagan occupy different positions within that structure.

> If P is a proposition having a single subject position and a one-place property position, then P is true iff the subject position is filled by one, and only one, object, and it exemplifies the property filling the property position. If P is not true, then it is false.[9]

Now, it seems that there could be a propositional structure containing positions unfilled by either individuals or relations. "According to the Unfilled [i.e., Gappy] Proposition View, sentences that

[7] Braun also mentions the No Proposition View, which he takes to be both defensible and consistent with Direct Reference. I shall not consider it here, however, since it cannot account for the obvious truth of 'Vulcan does not exist' – as Braun acknowledges. It also faces other problems, partially overlapping with those of the Gappy Propositions View, to be considered shortly.
[8] D.Braun, (1993), pp. 460-1.
[9] D.Braun, (1993), p. 463.

make sense, and contain non-referring proper names, express unfilled propositions".[10] The view claims that unfilled propositions "strongly resemble" completely filled propositions that bear truth-values, in so far as they, too, bear truth-values. "If there is no occupant of the subject position of a proposition P, then P is not true, and so it is false. So atomic unfilled propositions [like that expressed by 'Vulcan exists'] are false".[11]

What is most unconvincing in this view is the claim that unfilled or gappy propositions resemble *bona fide* propositions closely enough to bear truth values. Admittedly, for *some* gappy propositions, e.g. the one expressed by 'Vulcan is a planet', the similarity is striking enough and ascribing to them *some* truth value might not seem to be such a big leap – although it is not quite clear why the truth value False is to be favoured over Truth.[12] But what about what is expressed by some such sentence as 'All mimsy were the borogoves', which is meant as a mere nonsense? Taking it to be false – so that its negation turns out to be true – is extravagant. It might be conjectured that the reason why we feel that it is nonsense, rather than fiction, is due to the fact that we are unable to attach properties to the predicate end points of the structure tree. This is a more serious obstacle to understanding than the inability to attach individuals to the proper-name end points. But there is nothing in the theory to tell properties and individuals apart – or predicates and proper names, for that matter.

Second, the theory is bound to take 'Vulcan is a planet' and 'Ossian is a planet' to express the same gappy proposition, and therefore is unable to ascribe different truth-values to 'LeVerrier believed that Vulcan was a planet' and to 'LeVerrier believed that Ossian was a planet'. Differences in cognitive value thus go unexplained by the theory. Braun resorts to a supplementary theory of belief as a mental state or event. This theory too is unconvincing, for independent reasons,[13] but in any case the fact that the Gappy Proposition View is insufficient by itself to account for the difference

[10] D.Braun, (1993), p. 462.
[11] *Ibid*.
[12] Braun's truth definition quoted above provides a weak motivation, as it seems to be little more than a technical trick. In any case, compared with 'Ossian is a planet', 'Vulcan is a planet' stands a rather better chance to appear to be true rather than false.
[13] The supplementary theory takes some mental states or events to counts as beliefs even though they have no propositional contents. 'LeVerrier believed that Vulcan is a planet' is somehow associated with one such state or event, which is supposed to have taken place at some stage in LeVerrier's mind, whereas 'LeVerrier believed that Ossian was a planet' is associated with another that did not. But it is not clear what such states or events have in common with *bona fide* beliefs, and therefore how it can be true that Leverrier *believed* either of those things. That those non-propositional mental events can cause behaviour is certainly non sufficient. When a person has a headache, for instance, *something* goes on in her mind – even something that it is appropriate to mention as a cause of behaviour – but it would be extravagant to call it a *belief*. Braun also says that those mental states or events are somehow associated with mental sentences and are thus representational. Again, it is not clear to me that this sufficient for our purposes. *Something* obviously associated with a sentence goes on in my mind when I sing 'Strangers in the night, exchanging glances …'. But I need not believe that strangers are exchanging glances in the night, etc..

in truth value and cognitive value of those sentences concerning LeVerrier's beliefs, weighs against it.

