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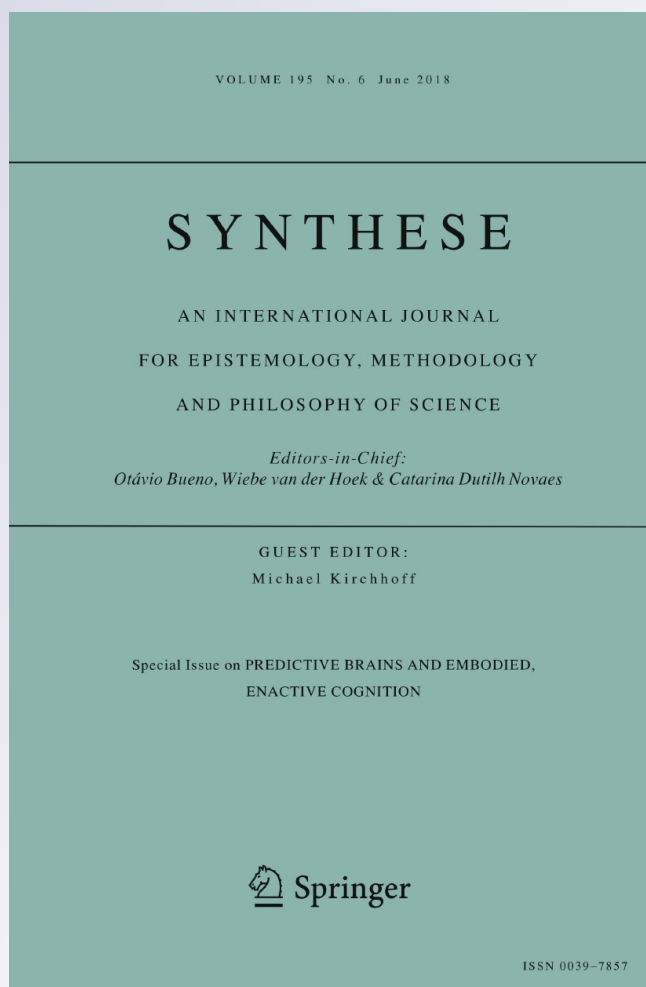
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Singular truth-conditions without singular propositions

Gregory Bochner¹ 

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Abstract In this paper I argue that propositionalism (the doctrine that the contents of thoughts and utterances are propositions to be evaluated with respect to possible worlds) is what generates a tension between referentialism and harmony (the traditional idea that cognitive values can be fully explained by means of truth-conditional contents). Harmony can be preserved if we replace propositionalism by centred referentialism, according to which referential thoughts and utterances about an object have descriptive contents that must be evaluated relative to a world centred on that object at the relevant time. By disentangling (absolute) truth-conditions and (relative) contents, this move allows us to dissolve the tension between referentialism (taken as a thesis about truth-conditions) and descriptivism (taken as a thesis about contents). The view that emerges has three main components: (i) the (absolute) truth-conditions of a referential utterance or thought involves its referent (referentialism); (ii) its reference is determined by causal relations of acquaintance in the context of use (pragmatic picture); and (iii) its cognitive value is fully explained by associated descriptions or (relative) truth-conditional contents (harmony).

Keywords Reference · Singular thought · Descriptivism · Relative content · Centred worlds · Acquaintance

✉ Gregory Bochner
 gbochner@ulb.ac.be

¹ Fonds National de la Recherche Scientifique (F.R.S.-FNRS), Centre de Recherche en Linguistique LaDisco, Université Libre de Bruxelles, CP 175, 50, Avenue F. Roosevelt, 1050 Brussels, Belgium

1 Introduction: content and harmony

Thoughts and utterances have content: they represent the world as being a certain way. The content of my thought (or statement) that a fox ate the hens determines a set of possible situations in which a fox ate the hens. How does this content identify that particular set? A drawing of a fox eating the hens, or the footprints of a fox near the empty henhouse, could identify the same set. But unlike those other types of representations, my thought (or statement) represents the possible situations it represents *by virtue of being true*. Thus a situation *S* belongs to the set of possible situations it represents only if the content of my thought (or statement) is true with respect to *S*. In other words, thoughts and utterances have *truth-conditional contents*: they represent the world *by describing it*.

In traditional theories of propositional attitudes developed under the influence of Frege and Russell, the truth-conditional contents of thoughts play two complementary roles:

- (1) Truth-conditional contents are the bearers of truth-values.
- (2) Truth-conditional contents are the bearers of cognitive values.

On the one hand, contents play an objective role: they are the entities that are either true or false, depending on the facts. When I think that a fox ate the hens, the content of my thought is false: actually, the hens were not eaten by a fox but by a weasel. It is then false because the situation at issue does not belong to the set of possible situations in which a fox ate the hens. The truth-value of this content owes nothing to the fact that a mind apprehends it. On the other hand, contents also play a more subjective role: they account for the cognitive perspectives of subjects on the world. Contents can play that role only insofar as they are grasped. Folk psychology ascribes thoughts to agents in an effort to make rational sense of their behaviour. What an agent does primarily depends not on how the world is, but on how the world is *according to the contents of her attitudes*. For instance, why does rational Eva, whose only desire is to eat chocolate, decidedly open the cupboard? Because she believes that there is chocolate in it. In the actual world, there is no chocolate in the cupboard. But in the world *as she takes it to be*, there is. What we call the ‘cognitive value’ of a thought is the way in which it describes the world as being according to the subject who grasps it. Theorists are entitled to infer the cognitive value of a thought by observing which truth-value rational subjects would ascribe to it under various circumstances, real or possible.

