

Context-Dependence, Perspective and Relativity

p. 141

Mouton Series in Pragmatics 6

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De Gruyter Mouton

Context-Dependence, Perspective and Relativity

edited by

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De Gruyter Mouton

ISBN 978-3-11-022776-5
e-ISBN 978-3-11-022777-2
ISSN 1864-6409

Library of Congress Cataloging-in-Publication Data

Context-dependence, perspective and relativity / ed. by François Recanati, Isidora Stojanovic, Neftalí Villanueva.
p. cm. – (Mouton series in pragmatics; 6)
Includes bibliographical references and index.
ISBN 978-3-11-022776-5 (alk. paper)
1. Context (Linguistics) 2. Semantics. I. Recanati, François,
1952– II. Stojanovic, Isidora, 1973– III. Villanueva, Neftalí,
1979–
P325.5.C65C649 2010
401'.43–dc22

2010023627

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

© 2010 Walter de Gruyter GmbH & Co. KG, Berlin/New York

Printing: Hubert & Co. GmbH & Co. KG, Göttingen

∞ Printed on acid-free paper

Printed in Germany

www.degruyter.com

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Introduction

*François Recanati, Isidora Stojanovic,
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1. Introduction

The philosophy of language community has recently witnessed the “context wars” (as Kent Bach once put it).¹ A number of closely related debates have taken place concerning the role of context in linguistic understanding. This volume is devoted to (some of) these debates.²

2. Literalism and contextualism

The first debate is that between literalism and contextualism. Contextualism is the view that context-sensitivity (in various forms) is a pervasive feature of natural language. It seems that everybody is a contextualist nowadays –literalism, according to which (many or most) sentences express propositions independent of context, has been extinct for some time. But there have been recent attempts to revive it. In particular, the philosophers who call themselves “semantic minimalists” claim that, more often than not, alleged context-sensitivity only is *apparent* context-sensitivity.

Suppose that at a symposium on semantics, the following dialogue takes place between Josh and Marsha:

(1) Josh: *Are there any philosophers?*

(2) Marsha: *Yes, though most people are linguists.*

It seems that Marsha’s answer in (2) isn’t made true by the mere existence of some philosopher somewhere, but only by there being some philosophers *in the domain relevant in the context in which the sentence is uttered* and/or evaluated for truth. In our case, it would typically be the domain consisting of the people attending the symposium. Similarly, for her sentence in (2) to be true, it is only required that most people *in the contextually restricted domain* are linguists. So quantified sentences like (1) and (2)

are context-sensitive. That, at least, is what a contextualist would say. But, a literalist might argue, this is an illusion.

According to the literalist, what Josh (literally) asked in (1) is whether there are any philosophers *tout court*, and Marsha's answer in (2) is made true by the mere existence of some philosopher somewhere, regardless of how things stand at the symposium. And while her answer to Josh's question is almost trivially true, what she further says is almost trivially false, since, according to the literalist, it means that most people in the universe are linguists. In other words, literalism holds that quantifier words such as "there are", "most", "every", etc. always behave the way we would take them to behave in e.g. "There are no unicorns" or "Most people have an IQ over 80;" that is, that they quantify over everything, *in a context-independent manner*. Context-sensitivity, in such a case, is merely apparent. The only cases in which context can have an impact on semantic content and truth value are those of resolving lexical and syntactic ambiguities and of determining the reference of indexicals such as "I", "this", or "today".

In a situation in which 90% of the people at the symposium are linguists, the literalist claims that what Marsha says in (2) is false, while the contextualist claims that it is true. There is no doubt that ordinary speakers' intuitions on truth value are more in line with the contextualist predictions than with the literalist. The literalist's assignment of truth-conditions to sentences like (1) and (2) are strikingly counter-intuitive. Literalism thus faces the problem of accounting for ordinary speakers' intuitions, and its proponents typically argue that what speakers' intuitions actually track is some level of pragmatically conveyed content, rather than semantic content itself. In other words, literalists hold that speakers often mistake what is *conveyed* for what is *said*.

It should be noted that none of the contributions in this book attempts to argue for semantic minimalism. This, in our view, reflects the fact that the recent attempts to resurrect literalism have failed.³

3. The semantics/pragmatics interface

The next debate of importance is internal to the contextualist camp, and it is well-represented in this book. Consider, again, the case of quantifier domain restriction, illustrated by the dialogue above. There remains

considerable disagreement on the issue of how context is involved in determining the truth values of sentences containing quantifiers. The first branching point is on the question of whether there is something either in the meaning or in the syntax of the expressions used that calls for domain restriction, the alternative being that the context somehow in and by itself restricts the domain of quantification. This is not just a matter of technical detail. On this issue hinges the whole debate regarding the semantics/pragmatics interface.

On the currently dominant picture, the only truth-conditional role of pragmatics corresponds to so-called “saturation”. Saturation is a pragmatic process of contextual value-assignment that is triggered (and made obligatory) by something in the sentence itself, namely the linguistic expression to which a value is contextually assigned. For example, if the speaker uses a demonstrative pronoun and says “She is cute,” the hearer must determine who the speaker means by “she” in order to fix the utterance’s truth-conditional content. The expression itself acts as a variable in need of contextual instantiation. So pragmatics comes into play, but it does under the guidance of the linguistic material.

Recanati (2004) describes saturation as a “bottom-up” process in the sense that it is signal-driven, not context-driven. A “top-down” or context-driven process is a pragmatic process which is not triggered by an expression in the sentence but takes place for purely pragmatic reasons -in order to make sense of what the speaker is saying. Such processes are also referred to as “free” pragmatic processes-free because they are not mandated by the linguistic material but respond to wholly pragmatic considerations. For example, the pragmatic process through which an expression is given a nonliteral (e.g., a metaphorical or metonymical) interpretation is context-driven: we interpret an expression nonliterally in order to make sense of the speech act, not because this is dictated by the linguistic materials in virtue of the rules of the language.

The dominant view, then, is that no “top-down” or free pragmatic process can affect truth-conditions -such processes can only affect what the speaker means or implies (but not what she says). Or, to put it in King’s and Stanley’s terminology: there can only be “weak” pragmatic effects on truth-conditional content. They define a weak pragmatic effect as follows:

A weak pragmatic effect on what is communicated by an utterance is a case in which context (including speaker intentions) determines interpretation of a lexical item *in accord with the standing meaning of that lexical item*. A strong pragmatic effect on what is communicated is a contextual effect on

what is communicated that is not merely pragmatic in the weak sense. (King and Stanley 2005: 118–119; our emphasis)

But there is a dissenting position, sometimes referred to as “Truth-Conditional Pragmatics,” according to which free pragmatic processes *can* affect truth-conditions. For example, a sentence like

(3) *There is a lion in the middle of the piazza*

has several readings. On one reading “lion” is given a non-literal interpretation and means something like “statue of a lion.” On that reading (3) may be true even if, literally, there is no lion in the middle of the piazza (but only a statue of a lion). The non-literal reading of “lion” arguably results from a pragmatic operation of “modulation” that is not mandated by the lexical item “lion”. There is no slot to be filled or anything of the sort. The pragmatic effect here looks like a strong pragmatic effect, yet it affects truth-conditional content. That is the sort of example which motivates Truth-Conditional Pragmatics.

Once the possibility of strong pragmatic effects on truth-conditional content is acknowledged, a new tool becomes available and various semantic phenomena can be reinterpreted. For example, it is common to posit a covert generic quantifier to account for generic readings of sentences like “Pandas eat bamboo shoots.” Yet such a quantifier is said to be “phonologically null:” it cannot be heard. How then, one might ask, do language users manage to interpret the sentence correctly if the quantifier in it cannot be heard? This problem suggests an alternative approach. Thus Cohen (forthcoming) argues that a free pragmatic process of “predicate transfer” (Nunberg 1995) is responsible for the generic readings of such sentences. Through that pragmatic process a generic quantifier is introduced into the logical form, but it is not there in the syntax, nor is its introduction semantically mandated. On this view, free pragmatic processes take place locally and interact with semantic composition, affecting logical form.

To revert to our pet example (quantifier domain restriction) one may consider the quantifier domain to be restricted through a free pragmatic process, or consider that quantifier domain restriction is entirely a matter of saturation.⁴ According to the former position, the literal reading is the unrestricted reading (as it is for the literalist), and the restricted readings result from free pragmatic processes which end up affecting truth-conditions (contrary to what the literalist would say). According to the other position,

the so-called unrestricted reading is a particular case of contextual domain restriction: the case in which the contextually provided domain is the maximal domain.

Of course, a number of decisions still have to be made, whichever position one takes. If one opts for a saturation account, one has to decide whether it is the lexical semantics of the overt quantifier phrase which requires an argument, presumably a domain of quantification, or whether the domain in question is the value of a covert element in the syntax. If the latter, we still have to identify the element in question and its syntactic position: for example, is the hidden “domain variable” syntactically part of the nominal argument of the quantifier, or is it part of the determiner itself? If one opts for a free pragmatic account of quantifier domain restriction, we similarly have to choose between an account that treats the quantifier domain as an “unarticulated constituent” of the interpretation (something which does not correspond to any constituent in the sentence but results from pragmatically enriching its global interpretation), or as the result of locally “modulating” the meaning of some expression in the sentence (presumably the quantifier phrase itself).

4. Contextualism and relativism

The next debate, which also looms large in the present book, is the so-called contextualism-relativism debate. In section 2, we noted that contextualism conforms to ordinary intuitions when it comes to assessing particular utterances as true or false, while literalism often doesn’t. Relativism is another position which respects our intuitions regarding contextual variations of truth-value. In contrast to contextualism, however, it does not posit a corresponding variation in the content of the utterances under evaluation. The starting point of semantic relativism is the observation that *two* things are needed to determine a truth-value: we need a thought content (a proposition) and a circumstance of evaluation for that content. A content, by itself, is not enough to determine a truth-value. Take, for example, the proposition that Michael Jackson died in 2009. It is true because the actual world makes it true. Had things turned out differently, the proposition would be false. In other words, the proposition is contingent: it is true with respect to certain worlds, and false with respect to others. The proposition itself only determines a function from worlds to truth-values. To get a truth-value, we need a world (e.g., the actual world) in addition to the proposi-

tion. Indeed, we evaluate the proposition as true simpliciter because we evaluate it with respect to the actual world.

Since the truth-value of an utterance depends upon two factors (the proposition which the utterance expresses, and the circumstance –the world – with respect to which it is evaluated), context-sensitivity itself comes in two varieties. By “context-sensitivity” here, we mean the fact that the truth-value that we intuitively assign to an utterance varies with the context in which the utterance is made (so that, for example “Most participants are linguists” is assessed as sometimes true, and sometimes false, depending on the context of utterance). The two forms of context-sensitivity are:

- (i) (Standard context-sensitivity) The proposition expressed by the utterance depends upon the context. That is so when, for example, the sentence contains an indexical expression, i.e. an expression whose content depends upon the context. Thus “I am French” expresses different propositions when uttered by different people, and may take different truth-values accordingly.
- (ii) (Circumstance-relativity) The circumstance with respect to which the proposition expressed by an utterance is evaluated also depends upon the context. Typically, it is evaluated with respect to the actual world, which is the world in which the utterance is made (the “world of the context,” as Kaplan and Lewis put it).

The second form of context-dependence (circumstance-relativity) is not generally taken into consideration because it is benign – it introduces no actual variability in truth value since, as a matter of fact, all utterances are made in one and the same world, namely the actual world. To make room for it we have to imagine possible utterances in a counterfactual world (MacFarlane 2007). For example, we imagine a world in which Michael Jackson did not die in 2009, and in which, having been misinformed, I say (wrongly) that he did. My utterance of “Michael Jackson died in 2009” in the imagined context counts as false, intuitively, because the world in which the utterance is made does not make the proposition true. If we change the context and suppose that this utterance is made in the actual world, then of course it counts as true. This shows that the truth-value of a proposition depends upon a feature of the context of utterance (namely the world of the context). This form of context-sensitivity is distinct from the

standard form, in which it is the proposition expressed by the utterance which depends upon the context.

Rather than consider imaginary utterances in counterfactual situations, a relativist may appeal to the fact the circumstance of evaluation is often said to involve a *time* as well as a world (see e.g. Kaplan 1989). Now, if all (actual) utterances are made in one and the same world, namely the actual world, they are not made at one and the same time. For that reason, if we admit temporal relativity as a form of circumstance-relativity, we will not be seduced into thinking that circumstance-relativity is a benign form of context-sensitivity, one that can safely be ignored.

To make sense of the idea of temporal relativity, consider the following claim:

(4) *Tokyo is the capital of Japan.*

While that claim is true, one might ask whether it has always been true. And, given that in the past, Kyoto used to be the capital of Japan, it does not seem incorrect to say the claim made in (4), though true now, was not always true in the past. The intuition that the truth value of (4) may vary with time is what relativism with respect to time, or *temporalism*, tries to capture. On this view, just as there are contingent propositions, i.e. propositions that are true with respect to some worlds and false with respect to others, there are temporal propositions, like the proposition expressed by (4), which are true with respect to some times and false with respect to others. And just as an utterance that expresses a contingent proposition is true simpliciter if the proposition is true at the world of the context (viz. the actual world, if the utterance is one which is actually made rather than an imaginary utterance), an utterance expressing a temporal proposition will be true simpliciter if it is true at the time of the context (viz. the time at which the utterance is made).

To sum up, the context plays two roles: it contributes to determining which proposition is expressed, by assigning values to indexicals, free variables, etc. (and, possibly, by determining how the meanings of the words in the sentence should be contextually modulated); and it determines the world, the time, and more generally the circumstances with respect to which we evaluate that proposition for a truth-value.⁵ Corresponding to the two roles of context, there are two forms of context-dependence: standard context-sensitivity, where the content of the utterance varies with the context, and circumstance-relativity, where the content is fixed but the

circumstance with respect to which it is evaluated contextually varies. The existence of these two forms suggests that an intuitive variation in truth-value can be accounted for in two ways, and that suggestion gives rise to the contextualism/relativism debate. According to contextualist accounts, what varies contextually is the content of the utterance. Thus a sentence like (4) will be said to be indexical: because of the present tense, which (in this case at least) refers to the time of utterance, the sentence expresses different propositions when it is uttered at different times. According to relativist accounts, however, the sentence expresses one and the same (temporal) proposition, whichever context it is uttered in, but that proposition can be evaluated with respect to different times, where the time of evaluation depends upon the context, just as the world of evaluation depends upon the context.

It is possible to extend the relativist idea by including in the circumstance of evaluation not only a time and a world but also a judge or a standard of taste. In this way, one can account for e.g. the fact that “spinach is delicious” is true only for the persons who share a certain taste, but not for others who don’t. Here, the word “relativism” comes closer to its ordinary sense.

The relativist move is also applicable, in principle, to our working example: domains of quantification. Reconsider the example from Section 2, and suppose that the following is said while talking about the symposium:

(5) *Most people are linguists.*

Intuitively, (5) is true. However, one might ask whether it remains true in some larger situation, such as the one whose domain includes not only the linguists’ symposium, but, say, all the symposia currently held at a certain convention center. And one could well hold that what (5) expresses, though true in the “small” situation where almost everyone is a linguist, is false with respect to the larger situation where linguists are a minority.⁶ This suggests that, perhaps, the domain of quantification itself can be construed as an aspect of the circumstance of evaluation, or something that is determined by the circumstance of evaluation. Since the circumstance of evaluation depends upon the context, a quantified sentence such as (5) remains context-sensitive, but on the relativist construal the form of context-sensitivity at issue is not the standard form. It is not the content of the utterance that varies contextually, according to the relativist position, but the

circumstance in which the content is evaluated.⁷ A contextualist, by contrast, will insist that what varies is the content, regardless of whether the contextual variation of content is accounted for in terms of saturation or modulation (section 2).

5. Faultless disagreement

How can we adjudicate between contextualism and relativism? One argument often advanced in favor of relativism is that it allows the theorist to account for an otherwise puzzling phenomenon. Suppose that A says “spinach is delicious” and B responds, “No, it isn’t.” A and B simply do not have the same taste: what is delicious for the one is not delicious for the other. On a contextualist analysis, “delicious” is context-sensitive. It does not express an absolute property, but a relation between an object and a person, namely the relation which holds just in case the person finds the object delicious. The person at issue is determined by context: it is, typically, the speaker. On this view, A’s utterance expresses the proposition that spinach is delicious for A, that is, according to A’s taste. Clearly, that is not what B is denying. What B denies is that spinach is delicious according to his *own* taste. Since the proposition that A asserts is *not* the proposition that B denies, they do not disagree, appearances notwithstanding. They no more disagree than they would if A said “I am tall”, and if B responded “No, I am not tall.”

At this point the relativist sees his chance. For it is intuitively very clear that the two cases are different, and ought to be treated differently. We have the feeling that A and B *actually disagree* when one says “This is delicious” and the other responds “No, it isn’t.” This is not at all like “I am tall”/“No, I am not.” The contextualist seems to be guilty of conflating the two sorts of case, but the relativist believes that he can capture the difference. When A says “I am tall” and B responds “No, I am not,” we find the exchange infelicitous because, obviously, what B says (that he is not tall) in no way contradicts what A has just said (that he – A – is tall). There is no single content over which they disagree. But when A says “spinach is delicious” and B says “No, it isn’t,” we don’t have the same intuition. Here it seems that A and B do disagree, and the relativist accounts for that intuition by saying that there is a content (viz. the proposition that spinach is delicious) to which they assign opposite truth-values. Being evaluative, the proposition in question is assessed as true or false with respect to a

circumstance that includes not only a world and a time, but also a judge or a standard of taste. From A's point of view, the proposition is true; from B's point of view, it is false. Even though A and B disagree, they are both right; for the proposition *is* true for A, and false for B. That is what, in the relativist literature, is referred to as "faultless disagreement" (cf. Kölbel 2003).

A similar phenomenon involves epistemic modals (cf. Egan et al. 2005). Suppose A says "John might be in London." This means that what A knows does not rule out John's being in London: John's being in London is an epistemic possibility for A (given the body of information in her possession). Now suppose that B replies: "No, he can't be – Peter saw him in Delhi two hours ago." B contradicts A in the sense that B's utterance establishes that John's being in London is *not* a possibility. Since B turns out to be better informed than A, A can only concede that she stands corrected: "Ok, I was wrong then. He can't be in London." But this "retraction" is puzzling. If A's initial utterance at time *t* meant that John's being in London is compatible with A's knowledge at *t*, why does A say that she was wrong when he made it? Again, the relativist solution distinguishes between the proposition that gets asserted (viz. the proposition that John's being in London is a possibility) and the point of view from which it is assessed. Here the point of view involves the epistemic state of some agent. At time *t*, A assesses the proposition as true from her point of view (i.e. the state of her knowledge at *t*). B assesses the proposition as false from his own point of view, since he knows better; and he provides A with a new piece of information which changes A's own epistemic state. A is now in a position to re-evaluate the proposition: from A's point of view at *t'* (after gaining new information), the proposition is false. A therefore retracts her earlier assertion: the proposition that she judged to be true, she now judges to be false.

The problem with the relativist explanation of faultless disagreement and related phenomena is that it overgeneralizes. There are plenty of cases which seem to be amenable to a relativist analysis, but which do not elicit the same intuitions regarding agreement and disagreement. Thus I call you on the phone, and commenting upon my situation I say "It is raining." If you say "No, it isn't," meaning that there is no rain in your situation, there is misunderstanding rather than genuine disagreement. Or, adapting an example due to Jon Barwise (1989), suppose that Watson says "The salt is left of the pepper," and Holmes, speaking from his own perspective (opposite Watson), replies, "No it is not." Clearly, there is no substantive disa-

greement here. If each of them is talking about his own perspective, there is misunderstanding rather than genuine disagreement. The same considerations apply to the temporal case. At time t , you say “It is raining.” Later, when the sun is shining again, you say “It is not raining”. You cannot conclude “so I was wrong.” Still, in all these cases, a relativist analysis is in order: from a relativist point of view, a sentence like “It is raining” expresses a proposition that is true or false not relative to worlds simpliciter, but relative to rich circumstances involving a world, a time, and a place; while “The salt is left of the pepper” expresses a proposition that is true or false relative to a world, a time, a place, and a perspective. The relativist position is considerably weakened if such cases cannot be handled along relativist lines. But if they *are* handled along relativist lines, then the relativist explanation of faultless disagreement suffers from overgeneration: it predicts that in such cases also we should have the intuition that genuine disagreement occurs, yet no such intuition actually arises.

6. Use-sensitivity vs. assessment-sensitivity

Faced with the overgeneration problem, the relativist has an option: sever the link between the context of utterance and the circumstance of evaluation. As we have seen, on the standard approach, an utterance expresses a proposition which is evaluated with respect to the world of the context. Relativist approaches construe the circumstance of evaluation as involving parameters other than the possible world –e.g., a time, a judge, a location, a body of information, etc. But the time is still construed as the time of the context (i.e. the time of utterance); the location –for “It is raining”– is the place of utterance, and so on and so forth. As Lewis 1980 puts it, the “index” of evaluation for an autonomous utterance always is “the index of the context.”⁸

It is, however, possible for an utterance such as “It is raining” to be evaluated not with respect to the place of utterance, but with respect to some other place which happens to be salient or has just been mentioned in the conversation. Some theorists would say that, in such a case, the utterance is elliptical for a longer utterance explicitly referring to that location and saying that, at that location, it rains. From a relativist standpoint, however, it is preferable to maintain that the location is an aspect of the circumstance of evaluation, while accepting that the place of evaluation need not be the place of the context of utterance. In general, on this view, the index need

not be the index of the context: it is the index *determined by* the context. Thus the world of evaluation need not be the world of the context. If we have just made a supposition, a subsequent utterance may well have to be evaluated with respect to the set of possible worlds introduced by that supposition, rather than with respect to the actual world (in which the utterance is made). Similarly, there are what Lasersohn (2005) calls “exocentric” uses of predicates of personal taste: after choosing one particular brand of cat food rather than another in the supermarket, I may justify my choice by saying “This one is tasty,” meaning by this that it is tasty *to my cat*. Here the judge is not the speaker, but someone else whose taste is contextually relevant.

A more radical move would consist in denying that the circumstance of evaluation is always determined by the context of utterance. Consider the example discussed above (section 4):

(6)

A (at time t): *John might be in London.*

B: *He can't be – Peter saw him in Delhi two hours ago.*

A (at time t'): *Ok, I was wrong then. He can't be in London.*

A's utterance at t is to be evaluated with respect to A's information state at t . Here the index is the index of the context. At t' , however, A re-evaluates her initial utterance from the point of view of the new epistemic state she finds herself in at t' . Is this legitimate? It is, if the circumstance of evaluation is not necessarily the circumstance of the context of utterance, nor even a circumstance determined by the context of utterance, but, rather, a circumstance determined by the context in which *the assessor* finds himself or herself when evaluating the utterance. At t' , when she evaluates her prior utterance as false, A finds herself in a new epistemic state, distinct from the one that she was in when she made the utterance. According to MacFarlane's brand of relativism (the only genuine form of relativism by his standards)⁹, it is the context of the assessor, not the context of the speaker, which fixes the relevant circumstance of evaluation. Of course there are many cases in which there is no difference between the context of utterance and the context of assessment. Thus when A makes her utterance at t , she assesses it as true with respect to the context she is in, which context is both the context of utterance and the context of assessment. But at t' , when she re-evaluates the utterance, the context of utterance and the context of as-

assessment diverge: qua assessor at t' , A has more extensive knowledge that she had, qua speaker, at t . The fact that she then evaluates her prior utterance as *false* shows that what fixes the circumstance of evaluation is the context of assessment, not the context of utterance.

In this “double-context” framework, put forward by John MacFarlane, can we dispose of the overgeneration problem which besets simpler forms of relativism? We can. According to MacFarlane, some expressions are “use-sensitive” in the sense that their semantic value (their truth-value, in the case of complete sentences) depends upon the context of use. As we have seen (section 3), this dependence on the context of use covers two types of case. The expression may exhibit standard context-sensitivity, i.e., its content may depend upon the context of use; or the expression may be circumstance-relative, i.e., its extension may be relative to a circumstance determined by the context of use. In contrast to these two types of case, an expression is *assessment-sensitive* just in case its semantic value depends upon the context of assessment, distinct from the context of use. Epistemic modals are assessment-sensitive, MacFarlane claims: that is what the dialogue in (6) shows. Likewise, predicates of personal taste are arguably assessment-sensitive: that is why it is possible and legitimate for B to contradict A’s claim that spinach is delicious. When B assesses A’s claim, the relevant standards of taste are B’s standards, for B is the assessor. To solve the overgeneration problem, then, one has simply to concede that not all expressions are assessment-sensitive. Some are use-sensitive. In the “It’s raining” case, the relevant location needs to be fixed by the context of utterance. It will not do to re-evaluate the speaker’s utterance of “It is raining” with respect to a location distinct from the location which he had in mind and was talking about. In other cases, however, such things happen. So –according to the view under discussion– we need assessment-sensitivity as well as use-sensitivity.

At this point, it should be obvious that there is room for two forms of assessment-sensitivity, just as there are two types of use-sensitivity. An expression is use-sensitive, we said, if either its content depends upon the context of use or it is to be evaluated with respect to a circumstance which depends upon the context of use. Similarly, an expression is assessment-sensitive if it is to be evaluated with respect to a circumstance determined by the context of assessment, or *if its content depends upon the context of assessment*.