Finally, is it really credible that empty proper names have absolutely no semantic function to perform, in so far as they have nothing at all to contribute to propositions? Whether or not this is mandated directly by Direct Reference, it seems to me that it constitutes the most far-reaching objection to the Gappy Proposition View.

The Metalinguistic View was inspired by Keith Donnellan's remark[14] that a name like 'Vulcan' fails to refer when the historical chain leading to a use of it "ends in a block" and that the truth conditions of 'Vulcan does not exist' are the same as those for '"Vulcan" does not refer'. According to the Metalinguistic View, in a negative existential a name refers to itself. There is no obstacle therefore to giving 'Vulcan does not exist' a proposition to express: the proposition contains the name 'Vulcan' as a constituent and is likewise expressed by '"Vulcan" does not refer', which is straightforwardly true.

Braun raises two objections to this view. First, the following sentences

a. If Vulcan does not exist, then 'Vulcan' does not refer,
a'. If 'Vulcan' does not refer, then 'Vulcan' does not refer,

do not intuitively say the same. Yet they express the same proposition, according to the Metalinguistic View. Second,

b. London does not exist,
b'. Londres n'existe pas,

intuitively do say the same. Yet they express two different propositions, according to the Metalinguistic View.

§ 4. The alternative presented above to [PROPER NAMES] – i.e., [PROPER NAMES. SECOND FORM] – is far from being a satisfactory semantic theory of empty names. Still, it fares better than the two

[14] Donnellan (1974).

theories just considered. The idea was that the proposition expressed by a simple sentence such as ‘Cicero is bald’ is composed, not of an individual and a property, but rather of two sets of expressions – those intersubstitutable *salva veritate* with ‘Cicero’ and ‘is bald’, respectively. The truth conditions for it are modified accordingly. If Direct Reference is also endorsed, then the intersubstitutable proper names are just the co-referential ones.

According to this theory, whether or not Direct Reference is endorsed, there clearly is no difficulty in giving ‘Vulcan exists’ a structured proposition to express. Direct Reference only adds that the names intersubstitutable *salva veritate* with ‘Vulcan’ are all the empty ones. Since concatenating any empty name with ‘exists’, or any other predicate intersubstitutable with it, yields a false sentence, the truth conditions as stated above give us the correct result.

Our theory thus fares better than the Gappy Proposition View, in that it is not vulnerable to the first of the three objections raised against it above. It also fares better with respect to the third objection: empty proper names do have some semantic function to perform, as they contribute to propositions just as much as referring names. It is to be mentioned, however, that the present theory is still unable to account for differences in cognitive values between (sentences containing) co-referring names.

Let us now compare our theory with the Metalinguistic View. There is some similarity in how propositions are composed: in the case of ‘Vulcan exists’, it is the very name ‘Vulcan’ that figures in the proposition (in our theory, it is accompanied by all the intersubstitutable ones). Note that, in our theory, negative existentials (or positive existentials for that matter) do not constitute any exception: in general, *every* proper name contributes to propositions, as its own semantic value, the class composed of itself and every other name intersubstitutable with it *salva veritate*. Thus, our theory is not *ad hoc*.

However, the two theories widely differ as to the truth conditions for propositions. The Metalinguistic View embraces the standard Russellian dogma that a simple (subject/predicate) structured proposition is true iff its first component bears the property occurring as its second component. In particular, the proposition expressed by ‘Vulcan exists’ is true iff the name ‘Vulcan’ has the property of referring. It is not so in our theory. As emphasized above, a proper name’s semantic value is *not* the individual bearing it. Semantic value and reference are quite distinct.

As to Braun's two objections, let us examine how our theory fares. Consider first

a. If Vulcan does not exist, then 'Vulcan' does not refer,
a'. If 'Vulcan' does not refer, then 'Vulcan' does not refer.