According to a theory combining (1) and (2), truth-conditional contents provide the interface between the objective and the cognitive. Such a theory thereby brings their analyses into harmony. In what follows, I shall say that a theory encompasses *harmony* whenever it purports to explain cognitive values in terms of only two notions: truth and conditions. Harmonious theories allow us to identify truth-conditional contents by differences in truth-values *and/or by differences in cognitive values*. On the one hand, if two thoughts have different truth-values, this establishes that they have different truth-conditions. Thus the thought that grass is green and the thought that the earth is flat, having different truth-values, must have different truth-conditions. On the other hand, if two thoughts have different cognitive values, a harmonious theory predicts

that this *also* suffices to show that they have different truth-conditions. For example, it is possible for a rational and coherent subject to accept that the inventor of the phonograph was American while refusing that the inventor of the light bulb was American. As these thoughts have different cognitive values, they must have different truth-conditions. The conditions that must be satisfied to make them true, and hence the sets of possible situations that they identify, are different. Thus, according to a harmonious theory, a difference in cognitive values indicates a *potential* difference in truth-values. That is, it reflects a difference in truth-values *with respect to some possible situation*. In short, harmonious theories invoke *one* notion (truth-conditional content) to account for the relations between the objective and the cognitive roles of thoughts. Being simple, parsimonious and elegant, harmonious theories should be preferred (*ceteris paribus*) to more complex theories which introduce further notions.

Nevertheless, harmony has recently come under pressure. It appears to lead to descriptivism (the view that the truth-conditions of thoughts only involve conditions describing objects). This did not bother the pioneers of truth-conditional semantics—Frege, Russell, and Carnap—who were happy to embrace descriptivism. But in 1970, descriptivism became superseded by referentialism (the opposite view that the truth-conditions of thoughts can directly involve objects). The apparent incompatibility between harmony and referentialism fostered new theories of content, according to which differences in cognitive values do not always correspond to differences in truth-conditions. Some ('Neo-Fregeans') argued that contents may involve truth-conditionally irrelevant ingredients making a difference to cognitive values (Peacocke 1981; Evans 1982; McDowell 1984). Others ('Neo-Russellians') posited non-descriptive ways of grasping a truth-conditional content (Perry 1979; Salmon 1986; Kaplan 1989).¹ These trends, which have become widespread today, reject harmony: cognitive values are not explained only in terms of truth-conditional ingredients.

But again, harmonious theories have important virtues which should not be underestimated. If the notions of truth and conditions suffice to explain cognitive values, the precise tools developed in semantics will suffice to understand how, in the realm of thought, a cognitive *perspective* on the world relates to a possible *state* of the world: via the satisfaction of descriptive conditions. We can then use characteristic functions from possible situations to the True to represent such a perspective.

The remainder of this paper is structured as follows. In sects. 2 and 3, I present two well-known arguments, one against referentialism (Frege's puzzle), the other against descriptivism. I show that they yield two inconsistent triads between the theoretical predictions of referentialism, empirical observations, and *harmony*. In sects. 4 and 5, I highlight an important fact that has not been duly appreciated in the literature: the tension between harmony and referentialism is actually a tension between harmony, referentialism, and *propositionalism* (the doctrine that the truth-conditional contents of thoughts are propositions which are evaluated as true or false with respect to possible states of the entire world). So, if we want to preserve the benefits of harmony, we must give up propositionalism. In sect. 6, I argue that the only way to maintain referentialism and harmony without propositionalism is to acknowledge that the truth-conditions of

¹ See Recanati (1993, Chapt. 2) for a clear presentation of these 'Neo-Fregean' and 'Neo-Russellian' trends.

a referential thought or utterance involve more than a truth-conditional content. They also involve a particular circumstance of evaluation, a concrete situation completing the content. On the account I sketch, ‘centred referentialism’, referential thoughts and utterances have descriptive contents that are true or false relative to a world centred on a referent. Instead of being part of contents, referents feature in the circumstances against which the relevant thoughts and utterances are evaluated. In sect. 7, I address further problems that a harmonious theory faces in the realm of cognitive values. The conclusion is that cognitive values should not be absolute. Just as the truth-values of referential thoughts and utterances are relative to an objective situation centred on a referent, their cognitive values are relative to an epistemic situation regarding what is taken to be a unique referent by some particular subject at some given time. The sects. 8 and 9 address the issue of reference determination. I sketch a pragmatic picture according to which the referent or situation of evaluation for a referential thought or utterance is the one that the subject *has in mind* (whether intentionally or not). I then emphasise the role that causal relations of acquaintance should play in determining that a subject has a referent or situation in mind. Knowledge by acquaintance becomes knowledge of a situation, and knowledge by description is knowledge of truths about that situation. The picture that emerges yields the following predictions: the truth-conditions of referential thoughts and utterances are referential, what determines their reference are causal relations of acquaintance that are independent of language itself, and their cognitive values are explained only in terms of associated descriptions or truth-conditional contents, as harmony requires.

2 An argument favouring descriptivism over referentialism

Singular thoughts and utterances concern particular things in the world. According to referentialism, the truth-conditions of singular thoughts and utterances may directly involve their referent. On this view, the thought I express in saying that Hesperus is a planet is true just in case Venus is a planet. The truth-conditional import of the term ‘Hesperus’ is just its referent, Venus.²

Frege (1892) raised a famous objection against referentialism. This appears to predict R1:

- R1. If two referential terms have the same referent, they have the same truth-conditional content.

As ‘Hesperus’ and ‘Phosphorus’ designate the same thing (Venus), they should by R1 have the same truth-conditional content. However, Frege remarked that R1 conflicts with an empirical datum:

- D1. Two referential terms can have the same referent but different cognitive values.

Thus referentialism appears to predict that ‘Hesperus is a planet’ and ‘Phosphorus is a planet’ have the same truth-conditional content. Yet it is possible for a rational subject A who understands these utterances to assent to the one while dissenting from the other.

² I will henceforth use ‘term’ indistinctly to cover occurrences of linguistic and mental terms.

In a situation like this, *A* takes these utterances to have different truth-values because *A* takes them to express different pieces of information. And *A* takes the utterances to express different pieces of information because *A* takes ‘Hesperus’ and ‘Phosphorus’ to have different referents. From this, the theorist can infer that *A* takes ‘Hesperus’ and ‘Phosphorus’ to make different contributions to the meanings of the utterances. The theorist endorsing the truth-conditional approach to meaning can recast this result by saying that *A* takes ‘Hesperus’ and ‘Phosphorus’ to have truth-conditional imports. In general, then, if *A* is rational and competent, (i) two terms have different cognitive values if and only if *A* can take them to have different truth-conditional imports, and (ii) two utterances have different cognitive values if and only if *A* can take them to have different truth-conditions.