The intriguing view that, in some cases, the *content* of an expression may depend upon the context of assessment rather than the context of use

has been dubbed “content-relativism” by some and “indexical relativism” by others.¹⁰ Most of the intuitions in favor of such a view seem to come from examples in which the interpreter’s context, or context of reception, matters more than the speaker’s context (Egan 2009). It is not clear that such examples cannot be dealt with within the standard use-sensitivity framework (since the “use” of an expression involves its reception as well as its utterance); but the theoretical option is definitely there, awaiting the empirical data for which it could profitably account.¹¹

Notes

1. Relatedly, Larry Horn speaks of the “border wars” over the semantics/ pragmatics interface (Horn 2006).
2. The present volume originated in the conference *Context-Dependence, Perspective and Relativity in Language and Thought*, held at the Ecole Normale Supérieure in Paris, 9–11 November 2007.
3. Even Herman Cappelen, whose book *Insensitive Semantics* (co-authored with Ernie Lepore: Cappelen and Lepore 2005) gave its impetus to the minimalist crusade, now embraces contextualism, as witnessed by his most recent book (Cappelen and Hawthorne 2009).
4. Intermediate positions are also available, as Angelika Kratzer argued in her 2009 Context and Content lectures in Paris (Kratzer forthcoming).
5. Kaplan (1989) already distinguishes these two roles of the context parameter; for a discussion of the importance of this distinction, from both a semantic and a logical point of view, see e.g. (Predelli and Stojanovic 2008).
6. This sort of suggestion may be found, for instance, in (Barwise 1989).
7. A relativist account of quantifier domain restriction has recently been presented and defended e.g. in (Stojanovic forthcoming).
8. For embedded sentences, the index of evaluation may be “shifted” by the operator under which the sentence is embedded.
9. What we have called “relativism” so far is a position MacFarlane prefers to refer to as “non-indexical contextualism” (MacFarlane 2009). Recanati (2007) calls it “moderate relativism” to distinguish it from MacFarlane’s more radical form of relativism, where the circumstance of evaluation is determined by the context of assessment.
10. See Cappelen (2008), Sweeney (ms.), Weatherson (2009).
11. Research on the themes of this book has received funding from the European Research Council under the European Community’s Seventh Framework Programme (FP7/2007–2013) / ERC grant agreement n° 229 441 – CCC.

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1. Implicit content (1): philosophical perspective

Unarticulated tension

Lenny Clapp

Abstract: The idea of unarticulated constituents is used in several different ways in the philosophy of mind and the philosophy of language. My purpose here is to clarify these uses and thereby illustrate that there is considerable tension between them. More specifically, I will argue that if one endorses the original arguments in support of unarticulated constituents of the contents of thoughts and utterances (Perry 1986), then one should reject the later invocation of unarticulated constituents to solve the familiar puzzles of belief reports (Crimmins and Perry 1989; Crimmins 1993). Since it is John Perry who introduced the notion of unarticulated constituents, my remarks will focus on his uses of the notion. But the conclusions drawn here will be of interest to any philosopher whose views about content, cognitive significance, or belief reports have been influenced by Perry's views. Indeed, in the fifth section I will explore the consequences of these conclusions for semantic relativism, a position that bears at least very strong resemblance toward the views advanced in (Perry 1986).

1. Varieties of unarticulated constituents

In a recent summary of his views Perry distinguishes between three “uses of the idea of unarticulated constituents” (2007: 538). The first use derives from where the idea is introduced, in Perry's (1986), and this use concerns what is represented in *thought*. The main point of “Thought Without Representation” – as is suggested by the title – is that at some basic level of cognition one can have a thought pertaining to an entity, e.g. oneself or one's immediate environment, and yet employ no mental representation that represents that entity.¹ Or as Perry puts it for the case of thoughts expressed by sentences such as “He is to the right” or “That's a long ways away”, “there are thoughts, roughly expressible by these sorts of sentences, in which the person doing the thinking is not explicitly represented. ... [T]he person having the thought is an unarticulated constituent ...” (2007: 538). So, generalizing now, a constituent of the content of a *thought* that is not represented by any representation in that thought is an *unarticulated constituent* of the content of that thought.

The second use of the idea is closely related to the first. The difference is that the second use deals with what is represented in *language* instead of

what is represented in *thought*. Perry explains that “when I say, ‘It’s raining,’ my utterance will be true or false because it is raining or not raining in some particular place, the one I am talking about. That place is an unarticulated constituent of [the] proposition expressed by my utterance” (2007: 538). So, the truth-conditional content of a typical *utterance* of, e.g., “It is raining” that takes place in Palo Alto pertains to Palo Alto, even though there is no *overt* (pronounced or written) word or other representation in the utterance (or inscription) that refers to Palo Alto. So, generalizing again, a constituent of the content of an *utterance* that is not represented by any *overt* representation in that utterance is an *unarticulated constituent* of the content of that utterance.

I will refer to the first use of unarticulated constituents as the *thought use*, and to the second as the *language use*. These uses of the idea of unarticulated constituents are closely related, and mutually supporting. For it is plausible to suppose, and Perry (1986) does suppose, that at least sometimes if a speaker performs an utterance U and object O is an unarticulated constituent of the truth-conditional content of U, then the truth-conditional content of the thought T that the speaker expresses by performing U also has O as an unarticulated constituent. So, for example, if Murdock is an unarticulated constituent of the truth-conditional content of my utterance of “It is raining”, then it is plausible to suppose that Murdock is also an unarticulated constituent of the truth-conditional content of the thought I have and express via this utterance.² Though it is plausible to suppose that it is at least sometimes the case that an entity that is an unarticulated constituent of the truth-conditional content of an utterance is also an unarticulated constituent of the truth-conditional content of the thought that utterance expresses, there is nothing in Perry’s usage of the idea suggesting that the uses must always coincide in this way: Perry’s usage allows that there be an entity that is an unarticulated constituent of the truth-conditional content of an utterance, but not an unarticulated constituent of the truth-conditional content of the thought expressed by that utterance. That is, Perry’s usage allows for the following: an utterance expresses a thought, and the utterance and thought thereby expressed have the same truth-conditional content, yet there is a constituent of this content that is articulated relative to the thought, but unarticulated relative to the utterance. Indeed, Perry suggests that the example wherein the idea is introduced involving his son’s utterance of “It’s raining” may be one such case: Perry writes regarding this case, “Here it is natural to think that we are explaining which unarticulated

constituent a statement is about in terms of something like the *articulated* constituents of the beliefs and intentions it expresses" (1986: 142).³

Before the third explanatory role played by the idea of unarticulated constituents can be introduced an additional layer of complexity must be recognized. Perry (1986) draws a distinction between *being about* and *concerning*, and the distinction applies to both utterances and thoughts: a thought or utterance that pertains to an entity *x*, i.e., whose truth depends upon how things are with *x*, can either be *about* *x*, or can merely *concern* *x*. What is the difference? Precisely how the distinction between *being about* and *concerning* is to be drawn is a matter somewhat open to interpretation, but as I understand Perry the distinction at the level of language depends upon the distinction at the more fundamental level of thought. So in what follows I will first explain how I think the distinction is to be drawn for thought, and then explain how it is to be drawn for language.

At the level of thought *being about* and *being articulated* coincide; a thought is *about* all and only those entities it articulates, i.e., all and only those entities it explicitly represents. So, if an entity *O* is a constituent of the truth-conditional content of a thought *T*, yet *O* is unarticulated by *T*, then *T* merely *concerns*, and is not *about*, *O*. I think it is relatively clear that Perry thinks that *cognitive states* are individuated in terms of the content they are *about*: Two token thoughts *T*₁ and *T*₂ are instances of the same *state* only if they are *about* the very same entities; though of course *T*₁ and *T*₂ may be instances of the same *state* even if they *concern* different entities.⁴

How the distinction between *being about* and *concerning* is to be drawn in the case language is parasitic upon how the distinction is drawn in the case of thought. This is because Perry seems to maintain that when an utterance *U* expresses a thought *T*, the aboutness-content of *U* just is the aboutness-content of *T*. That Perry maintains that the aboutness-content of an utterance is provided by the aboutness-content of the thought expressed by the utterance is implied by what Perry says with regard to the example of his son, who is in Murdock, uttering "It is raining" in response to Perry, who is in Palo Alto, asking "How are things there?":

My son's belief was about Murdock, and his intention was to induce a belief in me that was about Murdock by saying something about Murdock. Here it is natural to think that we are explaining which unarticulated constituent a statement is about in terms of something like the *articulated* constituents of the beliefs and intentions it expresses. (1986: 142, emphasis in original).

Generally then, if an utterance *U* expresses a thought *T*, and there is an object *O* such that *O* is articulated by *T* (and thus *T* is *about* *O*) but *O* not articulated by *U*, then *U* is *about* *O*, even though *U* does not articulate *O*. So, in contrast to the case of thoughts where *being about* and *being articulated* coincide, some utterances are *about* unarticulated constituents.⁵

The distinction between thoughts and utterances *being about* entities and their *merely concerning* entities requires us to draw a corresponding distinction between two sorts of content. When a *Z*-lander thinks an *it is raining* thought, his thought concerns, but is not about, *Z*-land. So what are we to say with regard to the content of this thought? In one sense the content of the thought includes only those entities the thought is *about*, and in this sense the content is not a truth-conditional proposition containing *Z*-land, but rather a *propositional function* whose value for the argument *Z*-land is a full truth-conditional proposition whose truth value depends upon the weather in *Z*-land. But, since we take the *Z*-lander's thought to be true or false depending upon the weather in *Z*-land, there is another sense in which *Z*-land is a constituent of the content of the *Z*-lander's *it is raining* thought, even though that thought *merely concerns*, and is not *about*, *Z*-land. Let us then call the first sense of "content" *aboutness-content*, and the second sense *concerning-content*.⁶

This distinction between kinds of content in turn gives rise to a distinction between two kinds of unarticulated constituents. For example, *Z*-land is an unarticulated constituent of the *concerning-content* of the *Z*-lander's *it is raining* thought, but *Z*-land is not an unarticulated constituent of the *aboutness-content* of this thought. *Z*-land is not an unarticulated constituent of the aboutness-content of the *Z*-lander's *it is raining* thought *not* because it is an *articulated* constituent of the aboutness-content, but rather because it is not a constituent of the aboutness-content at all. A diagram will serve to summarize and clarify the complex relationships between the first two uses of the idea of unarticulated constituents, and the two varieties of content (see Table 1)

The categories on the left of the table are the two relevant kinds of representations: *Thought* includes instances of complex mental representations and *Language* includes instances of natural language expressions. The categories above the table are the relevant sorts of content that these kinds of representations can have, where these kinds of content correspond to Perry's distinction between *being about* and *concerning*. The information inside the table answers two questions: First, are there unarticulated constituents of this variety of content? And second, is this variety of content al-

ways truth-conditional? So, for example, the information in the bottom-left quadrant tells us that, first, there are *utterances* whose aboutness-content contains a constituent that is not articulated by that utterance, and second, that the aboutness-content of some utterances is truth-conditional, but for others it is only a propositional function and thus non-truth-conditional.

Table 1. Aboutness content, concerning-content and unarticulated constituents

	Aboutness-content	Concerning-content
Thought	No unarticulated constituents.	Some unarticulated constituents. Always truth-conditional.
	Sometimes truth-conditional, and sometimes a propositional function.	
Language	Some unarticulated constituents.	Some unarticulated constituents. Always truth-conditional.
	Sometimes truth-conditional, and sometimes a propositional function.	

A few remarks regarding the information in the table may serve to further clarify the variety of unarticulated constituents involved in Perry's first two uses of the idea. Note that concerning-content is always truth-conditional. This is because, by definition, only thoughts and utterances whose aboutness-content is a propositional function have concerning-content; the concerning-content of such a thought or utterance is the result of feeding an appropriate argument into the propositional-function that is its aboutness-content. Aboutness-content, on the other hand, is sometimes truth-conditional (because some thoughts and utterances articulate full truth-conditional propositions), and sometimes not; some of our thoughts and utterances are like the *Z*-landers' weather thoughts and utterances in that they articulate only propositional functions *from* the entities those thoughts concern *to* propositions containing those entities. It is this last idea, that the aboutness-content of a subject's thought or utterance can be a mere function from entities in the environment of the subject to full truth-conditional propositions, that has inspired, or at least bares a strong resemblance to, *semantic relativism*. For the essence of semantic relativism is the idea that some utterances – utterances pertaining to the future, or to matters of personal taste, or to knowledge, etc. – have content that is true or false only relative to some further parameter. (The similarities between Perry's

thought and language uses of the idea of unarticulated constituents and the framework of semantic relativism will be explained in more detail in the fifth section.)

The third and final explanatory use of the idea of unarticulated constituents is related to Crimmins and Perry's proposed analysis of belief reports. Crimmins and Perry maintain that analyzing utterances of belief reports as having contents with unarticulated constituents is essential to solving the "doxastic puzzle cases" (1989: 687).⁷ The puzzle is to explain why, e.g., utterances of

- (1) *Miles Hendon believes that he is of royal blood.*

and

- (2) *Miles Hendon believes that Edward Tudor is of royal blood.*

not only seem to us to say different things, but also have different truth values, even though the relevant utterances of "he" and "Edward Tudor" are coreferential.⁸

Crimmins and Perry's (1989) general strategy for solving the puzzle is as follows. According to Crimmins and Perry basic *thoughts* – and a *belief* is one sort of *thought* – are particular structured mental representations composed of *notions* and *ideas*, where a *notion* is a mental particular that represents a particular individual, and an *idea* is a mental particular that represents a property. Notions, like Frege's senses, correspond to *ways of thinking* of particular things; where Frege would say a subject is grasping two senses of the same referent, Crimmins and Perry would say that the subject is employing two *notions* of the same referent. Now Crimmins and Perry maintain that "in reporting beliefs, we quite often are talking about such notions, though our belief reports do not explicitly mention them" (1989: 697). So, Crimmins and Perry claim that the reason we interpret utterances of (1) and (2) as saying different things and having different truth values is that a typical utterance of (1) will have one of Miles Hendon's notions of the young prince (a notion associated with the concepts of royalty and wealth, say) as an unarticulated constituent of its content, while a typical utterance of (2) will have some other notion of the young prince (a notion associated with a visual experience of a boy dressed in rags, say) as an unarticulated constituent of its content.⁹ Thus the general idea behind Crimmins and Perry's proposed solution is that such utterances have differ-

ent notions as unarticulated constituents of their contents in something like the way different utterances of “It is raining” have different locations as unarticulated constituents of their contents. And if the truth-conditional contents of utterances of (1) and (2) contain distinct (unarticulated) constituents, it is no longer puzzling that they have distinct truth values.

The formal details of Crimmins and Perry’s analysis of attitude ascriptions are presented in the following passage¹⁰:

We take a belief report to be an utterance u of a belief sentence of the form

A believes that S

where A is a singular term and S is a sentence. We assume a semantics for the use of the embedded sentence, so that $Con(u_s)$ (the content of u_s) is the proposition expressed by the subutterance of u corresponding to S . Where u is a belief report at t which is about notions $n_1 \dots n_k$, and $p = Con(u_s)$,

$$Con(u) = \exists b [B(a, b, t) \wedge Content(b, t) = p \wedge \bigwedge_{ri \text{ in } p} Responsible(n_i, r_i, b)]$$

The claim made by the belief report is that the agent a has a belief with content p , involving the notions $n_1 \dots n_k$ (in a certain way). This claim entails the proposition that a has a belief with the content p , but the truth of that proposition is not sufficient for the truth of the report – the report says more than that about the ascribed belief. (1989: 697–698)

To understand the above formal schema we need to have a working conception of the ternary relation of *responsibility*. Crimmins and Perry conceive of a belief as being structurally isomorphic with the proposition that is its content. We can think of them both as having a syntactic tree-structure in common, but where the “leaves on the tree” of the belief are notions and ideas, the leaves on the tree of the proposition that is the content of that belief are the individuals and properties represented by the corresponding notions and ideas. The *roles* in a proposition are the places where the represented entities are; the roles of a proposition are, if you will, the places where the leaves grow on the tree-structure. Now, to say that a particular notion n_i of belief b is *responsible* for role r_i of proposition p is simply to say that the content of n_i is what “fills” role r_i in p . It is important to notice that in the above formal schema ‘ n_i ’ is *not* a bound variable: rather it is a sort of schematic letter to be replaced by a *name* for a notion, and for any true (or false) belief report there must be such a name corresponding to each role r_i of proposition p . In other words, the unarticulated constituent analysis entails that a true (or false) utterance of a belief report tacitly refers to a notion (or idea) of every constituent of the proposition p

articulated by the complement clause: there can be no constituent of p that is not represented by some tacitly referred to notion (or idea).

2. The primary tension: reporting beliefs that have unarticulated constituents

Distinguishing clearly between the three uses of the idea of unarticulated constituents makes apparent a significant tension between the *thought* use and the *belief report* use: According to the former a subject can have a belief whose concerning-content contains a constituent that is in no way mentally represented by the subject. But according to the latter what one reports when one reports a subject's belief is not only the content of that belief, but also the particular mental representations – the particular notions and ideas – the subject utilizes in the belief. Indeed, we have just seen that Crimmins and Perry's unarticulated constituent analysis of belief reports applies only to beliefs b that fully articulate their content p . And now the tension is apparent: Crimmins and Perry's analysis of belief reports presupposes that if a subject has a belief b with a content p , then p is fully represented, fully articulated, by b . But this clearly conflicts with the proposal that the concerning-contents of some of our thoughts, in particular some of our beliefs, contain unarticulated constituents, or entities that are not represented by notions, ideas, or any other sort of mental representation.

The tension can be illustrated in terms of an example. Suppose that when Perry's son uttered "It's raining" the location, Palo Alto, is articulated neither by the utterance, nor by the thought the utterance expresses. Now suppose that in an attempt to report to you the belief that Perry's son had when he performed this utterance of "It is raining" I utter the following:

(3) *Perry's son believes that it is raining.*

If we assume that the relevant proposition p is *that it is raining in Palo Alto*, then, according to Perry's analysis of belief reports, my utterance is true only if I tacitly refer to a notion in Perry's son's belief that represents Palo Alto – such a notion is an unarticulated constituent of my utterance of (3). Applying the above formal schema for the analysis to this case yields the following: Let u^* be my utterance of (3), and t^* be the time of u^* , and finally let p^* be the proposition that is the concerning-content of my subut-

terance of “it is raining”, so p^* is the proposition *that it is raining in Palo Alto*. (I will demonstrate below that other problems arise if one takes p in the schema to be the aboutness-content of my subutterance.). $Con(u^*)=$

$$\exists b [B(\text{Perry's son}, b, t^*) \wedge \text{Content}(b, t^*)=p^* \wedge \\ \text{Responsible}(N_{\text{Palo Alto}}, R_{\text{Palo Alto}}, b) \wedge \text{Responsible}(I_{\text{rain}}, R_{\text{rain}}, b)]$$

where “ $N_{\text{Palo Alto}}$ ” allegedly refers to the token mental representation in Perry’s son’s belief that is a *notion* of Palo Alto, and “ I_{rain} ” refers to the token mental representation in this belief that is Perry’s son’s *idea* of the property of rain, and “ $R_{\text{Palo Alto}}$ ” refers to the role filled by Palo Alto in p^* and “ R_{rain} ” refers to the role filled by the property of *rain* in p^* . (For simplicity I will treat *rain* is a property of places, instead of a relation between places and times.) The problem is that since Perry’s son’s belief merely *concerns* Palo Alto and is not *about* Palo Alto, there is no relevant notion of Palo Alto to which my utterance of (3) could tacitly refer. That is, if Perry’s son’s belief merely concerns Palo Alto, then “ $N_{\text{Palo Alto}}$ ” lacks a referent. Thus, the unarticulated constituent analysis incorrectly predicts my utterance of (3) to be neither true nor false. Or perhaps it would be more appropriate to say that the analysis simply does not apply to such reports of beliefs with unarticulated constituents.¹¹

In the above application of Crimmins and Perry’s analysis to my utterance of (3), I have assumed that the relevant sort of content of the subutterance of ‘it is raining’ is *concerning-content*, rather than *aboutness-content*. That full truth-conditional concerning-content, rather than propositional-function aboutness-content, is the kind of content invoked in the unarticulated constituent analysis of belief reports is strongly suggested by Crimmins and Perry’s presentation of the analysis, since they always assume that contents of the reported beliefs are fully propositional.¹² They write, for example, “Each belief has as its content the *proposition* that the objects its notions are of have the property or stand in the relation, that its idea is of” (1989: 692, emphasis added). The problem we have encountered is that according to Perry (1986), some beliefs have full truth-conditional propositions only as their concerning-content, and such concerning-contents contain constituents unarticulated by any notion or idea in the belief; in such cases the above assumption is false. But perhaps Crimmins and Perry’s could amend their analysis of belief reports by simply giving up this assumption in cases such as (3), in which a belief with an unarticulated constituent in its concerning-content is being reported. That is, perhaps the

relevant sort of content of the subutterance of the complement clause is not concerning-content – which is sometimes not fully articulated in thought – but rather aboutness-content – which is always fully articulated in thought. One consequence of this would be that the relevant content – p in the formal schemata – would sometimes be a propositional function and not a full truth-conditional proposition. Amended in this way the analysis of (3) would be as follows: $Con(u^*) =$

$$\exists b [B(\text{Perry's son}, b, t^*) \wedge \text{aboutness-content}(b, t^*) = f^* \wedge \text{Responsible}(I_{rain}, R_{rain}, b)]^{13}$$

where ' f^* ' designates the aboutness-content of Perry's son's belief, i.e. ' f^* ' designates the propositional function that, given a location as argument, delivers a proposition that is true *iff* it is raining at that location. This amended unarticulated constituent analysis of belief reports takes into account Perry's (1986) claim that some beliefs have only propositional functions as aboutness-content. Under the amended analysis my utterance of (3) reports only that Perry's son believes it is raining *simpliciter*; it does not report that Perry's son believes it is raining in Palo Alto with a belief that utilizes a particular notion of Palo Alto. Thus the amended analysis, according to which only aboutness-content is reported, yields the correct result that my utterance of (3) is true.

The problem, however, is that, at least under normal circumstances, in reporting beliefs what matters to us is the fully propositional content of the belief. And this holds even for beliefs which, according to the thought use of unarticulated constituents, have unarticulated constituents of their concerning-contents. Suppose Perry's son is a musician in a touring band. It has been a long and exhausting tour, and the weather has been terrible in every city on the tour. The band is now in Palo Alto, though Perry's son does not know this; in the blur of late-night performances and sleepy drives in the van, Perry's son has lost track of where he is. You are with the band in yet a another dingy hotel, and you witness Perry's son wake up, look out the window, and then mutter to himself, "Damn – its raining." Here we have a very plausible case where, in keeping with the thought use of unarticulated constituents, Perry's son has expressed a belief that concerns, but is not about, Palo Alto. Now, suppose I call you on the phone, from Sacramento say. I am worried that all the bad weather, which I hear about on TV, is taking an emotional toll on the tired musicians. So I ask you, "Are

they awake yet? Are they aware that it is raining there?" It seems perfectly appropriate for you to respond to my question by uttering,

(4) *Perry's son believes that it is raining here.*

Indeed, given that my question specifically asks about the musicians' beliefs with regard to the rain *there*, an appropriate response must *at least concern* the relevant location.¹⁴ So, even if you had uttered only

(4') *Perry's son believes that it is raining.*

the truth-conditional concerning-content of *your report* would, despite the absence of an overt word referring to the relevant location, none-the-less contain the relevant location, Palo Alto, as an unarticulated constituent. So, the tension between the thought and belief report uses cannot be resolved by maintaining that only aboutness-content of beliefs is reported.

Let us review. According to Crimmins and Perry's original (1989) analysis, attitude reports always attempt to report both the fully-propositional contents of beliefs and the notions and ideas which fully articulate such propositions. We saw above, however, that this analysis does not apply to beliefs which do not fully articulate *propositional* content; it does not apply to beliefs with unarticulated constituents in their concerning-content. One way to avoid this difficulty would be to maintain that belief reports always attempt to report only the aboutness-content of beliefs; this would avoid the difficulty because aboutness-content, which is sometimes only a propositional-function, is always fully articulated. We have just seen, however, that even with regard to beliefs that do not fully articulate propositions (i.e., beliefs with unarticulated constituents in their concerning-content), in reporting a belief we are usually interested in the fully-propositional content of the belief. So, it will not do to maintain that in reporting beliefs we are always interested only in their aboutness-content.

A natural suggestion to make at this point would be to acknowledge that in making a belief report we are (usually) interested in the fully-propositional concerning-content of the belief, but to reject the assumption made in Crimmins and Perry's (1989) analysis that a belief report must

tacitly refer to a notion or idea of *every* constituent of this propositional content. That is, instead of

$$Con(u) = \exists b [B(a,b,t) \wedge Content(b,t) = p \wedge \bigwedge_{r_i \text{ in } p} Responsible(n_i, r_i, b)]$$

Crimmins and Perry should endorse something like following *compromise* analysis

$$Con(u) = \exists b [B(a,b,t) \wedge Concerning-content(b,t) = p \wedge \bigwedge_{r_i \text{ in } p \text{ that is articulated by } b} Responsible(n_i, r_i, b)]$$

where a *role* r_i in proposition p is *articulated* by belief b just in case there is a notion or idea in b that fills r_i . The motivation for the compromise analysis is to combine three ideas: first, a true belief report must express the fully propositional concerning-content of the belief; second, a true belief report must involve tacit reference to whatever notions and ideas comprise the belief that has this concerning-content; and third, in cases of beliefs with unarticulated constituents in their concerning-contents, a true belief report need *not* involve tacit reference to any notions (or ideas) *of* these unarticulated constituents.

Note, however, that the compromise analysis of belief reports has excised some of resources that were posited for the purpose of solving the doxastic puzzles. That is, according to Crimmins and Perry (1989) the explanation of why utterances of (1) and (2) have different truth conditions, despite the fact that the utterances attribute belief in the same proposition to the same subject, is that the speaker tacitly refers to different notions (and ideas) that the subject uses to represent this proposition. But under the proposed compromise analysis, in uttering (4) I do not tacitly refer to a notion that represents Palo Alto, since Palo Alto is an unarticulated constituent of the concerning-content of Perry's son's belief, there is no such notion that fills the relevant role of the proposition. But this means that the compromise analysis lacks the resources to solve puzzle cases involving such unarticulated constituents, and it is not difficult to formulate such puzzle cases.