According to our theory, the antecedent in the first sentence clearly expresses a proposition quite different from that expressed by the consequent, as the name 'Vulcan' differs from '"Vulcan"' and the predicate 'exists' differs from 'refers'. Thus, our theory is not vulnerable to the first objection. The second of Braun's objections is that, according to the Metalinguistic View, (b) and (b'),

b. London does not exist,
b'. Londres n'existe pas.

express two quite different propositions, which is counterintuitive. The same objection was raised again, a few years later, by Scott Soames against Larson and Ludlow's theory of linguistically enhanced propositions. It is clearly related to Church's translation argument against sententialism.

Sententialism[15] is the view that that-clauses appearing as complements to verbs of propositional attitude are self-referential – i.e., roughly, propositions, as the objects of the attitudes, are just the sentences themselves. As a semantic theory for ascriptions of propositional attitudes, sententialism faces formidable objections. Very briefly, if propositions so construed were taken to be the referents of that-clauses, then one would have to say that ascribing to Galileo, say, the belief that the earth moves, in English, amounts to relating Galileo to an English expression, whereas ascribing the same belief to him in Italian, amounts to relating him to an Italian expression. It would then be impossible to ascribe the same belief both in English and in Italian. The very possibility of translating from any language into any other would be jeopardized. This is, in a nutshell, the substance of Church's objection to Carnap's sententialism.

Similarly, Braun objects to the Metalinguistic View that (b) and (b') express different propositions, which is at least counterintuitive. It is to be admitted that this would indeed be disastrous if propositions were taken to be what that-clauses refer to, as well as the objects of propositional

[15] The name is due, I believe, to Schiffer (1987) and (2003). Higginbotham attempts a defence of it in his (2006). He states the view as follows: it is "the view that at least some complementized clauses, particularly those headed by the complementizer 'that', appearing as complements to verbs of propositional attitude or epistemic state, are self-referential." (p. 101).

attitudes. Clearly, if Ralph, for instance, believes that London does not exist, it ought to make no difference whether this belief is ascribed to him in English or in French. This is to say that

c. Ralph believes that London does not exist
c'. Ralph croit que Londres n'existe pas

ought to ascribe the same belief to Ralph. But it would clearly not be so if the propositions expressed by (b) and (b'), *and* referred to by 'that London does not exist' and 'que Londres n'existe pas', respectively, are different.

Clearly, we have constructed our propositions much as the sententialist and the metalinguistic theorist do – namely, by enclosing in the proposition expressed by a sentence the sentence itself or, more precisely, the syntactic components of the sentence itself together with other linguistic material. However, the present theory is *neither* sententialist *nor* metalinguistic. This will become very clear when a full semantic theory for ascriptions of propositional attitudes will be given, in a subsequent paper. But I can already anticipate that propositions will not be assigned to that-clauses as their *referents*, just as the class of all names intersubstitutable *salva veritate* with a given name is not assigned to it as its *referent* but, rather, as its *semantic value*. This is especially clear in the case of empty names. Once reference and semantic value are sharply separated, and propositions are no longer assigned to that-clauses as their referents, it is no longer obvious that Church's, and Braun's, objection retains its sting. It remains to be seen, of course, what the referents of that-clauses are – *if they have any, for it is not at all unthinkable that they are themselves just some kind of empty names.* If this is so, it is not even clear that the translation argument applies at all.

Since the present theory sharply distinguishes the semantic values of proper names from their referents, it also differs from neo-Russellian theories, without giving up Direct Reference. It differs from Fregeanism, too. Even though it ascribes to proper names both semantic values and referents, if they have any, it does not hold that truth values are obtained from the semantic values of subject-predicate sentences by first determining the referents of their components and then checking whether or not the individual referred to by the subject bears the property or relation referred to by the predicate, as the Fregean does. Rather, it goes directly from semantic values to truth values. Moreover, semantic values, as understood here, bear little resemblance to Fregean senses. For instance, even though 'London' and 'Londres' co-refer, the semantic value assigned by our theory to the former in English is 'London' itself (along with all co-referring names of English), whereas

the semantic value of the latter in French is ‘Londres’ itself (along with all co-referring names of French). This amounts to saying that the notion of semantic value is not language-independent. But there was no reason in the first place to expect that two co-referring names have the same semantic value (in our sense) in two distinct languages. Of course, sameness of semantic value is not to be taken as a necessary condition for two names in different languages to translate each other. This is enough to show that our notion of semantic value widely differs from Frege’s notion of sense. It remains to be seen whether propositions, construed as language-bound entities, can serve all the purposes they are usually burdened with.