If the puzzle arises from the conjunction of R1 and D1, then, provided that D1 is a datum, the only possible solution is to jettison referentialism and R1. This is what Frege did. He replaced referentialism by descriptivism: the truth-conditional import of a singular term is not a referent but a descriptive Sense fixing a referent by satisfaction or fit.³ ‘Hesperus’ and ‘Phosphorus’ contribute different Senses, or descriptive conditions, which only happen to determine the same referent. Thus *A* might associate with ‘Hesperus’ the descriptive condition *being the brightest celestial body in the evening sky* and with ‘Phosphorus’ the descriptive condition *being the brightest celestial body in the morning sky*. Then, ‘Hesperus is a planet’ expresses the Thought *that the brightest celestial body in the evening sky is a planet*, and ‘Phosphorus is a planet’ expresses the Thought *that the brightest celestial body in the morning sky is a planet*. The Thoughts are general rather than singular: they are abstract entities containing only abstract Senses, and not concrete referents. So that grasping them is not sufficient to know that they target the same referent and thereby share the same truth-value. Whether they do depends not (only) on the Thoughts or truth-conditional contents themselves, but (also) on the state of the external world.

Frege presents his puzzle as arising from R1 and D1, but the conjunction of R1 and D1 is not by itself problematic. A puzzle arises *only* because a further premiss is tacitly presupposed by Frege:

³ It is notoriously difficult to find unambiguous exegetical evidence demonstrating that Frege commits to the idea that Senses should be identified with descriptive conditions. On the one hand, his illustrations of Senses often involve descriptions, and he explicitly allows for the possibility that Senses and Thought lack reference. Thus in a letter to Russell (13.11.1904, in [Beaney 1997](#), pp. 291–292), he writes: ‘Now, can we not be satisfied with the sense of the proposition and do without a *Bedeutung*? For it does sometimes happen that a sign has a sense but no *Bedeutung*, namely in legend and poetry. Thus the sense is independent of whether there is a *Bedeutung*. Accordingly, if all that matters to us is the sense of the proposition, the thought, then all we need to worry about is the sense of the signs that constitute the proposition; whether or not they also have a *Bedeutung* does not affect the thought. And this is indeed the case in legend and poetry.’ On the other hand, he claims that concepts correspond to unsaturated functions whose arguments can be ordinary individuals. Thus in *Function and Concept*, he says that in the sentence ‘Caesar conquered Gaul’, the argument of the function ‘conquered Gaul()’ is the individual Caesar (1891/1970, p. 31). In this paper, I follow the mainstream interpretation according to which Fregean Senses are purely descriptive. I do this for two reasons. First, from a historical point of view, this has been the most common interpretation, and the one that has been attacked and refuted during the referentialist revolution in the 1970s. Second, I hope to show here that a suitably amended version of the descriptivist view attributed to Frege remains compatible with this revolution.

- F1. If two referential terms have different cognitive values, they have different truth-conditional contents.

Given F1, any difference in cognitive value is sufficient to establish a difference in truth-conditional content. This means that, whenever two terms have different cognitive values for *A*, so that *A* takes them to have different truth-conditional imports, *A* is right: they have different truth-conditional imports. Now a genuine puzzle arises. Given R1, ‘Hesperus’ and ‘Phosphorus’ should have the same truth-conditional content. But given D1 and F1, they should have different truth-conditional contents. So what the puzzle reveals is that R1, D1, and F1 form an inconsistent triad.

Once the role of F1 is made explicit, we see that there was more than one possible way out. R1 and F1 cannot both be true. As we saw, if R1 is false, referentialism appears to be compromised. But as we will now see, if F1 is false, it is harmony which is compromised.

3 An argument favouring referentialism over descriptivism

We see that F1 plays an important role in the generation of Frege’s puzzle. Without it, no puzzle arises. Yet we are puzzled. So it seems that our puzzlement betrays an implicit commitment to F1.

What is the justification for F1? Whereas D1 was a datum, and R1 a theoretical prediction, F1 is justified by harmony. If the contents of thoughts are analysed only via the notions of truth and conditions, and if the contents of thought explain their cognitive values, then the cognitive values of thoughts must be explained only via the notions of truth and conditions. (This is the reasoning that led Frege to descriptivism.) Then, harmonious theories should ideally be guided by a principle F:

- F. Two referential terms have different truth-conditional contents if and only if they have different cognitive values.

And now F implies F2, the converse of F1:

- F2. If two referential terms have different truth-conditional contents, they have different cognitive values.

The next problem is that another conflict arises between F2 and referentialism, a conflict which will at first sight appear to give a decisive advantage to referentialism over harmony.

Imagine two twin sisters who look exactly alike. Lena is a pianist, Nora is a painter. Having met Lena in the morning, Oscar later points to her and says: ‘She is a pianist’. In the afternoon he meets Nora and mistakes her for Lena. Pointing to Nora, he says: ‘She is a pianist’. Let us stipulate that in this scenario Oscar represents Lena and Nora under the same qualitative description, and that some elements in that description are false of both Lena and Nora. Now Oscar takes the truth-conditional contents expressed by his two utterances to be the same. So they should have the same cognitive value for him. Yet the first utterance is true and the second is false.

Scenarios like this teach us several lessons.⁴ First, consider the common assumption P1,

- P1. If two utterances or thoughts have different truth-values, they have different truth-conditions.

Given P1, the two utterances must have different truth-conditions. As the difference in their truth-conditions can only stem from a difference in their referents, it follows that referents can make a difference to truth-conditions. This refutes descriptivism about truth-conditions and establishes referentialism. Second, the two referents of the occurrences of ‘she’ cannot be fixed by the unique qualitative description through which Oscar represents Lena and Nora. The problem is not only that the referents of indexicals depend on the context; that qualitative description also contains elements that are false of both Lena and Nora. This undermines the descriptivist thesis about the mechanism of reference. Third, the scenario elicits the datum D2, while referentialism appears to predict R2:

- D2. Two referential terms can have different referents but the same cognitive value.
R2. If two referential terms have different referents, they have different truth-conditional contents.