Consider again the above described case involving Perry's exhausted son. Suppose that after asking of the tired musicians, "Do they believe it is raining *there*?" and hearing you utter (4) in response, I ask further, "Yeah, but does he believe it is raining in *Palo Alto*?" It seems that it would *not* be

correct for you to respond to this second question in the affirmative. That is, it would not be correct for you to respond to my question by uttering

(5) *Perry's son believes that it is raining in Palo Alto.*

Perry's son's believes *that it is raining*, and this belief *concerns* his current location. But because of his exhausted state, Perry's son does not realize that he is currently in Palo Alto. (We might suppose that he has never even heard of Palo Alto.) Thus, though he believes that it is raining at his current location, he does not realize that his current location is Palo Alto, and so he does not believe it is raining in Palo Alto. Since the utterances of (4) and (5) attribute belief in the same proposition to Perry's son, we have a puzzle case analogous to the puzzle case involving (1) and (2). But, under the proposed compromise analysis the utterances of (4) and (5) would express the very same proposition, since there are no relevant notions of Palo Alto to which the speaker might tacitly refer. The compromise analysis thus lacks the resources to solve such puzzle cases involving unarticulated constituents of the subject's belief.¹⁵

It is relatively easy to multiply this sort of puzzle case, wherein a subject has a belief whose concerning-content has an unarticulated constituent.¹⁶ Suppose Watson believes *that the salt is to the left*, and he himself is an unarticulated constituent of the concerning-content of his belief; thus the concerning-content of Watson's belief is something like *that the salt is to Watson's left*. But we are in a house of mirrors, and Watson believes that some of the reflections are of another man, though in fact all are reflections of him. In such a scenario, different utterances of

(6) *Watson believes that the salt is to his left.*

(wherein the utterance of 'his' is accompanied by demonstrations toward various reflections) can vary in truth value, depending upon which reflection is demonstrated. When the demonstrated reflection is such that Watson believes it to be a reflection of himself, the corresponding utterance of (6) would be true. But when the demonstrated reflection is such that Watson believes it to be of a different person, it is likely that the corresponding utterance of (6) is false. Again we have constructed a doxastic puzzle case that Crimmins and Perry's unarticulated constituent analysis of belief reports cannot solve; for Watson is an unarticulated constituent of the concerning-content of the belief in question, and thus there are no relevant

notions or ideas that might be tacitly referred to by different utterances of (6).

Such cases reveal that there is a fundamental tension between the use of unarticulated constituents in the analysis of belief reports and the thought use of unarticulated constituents. If Perry (1986) is correct to maintain that there are unarticulated constituents of the concerning-contents of beliefs (and other cognitive states) then many doxastic puzzle cases cannot be explained by Crimmins and Perry's unarticulated constituent analysis of belief reports. It seems then that one cannot endorse both Perry's (1986) view that there is such a thing as thought without representation and his later (1989) proposal that what explains the doxastic puzzles is tacit reference to different notions and ideas utilized by the subject.

3. Secondary tension: Cognitive significance and tacit reference fixing

Another tension between the uses of the idea of unarticulated constituents is related to the question of whether or not unarticulated constituents are explanatorily relevant with regard to the *cognitive significance* of thoughts and utterances. The view according to which there are unarticulated constituents of the concerning-contents of thoughts, i.e., the view that there is thought without representation, is a form of *content externalism*. It allows, for example, that Bert and Twin-Bert might think different *it is raining* contents even if they employ the very same mental representations, even if they are molecule for molecule doppelgangers, because such representations contain no elements that represent the different locations in those contents.¹⁷ Or, to put it terms of switching instead of doppelgangers, if we could switch Bert back forth between Palo Alto and Murdock without his knowing it, he could think different *it is raining* concerning-contents without his being cognizant of doing so. Thus, unarticulated constituents of the concerning-contents of thoughts are wholly irrelevant to explaining the cognitive significance of thoughts. The same point applies, *mutatis mutandis*, to unarticulated constituents of the concerning-contents of utterances, where the utterances in question are expressions of thoughts whose concerning-contents contain unarticulated constituents. Suppose Bert utters "It is raining" in Palo Alto and that Palo Alto is an unarticulated constituent of both the utterance and the thought Bert thereby expresses. Now suppose we surreptitiously switch Bert to Murdock where he utters this sentence again, so that now Murdoch is an unarticulated constituent of the concerning-

content both the utterance and the thought thereby expressed. Bert would not be aware of having said different things; despite expressing different truth-conditional concerning-contents, the utterances would have the same cognitive significance for Bert. (I am here again ignoring the time parameter.)

What this illustrates is that unarticulated constituents of the concerning-content of an utterance are irrelevant to explaining the cognitive significance of the utterance.¹⁸ But in order to solve the doxastic puzzle involving, e.g., utterances of (1) and (2), one of the things that must be explained is the difference in cognitive significance between the utterances.¹⁹ And if unarticulated constituents are to play this role in explaining our judgments that utterances of (1) and (2) say different things, then the invoked articulated constituents must be represented somehow in our minds. Miles Hendon's distinct notions of the young prince cannot be unrepresented by you when you hear utterances of (1) and (2) in the way that Palo Alto can be unrepresented by Perry's son when he looks out the window in Palo Alto and says it is raining. Palo Alto – the unarticulated constituent of the concerning-content of Perry's son's thought – has no effect whatsoever on the cognitive significance of that utterance for him because it is not mentally represented by him. In contrast, if Miles Hendon's distinct notions of the young prince – the relevant unarticulated constituents of utterances of (1) and (2) – are to explain the difference in cognitive significance of such utterances for you, these notions must be mentally represented by you, and moreover if tacit reference to such notions is to explain why (1) and (2) differ in cognitive significance for you, these notions must be represented by you in different ways. This means that the thoughts expressed to you by utterances of (1) and (2) must employ distinct notions of *distinct notions* of the young prince.²⁰ So the (1989) belief report use of unarticulated constituents differs from the (1986) thought and language uses. The unarticulated constituents of the truth-conditional content of a belief report must, in order to be explanatorily relevant to the cognitive significance of the report for an interpreter, be mentally represented by the interpreter; in contrast, the principle thesis defended in Perry (1986) is that the truth-conditional contents of utterances might contain constituents that are explicitly represented neither by the utterance nor by the thought thereby expressed.

A closely related issue concerns how unarticulated constituents of the contents of thoughts and utterances are fixed. In the case where one looks out the window, perceives rain, and thereby comes to believe it is raining, Perry maintains that there is an "external guarantee that the weather infor-

mation we receive be about, and our actions concern, our own locale” (1986: 149). So, for example, the reason that the concerning-content of Perry’s son’s utterance of “It is raining” and the belief thereby expressed have Palo Alto as an unarticulated constituent is that Perry’s son is located in Palo Alto when he perceives the rain, formulates the belief, and performs the utterance. That all of these events occur in Palo Alto is the “external guarantee” that fixes Palo Alto, as opposed to Murdock or some other location, as an unarticulated constituent of the concerning-content of both the thought and the utterance. It is because of this external guarantee that Perry’s son need not explicitly represent Palo Alto in his utterance, or in his thought, in order for his utterance and thought to pertain to Palo Alto, as opposed to some other location. And similar remarks apply to thoughts and utterances relative to which the thinker and/or speaker himself is an unarticulated constituent. When Perry thinks, e.g., *There is a milkshake just two feet away!* his thought has the concerning-content that the milkshake is two feet away *from Perry* because *Perry’s* sight of the milkshake caused *Perry* to form this belief, which subsequently causes *Perry* to advance; these coordinated facts constitute the “external guarantee” that fixes Perry, as opposed to somebody else, as an unarticulated constituent of the concerning-content of his thought. Or as Perry puts it, “The eyes that see and the torso or legs that move are part of the same more or less integrated body. And this fact, external to the belief, supplies the needed coordination” (1986: 151).

In contrast, in the case of the analysis of belief reports there are no such “external guarantees” that would suffice to fix one notion (or idea), as opposed as some other notion (or idea), as an unarticulated constituent.²¹ For in the case of the meta-beliefs one expresses in belief reports – one’s beliefs concerning another’s beliefs – there is no such systematic coordination between features of the environments in which meta-beliefs are formed and expressed, and the notions and ideas that are alleged to be unarticulated constituents of the contents of those utterances. When Perry’s son looks out the window and utters “It is raining” his utterance and the thought he thereby expresses concern Palo Alto because he is in Palo Alto when he perceives, thinks and speaks. But, assuming that an utterance of (1) does tacitly refer to one of Miles Hendon’s notions *n*, there is no such coordination between the environment in which the speaker perceives, thinks, and speaks, and *n*. (Indeed, *n* may have ceased to exist long before the belief report that is alleged to tacitly refer to *n* is uttered.) So, here we have another reason for supposing that the notions (and ideas) tacitly referred to by

utterances of belief reports must be articulated in the meta-beliefs expressed by such utterances. For given the lack of “external guarantees” that determine what the unarticulated constituents are, there is nothing other than the beliefs and intentions of the speaker that could determine which notions and are ideas are tacitly referred to by the utterance.

In summary then, there is a significant difference between, on the one hand, the (1986) thought and language uses of unarticulated constituents, and, on the other hand, the (1989) belief report use. The main thesis of “Thought without Representation” is, as is suggested by the title, that the truth-conditional content of our thoughts and the utterances that express them can outstrip what is explicitly represented by them; i.e., the truth-conditional content of our thoughts and utterances can contain unarticulated constituents. Such entities are not determined to be constituents of the truth-conditional content by being explicitly represented by thoughts and utterances; rather they are fixed as constituents of the truth-conditional content by “external guarantees.” Moreover, such unarticulated constituents of the truth-conditional content of thoughts and utterances are, *because* they are unarticulated, irrelevant to the cognitive significance of such thoughts and utterances. In contrast, the unarticulated constituent analysis of belief reports is committed to the position that the notions and ideas tacitly referred to by an utterance of a belief report are fully articulated in the thought that is expressed by the utterance of that report. For in the case of belief reports there are no “external guarantees” that could determine which notions and ideas are the unarticulated constituents.²² And moreover the unarticulated constituent analysis of belief reports must explain the difference in cognitive significance between, e.g., utterances of (1) and (2), but the tacitly referred to notions and ideas would be irrelevant to such explanations unless they were articulated in the meta-beliefs expressed by belief reports.

I admit, however, that these secondary tensions do not constitute outright incompatibility between the uses. That is, there would be nothing contradictory in maintaining that the unarticulated constituents of the truth-conditional contents of belief reports differ from other sorts of unarticulated constituents in that the unarticulated constituents of belief reports must be fully articulated in the thoughts thereby expressed. Nonetheless, appreciation of the secondary tension does serve to undermine the central argument Crimmins and Perry offer to motivate their unarticulated constituent analysis of belief reports. For Crimmins and Perry (1989) support their treatment of belief reports as involving notions and ideas as unarticulated constituents

by analogy with the sorts of utterances that Perry (1986) treats as involving unarticulated constituents. But, given the secondary tensions described above, the analogy is rather weak.

In motivating their proposal that utterances of belief reports have notions and ideas as unarticulated constituents, Crimmins and Perry cite what are alleged to be analogous cases: weather reports which can concern different locations (1989: 699); time reports which can concern different time zones (1989: 700); and velocity reports which can concern different frames of reference (1989: 701). And in the following passage they summarize the general theoretical perspective that justifies positing unarticulated constituents in all such cases:

Unarticulated constituency is one example of the incrementality of language. In the circumstances of an utterance, there always is a great deal of common knowledge and mutual expectation that can and must be exploited if communication is to take place. It is the function of the expression uttered to provide just the last bit of information needed by the hearer to ascertain the intended claim. What is obvious in context we not belabor in syntax – we do not articulate it. (1989: 700).

Now, it seems quite plausible that, e.g., when we are driving in my car and you warn me that I am speeding by uttering “You’re going eighty-five miles per hour!” it is in some sense obvious in context what the relevant frame of reference is. And in this case it seems indubitable that our exploiting the same frame of reference is an essential aspect of “common knowledge and mutual expectation” and moreover that because of this it need be explicitly represented in neither our utterances nor our thoughts.²³ As Perry (1986) might put it, when it comes to our thoughts and utterances concerning velocity, there is a little Z-lander in us. But, as consideration of the secondary tensions makes clear, the case of belief reports is much different. Suppose that I explain to you why McCain chose Palin as his running-mate by uttering “He thought that she would win-over the working-class”. According to the unarticulated constituent analysis of belief reports, my utterance has one of McCain’s *notions* of Palin as an unarticulated constituent of its truth-conditional content. But in this case there is not some particular notion McCain has of Palin such that it is part of the “common knowledge and mutual expectation” between us that my utterance concerns this notion. So, if such a notion really is an unarticulated constituent of the truth-conditional content of my utterance, then, since it is not “obvious in context” *which* notion my utterance concerns, it could only be my beliefs and referential intentions that fix this notion as an unarticulated constituent.

Moreover, as I know very little about McCain's mental representations, it seems implausible that I would have such discriminating (tacit) referential intentions. And it seems even less plausible that in order for you to understand my report you would have to discern these communicative intentions and thereby identify the relevant notions and ideas. At any rate, regardless of these issues of plausibility, the secondary tensions serves to undermine the analogy between the alleged unarticulated constituents of belief reports, and the unarticulated constituents of weather reports, time reports, and velocity reports.

4. Consequences for semantic relativism

Semantic Relativism is a general theoretical perspective that utilizes ideas very similar to those advanced in Perry (1986).²⁴ The principle motivation for semantic relativism is that it can explain the phenomenon of *faultless disagreement*. This phenomenon arises for many sorts of sentences, but perhaps the paradigm case involves predicates of personal taste.²⁵ The central idea is this: Two subjects might disagree about the *content* of (7), which contains no (relevant) context-sensitive terms:

(7) *Roller-coasters are fun.*

But, disagreement regarding what is said by utterances of (7) differs from paradigmatic cases of disagreement in that it seems that there is no objective fact of the matter that might, even in principle, settle the matter. It seems that if Mary sincerely avows the content of (7), yet John disavows it, neither one could be wrong; indeed, it seems that both are in some sense right. So, though they disagree, they are both faultless in the sense that both are in some sense right. But this is puzzling: How can Mary and John disagree over the content of (7) if they are both right?

The distinction between aboutness-content and concerning-content allows one to provide an explanation, the essence of which is that Mary's true avowal and John's true disavowal take place at the level of different concerning-contents, while the disagreement takes place at the level of shared aboutness-content. The case of faultless disagreement is analogous to the case where Perry, who is in Palo Alto, judges the aboutness-content *it is raining* to be true, while his son, who is in Murdock, judges this same aboutness-content to be false. In this case Perry's *it is raining* thought con-

cerns Palo Alto, whereas Perry's son's *it is raining* thought concerns Murdock. Assuming that at the time of judgment it is raining in Palo Alto, but not in Murdock, both Perry and his son are correct. The shared aboutness-content that Perry avows and his son disavows is the propositional function from locations *L* to propositions, propositions that are true *iff* it is raining at *L*. (I continue to ignore the time parameter.) For Palo Alto as argument, this function has a true proposition as its value, but for Murdock, it has a false proposition as its value. The explanation for the faultless disagreement between Mary and John is analogous: the shared aboutness-content of (7) is a propositional function, and a judgment regarding the truth or falsity of this aboutness-content can be assessed only relative to an unarticulated constituent of the concerning-content of such a judgment. The one difference is that whereas in the *it is raining* case the relevant unarticulated constituents of the concerning-contents are locations, in the *roller-coasters are fun* case the relevant unarticulated constituents are *judges*, specifically judges as to what is fun. When Mary avows the aboutness-content of (7) and her avowal is assessed as true, her avowal is taken to concern herself as judge; whereas when John denies the aboutness-content of (7) and his denial is assessed as correct, his denial is taken to concern himself as judge. So, in summary, the reason that Mary and John disagree is that Mary avows yet John disavows the same *roller-coasters are fun* aboutness-content. Yet this aboutness-content is only a propositional function, and thus avowals and disavowals regarding this aboutness-content can be assessed for truth only relative to entities such judgments concern; in this case such entities, which are unarticulated constituents of the concerning-contents of the avowals and disavowals, are judges – judges as to what is fun.²⁶

Given these similarities between semantic relativism and Perry's thought and language uses of the idea of unarticulated constituents, one would expect the same tension that was found to obtain between the uses of the idea of unarticulated constituents to also obtain between semantic relativism and the unarticulated constituent analysis of belief reports. And this is indeed the case. In what follows I will present such a puzzle case for Lasersohn's (2005) relativistic analysis of predicates of personal taste. I have chosen Lasersohn's treatment of predicates of personal taste because he specifically addresses the issue of belief reports in a relativistic framework (though he does not address the sort of opacity problems I discuss). But I think it is clear that similar puzzle cases can be formulated for relativistic analysis of other sorts; there is no particular feature of Lasersohn's

relativistic treatment of predicates of personal taste that gives rise to the tension.

Suppose one of Peter's acquaintances is Mad Max, and, as his name suggests, Mad Max delights in danger and excitement. Another of Peter's acquaintances is Gentle Jim. Peter knows that Gentle Jim enjoys knitting and old movies, and Peter cannot even imagine Gentle Jim agreeing to go to amusement park, much less enjoying the experience of riding a roller-coaster. But, as luck would have it, unbeknownst to Peter and Peter's other friends, Mad Max and Gentle Jim are one and the same person. Now suppose Peter and his other friends are discussing Max's recent trip to an amusement park, and wondering whether or not Max, whom they all know to be a thrill-seeker, enjoyed himself. "Did he enjoy himself?" a friend asks. Peter, who saw Max dozing on the Merry-go-round, but laughing and yelling with excitement on the roller-coaster, replies, "Well, the roller coaster was fun." When Peter performs this utterance of "The roller-coaster was fun" Peter is not expressing the judgment that it was fun *for himself*; rather he is expressing what is fun *for Max*. Lasersohn (2005) says that judgments concerning what is fun for *oneself* are made from what he calls the "autocentric perspective," while judgments concerning what is fun *for another* are made from an "exocentric perspective." Moreover, Lasersohn claims that the exocentric perspective is required when one is expressing judgments of personal taste concerning a particular event that one did not oneself participate in. So, since Peter's utterance and the judgment it expresses concern Max's riding the roller-coaster, they are made from an exocentric perspective. Hence, whether or not they are true depends upon whether or not riding the roller-coaster was fun *for Max*. The content of Peter's utterance and the judgment it expresses, however, is simply that the riding event was fun *simpliciter*; the content is a propositional-function from judges to truth-conditional propositions. In terms of Perry's distinction between concerning and being about, Peter's utterance and judgment *concern* Max, but they are not *about* Max.

Now suppose that I want to report to you the belief that Peter expressed with his utterance of "The roller-coaster was fun". Given that Peter does not realize that Max and Jim are the same person, it seems that an utterance of (8) would be true, while an utterance of (9) would be false, despite the fact that (8) and (9) articulate the same proposition:

- (8) *Peter thinks that the roller-coaster was fun for Max.*
- (9) *Peter thinks that the roller-coaster was fun for Jim.*

But how this difference in truth conditions, and even truth values, to be explained, given that content of the belief I am reporting merely *concerns* Max/Jim, and thus does not explicitly represent him? This doxastic puzzle case is of course analogous to the previous puzzle case involving utterances of (4) and (5): If semantic relativism is correct, then Peter can judge that the roller-coaster ride was *for Max/Jim* without in any way mentally representing Max/Jim. And hence the intuitive difference in truth conditions between utterances of (8) and (9) cannot be explained by appeal to tacit reference to different ways of representing Max/Jim.²⁷

Let me be clear that I am not posing such doxastic puzzles as an objection against semantic relativism. My point rather is that because semantic relativism is in the relevant respects analogous to Perry's (1986) views regarding unarticulated constituents, semantic relativism would also be in tension with an analysis of belief reports that is similar in the relevant respects to Crimmins and Perry's (1989) unarticulated constituent analysis of belief reports: If, as I have suggested, the extra parameters that semantic relativists posit in the circumstances of evaluation (judges, times, standards of evidence, etc.²⁸) are analogous to Perry's unarticulated constituents, then one cannot consistently endorse both semantic relativism and an approach to belief reports that attempts to explain the doxastic puzzles by invoking different mental representations utilized by the subjects.

5. A resolving tension?

In conclusion I will discuss one more tension in Perry's views, though, to be fair, this final tension is not internal to Perry's views concerning uses of the idea of unarticulated constituents. Perry (2001) warns against what he calls the "subject matter fallacy": "the subject matter fallacy is supposing that the content of a statement or a belief is wholly constituted ... by the conditions it puts on the objects the words designate or the ideas are of" (2001: 50). But in proposing his own unarticulated constituent analysis of belief reports is Perry not himself guilty of committing the subject matter fallacy? Taylor, who is making essentially the same point, puts it this way:

One might have expected Perry to say that the mistake of many previously extant approaches to attitude statements is to assume that embedding somehow effects, for good or for ill, the subject matter of the relevant [utterance]. ... To think otherwise, one might have expected Perry to say, is to commit a subject matter fallacy" (2007: 217).

Frege's (1892) proposed solution to the belief report puzzle involves shifting the referents of embedded words so that the subject matter is their "secondary referents," viz. senses. Russell's (1905) proposal involves positing disguised descriptions whose subject matter is different properties. Davidson's (1968) solution to the analogous indirect discourse puzzles involves allowing different utterances of "that" to have different utterances as subject matter. Crimmins and Perry's unarticulated constituent analysis of belief reports involves allowing utterances to tacitly refer to different notions and ideas, and thus have different mental particulars as subject matter. Do not all of these proposals commit the subject matter fallacy? Consideration of this final tension thus points us toward the resolution I am advocating: The central thesis advanced in (Perry 1989) and endorsed by semantic relativism, viz. that the truth-conditional contents of some thoughts and utterances contain unarticulated constituents, is correct. The unarticulated constituent analysis of belief reports, however, commits the subject-matter fallacy and should be rejected.²⁹

Notes

1. My use of "pertains to" is intended to connote a general and theoretically neutral sense of representation: roughly, a thought or declarative utterance *pertains to* an entity *x* if and only if its truth depends upon how things are with *x*. Thus a thought or utterance can pertain to an entity *x* either by *being about x*, or by merely *concerning x*. I will have more to say with regard to Perry's distinction between *being about* and *concerning* below.
2. Though, as Recanati (2007: 226) points out, it does not follow from (a) entity *O* is an unarticulated constituent of the content of the thought *T* which is expressed by utterance *U*, that (b) there is no other thought *T'* such that *O* is an *articulated* constituent of the content of *T'*.
3. That the *thoughtuse* and the *languageuse* are closely related but nonetheless distinct has led to some confusion in debates over whether or not there are any unarticulated constituents. For example, Stanley (2000), who is concerned with defending the compositionality of language, assumes that if *O* is an unarticulated constituent of the content of an utterance, then *O* is represented neither overtly by some phonetically realized element in the utterance nor by any aphonic element at the level of mental representation known as *logical form*. In short, Stanley ignores the distinction between being an unarticulated constituent of the content of an utterance and being an unarticulated constituent of the content of a thought thereby expressed. Recanati (2002) criticizes Stanley's (2001) "argument from binding" against unarticulated constituents, and

in so doing Recanati more-or-less adopts Stanley's use of the term and thus also ignores the distinction. Neale (2007) takes Stanley (2000) to task for ignoring the distinction, though the issue of whether or not Stanley's "binding argument" succeeds in justifying the positing of aphonetic elements in logical forms seems to be independent of the confusion surrounding the use of "unarticulated constituents".

4. This conception of cognitive states is implied by what Perry says regarding *belief states*:
The term 'belief state' suggests to many the total doxastic state of the agent, but I do not use it in that way. Two agents, each of whom has just looked outdoors and seen rain, could be in the same belief state, in my sense, in virtue of the aspect of their total states that would lead each of them to say, 'It is raining', even though there is little else they would be disposed to say. (1989, 149, note 4)
5. Recanati (2007, part 9) argues against Perry that there are no unarticulated constituents of the aboutness-content of utterances; Recanati thus maintains that there are no unarticulated constituents in the aboutness-content of either thoughts or utterances, and thus only concerning-content contains unarticulated constituents. Recanati, however, misinterprets Perry's motivation for supposing there are unarticulated constituents of the aboutness-content of utterances. Recanati interprets Perry's positing of this variety of unarticulated constituent as resulting from Perry's mistaken endorsement of the "externality principle." This principle in effect requires that any unarticulated constituent of the concerning-content of an utterance "must be contributed by the external environment rather than cognitively discriminated" (2007: 224). Recanati thinks that Perry is forced by this restriction to posit unarticulated constituents in the aboutness-content of utterances that should, according to Recanati, be in the concerning-content. But it is not the externality principle that motivates Perry to posit unarticulated constituents in the aboutness-content of some utterances. As explained above, Perry is compelled to posit unarticulated constituents of the aboutness-content of some utterances because he maintains (i) That if utterance U expresses thought T, then the aboutness-content of U just is the aboutness-content of T. (ii) There are utterances U and thoughts T such that U expresses T yet the aboutness-content of T contains constituents unarticulated by U. As Recanati claims that (i) is equivalent to the "congruence principle," which he endorses (2007: 226), I suggest that what Recanati ought to reject (ii).
6. The distinction between concerning-content and aboutness-content is analogous to Recanati's (2007) distinction between the "Austinian proposition" and the "lekton."
7. Following Perry (2007), I will treat the belief report use and the thought use as being distinct, but there is a sense in which the belief report use is an applica-

tion of the language use in the case of belief reports. I think nothing important depends upon such architectonic issues.