§5. Believing that Vulcan exists is not the same as believing that Ossian exists. Each one of the three theories considered so far is unable to account for any difference in cognitive value between two distinct empty names, and therefore cannot straightforwardly be extended to a fully satisfactory semantic theory for ascriptions of propositional attitudes.

However, the theory presented above can easily be modified, so that two empty names, such as ‘Vulcan’ and ‘Ossian’, are no longer on a par. The key notion here is that of translation, which we appealed to above in giving the truth condition for propositions. The crucial observation is that ‘Vulcan’ and ‘Ossian’, even though they are both empty, cannot be translated into any language by means of one and the same name. This makes them non-intersubstitutable *salva veritate*, after all. The resulting theory will no longer satisfy the Fundamental Thesis of Direct Reference, of course, but the departure can be kept to a minimum. I do not have time to go into any of this now, but I can give at least one example of the problems that, hopefully, the resulting theory will be able to handle.

The Gappy Proposition View, as well as the theory presented above, ascribes the same semantic value to all empty names. The Metalinguistic View goes to the other extreme and ascribes to every empty name (or to any name whatever, for that matter) a semantic value of its own. Here is an example to show that a more balanced, and appropriately flexible, position is needed.

Let Wang be an illiterate and monolingual Chinese peasant living in China in the Seventies of the twentieth century, and consider

1. Wang was aware that Mao Tze Tung was the Chinese president
2. Wang was aware that Mao Zedong was the Chinese president.

Suppose (1) is true. Is (2) *ipso facto* also true? The only difference between (1) and (2) concerns the spelling of Mao's name in English, of which Wang was certainly unaware (the form 'Mao Zedong' having been introduced into English years later – or so we can suppose). 'Mao Tze Tung' and 'Mao Zedong' are just two different transliterations into the Latin alphabet of the same Chinese proper name. (1) and (2) ascribe to Wang the same state of awareness. Once we are told that (1) is true, there is nothing else we need to know to conclude that (2) is also true. Unless 'Mao Tze Tung' and 'Mao Zedong' are given the same semantic value, it is hard to understand how this can be so.

On the other hand, consider Joe, a present day American schoolboy, who is unaware of the changes in the Western transliteration conventions in the past few decades.

3. Joe believes that Mao Zedong was the Chinese president, but does not believe that Mao Tze Tung was the Chinese president.

Or, more simply,

4. Joe believes that Mao Zedong was not Mao Tze Tung.

This seems to suggest, contrary to what we have just concluded, that even small differences in spelling ought to be taken into account in assigning semantic values to names, and even such close variants as 'Mao Zedong' and 'Mao Tze Tung' are to be given different values.

The same, apparently conflicting, intuitions apply in the case of empty names. Let Caius be a Roman in antiquity, and consider

5. Caius believed that Jove was the king of gods
6. Caius believed that Jupiter was the king of gods.

The difference between 'Jove' and 'Jupiter' only exists in English, which did not come into existence until a few centuries after Caius. But of course, the following can also easily be true:

7. Joe is unaware that Jove is Jupiter.

It is not obvious how a general rule can be extracted from these cases. The fact that ‘Mao Zedong’ and ‘Mao Tze Tung’, as well as ‘Jupiter’ and ‘Jove’, are in some sense variants of the same name must play some role, but it is not obvious which.

These examples are clearly related to those discussed by Kripke in his classic paper, “A Puzzle about Belief”, in that they all involve the notion of translation somehow. From such examples as the above, we shall be able to extract some very general constraints on the notion of translation itself. Given that the notion of semantic value, as defined in this paper, is closely related to translation, those constraints can serve to differentiate between the semantic values even of empty names.