But now R2, D2, and F2 form another inconsistent triad. As D2 is a datum, the culprit must be R2 or F2. Provided that R2 follows from referentialism, and as referentialism gets independent support from the scenario and P1, it seems that F2, and with it harmony, must be jettisoned.

4 Two inconsistent triads

To sum up our results so far, we have identified two conflicts between referentialism and harmony:

Inconsistent Triad #1 (Frege’s puzzle):

- R1. If two referential terms have the same referent, they have the same truth-conditional content.
D1. Two referential terms can have the same referent but different cognitive values.
F1. If two referential terms have different cognitive values, they have different truth-conditional contents.

Inconsistent Triad #2:

- R2. If two referential terms have different referents, they have different truth-conditional contents.
D2. Two referential terms can have different referents but the same cognitive value.
F2. If two referential terms have different truth-conditional contents, they have different cognitive values.

⁴ Arguments relying on this kind of scenario, which typically involve twins or qualitative duplicates, were massively deployed against Fregean descriptivism in the 1970s (see Bar-Hillel 1954; Strawson 1959; Putnam 1975; Perry 1977; Kripke 1980; Evans 1982; Kaplan 1989).

Along the way, we have mentioned two very strong arguments against descriptivism. One highlights that reference is not always fixed by satisfaction. The other shows, via P1, that the truth-conditions of utterances or thoughts can directly involve a referent, which is precisely what referentialism says.

But now if this is precisely what referentialism says, there is a gap between referentialism (a thesis *about truth-conditions*) and predictions R1 and R2 (claims *about truth-conditional contents*). In the contexts of those discussions, that gap is commonly filled by another implicit presupposition:

- P2. Two utterances or thoughts have different truth-conditions if and only if they have different truth-conditional contents.

Thesis P2 amounts to *semantic absolutism*. This says that the truth-conditions of an utterance or thought are exhausted by its content. Without P2, we do not get the predictions R1 and R2, and so we do not get the inconsistent triads. In other words, if P2 is false, there is no incompatibility between referentialism and harmony. Then, we can see that the fundamental problem becomes this. The conjunction of harmony, referentialism, *and* P2, leads to inconsistencies. Yet referentialism about truth-conditions can be established via P1. Hence it appears that the culprit must be harmony (represented by thesis F) or semantic absolutism (represented by P2).

5 A conflict between harmony and propositionalism

Like harmony, semantic absolutism comes from Frege, who takes the contents of utterances and attitudes ('Thoughts') to have *absolute truth-conditions*. A content has absolute truth-conditions if and only if it is truth-evaluable (or complete), and can be evaluated as true or false (*simpliciter*). An absolute content cannot be true relative to some parameter (a world, a time, an individual) *and* false relative to another such parameter.

With the developments of modal logics and intensional semantics during the twentieth century, absolutism lost ground in favour of *propositionalism*. According to propositionalism, the contents of utterances and attitudes are 'propositions' which must be evaluated with respect to possible worlds. A proposition can be true relative to a world and false relative to another world, and each proposition determines the set of possible worlds relative to which it is true (Stalnaker 1976, 1999). Unlike Thoughts, propositions have only *relative truth-conditions*. The proposition *that the first man in space was Russian* is true relative to an arbitrary possible world w if and only if there is an individual x who is the first man in space in w and x is Russian in w . These relative truth-conditions are stated by using a variable for the world of evaluation. Depending on the value of the variable, different absolute truth-conditions are determined. Thus that proposition *qua evaluated at the actual world $w_@$* is true (*simpliciter*) if and only if there is an individual x who is the first man in space in $w_@$ and x is Russian in $w_@$. While the relative truth-conditions of this proposition involved only *a description of a way a world might be*, these absolute truth-conditions involve that same description *plus some particular world which it is now being used to describe*. That difference aside, Thoughts and propositions share an important feature: they cannot be true at one portion of the world and false at another. That is, they are never evaluated relative

to situations of evaluation corresponding to *centred worlds*, i.e. pairs $\langle w, c \rangle$ consisting of a possible world w and some designated centre c (a time, a place, and/or an individual) inside w . Consequently, *relative to any fixed possible world, a difference in truth-value entails a change in the Thought or proposition expressed*.

Once truth-values are relativised to possible worlds, some of our assumptions must be adapted:

P1*. If two utterances or thoughts have different truth-values *relative to the same possible world of evaluation*, they have different truth-conditions.

P2*. Two utterances or thoughts have different truth-conditions if and only if they have different *propositional* contents.

Thesis P2* amounts to propositionalism. Unlike P1 and P2 (which followed from absolutism but not from propositionalism), P1* and P2* follow from *both* absolutism and propositionalism.

The propositionalist theses P1* and P2* continue to make the two triads inconsistent, but they allow us to pose the puzzles in their most general forms. First, the fact that two referential terms can have the same referent but different cognitive values (D1) shows that at least one of the following claims is false: referentialism about truth-conditions, P2*, or F1. Second, the fact that two referential terms can have different referents but the same cognitive value (D2) shows that at least one of the following claims is false: referentialism about truth-conditions, P2*, or F2. Since referentialism about truth-conditions is true, the two inconsistent triads eventually boil down to one unique dilemma: *harmony and propositionalism cannot both be true*.

6 Centred referentialism

If the problem comes from harmony, truth-conditional semantics has been founded on a mistake. Its primary ambition was to account for the relations between truth *and thought* (knowledge, belief, informativeness, rationality, inference, etc.). But in the end, it will account only for the relation between truth and objective states of the world, independently of cognitive perspectives. If the problem comes from propositionalism, this will be because propositionalism precludes the idea that referents can be part of the truth-conditions of utterances and thoughts without being part of their contents. Indeed, if these contents are always evaluated relative to entire possible worlds, the only truth-determinants that can be part of truth-conditions without being part of contents are entire possible worlds. Hence the conjunction of P2* and referentialism about truth-conditions will leave us no choice: it leads to R2, and from there, to the conflict between R2, D2, and F2.

If we want to maintain F2 and harmony, we must oppose the view that the truth-conditional contents of referential utterances and thoughts are *singular propositions*. How could we have a referentialist theory of truth-conditions without a referentialist theory of contents? There is only one option: we should admit that referents are part of the situations relative to which referential utterances and thoughts are evaluated. Then, the ‘index’ or ‘circumstance’ of evaluation for a referential utterance or thought will be *a world centred on the referent*.