8. Here I am slightly amending Crimmins and Perry's example from their (1989). The example is inspired by Twain's *The Prince and the Pauper*.
9. Which sort of content is relevant here? Are the notions of the young prince that are unarticulated by utterances of (1) and (2) constituents of the aboutness-content, or the concerning-content? Crimmins and Perry (1989) do not address this question, though I will address it in the following section.
10. The above general description and the formal analysis that follows are presentations of what Crimmins and Perry call the *notion provision* analysis. But the official position adopted in Crimmins and Perry (1989: 706) maintains that some instances of the puzzle require a variation on the general strategy described above. (Crimmins 1993 defends the stronger claim that our belief-ascribing practices involve only notion provision.) The variation, which they call the *notion constraint* analysis, differs from the notion provision analysis in that the notions are (tacitly) existentially-quantified-over instead of being (tacitly) referred to. Crimmins and Perry present the notional constraint analysis with this formal schema:

$$\text{Con}(u) = \exists b [B(a, b, t) \wedge \text{Content}(b, t) = p \wedge \exists n_i \dots n_k \bigwedge_{i=1}^k (C_i(n_i) \wedge \text{Responsible}(n_i, r_i, b))] \text{ (1989, 705)}$$

Here (each) " n_i " is a variable bound by an existential quantifier, and (each) " C_i " designates a condition or *constraint* that some notion or other must satisfy. Crimmins and Perry suggest that this notion constraint analysis applies to belief reports, and negated belief reports, which are intuitively true or false even though it is obvious that the subject of the report does not have an appropriate notion (or idea), though in Clapp (1995) I argue that the notion constraint analysis does not solve the problem. At any rate, the tension I am concerned to articulate here arises (in slightly different ways) for both analyses, and thus I will focus my remarks on the notion provision analysis.

11. The notion constraint analysis also fails when applied to my utterance of (3), though for slightly different reasons. The notion constraint analysis would yield the following: $\text{Con}(u^*) =$

$$\exists b [B(\text{Perry's son}, b, t^*) \wedge \text{Content}(b, t^*) = p^* \wedge \exists n \exists i (C(n) \wedge \text{Responsible}(n, R_{\text{Palo Alto}}, b) \wedge C'(i) \wedge \text{Responsible}(i, R_{\text{rain}}, b))]]$$

where " n " and " i " range over notions and ideas, respectively, " $C()$ " designates a constraint on notions, and " $C'()$ " designates a constraint on ideas. Since Perry's son utilizes no notion of Palo Alto in his belief, then regardless of what $C()$ is he utilizes no notion that satisfies it. So the notion constraint analysis incorrectly predicts that my utterance of (3) is false.

- (Though again it would perhaps be more appropriate to say that the notion constraint analysis simply does not apply to such reports of beliefs with unarticulated constituents.)
12. Moreover, since the analyses themselves are supposed to explain the truth conditions of utterances of attitude ascriptions, the predicate “*Con*()” in the formal schema presenting the notion provision and notion constraint analyses must be interpreted as *concerning-content*, for only concerning-content is guaranteed to be full truth-conditional. And this suggests that when Crimmins and Perry apply *Content*() to a subutterance of a complement clause of a belief report it is again concerning-content that is the relevant sort of content. (Though this does raise the question as to why sometimes Crimmins and Perry use “*Con*()” and other times use “*Content*()” – the variation in notation is nowhere explained.)
 13. The relation of *responsibility* and related concepts such as that of *roles* and *filling* would also have to be amended so that notions could be said to be *responsible* for *roles* in *propositional-functions* instead of full truth-conditional *propositions*, but I see no obstacle in the way of doing this. So, since nothing of importance depends upon such details, I will ignore such complexities.
 14. Perry endorses adoption of what he calls the “external viewpoint” (2007: 540–541) when characterizing beliefs of others that have unarticulated constituents. Perry considers a case in which a young child who is unaware of time-zones looks at her watch and thereby comes to believe that it is quarter to one. The belief she acquires thus *concerns* the time-zone she is in when she acquires the belief, and this time-zone is thus an unarticulated constituent of the concerning-content of her belief. Perry then states that he can “identify the information she gets from her watch within my richer system, with the proposition ‘It is quarter to one Pacific Time’.” This certainly suggests that Perry thinks it would be correct to report the child’s belief from the “external viewpoint” by uttering “She believes that it is quarter to one Pacific Time”. Moreover, Perry (1986: 150–151) maintains that there is very tight connection between thoughts which merely *concern* entities and indexicals, so it is even more plausible that the child’s belief could be accurately reported, from the external viewpoint, with an appropriately located utterance of “She believes that it is quarter to one *here*”.
 15. It has been suggested to me that Crimmins and Perry might somehow resolve this problem by invoking Crimmins (1991: 58–73) theory of *tacit belief*. The proposal would then be to treat reports of beliefs whose concerning-contents contain unarticulated constituents in the same way that Crimmins (1991) proposes treating reports of tacit beliefs. The suggestion, however, is a non-starter. For under Crimmins’ theory beliefs with unarticulated constituents in their concerning-content are clearly *not* tacit beliefs. According to Crimmins’ theory, subject *a* tacitly believes that *p* only if *a* possesses notions and ideas of all of the constituents of *p*; what makes the belief tacit is if *a* does not actually

combine all these notions and ideas into an *explicit* belief, as Crimmins puts it, for him a tacit belief is a “hypothetical explicit belief” (1991: 61). But clearly beliefs whose concerning-contents contain unarticulated constituents are not “hypothetically explicit” in this sense.

16. Bach shows that “every case is a Paderewski case, at least potentially” (1997: 233), by which he means that for any that-clause “*that S*” one can construct a story involving an agent A so that utterances of both “A believes that S” and “A does not believe that S” are intuitively true. Bach maintains that this illustrates that that-clauses only *describe*, and do not *specify*, beliefs. If this is correct, then we should also expect it to be the case that for any belief *b*, *b* could be accurately described, for some purpose, by a that-clause “that S” and not accurately described, for some purpose, by “that S*”, even when “S” and “S*” articulate the same proposition.
17. I here assume familiarity with Putnam’s (1975) Twin-Earth thought experiments.
18. Recall that if an utterance U expresses a thought T, and entity O is articulated by T, then U is about and does not merely concern O. Thus if an utterance U has O as an unarticulated constituent of its concerning- content, then O is not articulated by the thought T expressed by U. So, for example, if Perry’s son’s utterance of “It’s raining” merely concerns and is not about Palo Alto, then the thought he thereby expresses contains no mental representation of Palo Alto, and thus the thought also merely concerns Palo Alto.
19. Though Crimmins and Perry (1989) do not explicitly address the issue of the difference in cognitive significance between, e.g., utterances of (1) and (2), it is relatively clear that they think their theory is at least relevant to the explanation of this difference. They claim, for example, that their theory is superior to those of Salmon (1986) and Soames (1989) on the grounds that these other theories “explain the apparent [falsity] of statements like (1) as an illusion generated by pragmatic features of such claims,” while on their unarticulated constituent analysis such pragmatic features “do not create an illusion, but help to identify the reality the report is about.” They summarize the advantages of their theory by stating their theory “honors the intuition” that utterances of (1) and (2) differ in truth value. These remarks strongly suggest that Crimmins and Perry take their theory to explain not only why, e.g., utterances of (1) and (2) can in fact differ in truth value, but moreover to explain why we *intuit*, or *judge*, that such utterances differ in truth value. That is, they take their unarticulated constituent analysis to be at least relevant to explain the *cognitive significance* of such utterances.
20. Hence Crimmins and Perry seem to be committed to a hierarchy of notions, and notions of notions, etc, that is analogous to Frege’s hierarchy of senses, and senses of senses, etc. If the belief I express when I utter “Miles Hendon believes that Edward Tudor is of royal blood” must contain a notion of one of Miles Hendon’s notions of the young prince, then the belief that you express

when you report my metabelief with an utterance of “He believes that Miles Hendon believes that Edward Tudor is of royal blood” must (i) tacitly refer to one of my notions of one of Miles Hendon’s notions of the young prince, and (ii) express a belief of yours that contains a notion of my notion of one of Miles Hendon’s notions of the young prince. This, it seems to me, is too much to believe.

21. Similar problems arise for the notion constraint analysis: just as in the cases of the notion provision analysis there are no “external guarantees” that can fix which notions (and ideas) are tacitly referred to by an utterance of a belief report, so in the case of the notion constraint analysis there are no “external guarantees” that can fix which constraints are tacitly designated by an utterance of a belief report.
22. Or in the case of the notion constraint analysis, there are no “external guarantees” that could determine which *constraints* are the unarticulated constituents.
23. I think it is telling that in the passage above Crimmins and Perry do not explicitly invoke the concept of unarticulated constituents being fixed by an “external guarantee.” This concept would apply to weather reports, time reports, and velocity reports, but Crimmins and Perry cannot invoke the concept here because they are attempting to motivate the claim that the contents of belief reports also contain unarticulated constituents, but, as was previously explained, there are no such “external guarantees” in the case of belief reports.
24. Paradigmatic endorsements of relativism include Kölbel (2002), MacFarlane (2003), and Richard (2004). For an introduction to semantic relativism, see Kölbel (2008).
25. I believe that Kölbel (2002) was the first to motivate semantic relativism by appeal to instances of faultless disagreement, though the approach is developed in more detail in Lasersohn (2005).
26. Lasersohn (2005) does not explicitly describe a layer of content analogous to what I called *concerning-content*. This is because Lasersohn presents his relativistic semantics within a formal theory that is closely associated with Kaplan’s (1989) theory of demonstratives: whereas Kaplan’s *circumstances of evaluation* are pairs of worlds and times, Lasersohn’s are triples of worlds, times and judges. But it is not difficult to translate back and forth between Lasersohn’s Kaplan-inspired system and Perry’s distinction between *concerning* and *being about*: whereas Lasersohn has only one sort of content, a function from world, time, judge triples to truth values, one could instead have two kinds of functions: the first, which would be equivalent to aboutness-content, would be functions from judges, to the functions of the second kind. And functions of the second kind, which would be equivalent to concerning-contents, would be functions from world, time pairs to truth values. (And of course the latter are equivalent to what Kaplan calls content.)

27. Lasersohn takes pains to explain how, given Peter's exocentric judgment concerning Max that riding the roller-coaster was fun, an utterance of (8) will be true. But Lasersohn does not address the issue of why an utterance of (8) would be true while an utterance of (9), which seems to attribute the same content to the same subject, would be false.
28. See Kölbel (2008) for a summary of additional parameters (i.e. entities relative to which the truth of contents would be true or false) proposed by semantic relativists.
29. A version of this paper was presented at *The Fourth UT-Austin/UNAM Philosophy Conference: Communicative Practices*, held at the Instituto de Investigaciones Filosóficas on October 2nd and 3rd, 2009. I am thankful to the participants – particularly Maite Ezcurdia and Enrico Grube – for very helpful comments and criticisms. The paper has also benefited from the suggestions of an anonymous referee.

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What is said

*Kepa Korta and John Perry**

Abstract: In the sixties and seventies two important developments in the philosophy of language relied on the intuitive concepts of what a person says, and what is said by an utterance. Referentialists drew on this concept to support the idea that statements containing names, indexicals and demonstratives express singular propositions, involving the individuals referred to, rather than modes of presentation of them. Grice saw what is said as the basic input to reasoning about implicatures. But the referentialist conception of what is said doesn't seem to meet Grice's needs, since utterances that express the same singular proposition can carry different implicatures. We develop an account of what is said that honors the insights of both referentialism and Grice's theory of implicatures.

1. The Importance of what is said

The nineteen sixties and seventies were exciting times for the philosophy of language. There was the “referential revolution”: work by Saul Kripke, Keith Donnellan, David Kaplan, and others led to a shift in thinking about reference. Grice's theory of conversational implicatures provided a powerful new way of thinking about pragmatics, which has had deep influences not only in the philosophy of language but also in linguistics and artificial intelligence.

Both of these developments relied on the more or less common sense notion of *what a person says*, or *what is said* by an utterance. For Grice, recognition of what is said is the “input” to reasoning about implicatures:

He has said that *p*; there is no reason to suppose that he is not observing the maxims, ...; he could not be doing this unless he thought that *q*; he knows (and knows that I know that he knows) that I can see that the supposition that he thinks that *q* is *required*; he has done nothing to stop me thinking that *q*; he intends me to think, or is at least willing to allow me to think, that *q*; and so he has implicated that *q*. (Grice, 1967a/1989, 31.)

Kaplan explicitly grounds the key concept of the content of an utterance in the concept of what is said:

Suppose I point at Paul and say,

He now lives in Princeton, New Jersey.

Call *what I said*—i.e., the content of my utterance, the proposition expressed—‘Pat’. Is Pat true or false? True! Suppose that unbeknownst to me, Paul had moved to Santa Monica last week. Would Pat have then been true or false? False! Now, the tricky case: Suppose that Paul and Charles had each disguised themselves as the other and had switched places. If that had happened, *and* I had uttered as I did, then the proposition I *would have* expressed would have been false. But in that possible context the proposition I would have expressed is not Pat. That is easy to see because the proposition I *would have* expressed, had I pointed to Charles instead of Paul—call this proposition ‘Mike’—not only *would have* been false but actually is false. Pat, I would claim, would still be true in the circumstances of the envisaged possible context provided that Paul—in whatever costume he appeared—were still residing in Princeton. (Kaplan, *Demonstratives*, 512–513).

Kaplan here grounds the more or less technical phrases “the content of an utterance” and “the proposition expressed by an utterance” in our ordinary concept of what is said. He assumes that we will have intuitive judgments about what is said that correspond with his. First of all, we will take it that in the original case he designates Paul, because Paul meets the condition of the person he is pointing to, and that what he says, Pat, will be true if Paul lives in Princeton, but false if he lives in Santa Monica. Second, we will take it that in the tricky case, he designates Charles, because he points to him, even though he thinks he is pointing at Paul; and that what he says, Mike, is false given that Charles does not live in Princeton.

All of these assumptions are consistent with Pat and Mike being the same proposition, viz.,

Erin: that the person to whom the speaker points lives in Princeton.¹

But Kaplan thinks we will also find it plausible that Pat is not Mike, and neither of them is Erin. We should be convinced by the fact that they differ in their counterfactual properties. Pat is true in the original case, in which Kaplan points to Paul and Paul lives in New Jersey. But it is also true in the tricky case, in which both Mike and Erin are false. Mike is false in the original case, in which Pat and Erin are true, as well as in the tricky case. So Pat is not Mike, and neither of them is Erin. If we take Pat to be the singular proposition that Paul lives in Princeton, and Mike to be the singular proposition that Charles lives there, we get the right results.

Thus we have an argument that what is said is a singular proposition about the object designated, rather than a proposition that incorporates the identifying condition—here *being the person the speaker points to*. And it is

our concept of what is said, so understood, that grounds the concepts of the proposition expressed by an utterance and the content of an utterance.

2. A dilemma about what is said

The situation in the sixties and seventies seems then to have been quite propitious. Gricean pragmatics rested on a concept of what is said, as the input to pragmatic reasoning. Referential semantics supplied a clear and well-argued account of what is said. Referential semantics seemed to supply what Gricean pragmatics needs.

But there is a problem. The concept of what is said as referential content does not seem to work for Gricean pragmatics; some “finer-grained” notion is needed. Suppose a group of strangers is having a meal at a soup kitchen, staffed by volunteers. Someone has spilled the salt and failed to clean it up. “Whoever spilled the salt, must clean it up,” the volunteer waiter says. Elwood stands up and says, “I spilled the salt”. He implicates that he will clean it up. But if he stood up and said, “Elwood spilled the salt,” he would not have implicated this, but implicated instead that he had not done it, and had no intention of cleaning it up. The relevant difference seems to be the identifying conditions associated with the term Elwood used to refer to himself. The character of the word “I”, that it refers to the speaker, seems to be just the element involved in the first case that generates the implicature; Elwood’s implicature relies on the fact the hearers will realize that the speaker is the person who, according to the speaker, spilled the salt. In the second case, he relies on their lack of knowledge that the speaker is the referent of his use of “Elwood”. The effect of these different ways of referring to Elwood, are just what singular propositions lose track of.

Or consider an elaboration on Kaplan’s own case –the second, tricky case. Elwood wants to know where Charles lives. We all think that Kaplan is unusually knowledgeable about where his philosophical colleagues reside. Kaplan says, pointing to Charles, thinking he is Paul, “He lives in Princeton.” If you say, pointing at Charles, “Kaplan said that man lives in Princeton,” you may implicate that Kaplan did not realize that he was pointing to Charles. If you merely say, “Kaplan said that Charles lives in Princeton,” you do not implicate this, and indeed most likely convey that there was no reason to doubt that Kaplan knew of whom he was speaking. The different manners in which you report what Kaplan said allow for different implicatures. But if in both cases what you said is simply that Kaplan

said Mike, and what is said is the input to implicative reasoning, how can this be so?

So we seem to have a dilemma about what is said. It can be coarse-grained, and fit the arguments and serve the needs of referentialism. Or it can be fine-grained, and fit the examples and serve the needs of Gricean pragmatics.

We shall argue that the dilemma is only apparent. Or, more cautiously, we argue that there is a single account of saying and what is said, that both preserves the referentialist identification of what is said with referential content, and explains how what is said is, if not precisely the input to, a major constraint upon, Gricean reasoning.

3. Saying-reports as contextual classifications of content

We shall not take issue with the idea that the phrase “what is said” can be regarded as designating a proposition. But, unlike typical singular terms, the nominals “what is said”, or “what he said” are closely related to interrogatives: “What was said?” or “what did he say?” Such questions are typically questions about particular utterances, or a circumscribed set of utterances, such as those that occur in a conversation. Further, such questions are typically focused on certain subject matter, as when one asks, “What did he say about *me*?,” or “What did he say about *Obama*?” or “What did he say about *San Sebastian*?” The fact that specifying “what is said” is typically tied to answering questions with such foci is the key to understanding some of the complexities of our concept of what is said.

We’ll consider an extended example concerning a conversation about San Sebastian. First, a brief geography lesson. San Sebastian is a city in the Basque Country, home of the University of the Basque Country, site of many conferences in the philosophy of language and related areas of linguistics, rhetoric and cognitive science. The name San Sebastian is an anglicized version of the Spanish name for the city, “San Sebastián”; Basques prefer to call the city “Donostia” whenever practical. Thus,

- (1) *Donostia and San Sebastian are the same city.*

Now imagine the following. A group of philosophers and linguists are on their way to a conference. Most of them are veterans, and know that Donostia and San Sebastian are the same city. Further, they regularly refer to this

city as “Donostia” when they are in the Basque Country. But one of them, the linguist Ivan, does not know this; this is his first trip to the Basque Country. All of the conference materials he looked at referred to the site of the conference as “San Sebastian”. As the bus travels from the Hondarribia airport to the city, Ivan is struck by the fact that, according to the signs along the road, San Sebastian and Donostia, a city he’d never heard of, were exactly the same distance from the airport, first fifteen kilometers, then ten, then seven, then three, and so on.

During the trip Ivan muses out loud, saying “This bus is going to San Sebastian,” and “This bus is not going to Donostia.” The following are intuitively true reports about what Ivan said:

- (2) *Ivan said that the bus is going to San Sebastian.*
- (3) *Ivan did not say that the bus is not going to San Sebastian.*
- (4) *Ivan said that the bus is not going to Donostia.*
- (5) *Ivan did not say that the bus is going to Donostia.*

Suppose, for example, that Tom overhears Ivan’s musings, and then provides the other veterans with reports (2) – (5). His hearers would grasp the situation; that Ivan has two notions of the same city that are unlinked in his mind. One of these notions is associated with the name “San Sebastian”, the other with the name “Donostia”. They would assume that Tom’s reports (2) and (3) were based on utterances using the name “San Sebastian,” while (4) and (5) were based on reports using “Donostia”.

Now imagine a somewhat different situation. Because of his high energy level, Ivan is put in charge of finding the right bus for the group to take to the conference. The veterans are sure the information he needs will be available under the name “San Sebastián”.² The tired, jaded veterans hop on the bus to which Ivan directs them. But after a while, for reasons that need not concern us, they begin to worry about whether they are on the right bus. They send Tom to check. At first Tom forgets that Ivan is not a veteran, and asks, “Is this bus going to Donostia”. Ivan says, “This bus is not going to Donostia.” Then Tom remembers that Ivan is likely ignorant of (1), and asks, “Is this bus going to San Sebastian?” Ivan replies, “This bus is going to San Sebastian”.

Tom returns to the veterans and says:

- (6) *Ivan said that the bus is going to Donostia*

It seems to us that, in this context³, (6) is intuitively correct, and in fact true, and if Tom had uttered (4) it would have been incorrect, and arguably untrue.

To make sense of our intuitions, we introduce two contextual considerations. The first is the difference between using saying-reports as *explanations* and using them as *information* (about the subject-matter).

What a sincere person says reveals something about the state of their minds, states which may explain various things they do or don't do. Suppose for example that the bus passes a sign that says

Free Drinks for Linguists at Noam's Bar in Donostia

Tom sees the sign, and says to Ivan, "Hey, that's good news!" Ivan replies, "But this bus isn't going to Donostia". Tom reports to the other veterans, "Ivan says this bus isn't going to Donostia. That's why he wasn't cheered up by the sign about Noam's bar." Tom is providing a saying-report as an explanation of Ivan's behavior, or lack thereof.

But when a person is sincere and knowledgeable, what they say can also provide information about the world, about the object they are talking about. Ivan is knowledgeable about where the bus is going, since he is the one that checked the sign on the front before getting on board. When Tom is sent to check on where the bus is going, and reports back with (6), he is providing a saying-report as information.

Both uses of saying-reports get complicated when a person has two notions of the same thing without realizing it. When Ivan sees the sign about free drinks, it affects his beliefs about Donostia, but not all of his beliefs about Donostia; only those that involve his "Donostia" associated notion. This is a notion of the city he acquired when he first saw the mileage signs. The beliefs that involve this notion are about the city, in that it is facts about the city that determine whether they are true or false.

His other notion of the city, the one that is associated with the name "San Sebastian", was acquired years ago, when Ivan took geography in school. His recent reading of conference materials has resulted in a lot of new beliefs about the city involving this notion: that it is where the conference is being held; that it is an attractive city on a bay; and so forth.

The beliefs Ivan has that involve his "Donostia" notion and those that involve his "San Sebastian" notion are insulated from one another, both in terms of explanation and information. The belief Ivan has, that explains his lack of euphoria on learning of free drinks at Noam's bar, is the one he would express with "This bus is not going to Donostia." When Tom uses saying-report (4) to explain the lack of euphoria, the veterans infer a belief

involving Ivan's "Donostia" notion, and it is this belief that does the explanatory work.

On the other hand, Ivan is a good guide to where the bus is going, only when he is drawing on the beliefs he has that involve his "San Sebastian" notion. It was a "San Sebastian" sign on the bus that led to the key beliefs; it is only his assertions involving the name "San Sebastian" that are a good guide to these beliefs.

This leads to our second contextually important factor, which we call a "conversational thread." A thread is part of a larger name-notion network.⁴ Such a network begins with an origin, in this case the city of San Sebastian/Donostia, and extends through utterances, perceptions of utterances, notions formed on the basis of such perceptions, and then further utterances. At some point the city was named "Donostia"; people called it that for centuries; eventually a sign was put up along the road, "Donostia: 15 km."; Ivan saw the sign; he formed a notion of the city; his notion guided his utterances to Tom. Similarly with "San Sebastian"; this network intersected with Ivan in school, led to his "San Sebastian" notion, and all the beliefs associated with it lead to the utterances in which Ivan uses this name.

The "San Sebastian" and the "Donostia" networks have the same origin, the city, and intersect in many places, as in the minds of the English speaking residents, and the minds of the veterans; when they hear or read something using the name "San Sebastian" or using the name "Donostia", the information gets associated with the same notion, one that is associated with both names. But in Ivan's head there are two *threads*; one through his "Donostia" notion, and one through his "San Sebastian" notion.

When Tom tells the veterans what Ivan said, he is implicitly talking about what Ivan said *along a conversational thread*. When he reports (4), using the report as an explanation, he is implicitly talking about the thread that goes through Ivan's Donostia notion, and through Ivan's utterances that use the name "Donostia". He is telling the veterans, more or less, "if you follow the thread back from my current utterance to Ivan's 'Donostia' using utterances, you'll find one the content of which is that this bus isn't going to Donostia." This thread is relevant because the report is provided as an explanation of Ivan's lack of euphoria at seeing a sign with good news expressed using the term "Donostia".

On the other hand, when Tom reassures the veterans that the bus is going to Donostia, using (6), he is in effect telling them that if they follow the thread that leads back from his use of "Donostia" to Ivan's use of "San

Sebastian”, they will find an utterance whose content is that the bus is going to Donostia. This thread is relevant because Ivan’s information about the bus was gained from a destination sign on the front that used the name “San Sebastian”.

We can now provide an account of saying-reports that is modeled on the Crimmins-Perry analysis of belief reports.⁵ In that theory, belief reports were taken to be about contextually determined *notions* or *types of notions*, in the mind of the believer. These were unarticulated constituents of the content of the belief report. Here we take threads running through notions and utterances of the sayer⁶, to the minds and utterances of the reporter to be contextually determined unarticulated constituents of the saying-report.

Where u is a saying-report of the form “X said that S”, we use u_S for the subutterance of ‘S’.

A report u of “X said that S,” about thread T , is true, iff:

- a) there is an utterance u' that lies along T , and u is about u' .
- b) ‘X’ in u designates the agent of u' ;
- c) the content of $u' =$ the content of u_S .