Centred worlds have recently gained some popularity. Despite their historical importance, semantic absolutism and propositionalism progressively have lost ground in favour of various versions of semantic relativism according to which the contents of utterances and attitudes may be evaluated relative to portions of the world. Thus Prior's (1957) tense logic and Kaplan's (1989) semantics for demonstratives appeal to temporal propositions, i.e. time-neutral contents evaluated at world-time pairs. 'Austinian semantics' invokes location-neutral contents, which are true or false with respect to spatio-temporal locations in the world (Barwise and Etchemendy 1987). On Lewis's view (1979), the contents of (all) attitudes and utterances are *de se*: they are not propositions, but properties that the subject self-ascribes. Such contents/properties are always subject-neutral, yet they are evaluated with respect to worlds centred on a subject (at some time).⁵ By contrast, the present proposal says that the content of a referential utterance or thought is a descriptive condition or property which is evaluated at a situation of evaluation corresponding to the world of utterance or thought centred on an *object* (at some time). This object can, but need not, be the subject. If the object (at the relevant time and world) satisfies the descriptive condition, then the utterance or thought is true.

Unlike Lewis's view, this proposal is compatible with referentialism about truth-conditions. Remember Oscar: in the morning, he points to Lena and says (or thinks) that she is a pianist; in the afternoon, he points to Nora, whom he confuses with Lena, and says (or thinks) that she is a pianist. On the one hand, according to Lewis, the first utterance (or thought) is true if and only the world centred on Oscar (in the morning) belongs to the set of worlds centred on a subject who is acquainted with an individual who looks thus-and-so and is a pianist (at some time), and the second utterance (or thought) is true if and only the world centred on Oscar (in the afternoon) belongs to the set of worlds centred on a subject who is acquainted with an individual who also looks thus-and-so and is a pianist (at some time). So Lewis predicts that the truth-conditions of the utterances (or thoughts) are (practically) the same (the only difference is the time of evaluation: morning or afternoon). On the other hand, we accepted that, as the first is true and the second is false (D2), the utterances (or thoughts) have different truth-conditions (by P1 or P1*), whose satisfaction depends on different referents. Our present proposal preserves this result: the first utterance (or thought) is true if and only the world centred *on Lena* (in the morning) belongs to the set of worlds centred on an individual who is a pianist (at some time), and the second utterance (or thought) is true if and only the world centred *on Nora* (in the afternoon) belongs to the set of worlds centred on an individual who is a pianist (at some time).

Our predictions about the *absolute* truth-conditions of these utterances (or thoughts) are identical to the predictions made by an advocate of singular propositions. The first utterance (or thought) is true (*simpliciter*) if and only if Lena is a pianist at the relevant time in the actual world. The second utterance (or thought) is true (*simpliciter*) if and

⁵ Various versions of truth-relativism have been proposed to deal with faultless disagreement, aesthetic and taste predicates, epistemic modals, future contingents, etc. For recent overviews and developments, see García-Carpintero and Kölbel (2008), MacFarlane (2014). I will not be concerned with these other versions of truth-relativism in what follows. I will confine my discussion to 'centred worlds' whose centre involves an objective and concrete individual.

only if Nora is a pianist at the relevant time in the actual world. The same determinants of truth-values are gathered, but their distribution is different.⁶ The singular proposition account puts referents in the contents, whereas our proposal rejects them in the circumstances of evaluation. Let us call these views, *propositional referentialism* and *centred referentialism*. According to propositional referentialism, the first utterance (or thought) expresses the singular proposition *that Lena is a pianist (at the relevant time)*. This proposition determines the set of possible worlds at which it is true that Lena is a pianist (at that time). The utterance is true (*simpliciter*) if and only if the actual world belongs to that set of worlds. By contrast, according to centred referentialism, the utterance (or thought) will express the property of *being a pianist*. That property determines the set of centred worlds at which it is true that the individual at the centre is a pianist at the time of the centre. The utterance is true (*simpliciter*) if and only if the actual world centred on Lena on that morning belongs to that set of centred worlds.

The core idea of centred referentialism is not new. Recanati (2004, Chapt. 8, 2007b, 2009, 2012a) invokes it to account for some cases of unarticulated constituents and for the immunity to error through misidentification of some *de re* judgements. Stojanovic (2008) defends it to explain Donnellan's referential uses of descriptions and to draw new boundaries between semantics and pragmatics. What is new is not the core idea itself, but the suggestion that it can be used more generally to dissolve the tension between two major puzzles in the theory of content: the argument against referentialism (Frege's puzzle) and the argument against descriptivism.⁷

Contrary to propositional referentialism, centred referentialism does not give rise to the inconsistent triads, because it no longer predicts R1 and R2. Instead, it only predicts R1* and R2*:

- R1*. If two referential terms have the same referent, they have the same truth-conditional import.
- R2*. If two referential terms have different referents, they have different truth-conditional imports.

Once P2 and P2* are rejected, referents can potentially contribute to the (absolute) truth-conditions of utterances and thoughts in two different ways: by being part of their content, or by being part of their circumstance of evaluation. Given harmony (thesis F), the conjunction of D1 and F1 precludes R1, and the conjunction of D2 and

⁶ See Recanati (2007a, p. 34) on the thesis he calls 'Distribution': 'The determinants of truth-value distribute over the two basic components truth-evaluation involves: content and circumstance. That is, a determinant of truth-value, e.g. a time, is *either* given as an ingredient of content *or* as an aspect of the circumstance of evaluation.'

⁷ Torre (2010) and Ninan (2012, 2013) invoke 'multi-centred worlds' to deal with assertion and *de re* attitudes. Although the present account is compatible with the idea of possible worlds centred on multiple referents, there is an important difference. In the wake of Lewis (1979), their accounts remain *egocentric*: the centred worlds they appeal to may involve objects of acquaintance and individuals other than the subject (beyond what Lewis recommends), but they always involve (at least) the subject of the attitude. On the present account, the centred worlds do not need to feature the subject. They can be directly centred on the object(s) to which the subject is appropriately related, without involving the subject herself. I think that this account will have advantages over its egocentric counterparts in the realms of perception and communication. For lack of space, I must leave these issues for another occasion.

F2 precludes R2. Then, referents can contribute to the (absolute) truth-conditions of utterances and thoughts *only* by being part of their circumstance of evaluation.

7 Relative cognitive values

At this stage, we have established that centred referentialism is compatible with harmony. Now we must face independent worries that arise for harmony given the way in which it was defined.

Suppose that Bill heard what Oscar said on both occasions. Contrary to Oscar, Bill knows that there are two twin sisters, and that Nora is a painter. He realises that on the first occasion Oscar was talking about Lena, but that on the second occasion he was mistaking Nora for Lena. While Oscar takes his two utterances of ‘She is a pianist’ to be true, Bill takes the first to be true and the second to be false. This raises two issues. (a) Do the utterances have different cognitive values after all? (b) If they do, how could centred referentialism explain this?

Let us start by noting that it would make no sense to claim that Oscar was mistaken about the cognitive values of his utterances. To say that a subject *A* is mistaken about the cognitive value of an utterance or thought is to say that *A* is *mistaken about what she takes its truth-conditions to be*. For that to occur, there should be a possible gap between what *A* takes the truth-conditions to be (a *real* cognitive value) and what *A* takes herself to take the truth-conditions to be (a *seeming* cognitive value). At this point, we should insist that, in general, cognitive values ought to be what *A* takes its truth-conditional import to be *upon ideal reflection*. Otherwise we will end up conflating differing cognitive values with differing processing costs. The interpretation of ‘ $2 + 2 = 4$ ’ and ‘ $2 + ((3467 \times 14) : 24,269) = 4$ ’ involves different cognitive processes, such that a rational and competent subject *A* could ascribe different truth-values to them because of distraction, failures of working memory, or errors of calculation. But mistakes due to such accidents should not be allowed to interfere with issues of cognitive value. What matters is rather that, *upon ideal reflection*, *A* cannot accept the first sentence while refusing the other. Then, they have the same (real) cognitive value. Now given this, it is hard to see how *A* could be mistaken about the (real) cognitive value of an utterance or thought. This would have to mean that *A* could be mistaken about what she *takes* its truth-conditions to be, *even upon ideal reflection*. But that makes no sense. We rely on cognitive values to explain the possibility of rational identity mistakes about things. If we hold that, even upon ideal reflection, *A* can commit identity mistakes about the (real) cognitive values of her utterances or thoughts, we cannot hope to explain her rational identity mistakes about things in terms of (real) cognitive values—however we might want to further analyse the relations between cognitive values and contents.

Then it will seem that, provided that Bill is a rational and competent subject who ascribes two different truth-values at the same time to two utterances, we should grant that the utterances have different cognitive values. Nevertheless, I think that this conclusion ought to be resisted. The relevant criterion should *not* be understood as meaning that, if it is possible to imagine one rational and competent subject *A* for whom a pair of identity statements is informative, this is sufficient to establish that the referential terms in it have two different cognitive values *for all subjects*

and for all eternity. For the criterion thus stated yields absurd results. Thus, as Kripke (1979) noted, an utterance of ‘Paderewski is Paderewski’ *could* be informative to some possible subject. So by that criterion, the two occurrences of ‘Paderewski’ should have different cognitive values for all possible subjects, even those who never doubted that ‘Paderewski is Paderewski’ was true. But now, if cognitive values define perspectives on the world which can be used in psychological explanations, this absolute criterion will overgenerate. It will often predict differences in cognitive values where a crucial similarity in what the subject takes the truth-conditions to be ought to be captured. Thus, even if Oscar confuses two twin sisters, the absolute criterion will predict that two cognitive values are involved, even for Oscar. But this criterion will miss the important facts in need of explanation *in that particular case*. As far as Oscar can tell, even on ideal reflection, this person in the morning (Lena) and that person in the afternoon (Nora) are the same person. That is *why* he utters ‘She is a pianist’ and starts to wave at Nora, whom he actually does not know. How a subject *A* behaves at a time *T* depends on the cognitive values that the relevant thoughts or utterances have *for A at T*.

It will be more fruitful to understand cognitive values in terms of informativeness. Being informative is a *relative* property that a thought or an utterance has *for a subject at a time (in a world)*. Thus the same utterance may be informative for one subject but uninformative for another subject. It may be informative for a subject at some time and uninformative for her at another time. And whether it is informative depends on the other thoughts and attitudes that the subject has at the relevant time. In other words, informativeness is context-dependent. The criterion may be adapted as follows. If it is possible for a rational and competent subject *A* at a particular time *T* to imagine that an identity statement ‘*a*=*a*’ is informative, the two occurrences of ‘*a*’ have different cognitive values *for A at T*; otherwise, they have the same cognitive value *for A at T*. By this relative criterion, the two utterances ‘She is a pianist’ have the same cognitive value for Oscar but different cognitive values for Bill.

Another problem will now arise when we consider the relations between cognitive values and contents. So far, we have used the thesis F to represent the core idea of harmony:

- F. Two referential terms have different truth-conditional contents if and only if they have different cognitive values.

Centred referentialism predicts that the two utterances of ‘She is a pianist’ express the same content, namely, the property of *being a pianist*. Now, when we combine the claim that the utterances have different cognitive values for Oscar (at the relevant time) with F, we get the wrong prediction that the utterances have different contents. So, does that not show that there is a problem with harmony?

There is a problem with F, but not with harmony. The core idea of harmony is that the cognitive values of utterances and thoughts can be explained in terms of the notions of truth and conditions alone. This core idea is preserved even when we replace F by the weaker thesis F*:

- F*. Two referential terms are mentally associated with two different clusters of truth-conditional contents by a subject *S* at some time *T* if and only if they have different cognitive values for *S at T*.