When Tom is using his reports as explanation, (4) and (5) are true. Context determines that he is talking about the thread that runs through Ivan’s “Donostia” notion. Along the “Donostia” thread, there are no utterances with the content that the bus is going to Donostia, and there is one with the content that the bus is not going to Donostia. When Tom uses them as evidence, he is talking about the “San Sebastian” thread. (4) and (5) are false and (6) is true; there is an utterance along the “San Sebastian” thread that has the content that the bus is going to Donostia.

Earlier, in introducing the example, we said that Tom’s utterance of (4) seemed intuitively true. Consider the context of our remark. We had just introduced an example that called attention to Ivan’s possessing two unlinked notions of the same city. Then we imagined Tom reporting what he had heard Ivan saying to himself. In this context, it was natural to take Tom’s reports as explanations, or at least as a way of conveying to the veterans that Ivan hadn’t grasped (1). That is, it was natural to take Tom’s utterance as concerning the thread that ran through his Donostia-notion; along that thread there was not utterance to the effect that the bus was going to San Sebastian, so his report was true.

4. The classificatory role of content

If this account, or something like it, is the right way to look at saying-reports, what does this imply about the claim that “what is said” is referential content? We think that it supports the claim, as long as we understand the role of the referential content, what is said, correctly.

It is misleading to think of a saying-report as simply a report of a relation that does or does not hold between the sayer and a certain object, one which happens to be a proposition. The job of the proposition is a bit more subtle. It plays a role in identifying a property the sayer does or does not have. A saying-report is a way of classifying an agent by the property of having produced an assertive utterance with certain truth-conditions. But not just any utterance will do. Context can constrain which conversation, or which part of a conversation, the utterance has to have been a part of, and along which track in that conversation the utterance must have lain.

That is, the job of the truth conditions of the embedded sentence in the saying-report is to tell us something about the sayer’s utterance *in addition to* the conditions it has to meet to be contextually relevant. In the case of Ivan and Noam’s bar, the issue was whether Ivan believed, via some notion that was associated with being the place the bus was headed, that it was the site of Noam’s bar. Assuming that Ivan saw and believed the sign, there will be associated with his “Donostia” notion, the property of being the site of a bar that serves linguists free drinks. Knowing that Ivan likes drinks, especially free ones, one assumes that if he believes he is heading to the site of Noam’s bar he will be cheered up. The remaining question is whether he believes, via his “Donostia” notion, that the bus is headed there. If he is sincere, what he says about where the bus is heading, using the term “Donostia” will indicate the presence or absence of such a belief. Given that these are the issues in the air, Tom’s report (4), tells the veterans what they need to know. The content of Ivan’s *relevant* belief, the one involving his “Donostia” notion, is that the bus isn’t going there. So he’s not in the right mental state to be cheered up.

Suppose now that the context of Tom’s remark isn’t so clear to the veterans. That is, they are not sure at the outset what Tom is trying to communicate to them. A few minutes ago he reported (6), to reassure them the bus was headed to Donostia, on Ivan’s authority. Now he says (4). Is his point that Ivan has changed his mind? Or is it rather that Tom’s conversational goals are different? If the latter seems more plausible, one will fill in the missing contextual information in a way that makes sense. Before he was

reporting what Ivan said relative to a thread relevant to his actions of getting us on this bus rather than another. Now he is reporting what Ivan said relative to a thread that is relevant to why seeing the sign about Noam's didn't cheer him up.

Now consider Kaplan's argument, in particular "the tricky case". Paul and Charles have disguised themselves as each other and changed places. Kaplan is looking at Charles. But he thinks he is looking at Paul. He says, "He now lives in Princeton, New Jersey." Kaplan argues that what he says in this case is false, and would have been false, even if the changing of places has not occurred, although in that case it would not have been what he said.

One can grant all of this, and still be dubious that in this circumstance the report, "Kaplan said that Charles lives in Princeton," would be true. Our account explains what is going on here. There are two threads in Kaplan's head, leading to Charles. One involves the notions that controls his use of "Charles", the other involves his perceptual notion, which is of Charles since Charles is the person he is looking at, and controls the use of "he". This latter thread is connected with his "Paul" notion, and the beliefs associated with that notion have become temporarily (until the ruse is disclosed) associated with his perceptual notion.

Suppose the issue is where Charles lives, and Kaplan is deemed to be an expert about where his philosophical friends reside. In this context, it would not be true to say "Kaplan said that Charles lives in Princeton." Of his two notions of Charles, the one that is authoritative about residence issues is the old one that controls his use of "Charles", not the new one that controls his use of "he". There is no utterance on a thread that goes through the authoritative "Charles" notion, and has the content that Charles lives in Princeton. This explanation of why it would be untrue in certain contexts to say "Kaplan said that Charles lives in Princeton" does not argue against the view that it is referential content that is at issue. The problem with the report is that in these contexts the speaker is talking about tracks on which authoritative utterances lie, and there is no authoritative utterance by Kaplan with the content that Charles lives in Princeton.

5. The general theory of content

The classificatory conception of content suggests the possibility of generalizing our ordinary concept of content in a way useful for theoretical pur-

poses. Focusing on assertive utterances, one can think of contents as abstract objects that encode the truth-conditions of the utterances. But *the truth-conditions of an utterance* is a *relative* and *incremental* concept. That is, one is saying what *else* the world has to be like, for the utterance to be true, *given* certain facts about the utterance that are taken as fixed. The concept of the referential content of an utterance gets at what else the world has to be like for the utterance to be true, *given* the language of the utterance, the disambiguated meanings and syntax of the words and phrases, and the facts, including contextual facts, that determine the reference of the singular terms and other contextually sensitive items.

But one can naturally extend the concept of content, by considering the truth-conditions of an utterance with some of these items left *unfixed*. For example, the referential content of an utterance *u* of “I don’t live in Princeton,” spoken to Kaplan by Charles while disguised as Paul, is simply the proposition that Charles doesn’t live in Princeton. An utterance of “Charles doesn’t live in Princeton” would have had the same referential content. But if we abstract over the contextual fact that the speaker of the utterance is Charles, what else has to be the case for *u* to be true? The speaker of *u* has to not live in Princeton. This proposition, that the speaker of *u* doesn’t live in Princeton, is a singular proposition about *u* and Princeton. It seems that this is the crucial bit of information that Charles is attempting to convey to Kaplan. Kaplan realizes that the person he is looking at, the one he has been taking to be Paul, is the speaker of *u*. So he learns that the person he is looking at, and has recently demonstrated with “he”, does not live in Princeton. If he is confident that Paul has not moved, and he believes what he hears, we will have to conclude that the person he just demonstrated, the person he is talking to, is not Paul after all.

The proposition that the speaker of *u* does not live in Princeton what we call “utterance-bound” or “reflexive” truth-conditions of the utterance *u*; that is, truth-conditions that are conditions on the utterance *u* itself. These contents are not *alternatives* to the referential content, but supplement it and mesh with it. In the actual world, the proposition that the speaker of *u* doesn’t live in Princeton, and the proposition that Charles doesn’t live in Princeton, will have the same truth-value.

In his argument, Kaplan distinguishes between two different questions we might ask concerning the counterfactual circumstance, in which Charles disguised as Paul is the person he points to. One concerns the proposition Pat, the proposition that Kaplan actually expressed –that is, what he actually said, when he said “He lives in Princeton”. Kaplan thinks Pat is the

proposition that Paul lives in Princeton, and this proposition will still be true in the counterfactual circumstance.

The second question is whether Mike, what Kaplan would have said in the counterfactual circumstance, would have been true in that circumstance. What he would have said is that Charles lives in Princeton. That proposition is false, and would have been false, since we didn't build anything about Charles living anywhere else into the counterfactual circumstance.

Earlier we distinguished Pat and Mike from Erin, the proposition *that the person to whom the speaker points lives in Princeton*. Erin is neither what Kaplan actually said, nor what he would have said. Nevertheless, we think that Erin deserves a place in the account of what happened; that is the theorist can find a role for Erin, even though it is not what is said in either the actual or the counterfactual circumstance.

Although Erin is not what Kaplan said in the counterfactual situation, he committed himself to the truth of it, for it is a truth-condition of his utterance; it is what the world has to be like for the utterance to be true given the meaning of the words used in English and of the gesture of pointing. Since Kaplan realized that he was the speaker, he also committed himself to the content we get by fixing this fact:

Megan: that the person who whom Kaplan points lives in Princeton.

When Charles said "I don't live in Princeton," his plan is roughly as follows:

Kaplan knows English, so he will know that my utterance is true iff the speaker of it does not live in Princeton. He can see that I am the speaker, and he realizes that I am the very person he pointed to a few seconds ago. So he will realize that if my utterance is true, the proposition that the person to whom he pointed lives in Princeton (i.e. Megan) is false, and so realize that what he said was false.

It is Megan that Charles intends to convince Kaplan of the falsity of, when he says "I don't live in Princeton". It wouldn't have worked to say the same thing by saying "Charles doesn't live in Princeton," because the truth-conditions of that utterance don't conflict with Megan.

6. Plans and implicatures

Understanding implicatures is a matter of intention discovery. Using language to generate implicatures is an intentional activity. But in both genera-

tion and understanding, the intentions are complex; they involve not a single intention, but a structure of intentions, to do one thing by doing another.

In the case of Charles in disguise, by saying “I don’t live in Princeton,” he intended to say that he didn’t live in Princeton. By saying that, he intended for Kaplan to figure out that what he had just said was false, and that the person in front of him was not Paul. This was part of what Charles meant; that is, he intended for Kaplan to recognize his intention. That is to say, he implicated that Kaplan had said something false, and that it wasn’t Paul that he demonstrated. In order for Charles to succeed in this, it didn’t suffice to simply say that he didn’t live in Princeton; he had to say it in a certain way. He had to say in such a way that the truth-conditions of his utterance were inconsistent with what Kaplan had said, given facts that he could count on Kaplan knowing, in particular that the speaker was the same person Kaplan had just referred to.

Charles plans for Kaplan’s reasoning to begin with Kaplan hearing his utterance *u*, and grasping its utterance-bound content, that the speaker of *u* doesn’t live in Princeton. Then he relies on Kaplan grasping its content given that the speaker is the person he sees in front of him, that that person doesn’t live in Princeton. Then, since he will recognize the person he sees in front of him is the same person he just referred to, he will grasp that the person he sees in front of him does not live in Princeton, and that what he said was false. And given his firm belief that Paul lives in Princeton, he will grasp that he wasn’t demonstrating Paul.

Charles plans on Kaplan’s reasoning beginning with the utterance-bound content, not with what he says. Thus we distinguish between what Charles says, or what is said by his utterance *u*, and the *operative propositions*. These are the propositions that he counts on Kaplan grasping in order to grasp his implicatures.

This example is typical of implicatures; the operative propositions are typically *not* what is said, but propositions that correspond to various truth-conditions that abstract from some of the fact relevant to determining what is said.

Suppose that, having lunch around a table at Tresidder Union at Stanford, David, John and Dikran are talking about boring university towns. Dikran says, “Princeton is even more boring than Palo Alto. I can’t imagine living in such a place.” John whispers:

(7) *He lives in Princeton,*

moving his eyes toward a man sitting at a couple of tables from theirs. He implicates that they should lower their voices if they didn't want to offend a Princetonian. Now, what's the operative content of John's utterance?

As a matter of fact, Dikran and David cannot see Paul, but John doesn't intend them to turn and look at Paul –causing an embarrassing situation, as Paul would think they were talking about him. In this case, the referential content of John's utterance, *that Paul lives in Princeton*, –our old friend Pat– is not what John intends to communicate to David and Dikran. For all we know, Pat can be a proposition that they both knew before John uttered anything. But John's point was not to remind them about that. In fact, as he didn't want them to turn around rudely to look at Paul, he couldn't reasonably intend them to grasp what he said, in any way that would allow them to recognize it as something they already knew. He is not trying to convince them that the actual world is one in which Paul lives in Princeton. He is trying to convince them that the actual world is one in which a Princetonian sits within earshot of them. It is by convincing them of this, that he hopes to instill in them the belief that it would be a good idea to lower their voices while saying negative things about Princeton.

John's plans more or less as follows.

David and Dikran will hear my utterance (7). They understand English and realize that it is true iff the person I am referring to with "he" lives in Princeton. They will see me pointing, and although they cannot see to whom I am pointing, they will realize I am pointing to someone nearby, and he is the person to whom I'm referring. Thus they will realize that someone near them is from Princeton. Given a modicum of common sense and politeness, they will realize we should not continue our conversation about the dullness of Princeton, or at least not at such a level so that a person nearby can hear. They will also notice that I am whispering, and figure out that I am doing that so the person I am referring to won't hear me, and will follow my example.

The operative proposition here, the key to Dikran and David grasping John's implicature, is the proposition that someone nearby them is from Princeton. This is the linchpin of the inferences he expects them to make, in figuring out what he is trying to convey to them and trying to get them to do. This is not what John said. Nor is it merely the utterance-bound content of his utterance. It is a proposition that encodes the truth-conditions of his utterance given a combination of semantical and contextual properties.

What about the proposition he expressed, what he says, that Paul is from Princeton? There is a sense in which David and Dikran will grasp this; they

will have various utterance-bound and context-bound conceptions of this proposition:

That the person referred to by the speaker of (7) is from Princeton;

That the person John refers to is from Princeton

That the person behind us and referred to by John is from Princeton.

But John does not plan on them being able to identify this proposition in any way that connects with their pre-existing notions of Paul; in that sense, his plan does not depend on them recognizing what he says.

So here again, the operative propositions are not the propositions that referentialism identifies with what is said. And yet, the referentialist account of what is said permits us to identify the propositions that are operative.

7. Conclusion

We agree with referentialism that what is said by simple utterances involving indexical, demonstratives and names are singular propositions with the referents of those terms as constituents, in spite of the problems posed for this view by problems of cognitive significance. More is involved in reporting what a person says, and answering the question, “What did he say?” than simply identifying these singular propositions. The questions, to which saying reports provide answers, can be, and typically are, questions about what a person said, in the course of a certain conversation, with utterances that drew on certain notions and beliefs involving those notions, that are relevant to certain actions the sayer might or might not take, or certain sources of information, the sayer might or might not have. Given an appreciation of the complexity and subtlety of such question and the reports that answer them, we can see how saying what a person said can provide information about utterances that goes beyond the bare identity of the singular propositions.

Grice is right that implicatures are generated by what a person says, if one interprets this to mean that the information needed to figure out the implicatures is the sort of information conveyed by answering questions about what is said. But, in line with what was said in the last paragraph, these answers will not simply identify the singular propositions expressed by the sayer. They will identify that proposition as the proposition expressed in the course of a conversation, with various contextual facts fixed in various ways. A person says something –expresses a singular proposi-

tion— by constructing an utterance that has certain truth-conditions. What is said will correspond to the referential content of the utterance, what the world has to be like for the utterance to be true, given facts about meaning and reference. But other truth-conditions of the utterance can be identified by abstracting from some reference-fixing facts, and fixing other contextual facts. The operative propositions, those the grasping of which will lead to grasping the implicatures, can be, and typically are, among these other truth-conditions of the utterance.

Thus, while the insights of Grice and those of the referentialists do not fit together in as simple a way as we conceived at the outset, with the “output” of semantics constituting the “input” to pragmatics, within a general theory of content the consistency of the insights can be appreciated. Referential semantics does provide what Gricean pragmatic needs.

Notes

* The research of the first author was partially supported by a grant of the Spanish Ministry of Education (HUM2006-11663/FISO) and the University of the Basque Country (GIU 08/23). He is also thankful to the Institute for Logic, Cognition, Language and Information (ILCLI). The second author was supported by the University of California at Riverside and Stanford University.

1. For the sake of simplicity, we are leaving aside the meaning and contents of “now”.
2. Henceforth we ignore the difference between the Spanish and English names, although it wouldn’t be hard to come up with examples where it was relevant.
3. We use “context” in the sense of properties of an utterance that are relevant to understanding, rather than in Kaplan’s technical sense of a quadruple of agent, location, time and world.
4. See (Perry forthcoming).
5. See (Crimmins and Perry 1989; Crimmins 1992).
6. When discussing saying-reports, we use the somewhat unfamiliar “the sayer” rather than “the speaker”, since both the sayer and the reporter are speakers.

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Context dependency in thought

Agustín Vicente

Abstract: This paper deals first with the idea that the vehicles of our thoughts may be context-sensitive and second with the intimately related question of whether natural language (NL) can be the vehicle of thought (VOT). The thesis will be that of all the varieties of context-dependency that we can distinguish, especially when we focus on NL, the VOT can only be “affected” by automatic or pure indexicality. The way to proceed is: first, I will try to distinguish several varieties of context-dependency that impinge on NL utterances. Then I will argue that the VOT must be explicit in a way that NL expressions, because of all these context-dependencies, cannot. This means that, given that the VOT must carry full propositions, NL can-not be the vehicle of thought. In the final two sections, I will move to consider two main objections to the thesis advanced. The first is that the VOT might be as context-sensitive as NL is, provided we can identify thought-contents with relativized propositions. The second objection comes from the alleged existence of unarticulated constituents in thought.

1. Introduction: Context dependency in natural language

The recent contextualism/ minimalism debate has arguably shown that natural language (NL) is largely context-dependent in the following sense: most, if not all NL utterances, depend on contextual information either in order to express a thought (a proposition with absolute truth-conditions) or in order to express the thought they are intended and intuitively judged to express (see, e.g., Carston, 2002, Recanati, 2004). These are some of the various ways in which this context-dependency of NL is exemplified:

- (i) *Automatic indexicality*: some utterances contain indexicals whose content depend on a determinate set of contextual parameters, the prototypical example being “I”, which picks up the speaker in the utterance context.
- (ii) *Wide-context indexicality*: in contrast with (i), there are indexicals whose content-picking function cannot be specified. Demonstratives, for instance, pick out a contextually salient entity in the context, but saliency is not reducible to a set of parameters.

(iii) *Other overtly context-sensitive expressions*: gradable adjectives exemplify a class of expressions which, not being indexicals, are context-dependent: “John is tall” does not express a proposition unless a reference class and a standard are specified.

(iv) *Unarticulated constituents*: there are sentential utterances, such as “it is raining” that express a thought that goes beyond what their semantics deliver. In order to get that “something else”, contextual information is required, or, to put it differently, the thought that these utterances express depends on the context of utterance. Utterances containing quantifiers plausibly belong to this class.¹

(v) *Meaning modulations*: the thought expressed by an utterance may not coincide with its alleged literal meaning, even if it is not so far away from the latter as to consider it “speaker’s meaning”. This may be the case of “the ham sandwich wants the bill”, whose meaning is plausibly that the customer who ordered the ham sandwich wants the bill. Modulations require contextual information.²

(vi) *Lexical ambiguities*: the meaning of homonyms and polysemous terms cannot be fixed in the absence of contextual information. Polysemy, on the other hand, is a ubiquitous feature of language (see Taylor, 2003).

(vii) *Rule ambiguities*: contextual information is also required to retrieve the thought expressed both by syntactically ambiguous expressions and by the use of semantic underdetermined rules, such as the one governing adj. + noun constructions, which only specifies that the adjective modifies the noun. For instance, “that is a red pen” may mean (at least) that the pen looks red or that the pen writes red. The concept expressed by the adjective modifies the concept expressed by the noun in both cases, but it turns out that such modification can be realized differently on different occasions. This example may look like a case of modulation: RED is modulated into RED WRITING. However, I think that this, as at least some of the so-called “Travis-cases”, can be dealt with as different determinations of underdetermined semantic rules. Suppose that the concept expressed by ‘red’ is RED and the concept expressed by “pen” is a compound like PHYSICAL OBJECT USED FOR WRITING. Then one could say that the ambiguity in the construction “red pen” results from PEN modifying mainly either one part of the construction (OBJECT) or the other (its telic *qualia* WRITING ARTIFACT: on this see Pustejovsky, 1995).

My purpose in what follows is to evaluate the claim that the vehicle of thought (VOT) may also be context-dependent. In particular, I will consider which of these context-dependencies can be also ascribed to the VOT. I will try to show that, except from automatic indexicality, the rest of context-dependencies jeopardize the idea that the vehicle of thought must *carry* thoughts, instead of just *expressing* them.

2. On carrying thoughts: the explicitness requirement for the VOT

NL utterances typically express thoughts. Contextualism has shown that in order to do so, NL makes massive use of contextual information. In many cases, NL utterances by themselves fall short of having a truth-conditional content; in other cases, the truth-conditions that they have as tokens of sentence-types do not coincide with the truth-conditions that they express. Thus, it can be said that NL utterances do not express thoughts by encoding or carrying them. On the side of the hearer, this means that in order to retrieve the thought expressed by an utterance, it is not sufficient to do the composition of alleged literal lexical meanings. The information provided by the syntax and the lexicon must be disambiguated, enriched, modulated or revised in the light of contextual information. This kind of general context-dependency of NL (of which (ii–vii) are species) has been called the “inexplicitness of NL” (see Fodor, 2001).

Probably the main reason why NL cannot be the language of thought is precisely its being inexplicit (see Vicente and Martinez Manrique, 2005, 2008). The vehicle of thought, be it linguistic or not, cannot be inexplicit. Jerry Fodor (2001) says that “a thought cannot be inexplicit with respect to its own content (...) because a thought just *is* its content” (14). François Recanati (2007) is right when he holds that this claim, as it stands, confuses contents and vehicles. Moreover, what Fodor claims about thoughts and contents can equally be said about truth-conditional meanings and contents of linguistic expressions –the truth-conditional meaning of a linguistic expression cannot be inexplicit about its content, because the truth-conditional meaning is its content; yet, as has been said, linguistic expressions are remarkably inexplicit about their contents.

However, it is possible to justify the requirement of explicitness for the vehicle of thought in other ways. On the one hand, Fodor’s claim above may be re-interpreted. Perhaps what Fodor has in mind is that, given that a vehicle of a thought is a compound of otherwise discrete representations

whose content is always the same, there is nothing more to having a thought than having that compound of representations activated.³ But if having a certain thought is nothing but having a determinate complex of this kind of stable representations active, then there seems to be no room for ambiguities or inexplicitness of any sort. Now, this argument may not be completely convincing. First, tokening a certain representational complex does not guarantee that the compound is explicit, even if it is a well-formed compound. For example, there may be syntactic ambiguities, such as scope ambiguities, that make the representational complex inexplicit about its content despite the stability of the representations' semantic properties. Second, on the present account, Fodor would be assuming a thesis of full-articulation or of homomorphic representation, as John Perry (1986; 2000) puts it, such that the content of a representation is given only by the contents of its constituents. However, it is an open question whether there are unarticulated constituents, i.e., constituents of content that are nowhere represented.

Now, the main argument for explicitness that I would like to propose is a sort of regress argument (though it will have to be supplemented with other considerations in order to rule out unarticulated constituents). Roughly: if the vehicle of a thought were inexplicit about its content, then the thinker would have to interpret it adding contextual information to the information that the vehicle carries. Then either all that information is put together in a vehicle that carries it (which would then properly be called the vehicle of thought) or else the regress goes on.⁴ In order to make this point it may be helpful to look at what happens with NL utterances: a well-formed NL sentence which is inexplicit about its content is subject to pragmatic interpretation. What we do in our pragmatics system is, basically, to put together linguistic and non-linguistic information. The output of the pragmatic system is a complete thought, which must make use of a vehicle capable of carrying it in an explicit way. The reason is that if it did not, the output of the pragmatic system would have to go through pragmatic processing again. Now, that could happen, but then either the process stops somewhere (and then we have found the vehicle of thought) or it goes on forever, which is absurd. Now, the claim is that what occurs with the output of the pragmatic system occurs with thought in general: what we call "our thinking" has to use an explicit vehicle. If this argument is sound, then vehicles of thoughts must be explicit about their contents, carrying thoughts instead of just expressing them. Another way to put it is this: what content a

certain token of the VOT has is not a matter of pragmatic interpretation, but of semantics alone.

Going deeper, and assuming the language of thought hypothesis, the requirement of explicitness implies two things: First, it implies that the vehicle of thought must have a classical compositional semantics, by which it is meant that the truth-conditional content of a token of a VOT is a function solely of its structure and the semantic values of its constituents. Second, the explicitness requirement implies that the constituents of a VOT must have determinate meanings. Compositionality is jeopardized by at least (iv) to (vii) context-dependencies. Cases (ii) and (iii) compromise at least the requirement of determinacy of meanings: the content of a demonstrative expression as well as the reference class, the standard, or what may, for a gradable adjective are largely underdetermined.

In contrast, automatic indexicals seem unproblematic *vis a vis* the explicitness requirement: the thought expressed by an utterance containing one of them can be obtained by semantic means alone. It can be said that automatic indexicals do not have a determinate meaning, unless such a meaning is identified with their character. However, the character of an automatic indexical is such that it determines automatically, i.e., without the recourse to interpretation, its occasional content. This, I take it, does not compromise the requirements of explicitness.

In what follows I will be arguing, against some possible objections and problems, for the view that the only context-sensitivity of the VOT is that brought about by automatic indexicals. One first –I think, minor– problem has to do with demonstratives. It seems reasonable to hold that there are demonstrative thoughts, that, for instance one can have a thought about a certain person of the sort THAT MAN IS DRINKING A MARTINI. The problem is that if there are demonstrative expressions in the VOT then it seems to follow that the VOT admits more context-sensitivity than that of automatic indexicals. The reply to this point consists not in denying that there are demonstratives in the VOT, but in denying that they behave as NL demonstratives (as semantically underdetermined expressions). Rather, the behavior of demonstratives in thought resembles that of automatic indexicals. If the vehicle of thought has expressions equivalent to “that man is drinking a Martini”, the demonstrative is, in the most common and simple case, linked to a percept –it points directly to the percept, whose content is determined automatically by its cause.⁵

It may be that two occurrences of [the equivalent to] “that man is drinking a Martini” differ in their truth-conditions: the percept may be the same,

or very similar, on both occasions but not its content, as when the scene is such that I cannot distinguish what happens to be two different persons drinking. In these cases, and from the first person perspective, it may be impossible to discern what content the vehicle carries. However, such content is determined in a non-interpretative way, in contrast with the behavior of demonstratives in NL. So the fact that there may be the equivalent to demonstrative expressions in the vehicle of thought does not count against the assumption of explicitness.