The content of a referential utterance or a thought like ‘She is a pianist’ is only the property of being a pianist. But the cognitive value of that content for S at T , and hence the truth-value that S ascribes to it at T , depends on the background of contents to which that content is added. A background is a cluster of truth-conditional contents, or properties, through which S at T describes a given referent.⁸ On the one hand, the same content will have different cognitive values relative to different backgrounds or clusters. This is what happens with Bill. The two utterances ‘She is a pianist’ have different cognitive values for him because he describes Nora and Lena under different clusters of properties. The property of being a pianist is compatible with his first cluster (for Lena), to which it is added and relative to which it is then taken to be true, but that same property is incompatible with his second cluster (for Nora), to which it is not added and relative to which it is taken to be false. On the other hand, the same content will have the same cognitive value relative to the same background or cluster. That is what happens with Oscar. The two utterances ‘She is a pianist’ have the same cognitive value for him because he describes Nora and Lena under the same cluster of properties. The property of being a pianist is compatible with his unique cluster (for Lena and later also Nora), to which it is added and relative to which it is taken to be true. Thus the cognitive value of a term for S at T is relative to the background contents *which she takes (correctly or not) to concern the same particular object*. It is, in other words, relative to an epistemic situation regarding some particular object.

Earlier I proposed to relativise the truth-values of the contents of referential utterances and thoughts to objective situations featuring a referent. Now I am submitting that their cognitive values must be relativised to epistemic situations regarding what is taken to be some unique referent. Such an epistemic situation determines a set of centred worlds relative to which the cluster of properties is true, and that set of centred worlds captures a way the referent might be according to S at T .

8 Having a situation in mind

The view I have sketched so far encompasses claims about truth-conditions and cognitive values. Referents contribute to the absolute truth-conditions of referential utterances and thoughts by being part of their circumstance of evaluation. The content of a referential utterance or thought, together with other background contents, determines a particular cognitive value. Now we must ask: how is reference determined? At this juncture, the view could be developed in different ways, depending on further commitments, especially regarding the line of divide between semantics and pragmatics.

My preference would be to embed it into a pragmatic picture of representations. This picture opposes what it identifies as two intellectualist tendencies in contemporary theories of meaning. First, there is the tendency to overlook the content/situation distinction. Two different sides of empirical representations are often collapsed (due

⁸ Unlike mental files (Recanati 2012b), the clusters I invoke are collections of descriptive conditions, not vehicles of thought (Recanati rejects harmony: he *denies* that descriptive conditions suffice to explain cognitive values).

to a lingering influence of absolutism): what represents (their content) and what is represented (the portion of the environment relative to which their content must be evaluated). By putting too much weight on what represents, traditional theories (like propositionalism) end up overloading content—at the expense of harmony. Second, there is the tendency to assume that all the truth-conditional ingredients of a representation owe their truth-conditional relevance to some rule *in* the representational system.

According to the pragmatic picture I favour, the internal rules will not by themselves determine some unique situation of evaluation for each utterance or thought. This determination is not incumbent upon the representational system, which therefore falls short of determining absolute truth-conditions. The situation or environment to which an empirical representation refers is *present* in its absolute truth-conditions, rather than represented in its content.⁹ And its presence there is not a (logical) product of the representation itself, but a (natural) result of the fact that the representation was embedded in, and created for, a certain environment. Thus the fact that a singular representation is about this or that object is not determined by what is *in* the representation, but by a *relation between* the representation and the object. And that relation is fundamentally pragmatic. It belongs to the causal-historical order, and it essentially depends on contextual factors and/or intentions.

An account of this pragmatic sort rejects the egocentric doctrine due to Lewis (1979) and thereby what Recanati (2007a, Chapt. 38) calls the ‘Generalized Reflexive Constraint’ (‘GRC’):

‘According to the GRC, the situation with respect to which the content of [an attitude or statement] is evaluated must involve not only the subject of the [attitude or statement], but also the time of the state, the location of the [attitude or statement], and so on and so forth: in Lewis’s terms, the index with respect to which the content is evaluated must be the ‘index of the context’. The [GRC] anchors the situation of evaluation to the context and makes it unshiftable.’ (Recanati 2007a, p. 269)

‘A representation may concern a situation that the subject is thinking or talking about, rather than the situation he or she is in. So for example the sentence ‘At this time of the year it is freezing’ may be uttered in reference to Chicago, the place being spoken about, even though the place of utterance is Berkeley. [...] Similarly, the situation a memory concerns is temporally distinct from (anterior to) the situation the subject who remembers is in. In both cases, the situation the representation concerns is distinct from the situation in which the representation is tokened. The evaluation index is not the index of the context.’ (Recanati 2007a, p. 279)¹⁰

⁹ Millikan (2004, p. 49) calls such truth-conditional ingredients ‘reflexive signs’: ‘Times that represent times and places that represent places are perfectly ordinary ingredients of natural signs ... We can invent a special term for the case where a sign element represents itself. Call these sign elements ‘reflexive’.’

¹⁰ See Recanati (2007a, pp. 285–286).

What Recanati rejects is the universality of the GRC: some representations do not conform to it. According to centred referentialism, the GRC does not hold in the case of referential representations about referents other than the subject. How, then, will a referent be determined on each occasion?

I think that the notion of *having in mind*, which [Donnellan \(1966\)](#) introduced to deal with his ‘referential uses’ of descriptions, should play a fundamental role here. As I understand him, one of the important things that Donnellan showed was that *words or symbols* (with their conventional meanings) are not always what determines reference. Reference can be fixed by non-linguistic or non-representational means. By uttering ‘The murderer is insane’ upon observing the odd behaviour of Smith at the trial, while in fact the murderer is not Smith but Jones, a speaker (falsely) *says of Smith* that he is insane. The description is used referentially *for that man whom she (already) had in mind*, and not attributively for whoever would happen to fit it. The moral should be, it seems, that the referent of an utterance is not always determined by the words or symbols in the sentence. It can be fixed otherwise, *independently of language*. This interpretation resonates with the historical and conceptual account of the roots of the different versions of referentialism given by [Almog \(2014\)](#), who claims that Donnellan’s radical insights pointed to what he calls an ‘outside-in’ theory:

‘... Donnellan’s *natural history* basis for direct semantic reference is very different from Kripke and Kaplan *conventional* rule basis.’ ([Almog 2014](#), p. 79)