3. On relativized truth-conditions

Now let me turn to what I consider to be the two most pressing objections to the present view. First of all, it can be said that the above may hold, if at all, only if the truth-conditions taken into account are absolute truth-conditions. Utterances such as “it’s raining” or “Peter is small” perhaps lack absolute truth-conditions, but they do carry relativized truth-conditions. By this I mean what Recanati (2007) calls *lektons* or *thin contents*. A relativized proposition is that proposition (if it is such) that results from discounting the circumstances of evaluation from the absolute truth-conditions (the *Austinian proposition*, in Recanati’s terminology). (On relativism, see, e.g., Predelli, 2004, McFarlane, 2007). The Austinian proposition, in contrast, includes such circumstances of evaluation. Thus, my utterance “it is raining”, used to describe the present situation, has two kinds of content: the thin content that it is raining, which is true or false relative to the circumstances of evaluation (worlds and places, say), and the Austinian content that it is raining here, which is true in those worlds where it is raining in the place I actually am.⁶

Perhaps then the vehicle of thought could be as context-dependent as NL is, insofar as context-dependency is dealt with by means of relativized truth-conditions and thought-contents identified with relativized propositions. If thoughts are not absolute but relativized propositions, an equivalent in the VOT of “I am short” would carry a thought –the thought that I am short; yet, its absolute truth-conditions would vary from occasion to occasion, which is why it would be context-dependent. In a nutshell, the explicitness requirement can be met and the VOT still be context-dependent (and NL be the VOT) if its contents were relativized propositions or *lektons*.⁷

Now, there are two problems for this move. Let me call them “the problem of explanatory adequacy” and “the problem of inexplicitness”:

3.1. The problem of explanatory adequacy

Briefly stated, this first problem consists in that relativized truth-conditions fall short of explaining behavior. In this respect, thought-contents must be richer than relativized propositions. If I stand on tiptoe in the middle of the crowd it is because I think that I am short with respect to the people around, not because I believe the relativized proposition that I am short, which can have different truth values in different situations. Or if I pick up my umbrella it is because I think that it is raining where I am, not because I think simply that it is raining. Circumstances of evaluation matter when we focus on the explanation of behavior.

It is possible to argue that even though circumstances of evaluation do matter, there is no reason why they should be represented. A relativized proposition can be taken to be just a propositional function that, *ceteris paribus*, produces different behavioral outputs depending on the different circumstances of evaluation it takes as arguments. In principle, there is no need for circumstances of evaluation to be represented. However, the problem is: how can this work unless circumstances of evaluation are represented one way or another? That is, how can circumstances of evaluation be taken as input for the behavioral output if the thinker does not have them in mind? One response, *à la* Perry (see next section), would be: the thinker could be just *attuned* to circumstances of evaluation. There are a variety of proposals within current Cognitive Science that could be thought to support this idea: thus, many claim that cognition is situated, or embedded, in its environment in such a way that it can do without representing it (see Clark, 1997, for an extended introduction).

I purport to discuss this idea in the next section, when I turn to the issue of unarticulated constituents in thought. But for now let me say the following: it is dubious that this proposal could be applied to cognitive creatures like us. We, in general, are not attuned to a specific environment. When I think that it is raining, my thought can be about my surroundings, about a nearby place I see, about a place I am being talked about, about a place I recall or imagine, etc. what this means is that an occurrence of “it’s raining” tokened in my mind is a terribly ambiguous utterance. If I am going to act based on its content, then I’d better know more about what it means. That is, I have to have some kind of representation of its circumstances of

evaluation, i.e. the situation to which it applies. Being in that situation is not enough: I have to know that I *am* in that situation, and not in another. The difference between cognitive creatures like us and a simpler cognitive creature is that the input environmental circumstances for the latter are invariant, while ours are not. And it seems that the only way for a cognitive creature whose thinking takes very different circumstances of evaluation to attune its behavior to them is by way of being informed of what those circumstances are.

It is true that absolute propositions are not well-suited either to explain behaviors: this is the lesson from the Frege and Putnam cases. The Frege cases show that absolute propositions are too coarse-grained to explain behavior: they make it mysterious why someone can buy all the music by Bob Dylan (as Bob Dylan) while being unmoved by what Robert Zimmerman (as Robert Zimmerman) does. Putnam cases, on the other hand, make manifest that absolute propositions are too fine-grained: they draw a distinction where, for the purposes of explaining behavior, there is none, such as that between my twin's (t)water thoughts and my water thoughts. However, the problem is different with relativized propositions. For the lack of harmony between wide contents and behavior may be corrected by appealing to modes of presentation, narrow contents, or to the very vehicle carrying such contents.⁸ The explanatory deficit of relativized contents, however, is of a different sort, for it is not restricted to contents themselves: it also affects the very vehicle carrying such contents. Vehicles must carry *more content*, so to speak. In particular, they have to represent what the relativist puts in the side of circumstances of evaluation. That is, the explanatory deficits that affect absolute propositions derive from the way we want to assign contents to representations: representational complexes themselves are not problematic. However, it seems that the explanatory deficits of relativized propositions have to do with the fact that the vehicle carrying them does not carry enough information or does not represent enough parts of the world.

It could be argued that there are more problems for the "absolutist". Suppose I am speaking on the phone with S, from London, and she says "it's raining here". Both she and I then think that it's raining in London. Yet, she picks an umbrella and I do not. Now, does this mean that absolute truth-conditions or Austinian propositions are not good candidates for explaining behavior? It does not. First, the scenario here devised can be considered a Frege case: the difference in our respective behaviors is due to the fact that each of us thinks about London differently: it's a "here" for her,

while it's a "there" for me.⁹ We have different indexical thoughts, which are mirrored by the vehicle of thought itself. But even if the scenario were retouched slightly so that there were no indexicals involved –e.g. if what she said were "it's raining in London", and then we both thought about London in the same way, the difference in our behaviors could be explained in a non-problematic way, namely, by resorting to the interaction of the belief that it is raining in London with other beliefs –e.g., that I am in London or I am not.¹⁰

Note, on the other hand, that the relativist cannot give this kind of reply when it is pointed out that thin contents cannot explain behavior. She could try the following explanation: the same thought, namely, that it's raining, brings about different behaviors due to a difference in some background beliefs. Thus, if I believe that it is raining and I believe that I am in a place where it is raining, I will pick up an umbrella; otherwise I will not. However, it is clear that in this case the explanatory job is entirely done by the background belief, namely, the belief that I am in a place where it is raining. The belief that it is raining enters nowhere in the explanation. In conclusion, whatever problems the absolutist may have in attuning Austinian propositions to behaviors, it seems clear that a proposition that leaves out circumstances of evaluation altogether is not better but significantly worse attuned to differences in behavior. So the VOT cannot carry relativized propositions.

3.2. The problem of inexplicitness

The second problem for the relativist is that relativized propositions cannot really meet the explicitness requirement. It is simply not true that if the VOT carries *lektons* then the VOT can be both context-dependent and explicit. Think about utterance comprehension on a relativist construal. If we think of what a hearer of an utterance of 'it's raining' has to do in order to understand what she is told according to this construal, it is easy to see that she has to go through a process of interpretation. She does not complete a propositional function with contextual information, as in the "absolutist" schema, but she interprets the utterance all the same.¹¹ Basically, she has to guess what situation the utterance must be evaluated against. In order to do so, she has to resort to lexical-semantic information, but, more important, she has to use her knowledge of the context of the utterance.¹² In a nutshell,

vehicles carrying relativized propositions are subject to pragmatic interpretation.

Just paying attention to the phenomenology of thought, it seems that nothing similar to the process of utterance interpretation just sketched occurs in thought: the situation against which we have to evaluate our thoughts is present to us; it's not something that we arrive at using semantic and pragmatic information as we do in NL comprehension. This suggests that circumstances of evaluation have to be linked to the VOT in a special way: either the vehicle includes a representation of the circumstances (thus having absolute truth-conditions) or else it has an index attached to it which points to them. Such an index, in turn, should behave as an automatic indexical, on pain of regress problems: it should behave as a demonstrative that signals unequivocally the situation against which the thought is evaluated. So vehicles of thoughts may carry thin contents, but only if at the same time they demonstrate the circumstances of evaluation of such thin contents, that is, if they carry thin contents... and something else. Returning to the purpose of this paper, we can so far conclude that, no matter whether we think in terms of absolute or relativized truth-conditions, the mechanics of context-dependency in thought are ultimately the mechanics of automatic indexicality.¹³

Now, in spite of all this, Recanati (2007) proposes that *lektons* can be the contents of thought. His discussion is mainly focused on *de se* thoughts and the class of thoughts exemplified by weather thoughts, so it is difficult to know whether he would hold the same position with respect to other context-dependencies. In any case, his attempted solution to the problem of the adjustment between *lektons* and behaviors is to resort to *modes* of thinking. Basically, what he claims is that the *explanans* of a given behavior is not just the content of the thought, but also the mode in which this thought is entertained, more in particular, whether the thought is in the perceptual mode, the memory mode or the anaphoric mode. A token of the equivalent to "it's raining" in the perceptual mode makes the subject pick up an umbrella, whereas if the mode is anaphoric – linked to a previous conversation, for instance – the subject will only feel vaguely worried about other people getting wet.

This approach would also solve the second problem I have raised for the relativist. For modes not only allegedly help to explain behaviors; they also disambiguate between one it's-raining thought and another. If I think that it's raining in the perceptual mode, then there is no doubt that my thought concerns the present situation (or the scene that is the cause of my percept);

if I am in the anaphoric mode, then the thought concerns the situation I have in mind, etc.

Now, this proposal may sound interesting, but also a bit fishy, I think. The notion of a mode of thinking, or of tokening a thought-content, is not clear to me. Perhaps what is meant by, e.g., “having a belief in the perceptual mode” is simply having a percept that gives rise to a belief. However, if this were so, we could ask ourselves what the content of such a belief might be: if it is a *lekton*, we have a problem of inexplicitness, since a *lekton*, as it has already been said, has to be interpreted. Moreover, we also have a problem of explanatory inadequacy, for it is the belief – and its content, and not its cause, what brings about the behavior to be explained. That is, mentioning the cause of the belief does not seem to change things a bit. So maybe what is meant is not that, but rather that what is entertained is a percept. The issue gets more complicated if we take this strand. Surely it can be argued that there are cases where percepts are causes of behaviors: simple organisms may have a very basic psychology where action is not mediated by beliefs and desires but responds directly to an interpreted stimulus – which can be called a percept. And surely some of our behaviors are similarly produced. The point is whether my picking up an umbrella is one of such behaviors. The usual way to explain a piece of behavior such as my picking up an umbrella resorts to a belief-desire psychology. In particular, the most common explanation is that a certain percept caused a belief, which, together with a desire – of not getting wet – made me pick up the umbrella. And at any rate, I take it that when we discuss about contents of thoughts, we are discussing about conceptual contents, not about non-conceptual ones.¹⁴

So probably Recanati means something else when he speaks about modes of thinking. However, whatever he means, I take it that modes do function as VOT demonstratives. That is, the perceptual mode picks up, automatically, the situation that produced the belief, the memory mode the situation one is remembering, etc. Consequently, modes complement the content of the thought by anchoring it to a certain situation; such anchoring is done in the same (automatic) way as VOT demonstratives anchor demonstrative thoughts to their content: i.e., in the same way as a “that” in a belief produced by a percept is anchored to the cause of such a percept, the mode of a belief in the perceptual mode is anchored to the cause of such a belief. Perhaps it is possible to explain our cognitive economy without resorting to these “modes” Recanati introduces. But the point is that if we

choose to include them as elements of our mental life, their presence does not seem to pose a problem for the thesis here advanced.

4. On unarticulated constituents

Some authors have argued that there are thoughts that go beyond what their vehicle codifies, that is, that some constituents of the truth-conditional contents of some thoughts are not explicitly represented. Ruth Millikan (2006) restricts such constituents to invariants in the environment in arguing that “aspects of a truth-condition are explicitly represented [only] when expressed as values of variables that can accept alternative values” (49). Perry (1986/2000), in turn, includes parameters that can vary, as long as such variation is fixed. Thus, a child concerned only about the weather in the place he is in would not explicitly represent in his thought the location of the rain, even though it is a parameter that varies with changes in his own location. Especially conspicuous in this category of thoughts are some simple thoughts which apparently do not require that we are self-represented, be they about our internal states or about things that happen in our surroundings. As Perry (1985) puts it “at the ‘bottom level’”, we have cognitions that have no representation of ourselves (or the present moment) which are tied pretty directly to cognition and action” (241). In the way they are put forward, these are ideas that compromise the requisite of explicitness.

Now, there are two replies open to the defender of explicitness. The first is to hold that at least some of the examples do not compromise explicitness, when properly construed. Thus, it can be said that what we demand when we say that the vehicle of thought must be explicit about its content is not that every constituent of the content must be represented. Rather, that a vehicle is explicit about its content can be taken to mean, minimally, that its content is not extracted by means of a process of interpretation. So the explicitness requirement may be conceptually distinguished from a requirement of full articulation or homomorphic representation (Perry, 1986/2000). But above all, it can be argued that the requirement has to do not so much with what notion of explicitness we assume, but with the regress argument that we have used to establish it and with the conclusion that it cannot be a matter of pragmatic interpretation what content a vehicle of a thought has. In the case of environmental invariants there is no ques-

tion about what value a determinate constituent takes, and, for this reason, not having a representation for that constituent does not count against explicitness so construed.

Perry (1986/2000) gives the case of Z-landers, people who we would describe as speaking and thinking (when about the weather) only about the weather in Z-land. Such people, according to Perry, do not represent Z-land when thinking about the weather, which makes Z-land remain unarticulated in their thoughts. In a first approximation (see below), Perry also suggests that Z-land belongs to the truth-conditions of their weather-thoughts. But if it does, this should not pose a problem for explicitness, for Z-landers' thoughts about the weather cannot but be anchored to Z-land: if one of them tokens the equivalent to "it's raining", there is no ambiguity to be resolved. The same goes for those simple thoughts Perry speaks about. Perry (1985), when speaking about simpler organisms than us says the following: "since they [themselves] are always in the background of their perceptions and actions, they [themselves] need not be represented in the cognitions that intervene between them" (241). If there is no question that such thoughts are about themselves, there is no need to token a self-representation.

According to this line of defense, there should be no problem either in admitting that parameters that shift invariably may not have a corresponding indexical representation. The child in the example above may be content with tokening a simple "it is raining" instead of "it's raining here" because there is no question in his case that "it's raining" always means that it's raining where he is. However, it cannot be accepted that parameters that can vary freely can also be unarticulated, for these parameters introduce ambiguity. Thus, when the child grows up and becomes concerned about the weather in other places, a tokening of the equivalent to "it's raining" may mean a variety of things. So her thought that it is raining where she is must then be fully articulated.¹⁵

Yet, this response may be considered not fully satisfactory, since it introduces a revision of the notion of explicitness. I take it to be a minor revision, if at all, for it comes to the claim that *x* is explicit if and only if *x* does not allow more than one interpretation (i.e., its content is fixed), which I think captures one of the possible meanings of "explicit". And in any case, it is the notion of explicitness we should care about in this debate, especially in light of the arguments advanced, as it has just been said. Nonetheless, it is also possible to defend explicitness without making any violence to the notion.

Thus, there is a second line available to the advocate of explicitness. It basically consists in denying that these examples show what they are intended to show, namely, that the truth-conditions of a vehicle of thought may exceed the content obtained by the composition of the contents represented. That is, instead of holding that the regress argument only supports a minimal explicit requirement – given that there are some unarticulated constituents in thought – it is possible to maintain that the argument does support a demand for full articulation, since *there are no unarticulated constituents in thought*. So it may be claimed, for instance, that the proposition a Z-lander entertains when tokening her equivalent to “it’s raining” is simply that it is raining, i.e. that their concept of rain does not pick out a dyadic property (a relation between times and places), but a monadic one (a property of times).¹⁶

Perry (1986/2000) offers two ways to account for the thoughts of Z-landers. The first holds that a Z-lander’s weather thought is *about* Z-land, even if Z-land is not represented: thus, Z-land would be an unarticulated constituent of the content of her thought. The other way consists in ascribing not propositions but propositional functions: instead of saying that a Z-lander’s weather thoughts are about Z-land, we can say that they *concern* Z-land, meaning that Z-land is not part of the content of their thoughts, but the circumstance or situation against which their thoughts are evaluated. Of these two possibilities, Perry opts for the latter. On the one hand, he claims, going absolutist has the undesirable consequence that if Z-landers began to move to other places and have weather thoughts about these different places, then either we would have to ascribe them false beliefs, for we would have anchored all their weather thoughts to Z-land, or we should say that their rain concept has changed (1986/200: 180). On the other, the relativist approach seems to be combining two views: our own view, which regards Z-land as a component of the Z-lander’s weather thoughts, and the Z-lander semanticist’s view, which takes it that weather concepts denote monadic properties. Perhaps it can be objected that this mixed view is in fact unable to do justice to any of its parties. However, the point is that when introducing the relativist view, Perry does mention the Z-lander semanticist’s view that RAIN is a monadic concept. Yet, he does not seem to consider it an interesting option, for he does not discuss it.

Now, following Eros Corazza (2007), I think that the most natural and faithful way to describe what Z-landers think is by adopting their own view. In particular, given that a Z-lander does not have the notion of other places, at least as far as the weather is concerned, I see no reason to hold

that her thoughts are about Z-land or even that they concern Z-land. (Think of someone lacking the notion of a possible world: would we say that, even so, her thoughts are about the actual world? And now imagine that there are parallel universes and someone is capable of traveling between them. Would she be fair to our language and our thinking if she translated “the cat is on the mat” as meaning that the cat is on the mat in the world we live in?).

This approach has two apparent shortcomings. First, if we hold that the Z-lander’s it’s-raining thoughts are partially constituted by a monadic concept, then, when Z-landers became nomads, we would have to say that their concept of rain has changed –equally, we would have to say that their term ‘rain’ has changed its meaning- now being dyadic. However, it is possible to reply that precisely that’s what has happened: they acquire new meteorological concepts as they abandon Z-land and develop the notion of “other places”. Second, suppose that we are concerned with a farmer in Z-land that thinks things of the sort “all the cows are safe now”. If we adopt the farmer’s point of view, we should say that the quantifier is not restricted to a particular domain (say, to Z-land). But given that there are cows outside Z-land, and some of them are not safe, we would be ascribing a false belief to her.¹⁷ It is more charitable to ascribe to her the thought that all the cows of Z-land are safe, thus including Z-land as an unarticulated constituent of her thought. Now, I do not think this is right. If we adopt the Z-landers’ point of view, we thereby adopt their view that the world begins and ends in Z-land –we take their ontology onboard- and so we can say that the truth or falsity of their thoughts must be evaluated against Z-land only, therefore obtaining a true belief.

Following this line of argument, one should say that when an animal perceives a potato and seizes it, the cognition that mediates both events is just that there is a potato there (or x centimeters. away). Millikan gives the example of bee dances. Bee dances, she says, represent direction, but the truth-conditions of a bee dance include the nectar, the hive and the sun, which are not represented. Now, why should this be so? The content may be plainly that the direction is such and so. One thing is the truth-conditions that *we ascribe* and another is the truth-conditions of the thought (perception, dance or whatever). In a nutshell, what I propose is that if invariants from the environment are not represented, there is no reason for them either to enter into the content of the thoughts.

What about the child who entertains only thoughts about the weather in her surroundings? The case is not clear to me. If the child is able to enter-

tain only present-tense thoughts (it's-raining thoughts), I would say that she cannot make the contrast here/there when thinking about the weather and that therefore she is not really able to think that "it is raining here (or where I am)". That is, her tokenings of the equivalent in the vehicle of thought to 'it is raining' would not mean that it is raining where he is but plainly that it is raining. Now, if she also has memories of weather events and can think it-was-raining thoughts, then she must master the distinction here/there (though not entirely). But then it is not clear why it must be assumed that she is not representing locations. On the contrary, it seems that she must represent them. Otherwise, how would she distinguish one raining past episode from another?

5. Conclusion

NL is widely context-dependent. The VOT, however, cannot be context-dependent, barring pure indexicality, because the VOT must be explicit at least in the sense that what content a VOT token has cannot be a matter of pragmatic interpretation: the content must be given by its semantics alone. I have tried to argue for this claim (and the consequence that NL cannot be the vehicle of thought) by means of a regress argument. Then I have tried to meet two possible objections. First, the VOT might carry relativized propositions so that the VOT could be context-dependent and explicit at the same time. I have argued that the explicitness *desideratum* is not actually met, for a vehicle carrying a relativized proposition is subject to pragmatic interpretation. Besides, relativized contents are ill suited for explaining behavior. Second, the truth-conditional content of a vehicle of a thought may exceed what is explicitly represented: such is the case of unarticulated constituents. My response has been that some examples of unarticulated constituents do not really pose a problem to explicitness, when the requirement is construed as demanding only that a vehicle of a thought must have its content fixed. But even if the requirement is construed as a demand of full articulation, it is possible to defend that there are no unarticulated constituents in thought. If we draw a distinction between the content that we ascribe and the content that a vehicle of a thought has, there is no reason to say that invariants in the environment, for instance, form part of the content of a vehicle of a thought.¹⁸

Notes

1. The existence and characterization of unarticulated constituents, and how they enter into the proposition expressed by an utterance, are controversial issues. I tend to be sympathetic to Recanati's (2002) approach, but this is not an important matter for present purposes.
2. The example must be taken with caution. A token of 'the ham sandwich wants the bill' looks more like a polysemous utterance today, for the use of 'ham sandwich' to refer to a particular customer has been conventionalized. This means that most hearers do not *modulate* the meaning of 'ham sandwich' to obtain "the customer that ordered the ham sandwich" but simply select, according to the context, one of the possible meanings of 'ham sandwich'. So I ask the reader to think instead of the first uses of the locution: on those first uses there was a reference transfer (or modulation).
3. As a matter of fact, the argument Fodor (2001) puts forward is that the vehicle of thought has been shown to be compositional, and that compositionality entails explicitness. However, compositionality entails explicitness only if the constituents of the whole have stable determinate meanings. For more on the distinction between compositionality and explicitness, see (Vicente and Martínez Manrique 2008).
4. For a more developed version of this argument and some exegesis of Fodor's argument, see (Vicente and Martínez Manrique 2005).
5. In other cases, the content may be fixed by the cause of a percept which forms part of a memory, and so on.
6. McFarlane (2007) presents his relativism as a "non-indexical contextualism". It is a contextualist proposal in that it acknowledges that the Austinian content expressed by a sentence varies from token to token. It is non-indexical in that contextual factors are put mostly on the circumstance of evaluation side. Thus, if thin contents –what other philosophers call propositional functions– were the contents of propositional attitudes, we could have an (Austinian) context-sensitive VOT without compromising explicitness. This would mean that explicitness does not require context-insensitivity (automatic indexicality aside). What I want to do is, first, show that thin contents are not good candidates to be the contents of our thoughts, and so that the entailment from explicitness to context-insensitivity holds. Then I will question the idea that relativized propositions do meet the explicitness requirement.
7. In what follows in the section, I will be dealing only with the relativistic proposal, basically because a variant of it has been put forward by Recanati (2007) and is also mentioned by Carston (2008). There might be other proposals, though. For instance, one might claim that thought-contents are not absolute propositions, but reflexive propositions (see Perry, 2001). I will only say it seems that reflexive propositions are way too general to be the usual contents of our thoughts, though they may occasionally be objects of thinking, as

when one overhears a conversation and forms a thought which is utterance-reflexive.

8. The idea that one has to take the vehicle into account –the representation that stands for Bob Dylan is not the same as the representation that stands for Robert Zimmerman– is developed by Fodor (1990). Levine (1988) defends a similar proposal for demonstratives. This would be the most economic way for the absolutist to go. However, the most usual approach to THE Frege cases is the mode-of-presentation approach (inspired by Frege himself). Of special importance for the purposes of this paper is what has been called the ‘hidden indexical account’ (see Crimmins and Perry, 1989, Schiffer, 1992). Crimmins and Perry (1989) hold that modes of presentation are unarticulated constituents of propositional attitude ascriptions. Now, if this means that thoughts have modes of presentations as unarticulated constituents, my position is in trouble, for the explanatory inadequacy of absolute propositions could only be remedied if their vehicle carried more content (and the absolutist would end up having the same problem as the relativist). I defer to criticisms of Crimmins and Perry’s position such as Clapp’s (1995), (2008) and Schiffer (1992).
9. ‘Here’ and ‘there’ are not automatic indexicals in NL, but their (plausibly many) counterparts in the VOT should be.
10. The chain of thoughts is plausibly: “it’s raining in London; I am in London; I’ll pick up an umbrella”.
11. This would be (Recanati’s 2004) or Relevance Theory’s (see Carston, 2002) “free enrichment” account. In other accounts, such as Stanley’s (2000) “hidden indexical” approach, the hearer must search for the saturation of a free variable within the wide context.
12. See (Barba 2008) for a model roughly along these lines.
13. I assume that any kind of automatic indexicals would be represented indexicals, and moreover, that their content would be conceptual. This assumption may be disputed, though. For instance, Eros Corazza has pointed out that the automatic indexicals I speak about could be Pylyshyn’s (2007) style FINSTs, which are indexicals allegedly used in vision for binding purposes whose content is non-conceptual. It strikes me as odd that the situation against which we have to evaluate our thoughts (e.g. our it’s-raining thoughts) might not be conceptualized: it must at least be seen as a *here* vs. a *there*. But suppose it is not conceptualized: then circumstances of evaluation would not be part of the content of our thoughts, since thoughts contain only conceptual material. What this means is not that the relativist is right. Rather, it means that the content of a token of the equivalent in the VOT of ‘it’s raining’ would be that it’s raining, *simpliciter*. We would not have a context-dependent thought, but a fully articulated thought. I hope this becomes clear by the end of the next section.
14. Following conventional wisdom, I assume that there is a difference between the nature of concepts and that of percepts, e.g. that concepts are amodal

while percepts are not. This assumption has been under heavy attack lately (see e.g. Barsalou, 2003 or Prinz, 2002; and see Weiskopf, 2007, for a rebuttal), but discussing it here would take us too far afield. Let me just mention, somewhat dogmatically, that I don't think that the idea of reducing human cognition to perceptual and/or motor processing is very promising, even if it turns out to be a successful paradigm when applied to simpler cognitive creatures.

15. This is an oversimplification: the child must be able to have it's-raining thoughts about various places from the very beginning, even if these are always in her surroundings. So her thoughts cannot really have unarticulated constituents. The same goes for Z-landers. Even if they think that Z-land is the only place in the world, their weather thoughts won't be all about Z-land as a whole. They will move freely among the various parts of Z-land and represent them as different places.
16. For a development of this position, see (Corazza 2007).
17. This point was raised by Christopher Gauker.
18. Research for this paper was funded by the Project FFI2008-06421-C02-02/FISO of the Spanish Ministry. I have to express my gratitude to the editors of this volume and Juan Barba, Begoña Vicente, Neftalí Villanueva and Eros Corazza for helpful comments.

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2. Implicit content (2): linguistic perspectives

Contextual domain restriction and the definite determiner¹

Urtzi Etxeberria and Anastasia Giannakidou

Abstract: The question of whether contextual restriction of quantificational determiners (Q-dets) is done explicitly (i.e. at LF; von Stechow 1994, Stanley 2002, Stanley and Szabó 2000, Martí 2003, Giannakidou 2004), or purely pragmatically (via e.g. free enrichment as in Recanati 2002, 2004, 2007, or a relevance theoretic process) has been a matter of intense debate in formal semantics and philosophy of language. In this paper, we contribute to the debate and argue that the domain for quantifiers in certain languages is restricted overtly by a definite determiner (D). This strategy of domain restriction via D – DDR – happens by applying DDR to the nominal argument, but DDR can also apply to the Q-det itself, in which case it forms a constituent with it. In both cases, DDR is a type preserving function, i.e. a modifier, and supplies the contextual C variable. Evidence for our analysis is drawn from Greek and Basque – two genetically unrelated languages; our analysis also covers the behavior of D in St’át’imcets Salish. We build here on data and earlier insights of Matthewson (2001), Giannakidou (2004), and Etxeberria (2005, 2008, to appear). Our analysis provides support for the program that domain restriction is syntactically realized, but we propose an important refinement: domain restriction can affect the Q-det itself (pace Stanley 2002), and in fact quite systematically in certain languages. The Q-det that is affected by DDR is typically a strong one. So-called weak quantifiers cannot be contextually restricted by DDR, we argue, because they are not of the appropriate input for applying it.

1. The debate: context and the domains of quantifiers

One of the most fruitful ideas in formal semantics has been the thesis that quantifier phrases (QPs) denote generalized quantifiers (GQs; Montague 1974, Barwise and Cooper 1981, Zwarts 1986, Westerståhl 1985, Partee 1987, Keenan 1987, 1996, Keenan and Westerståhl 1997, among many others). GQ theory initiated an exciting research agenda in the ‘80s, and the decades that followed featured extensive studies of quantificational structures, with attention to the internal structure of QPs, their use in discourse, and their scopal properties. For many years the focus of inquiry was on English, but soon enough cross-linguistic research made obvious a specta-

cular variation (see e.g. the papers in Bach et al. 1995, Matthewson 2008, Giannakidou and Rathert 2009) in the means and patterns of quantification across languages, suggesting that some fine tuning, or perhaps more radical modifications, of the classical theory are necessary.

Classical GQ theory posits that in order to form a QP, quantificational determiners (Q-dets) combine with a nominal (NP) argument of type *et*, a first order predicate, to form a GQ. In a language like English, the syntax of a QP like *every woman* translates as follows:

- (1) a. $[[\text{every woman}]] = \lambda P. \forall x. \text{woman}(x) \rightarrow P(x)$
 b. $[[\text{every}]] = \lambda P. \lambda Q. \forall x. P(x) \rightarrow Q(x)$
 c.
- QP

$\langle\langle e, t \rangle, t\rangle$

Q-det

$\langle\langle e, t \rangle, \langle\langle e, t \rangle, t\rangle\rangle$

every

NP

$\langle e, t \rangle$

woman : $\lambda x. \text{woman}(x)$

The Q-det *every* combines first with the NP argument *woman*, and this is what we have come to think of as the standard QP-internal syntax. The NP argument provides the domain of the quantifier, and the determiner expresses a relation between this set and the set denoted by the VP. Quantifiers like *every woman*, *most women* are known as “strong” (Milsark 1977), and, simplifying somewhat (see McNally for more refined data), their distinctive feature is that they cannot occur in the so-called existential *there* construction, illustrated below:

- (2) a. #There are most women in the garden.
 b. #There is {every/each} woman in the garden.
 c. #There is the woman in the garden.
 d. There are {three/some/few/several} women in the garden.

Notice that definite NPs (DPs) pattern with strong quantifiers in this respect. By contrast, quantifiers like *three women*, *some women*, and *several women* (“weak” in Milsark’s terminology) occur happily in this structure, as indicated. The question of what accounts for the empirical difference we observe in existential structures is still open, but, for the purposes of this paper, it is important to note that weak quantifiers typically assert existence, rather than presuppose it. This is a point to which we return.

It has also long been noted that the domain of strong quantifiers is usually restricted. Much contemporary work agrees that we need to encode contextual restriction in the grammar somehow, but opinions vary as to whether contextual restriction is part of the syntax/semantics (Partee 1987, von Stechow 1994, Stanley and Szabó 2000, Stanley 2002, Martí 2003, Matthewson 2001, Giannakidou 2004), or not (Recanati 1996, 2004, 2007, and others in the *strong contextualism* tradition). In the syntax-semantics tradition, it is assumed that the domains of Q-dets are contextually restricted by covert domain variables at LF. These variables are usually free, but they can also be bound, and they can be either atomic, e.g. *C*, or complex of the form $f(x)$, corresponding to selection functions (Stanley 2002, Martí 2003):

- (3) *In the dinner party we organized last night, every student had a great time.*
- (4) $\forall x$ [student_c] had a great time.

In these examples, the nominal argument of \forall , *student*, is not the set of students in the universe, but the set of students in the dinner party we organized last night. This is achieved by positing the domain variable *C*, which will refer to a contextually salient property, in this particular case the property of being in the dinner party we organized last night. This property then will intersect with the property *student*, and the product will be the (desired) set of students in the dinner party we organized last night. In the complex version $f(x)$, the domain consists of a free function variable and an argumental variable of type *e* (that can be bound). Relative to a context *c*, *f* maps *e* to *et*, i.e. an object to a set, producing intersecting semantics. So, $[\text{student}_{f(x)}]$ in the example above will be interpreted as:

- (5) $\llbracket [\text{student}_{f(x)}] \rrbracket = \llbracket \text{student} \rrbracket \cap \{x: x \in c(f)(c(i))\}$ (Stanley 2002: (9))

This set is, then, the nominal argument of the Q-det “every”. Stanley (2002) further argues that the domain variable is, syntactically, part of the nominal argument, and not of the Q-det itself.

Recently, evidence has been presented that the Q-det itself can be domain restricted (Giannakidou 2004, Etxeberria 2005, 2008, 2009). In the present paper we want to build on this literature, and advance the claim that we must allow for both syntactic options in grammar, i.e. NP, as well as Q-det restriction. Semantically, both syntaxes will end up intersecting *C* with

the NP argument, but the difference will be that some Q-dets will *require* this intersecting semantics, whereas others will not. Contextual domain restriction, we further argue, can be overtly done via a definite determiner D, an idea that builds on an earlier proposal by Westerståhl (1984) that the definite article supplies a context set. Contextual domain restriction in this analysis is a presupposition contributed by the typical vehicle of presuppositions, the definite determiner. This conclusion can be cast independently of how we treat presuppositions, e.g. as preconditions on updates of contexts or information states (Heim 1983), or within van der Sandt's (1992) conception of them as propositions whose place in discourse is underdetermined by syntax – though it seems to favor, we think, Heim's approach.

The main data that support our claim comes from languages as diverse typologically as Greek, Basque, and Salish. The upshot of the discussion will be that (a) we have indeed evidence for the “explicit strategy” (von Stechow 1998) of contextual domain restriction, and (b) being contextually restricted is often an inherent property of the Q-det.

The discussion proceeds as follows. We start in section 2 with Matthewson's data from Salish which prompted Giannakidou's (2004) proposal that D cross-linguistically performs the function of contextually restricting the domain of Q-dets. In section 3, we simplify Giannakidou's GQ analysis by defining the domain restricting function of D as a type-preserving (i.e. modifier) function D_{DR} . D can thus apply to the NP *without* altering the type of the NP argument (*et*): this is the case of Salish. We show further that the modifier function D_{DR} can also affect the Q-det itself, using data from Greek, Basque, and SS. Q-dets that have undergone D_{DR} are shown to be presuppositional. We also maintain that D_{DR} can only apply once, which means that we cannot have simultaneously composition of D with the Q-det and D with the NP. This prediction is borne out in both Basque and Greek. In section 4 we discuss how the domain restricting function correlates with the weak-strong distinction: only strong Q-dets can be restricted via D in Basque, and we explain this by arguing, following Etxeberria (2005, 2008, 2009), that weak Q-dets are not Q-dets (*et*, *ett*), but number functions.

2. Background: D and the structure of QP

Here we present some data from St'át'imcets Salish (SS) that motivated Matthewson to suggest a syntactic modification to the standard GQ theory, namely that the Q-det combines with an *e* (instead of *et*) type argument. We

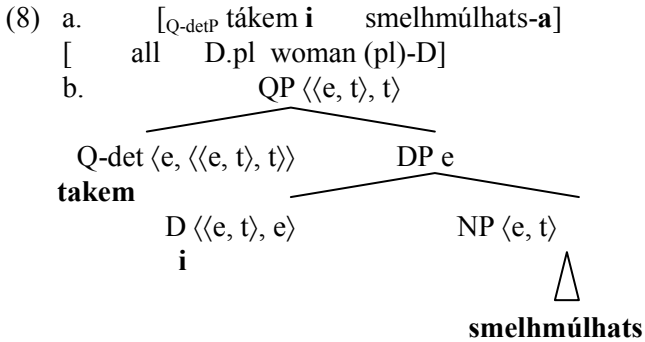
then present empirical problems with this idea, and give the reanalysis of these data proposed in Giannakidou (2004) within GQ theory. Giannakidou builds on Westerstål (1984) who claimed that the definite article provides a context set, and we will ground our theory based on this idea. Importantly, it is not crucial for us that the D be morphologically definite (the Salish D isn't), but that it performs functions associated with semantic definiteness, i.e. saliency and familiarity. For reasons of space we cannot expand on the relation between semantic and morphological definiteness in the present article, but see Etcheberria and Giannakidou 2009 for very detailed discussion, and Gillon 2006, 2009 for more facts of Salish supporting the idea we will argue for, i.e., that D associates with domain restriction.

2.1. St'át'imcets (SS) data (Matthewson 2001)

In SS, quantifiers in argumental phrases must always appear with a D modifying their NP.²

- (6) a. Léxlex [tákem i smelhmúlhats-a].
 intelligent [all D.pl woman(pl)-D]
 'All of the women are intelligent.'
 b. *léxlex [tákem smelhmúlhats]
 intelligent [all woman(pl)]
- (7) a. Úm'-en-lhkan [zi7zeg' i sk'wemk'úk'wm'it-a] [ku kándi].
 give-tr-1sg.subj [each D.pl child(pl)-D] [D candy]
 'I gave each of the children candy.'
 b. *Úm'-en-lhkan [zi7zeg' sk'wemk'úk'wm'it] [ku kándi].
 give-tr-1sg.subj [each child(pl)] [D candy]

Matthewson (2001) suggests a new syntax for the QP: first, D combines with the NP predicate to create a DP (type *e*); then, the created *e* object becomes the argument of Q-det which is now of type $\langle e, \langle \langle e, t \rangle, t \rangle \rangle$. This combination yields a GQ of the usual type $\langle \langle e, t \rangle, t \rangle$.



D in Matthewson's account is, crucially, the regular *et,e* (iota, maximalizing) function:

$$(9) \llbracket \text{smelhmúlhats (pl.)} \rrbracket = \llbracket * \rrbracket (\llbracket \text{smúlhats (sg.)} \rrbracket) \quad \text{"women"}$$

$$(10) \llbracket X \dots a_k \rrbracket^g = \lambda f \in D_{et} (g(k)) (f) \quad (\text{Matthewson 2001: 18})$$

The index of the determiner specifies which choice function will be used; g is an assignment function, from indices to choice functions, thus $g(k)$ is a choice function of type *et,e*. If the DP is plural, a pluralization operator $*$ is posited with standard semantics: it takes an one-place predicate of individuals f and returns all the plural individuals composed of members of the extension of f .

$$(11) \llbracket * \rrbracket \text{ is a function from } D_{et} \text{ into } D_{et} \text{ such that, for any } f \in D_{et}, x: D_e: \\ \llbracket *f \rrbracket (x)=1 \text{ iff } [f(x) \neq 1 \wedge \exists y \exists z [x=y+z \wedge \llbracket *f \rrbracket (y)=1 \wedge \llbracket *f \rrbracket (z)=1]] \\ (\text{Matthewson 2001: 17})$$

Hence, in this system, D functions as the more familiar definite plural (though, technically, it is a choice function in Matthewson's analysis). This analysis does convey an intuition that the DP argument refers to a discourse salient set – which is similar to saying that the NP set is contextually restricted, the property we want to capitalize on.³ Syntactically, however, the set becomes an individual, and this leads to the modification to the classical GQ theory. According to Matthewson, this pattern is *universal*, and *not* subject to cross-linguistic variation.

We review next the empirical problems with this claim, recycling from discussions in Giannakidou (2004), Etxeberria (2005, 2008, 2009).

2.2. Problems with Matthewson's syntax

2.2.1. *Q-dets do not take DP arguments*

One of the predictions of Matthewson's proposal (in (8b)) is that Q-dets should be able to combine with definites cross-linguistically. However, this prediction is not borne out.⁴

English:

- | | |
|--------------------------------|-------------------------|
| (12) a. * <i>every the boy</i> | f. <i>all the boys</i> |
| b. * <i>most the boys</i> | g. <i>only the boys</i> |
| c. * <i>many the boys</i> | |
| d. * <i>three the boys</i> | |

Spanish:

- | | |
|-----------------------------------|----------------------------|
| (13) a. * <i>cada los chicos</i> | f. <i>todos los chicos</i> |
| lit.: 'each the boys' | 'all the boys' |
| b. * <i>la majoria los chicos</i> | g. <i>sólo los chicos</i> |
| lit.: 'the most the boys' | 'only the boys' |
| c. * <i>muchos los chicos</i> | |
| lit.: 'many the boys' | |
| d. * <i>tres los chicos</i> | |
| lit.: 'three the boys' | |

Greek:

- | | |
|----------------------------------|---------------------------|
| (14) a. * <i>kathe to aghori</i> | d. <i>ola ta aghoria</i> |
| lit.: 'every the boy' | 'all the boys' |
| b. * <i>merika ta aghoria</i> | e. <i>mono ta aghoria</i> |
| lit.: 'several the boys' | 'only the boys' |
| c. * <i>tria ta aghoria</i> | |
| lit.: 'three the boys' | |

Note that the grammatical examples in (12–14) – which would fit in the configuration in (8b) – are formed exclusively with *all* and *only*, elements that have been argued not to be quantifiers (see Brisson 2003 for *all*; von Stechow 1997 for *only*). Observe that many of the ungrammatical construc-

tions in the examples above become automatically grammatical as soon as the partitive *of* is introduced (e.g. *most of the boys*, *many of the boys*, *three of the boys*).

2.2.2. Partitive “*of*” has semantic import

If Q-dets combine directly with entity-denoting elements of type *e*, *of* in partitive constructions such as *many of the girls* must be argued to be semantically vacuous – *pace* Ladusaw (1982), where *of* ensures that the Q-det receives an $\langle e, t \rangle$ type element as input. According to Matthewson (2001) indeed, the partitive preposition *of* is only employed for case reasons.

- (15) {Many/Some} of the banks are about to file for bankruptcy.

Apart from losing the neat semantic explanation for why we need an *of*-element in languages like English, Romance, Greek and the other discussed above, the case account faces empirical problems. Notice that *of* is optional in some constructions, and this should not be so if *of* was there only for case only.

- (16) a. all (of) the boys
 b. half (of) the boys
 c. both (of) the boys

Zulu (cf. Adams 2005) also provides evidence that it is undesirable to maintain that *of* is there just for case reasons. In the following grammatical sentences the counterpart of *of* is optional and its presence/absence has semantic import. In case the only role of the partitive preposition *of* is to assign case to the NP, what case would it be assigning in (17b) that need not be assigned in (17a)? Note that the quantifier and the NP are the same in both examples.

- (17) a. *Aba-fana aba-ningi ba-ya-dla.*
 cl2-boy cl2-many cl2-pres-eat
 ‘Many boys are eating.’
 b. *Aba-ningi b-aba-fana ba-ya-dla.*
 cl2-many cl2part-cl2-boy cl2-pres-eat
 ‘Many of the boys are eating.’

According to Matthewson (2001), the fact that SS (a language that lacks the partitive *of* element) lacks also overt case marking supports the claim that *of* (e.g. in English, Spanish, etc.) is there only for case. Zulu, just like SS, lacks overt case marking but, *pace* Matthewson's assumption, still has a partitive as shown in (17b). In other words, if partitive *of* were just inserted for case reasons, we would not expect to see it in a language where case is not marked overtly.

2.2.3. *Q-det* and *D* can vary their positions

Matthewson's analysis predicts that DPs are complements to Q-dets: [Q-det [DP]]. However, languages show evidence for both [Q-det [DP]] and [D [Q-det]] constructions showing that not always is an *e* type DP complement to the Q-det.

Although the majority of the SS quantifiers combine with a DP argument (18a-b), Matthewson also presents some data that does not fit her own quantificational structure, see (19a-b) –both with strong quantifiers:

- (18) a. *tákem i smelhmúlhats-a*
 all D.pl woman(pl)-D
 b. *zi7zeg' i sk'wemk'úk'wm'it-a*
 each D.pl child(pl)-D

- (19) a. *i tákem-a smúlhats* (Matthewson 2001: fn.5)
 D.pl all-D woman
 b. *i zi7zeg'-a sk'wemk'úk'wm'it* (Matthewson 1999: (41c))
 D.pl each-D child(pl)

Examples where the Q-det appears under D can also be found in Greek:

- (20) a. *oli i fitites*
 all D.pl students
 b. *o kathe fititis* (Giannakidou 2004: (32b))
 D.sg each student

Basque (a head final language) also provides evidence for the existence of these two structures: Strong Q-dets (see section 3.1), and not their nominal arguments, are composed directly with the D (*pace* Matthewson 2001).

- (21) a. *mutil guzti-ak* (Etxeberria 2005: (37a))
 boy all-D.pl
 Lit.: ‘boy all the(pl)’
 b. *mutil bakoitz-a* (Etxeberria 2005: (37b))
 boy each-D.sg
 Lit.: ‘boy each the(sg)’

We conclude that there is not much motivation to adopt the structure in (8b) in languages beyond SS. If we do, we make many wrong predictions. On the other hand, adopting the new QP syntax just for SS would be undesirable, if it turns out that we can explain the SS within the basic structure of GQ theory. Giannakidou (2004) suggested that we can do exactly this.

2.3. Reanalysis of SS data: Giannakidou (2004)

Giannakidou, building on (Westerståhl 1984), takes the data from SS to suggest that in order for a quantifier to combine with a nominal argument, this must be first contextually restricted. Thus, in SS the D will supply the contextual variable *C* *without* creating an individual, yielding a generalized quantifier with a contextually specified set as its generator.

- (22)
- $$\begin{array}{c} \text{DP } \langle\langle e, t \rangle, t \rangle \\ \swarrow \quad \searrow \\ \text{D } \langle\langle e, t \rangle, \langle\langle e, t \rangle, t \rangle \rangle \quad \text{NP } \langle e, t \rangle \end{array}$$

- (23) $\llbracket X \dots a \rrbracket = \lambda P \lambda Q \{x: C(x)=1 \text{ and } P(x)=1\} \subseteq \{x: Q(x)=1\}$

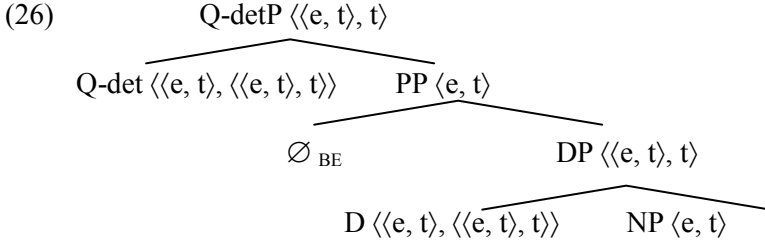
- (24) $\llbracket \text{ti smúlhats-a} \rrbracket = \lambda P \{x: C(x)=1 \text{ and woman}(x)=1\} \subseteq \{x: P(x)=1\}$
 ‘D woman’

Notice the difference here with Matthewson (2001) who treats the DP as a choice function. In Giannakidou’s analysis we have the standard GQ denotation expected of a definite, only the domain argument is now intersected with some property *C*.⁵

Once we get the combination in (22), Partee (1987)’s type-shifting operator BE shifts the GQ of type $\langle\langle e, t \rangle, t \rangle$ to the predicative type $\langle e, t \rangle$ for the Q-det to be able to combine with it.⁶

(25) BE: $\langle\langle e, t \rangle, t \rangle \rightarrow \langle e, t \rangle: \lambda P_{et} [\lambda x [\{x\} \in P]]$

If we assume, along with Partee (1987), Chierchia (1998), and others, that type shifters are syntactic elements, it follows that BE will be covert in this language. The result will be:



This result, Giannakidou argues, is consistent with the fact that there are no overt partitives in SS.⁷ It also renders SS QPs partitive like structures. Since overt type-shifters block covert shift (Chierchia 1998), the prediction is that languages with overt partitive prepositions *-of-* or partitive case (English, Greek, Spanish, Basque, etc.) block the covert shift. What we saw in the previous section, namely that in these languages DP does not combine directly with Q-det, as well as the contrast between these languages and SS, are thus readily explained.

The important insight here is that in order to capture contextual restriction syntactically, we need not revise our standard assumptions about the syntactic types of the arguments within the QP. In this light, then, the SS data tell us that we need to refine the syntax of QP so that we can capture the systematicity of overt contextual domain restriction in natural languages.

3. New proposal: Domain restricting D as a modifier function

3.1. Two ways of domain restricting via D: on the NP, or the Q-det

We will now preserve Giannakidou's insight, but propose a somewhat simpler analysis, where D functions not as an individual or GQ forming function, but as a *modifier*: a function that preserves the type of its argument, and modifies it by supplying the contextual restriction C. When D modifies the NP argument, we have the following:

$$(27) \llbracket D_{DR} \rrbracket = \lambda P_{et} \lambda x P(x) \cap C(x)$$

The D in SS exhibits this case. It is a type-preserving function, yielding a contextually salient set of women as the domain of *takem* ‘all’.

$$(28) \text{ Modifier semantics for } i...a \\ \llbracket i...a \rrbracket = \lambda P_{et} \lambda x P(x) \cap C(x)$$

Salish D can perform this function and applies directly to the nominal to restrict it; but the English, Greek and Basque D, along with the other European languages mentioned earlier, won’t be able to restrict the NP – when D is fed an NP it functions referentially in these languages, hence the need for the partitive preposition to give back the right input (*et*) for composition with Q.

It is important to stress that our definition of the modifier D_{DR} says essentially that the two important semantic functions of definiteness – familiarity/saliency, and reference – can be dissociated, and that a D element will have the ability, in some cases, to contribute just the former, without necessarily functioning as an iota. (Because familiarity and saliency are a presupposition, we cannot have D_{DR} with an element encoding reference to a novel set). The distinctive feature of SS, additionally, is that in this language, the domain argument is *always* contextualized syntactically via D_{DR} .