‘The satisfaction of this conventional rule in a context *makes* (in the logical sense) the word ‘I’ have me as its denotation—for that matter, *de jure* rigid denotation. But this is not enough for genuine *reference*. For this, the *object* concerned, JA, must make itself come to be in my mind, become by a *natural process*, the object of my thinking. Kaplan’s theory is, in contrast, an inside-out account, wherein meaning determines denotation. It is a further aspect of his theory of what-is-said (‘content’) that, unlike Frege, the denotation itself is placed into the content. But on the front that matters to us—what ‘makes’ the word have a certain object as its ‘value’—Kaplan offers a conventional rule that is the logical—not causal—*makes* of the object (by satisfaction). Donnellan’s account is quite orthogonal, an outside-in theory, making ‘I’ referential.’ ([Almog 2014](#), p. 81)

‘In my mind, Donnellan turned all this around [...] [H]e pointed out a distinct, and possibly the fundamental, source of *direct reference*—an object *coming*—by means of a *natural historical process*, to be connected with the mind of a thinker. We must take notice that we have here a reversal of the inside-out direction with which we standardly characterize reference, viz. how, as if we had a formal language, immaculate name (and the mind employing it), the name ‘determines’ for itself an external object as the given referent? [...] Donnellan’s idea of *coming to have in mind an object*, at least as I understood it, was reversing the flowchart by being an outside-in process: how an object determines my mind to have it and thus be thinking of (about) it. We are to think of the name ‘Aristotle’ (loaded with that ancient Greek) on the model of a light signal loaded with a remote (dead) star: the objects come to our mind by means of object-loaded signals. By the time I use such a charged term—say, ‘Aristotle’—to refer to the object I

am already fixed with, there is no reference *fixing* to be gone through; my mind is *already* Aristotle-fixed by the incoming historical process (signal), and my term merely rides back to the very object with which the term is loaded and with which I am—I reiterate this key point—*already* connected.’ (Almog 2014, pp. xv–xvi)¹¹

It seems to me that referential uses of descriptions exemplified a much more general phenomenon: empirical uses of representations. Truth-conditional representations (sentences or thoughts) do not in themselves *say* relative to what situation they are evaluated. Instead, an empirical representation is one that is *used* (whether intentionally in language or unintentionally in thought) to describe some independently given situation.¹² The situation of evaluation is the one that the subject (already) ‘has in mind’. A pragmatic picture generalising the outside-in picture to situations would relieve the mind of the burden of determination: the internal state of the representational system depends on the portion of the environment that is relevant to evaluate the representation, not the other way around.

9 Acquaintance and identity mistakes

How does a subject get to have a referent or situation in mind (or perhaps better, *before the mind*)? Several options are conceivable.¹³ But on the pragmatic picture, acquaintance and causal relations will play a fundamental role.¹⁴ Whatever the conditions are to gain acquaintance with something, a subject has a situation in mind only if she is acquainted with it. Acquaintance is what provides the causal glue between the content of a representation and a particular situation in the empirical world. It enhances, not the range of contents that a subject is able to apprehend, but the range of situations that the subject may summon before her mind to evaluate contents.

On this picture, Russell was right to hold that acquaintance allows us to grasp new singular thoughts about material objects, or to form new attitudes endowed with singular truth-conditions. His mistake was to presuppose absolutism. Given absolutism, objects can become part of truth-conditions only by being part of contents—which then amount to singular propositions. The conflict between this result and harmony is what led Russell to the unfortunate view that, in order to count as being acquainted with an object, a subject should be unable to commit identity mistakes about it. As Russell wanted to have both harmony and singular truth-conditions, his only option was to equate the epistemic conditions that harmony imposes on contents with the conditions that must be met to gain acquaintance with an object. Because he overlooked the content/situation distinction, he could not see that it is possible to maintain the epistemic conditions on the contents of thoughts and utterances *and* to acknowledge

¹¹ See also other recent essays on Donnellan’s work in Almog and Leonardi (2012).

¹² Cf. Recanati (2004, pp. 120–121) for a formulation of the same suggestion.

¹³ Thus a ‘liberal’ might hold that acquaintance is not necessary to refer to an object, and so to have it mind. For a recent and detailed defence of liberalism, see Hawthorne and Manley (2012).

¹⁴ For different views on the role of acquaintance in singular thoughts, see the essays collected in Jeshion (2010).

that these can have singular truth-conditions, *if we do not impose the same epistemic conditions on contents and acquaintance with situations*. Thus it was wrong to hold that, if a subject is acquainted with an object, she cannot commit identity mistakes about that object. In short, if there are epistemic conditions that must be met in order to gain acquaintance with an object, they will just not be the ones that harmony imposes on truth-conditional contents.

To adapt the distinctions drawn by Russell (1911), we may say that the situation of evaluation (referent) of an empirical representation is *presented* by acquaintance and *represented* by description (contents). Presentations and representations give different kinds of knowledge. Knowledge by acquaintance is knowledge of situations (or things). Knowledge by description is knowledge of truths concerning situations (or things). Presentations, which trace concrete aspects of the environment, are causal. Being representationally void, they cannot be true or false. But they enable empirical representations, which can be true or false. Representations, which describe what was independently presented, are satisfactory: they are true or false *of* what was presented.

10 Conclusions

An account encompassing centred referentialism and a pragmatic picture yields the following predictions: (i) the (absolute) truth-conditions of a referential utterance or thought involves its referent (referentialism); (ii) its reference is determined by causal relations of acquaintance in the context of use (pragmatic picture); and (iii) its cognitive value is fully explained by associated descriptions or truth-conditional contents (harmony). Centred referentialism makes room for a pragmatic picture in which reference is determined independently of representational contents, and the pragmatic picture makes room for a dissociation of what fixes reference and what explains cognitive values. In turn, that dissociation is what makes it possible to salvage harmony.

Of course, more work will be needed to develop the pragmatic picture sketched here into a full-blown theory. But if it is on the right tracks, the lessons of the referentialist revolution will be much more general than had been thought. This is usually taken to have shown that the referent of a term is not always fixed by the satisfaction of truth-conditional contents (descriptions). My hunch is that the most general lesson of that revolution is that the situation of evaluation to which some empirical representations refer is not determined via the satisfaction of *internal* rules, but more directly by *external* causal-pragmatic relations between the representation and the relevant situation.

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