Crucially, D also appears to be syntactically attached to the Q, as we mentioned earlier and repeat here:

(29) St’át’imcets (Matthewson 1998, 1999, 2001):

a. **i** *tákem-a smúlhats* (Matthewson 2001: 151, fn.5)

D.pl all-D woman

‘all of the women’

b. **i** *zí7zeg’-a sk’wemk’úk’wm’it* (Matthewson 1999: 41c)

D.pl each-D child(pl)

‘each of the children’

(30) Greek (Giannakidou 2004):

a. **o** *kathe fititis*

D.sg every student

‘each student’

b. *kathe fititis*; **kathe o fititis*

every student

(31) Basque (Ettxeberria 2005, 2009):

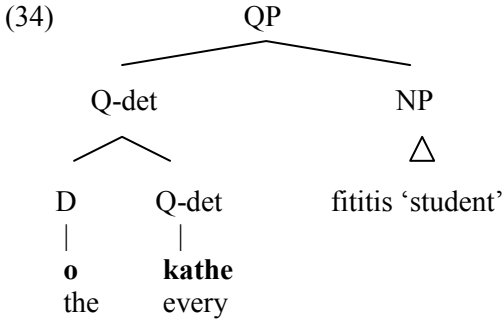
- a. *mutil guzti-ak*
 boy all-D.pl
 ‘all of the boys’
 b. **mutil guzti; *mutil-ak guzti*

In these structures, we are arguing that D functions as a modifier of the Q-det, yielding a Q-det with a contextually restricted domain:

(32) $[[D_{DR}]] = \lambda Z_{et,ett} \lambda P_{et} \lambda Q_{et} Z (P \cap C) (Q)$; where Z is the relation denoted by Q-det

We argued elsewhere that D attaches syntactically to the Q-det (Giannakidou 2004, Ettxeberria 2005, for more detailed arguments see Ettxeberria and Giannakidou 2009), so the result is the following structure:

- (33) a. $[Q_P o_D + kathe_{Q-DET} [NP fititis_N]]$
 b. o kathe fititis = [kathe (C)] (student) ‘each student’



- a. Basque: *ikasle guzti-ak* = (ikasle) [guzti (C)]
 Greek: o kathe fititis = [(C) kathe] (fititis)
 SS: i zi7zeg'-a sk'wemk'úk'wm'it = [(C) zi7zeg'] (NP)
 b. $[[Q-det]] = \lambda P \lambda Q. \forall x P(x) \rightarrow Q(x)$
 c. $[[D_{DR}]] = \lambda Z_{et,ett} \lambda P_{et} \lambda Q_{et} Z (P \cap C) (Q)$; Z the relation denoted by Q-det
 d. $[[o \text{ kathe}]] = \lambda P \lambda Q. \forall x (P(x) \cap C(x)) \rightarrow Q(x)$

In the next section, we compare the product of this application ‘o kathe fititis’ to ‘each student’ in English and see that the result is similar in terms of presupposition: they both require non-empty domains (and both QPs are strongly distributive, a fact that we gloss over here). Our hypothesis, then, will be that a possible composition of *each* would involve a structure parallel to the Greek and Basque that we propose here: [D-every], only with *each*, D is null. We are thus suggesting a generalization that all inherently D_{DR} -ed Qs have undergone a process of D modification that supplies C, but we cannot examine this further in this paper due to space.

As a concluding note, we would like to emphasize that the domain restricting function of $D-D_{DR}$ is proposed here as an additional meaning that the definite determiner can have in a given language. We are not suggesting that D_{DR} replaces the reference iota function, or the use of D as for kind reference (generic use). We are merely suggesting that D can also function as a modifier, and in this case it contributes only *familiarity*, i.e., the context set C, and not reference (i.e., iota).

In Salish, D can function as D_{DR} with both NP and D; in Basque and Greek only with the Q-det; in English the D_{DR} use is not possible for D. One must then ask the question of what determines this variation, and this question amounts to asking why the lexical properties of D in a given language L are the way they are in L. This is indeed a fascinating question worth exploring in the future, and the D_{DR} function we are suggesting here provides an additional dimension to examine. Interestingly, elements that are not morphologically D, e.g., Chinese *dou*, as argued recently in Cheng (2009), can take up the D_{DR} function, and in this perspective the relation between D_{DR} and definiteness marking becomes more complex. See Etxeberria and Giannakidou 2009 for more typological discussion.

3.2. The Q-det created via D is *presuppositional*

Determiners that have undergone D_{DR} are presuppositional and veridical (two closely related notions, if not the same):

(35) Presuppositionality of quantificational determiners

A determiner δ is presuppositional iff for all A, $B \subseteq D$, if $A = \emptyset$ then, $\langle A, B \rangle \notin \text{Dom}(\delta)$.

(based on Heim and Kratzer 1998:163)

- (36) (Non)veridicality of quantificational determiners (Giannakidou 1999)

A determiner/quantifier δ is veridical iff it holds that:

$\llbracket \delta \text{ NP VP} \rrbracket_c = 1 \rightarrow \exists x \text{ NP}(x)$; otherwise, δ is nonveridical.

“ \rightarrow ” means “presupposes”

Presuppositional and veridical determiners presuppose a nonempty domain, i.e., they come with a presupposition of existence. The definite article, in its referential use, is a well-known vehicle of this presupposition.⁸ Related to presuppositionality and veridicality is also the discussion of “existential commitment” in Horn (1997). Though *all*, *every*, *both*, *the*, and *each* generally appear to be associated with non-empty domains, only with the latter two is the nonempty domain a pre-condition for felicitous use. With *every* and *all*, it may not even be an entailment: we see below that we can negate the non-emptiness of the domain without contradiction (the data are drawn from Giannakidou 1998):

- (37) Every faculty member that lives in the neighborhood got invited to the party; which means zero, since no faculty member lives in this neighborhood!
- (38) All faculty members that live in the neighborhood got invited to the party; which means zero, since no faculty member lives in this neighborhood!

Each and *both*, on the other hand, come out as contradictory in this case. We illustrate below with Greek *o kathe* ‘each’ and *ke i dhio* ‘both’, literally “and the two”. Notice that *i* in *ke i dhio* is the plural of the definite article, indicating that *ke i dhio* has also undergone D_{DR} :

- (39) *O kathe fititis ap' aftin tin gitonia irthe sto parti.*
 # Diladi kanenas dhen irthe, afu den iparxun fitites edo giro.
 ‘**Each student** in this neighborhood came to the party’; # so no students came, since there are not students in this neighborhood!
- (40) *Ki i dhio fitites a' aftin ti gitonia irthan sto parti;*
 # Diladi kanenas dhen irthe, afu den iparxun fitites edo giro.
 ‘**Both students** in this neighborhood came to the party’; # so no students came, since there are not students in this neighborhood!

In Basque, the same situation obtains, and again, we find *-a(k)*, the definite D,⁹ with all the strong quantifiers (data from Etxeberria 2009):

- (41) a. *Akats guzti-ak/gehien-ak aurkitzen badituzu, sari bat*
 mistake all-D.pl.abs/most-D.pl.abs find if-aux reward one
emango dizut.
 give aux
 # *Baina gerta liteke bat-ere akats-ik ez egotea.*
 but happen aux one-too mistake-part no be-nom
 ‘If you find all of the/most of the mistakes, I’ll give you a re-
 ward.’
 # But there may be no mistakes at all.’
 b. *Ikasle bakoitz-ak liburu bat irakurtzen badu, sari bat*
 student each-D.erg book a read if-aux reward one
*emango diot.*¹⁰
 give aux
 # *Baina ikasle-rik ez dagoenez, ez dut sari-rik emango.*
 but student-part no since no aux reward-part give
 ‘If each student reads a book, I’ll give (each student) a reward. #
 But since there are no students, I’ll give no reward’

We see here, then, a consistent pattern of complex Q-dets, where D appears to be a constituent with the Q-det, and the Q-det as a whole requires a context that contains a nonempty domain for it. Such determiners can be called *presuppositional*. Another label that has been used in the literature is *D(iscourse)-linked* (Pesetsky 1987), a term capturing the fact that the created quantifier phrases are “linked” to a particular discourse salient set. In our analysis, presuppositionality and D-linking follow simply from the fact that D has applied and provided C, the context set.

D_{DR}-ed Qs, naturally, cannot be used in contexts that do not warrant existence or salience. Therefore, they cannot be used to refer to kinds, a fact known for *each* since Beghelli and Stowell (1997):

- (42) a. *Kathe monokeros exi ena kerato.*
 ‘Every unicorn has one horn’.
 b. # *O kathe monokeros exi ena kerato.*
 ‘Each unicorn has one horn’.
 c. # *Adarbakar bakoitz-a-k adar bat dauka.*
 unicorn each-D.sg-erg horn one has

Good: only as a claim about a specific set of unicorns, e.g. in an illustration that is present physically at the time of conversation.

(We've included objects to ensure that distributivity with the distributive quantifiers is satisfied). A D_{DR} -ed Q cannot be used to refer to a kind because kind reference is not tied to a context, and cannot even be about non-actual individuals, as with the unicorns above. Kind reference is thus *unrestricted*, and *o kathe*, *bakoitza*, and *each*, as we see, cannot be used in this way. However, in characterizing sentences they are fine:

- (43) a. Greek: *Sto programa mas, o kathe fititis prepi na epileksi dio mathimata simasiologias*.
 b. Basque: *Gure programan, ikasle bakoitz-ak bi semantika eskola aukeratu behar ditu*.
 c. English: 'In our program, *each student* must choose two semantics classes'.

What is crucial is the restriction "in our program", which renders the example not a predication of a kind, but a characterizing sentence that expresses a generalization about a particular set of students *in our program* (see Chierchia 1998, and earlier discussions in Carlson's 1977 seminal work on why such restricted sets can never evolve into kinds). *O kathe* 'D.sg each', *bakoitza* 'each-D.sg', and *each* can be used in this way, and this is consistent with our proposal that their quantification must be about a salient set for felicitous use.

3.3. D-restriction happens only once

When contextualization happens at the Q-det level, the addition of another definite results in ungrammaticality (cf. Giannakidou 2004, Etxeberria 2005, 2009), an ungrammaticality that could be explained in terms of type mismatch, since the Q-det would receive an *e* type argument rather than $\langle e, t \rangle$, as predicted by the standard analysis of GQ. Although we only offer Basque examples, this restriction is also observed in Greek (see Giannakidou 2004), in SS (see Matthewson 2009), and in Chinese (see Cheng 2009).

(44) Basque:

- a. * *ikasle-ak guzti-ak*
 student-D.pl all-D.pl
 ‘The all the students’
- b. * *ikasle-a bakoitz-a*
 student-D.sg each-D.sg
 ‘The each the student’

The overt partitive form is also excluded as shown in (44) below. Now, if we assume Ladusaw’s account of partitives where they provide elements of type $\langle e, t \rangle$, the ungrammaticality is unexpected because in this case the partitive does not produce type mismatch, as was the case in the examples in (43). In other words, the partitive *ikasleetatik* (lit.: student the.pl of) would yield the correct argument (an $\langle e, t \rangle$ type predicative argument) for the quantifier to quantify over; but still, (44) is out.

- (45) a. * *ikasle-eta-tik guzti-ak*
 student-D.pl-abl all-D.pl
 ‘the all of the students’
- d. * *ikasle-eta-tik bakoitz-a*
 student-D.pl-abl each-D.sg
 ‘the each of the students’

Hence, contextually restricting more than once does not yield a type mismatch. Now, we know from section 3.1 that partitives behave as contextual restrictors in languages where D_{DR} cannot apply directly to the NP argument, e.g., Basque, English, Greek, etc. Thus, in (44) we have double contextual restriction yielding ungrammaticality. The reason these sentences are ungrammatical is (as predicted by our analysis) that domain restriction is already fulfilled by means of the D that composes with the strong Q-dets. Additional contextual restriction is *redundant*: what would it mean to contextually restrict more than once? Not much, we think.

Unlike adjectival or other modification that adds a different description with each application and narrows down the NP domain in an informative way, domain restriction *with the same description* – *C* – does not reduce the domain further, nor does it have any other discourse effect. Notice that modifying a noun with the same adjective is also redundant, unless a different meaning is created:

- (46) *an expensive expensive car*

In (45) only one of the adjectives is interpreted as a restrictor. The other is interpreted as a degree modifier like “very”, yielding a meaning: *a very expensive car*. Hence reduplication of identical modifiers is generally prohibited in the usual case too, and the shift to some other meaning is triggered as a way to avoid redundancy. It is then only normal to expect redundancy with contextual restriction; but here we have ungrammaticality because there can be no other lexical shift for D, e.g. no degree meaning like “very”, in contrast with gradable adjectives like “expensive” in (45).

We thus claim that when D_{DR} acts as a modifier (cf. §3.1), it cannot apply more than once; for more data from Basque illustrating the interaction of D with partitive case and how it is consistent with this generalization see Etxeberria (2005, 2008, 2009).¹¹

3.4. D in fraction expressions: *not* D_{DR}

In fraction expressions like the ones in (46) we find what could be a Q-det accompanied by a D and its NP argument accompanied by a partitive. Such cases are found in many languages:

(47) Basque:

- a. *Ikasle-en erdi-a/heren-a/gehiengo-a berandu etorri da.*
 student-D.pl.gen half-D.sg/third-D.sg/majority late arrive aux
 ‘Half/One third/the majority of the students arrived late.’

Spanish:

- b. *La mitad de los estudiantes llegó tarde.*
 D.sg half of the students arrived late
 ‘Half of the students arrived late.’

French:

- c. *La moitié des élèves est arrivée en retard.*
 D.sg half of-D.pl students be arrived late
 ‘Half of the students arrived late.’

Greek:

- d. *I pliopsifia ton fititon psifise yper.*
 D.sg majority the.gen students.gen voted in favor
 ‘The majority of the students voted in favor.’

English:

- e. *The majority of the students voted in favor.*

Are these cases of Q-det via D restriction followed by a partitive, or are they to be analyzed as something else? We think that they are actually instances of something else.

The D that combines with the fraction expression does not function as a domain restrictor D_{DR} ; it seems more reasonable to treat it as the *iota* function and creating an individual. This is so because fraction expressions (at least in the languages we are considering) are not determiners (Q-dets), a prerequisite for applying D_{DR} , but NPs. The D with the fraction expression is inserted for syntactic reasons to turn the NP into an argument, since bare nouns in Basque, French, Greek, or Spanish – particularly singulars, as in English – are not allowed (cf. Artiagoitia 1998, 2002; Etxeberria 2005, 2007 for Basque; Bosque 1996 for Spanish; Kleiber 1990, Bosveld de-Smet 1998 for French; Carlson 1977, Chierchia 1998 among many others). Note that, when we eliminate the D that appears beside the fraction expression from (47) the sentences become ungrammatical:

(48) Basque:

- a. * *Ikasle-en erdi/heren/gehiengo berandu etorri da*
 student-D.pl.gen half /third/majority late arrive aux

Spanish:

- b. * *Mitad de los estudiantes llegaron tarde*
 half of D.pl students arrived late

French:

- c. * *Moitié des élèves est arrivée en retard*
 half of-D.pl students be arrive late

Greek:

- d. * *Pliopsifia ton fititon psifise yper.*
 majority the.gen. students.gen voted in favor

English:

- e. * *Majority of the students voted in favor*

Notice also the impossibility of the English bare singular – *majority* – in an argument position. Similar examples from Spanish (as well as other Romance languages, e.g., Catalan, French; although we only provide Spanish examples) are shown below with *la mayoría* ‘most’, where, as in Greek *d* above, a quantifying word combines with a D, and its argument NP is necessarily followed by a partitive.

- (49) *La mayoría de los estudiantes suspendieron el examen.*
 the.sg majority of D.pl students failed the exam
 ‘Lit.: The most of the students failed the exam.’

Again, what seems to be going on in Spanish is that *mayoría*, like *pliopsifía* in Greek, is not a Q-det but a noun, and that the first D in *la mayoría de los NP* ‘the majority of the NP’ is required in order to turn the NP into an argument (cf. Etxeberria 2009).

Evidence in favor of the fact that fraction expressions – as well as the Spanish counterpart of *most* – are nominal expressions (and not Q-dets) comes from the following fact: these elements can combine with numerals, e.g. one, two, etc., in opposition to what happens with real Q-dets.

- (50) a. Basque: *ikasleen heren bat*
 student-D.pl.gen third one
 b. Spanish: *un tercio de los estudiantes*
 one third of D.pl students
una (gran) mayoría de los estudiantes
 one (great) majority of D.pl students
 c. French: *une moitié des élèves*
 one half of-D.pl students
 d. English: *one half of the students*

Thus, from what we’ve seen in this subsection, fraction expressions such as *half*, *third*, *majority*, etc. are to be considered nouns or NPs and not Q-dets. It follows then that what appeared to be double domain restriction is not really that.

At this point we will summarize our main conclusions. First, D can contextually restrict Q-dets as well as their domains – the NPs they combine with –, and both options must be allowed (see also Martí 2003). When the D_{DR} applies to Q-det, the created quantifiers are referential, i.e., they come with a nonempty discourse salient domain. These D_{DR} -ed determiners were all shown to be strong. Now we ask the question: can a weak determiner be restricted via D_{DR} ?

4. Contextual restriction via D and the weak-strong distinction

In this section we discuss how the domain restricting function D_{DR} correlates with the weak-strong distinction. In Basque, there is a clear and very

significant asymmetry between strong and weak quantifiers: while the former *must* appear with the D –which plays the role of the domain restrictor– as shown by the examples in (50–51), the latter do not combine with D (52–53).

- (51) a. [Ikasle **guzti-ak**] berandu etorri ziren.
 [student all-D.pl.abs] late come aux.past.pl
 ‘All of the students came late.’
 b. * [Ikasle **guzti**] berandu etorri ziren.
- (52) a. [Ume **bakoitz-ak**] goxoki bat jan zuen.
 [child each-D.sg.erg] candy one eat aux.past.sg
 ‘Each student ate a candy.’
 b. * [Ume **bakoitz**] goxoki bat jan zuen.
- (53) a. [**Zenbait** politikari] berandu iritsi ziren.
 [some politician] late arrive aux.pl.past
 ‘Some politicians arrived late.’
 b. * [**Zenbait-ak** politikari] berandu iritsi ziren.
 c. * [**Zenbait** politikari-**ak**] berandu iritsi ziren.
- (54) a. [Politikari **asko**] berandu iritsi ziren.
 [politician many] late arrive aux.pl.past
 ‘Many politicians arrived late.’
 b. * [Politikari-**ak** **asko**] berandu iritsi ziren.
 c. * [Politikari **asko-ak**] berandu iritsi ziren.

It appears that only strong Q-dets can be contextually restricted via D in Basque. Hence, Basque can be said to show in the overt syntax (cf. Etxeberria 2005, 2009) that weak quantifiers are not contextually restricted – a claim often made in the literature for weak quantifiers (von Stechow 1998, Partee 1988). Weak quantifiers have been argued to be non-presuppositional in their cardinal reading, and “presuppositional” – thus, we take it, domain restricted – only in their proportional reading which is the reading that surfaces with the partitive. Notice that in this reading they are unacceptable in existential structures:

- (55) a. * *There are some of the boys in the yard.*
 b. *There are some boys in the yard.*
 c. * *There are the boys in the yard.*

As we see, the non-partitive *some*, though possibly referring to a specific set of boys, is allowed in the *there* sentence whose typical function is to *assert* existence. The partitive version of *some*, however, is excluded just like the definite *the boys*. What matters for our purposes right now is that weak determiners are not inherently domain restricted, and that as pure cardinals they can be used to refer to discourse novel sets.

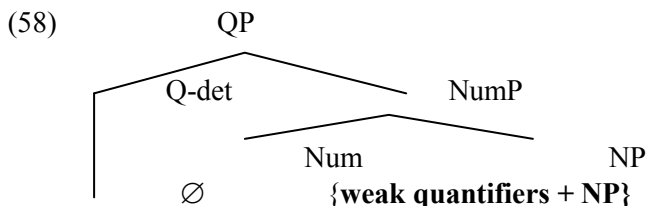
Weak determiners have often been treated in the literature as “adjectival”. In these analyses, they are not considered (real) determiners of type $\langle\langle e, t \rangle, \langle\langle e, t \rangle, t \rangle\rangle$ (cf. Milsark 1979, Partee 1988, Kamp and Reyle 1993, van Geenhoven 1998, Landman 2002). Link (1984) analyzes cardinals as adjectives, see also Kamp and Reyle (1993), Partee (1987) and others; in Greek, weak Q-dets are argued to be adjectival in Giannakidou and Merchant (1997) and Stavrou and Terzi 2009; Etxeberria makes the case for Basque (2005, 2008, 2009). We will follow here Etxeberria (2005, 2008, 2009), and suggest that weak quantifiers are cardinality predicates (number functions) which are generated in the predicative type $\langle e, t \rangle$. Note that in opposition to strong quantifiers, weak ones are grammatical in predicative position as exemplified in (55), vs. (56).

- (56) Gonbidatu-ak [ikasle asko/batzuk/gutxi] ziren.
 guest-D.pl student many/some/few be.pl
 ‘The guests were many/some/few students.’

- (57) * Gonbidatu-ak [ikasle **guzti-ak/den-ak/bakoitz-a**] ziren/zen.
 Guest-D.pl [student all-D.pl/all-D.pl/each-D.sg] be.pl/be.sg
 * ‘The guests were all of the students/all of the students/each student.’

The combination of a weak quantifier like *asko* ‘many’ with an NP predicate like *ikasle* ‘student’ (which following standard assumptions is also of type $\langle e, t \rangle$) will be carried out through intersection (cf. Landman 2002), yielding an element of type $\langle e, t \rangle$ as a result that allows them to appear in predicative positions.

Syntactically, since weak quantifiers are considered cardinality predicates, we argue that their base generating position is Number Phrase position.



If this analysis is correct, the reason why weak determiners cannot be contextually restricted through D_{DR} is because an $\langle e, t \rangle$ element is not of the appropriate input for D_{DR} , which needs a determiner. Recall that, with the exception of SS, D_{DR} cannot apply directly to the NP (e.g. in Basque, Greek, English, and other European languages we are considering). For this use we use the partitive construction. In SS, on the other hand, weak quantifiers can be contextually restricted by D_{DR} -ing the NP argument, as expected.

- (59) *cw7it i smelhmúlhats-a qwatsáts* (Matthewson 1998: 292)
 many D.pl woman(pl)-D left
 ‘Many (of the) women left’

Matthewson (1998: 284) states that: “weak quantifiers receive only a proportional, never a cardinal, reading in SS”, and this is captured neatly in our analysis.

Finally, we want to clarify that structures like the ones below are not relevant to the discussion of whether a weak determiner can be restricted or not:

- (60) a. [The [three students]] that came to the party were completely stoned
 b. [The [many/few students]] that came to the party were stoned

The structures in (59) are not QPs, but DPs. The D, as the brackets in (59) show, will not compose with the weak quantifier, but with the constituent *three students*. Then, the role the D plays in these cases is not that of D_{DR} , but that of the *iota*, i.e. it creates an individual of type e . In Etxeberria and Giannakidou 2009 (section 3.2) we compare these structures to our [D-Q NP] structure, and point out concrete asymmetries between the two syntactically and semantically.

We conclude then, that weak determiners cannot be modified via D_{DR} because they are not strictly speaking determiners, but predicates; and in

the languages we are studying (Basque Greek) D_{DR} does not apply directly to a predicate. In Salish, on the other hand, it does, and as expected we find sequences of D with these.

Conceptually, also, it is easy to understand why an indefinite determiner will not be compatible with D_{DR} . The main function of the indefinite NP is to *assert* existence; indefinite NPs are *novel* in the sense of Heim 1982. Definites and contextually restricted quantifiers, on the other hand, *presuppose* existence and are familiar. As such, the combination of a weak indefinite and D_{DR} , is bound to be express contradictory properties with respect to existence, and this renders it impossible.

5. Conclusion

The main lessons to be drawn from this work are the following. First, the need to contextually restrict the domain of quantifiers is syntactically more real than one would have expected had the phenomenon been primarily pragmatic. We put forth a theory where contextual domain restriction is encoded syntactically in the definite determiner D, which is the element responsible for supplying a contextual property C. A key component in this theory is that D functions as a modifier, and that, in this function, D_{DR} can modify the Q-det itself. This modification results in an inherently contextually restricted quantifier that is presuppositional and referential, and can thus be used only in contexts where its existential presupposition is satisfied, i.e. only when a discourse salient set is available.

An implication of our analysis was that weak determiners cannot be modified by D_{DR} because these are *not* Q-dets but rather cardinality predicates (thus modifiers themselves; see also Ionin and Matushansky 2006), or number phrases (as we argued following Etxeberria for Basque). In our system we thus predict that only a strong Q-det can be modified by D_{DR} , because only a strong determiner is of the appropriate syntactic type (a true determiner) to be modified by such a function. This means that only strong determiners can be inherently presuppositional (in agreement with earlier observations in the literature, see for a summary Reuland and ter Meulen 1984). With weak determiners, domain restriction is bound to happen on the noun phrase, again via D – either directly, as in Salish, or by means of D plus *of/case* as in the partitive structure in European languages. Indefinite determiners themselves are incompatible with D_{DR} because they are vehicles of novelty (in the sense of Heim 1982).

Here is an interesting final question: are we predicting that weak determiners will never be able to associate with some salient set? Are we saying that it is impossible to find a weak determiner that *sometimes*, or perhaps even frequently, associates with a discourse salient set? We consider this question in Etxeberria and Giannakidou (2009) – in response to a recent proposal by Martí (2008) – and we suggest that weak NPs and indefinites can also refer to non-novel sets, but only when they are used *specifically*. In the specific use, the indefinite is employed by a *speaker* to refer to a particular entity that she has in mind (we call this *targeted speaker reference* in our work), and this is a *felicity* condition on the use of indefinite, not a presupposition, as is the case with D_{DR} . This important distinction draws from Ionin's (2006) conception of the relation between specificity and definiteness; but space prevents us, unfortunately, from expanding on this idea in the present paper.

In the end, we are arguing for the position that the Q-det is the place where conditions on the use of variables must be stated (resonating with, among others, Farkas 2002, Giannakidou 2004, Matthewson 1998, 2001, Martí 2008) and that D is instrumental in creating presuppositional determiners by supplying domain restriction. (Recall our speculation earlier that *each* may also contain an abstract D). This idea will have much to learn from cross-linguistic semantic work, and is bound to enrich standard generalized quantifier theory and philosophical analysis with the subtlety and refinement it needs in order to capture the richness observed in quantificational structures across languages.

Notes

1. We are indebted to the many colleagues who read our work and were generous and kind to share their thoughts and ideas with commentary on this material. Special thanks go to Lisa Matthewson and Luisa Martí, as well as Francois Recanati, Isidora Stojanovic and Neftalí Villanueva Fernández for giving us the opportunity to present our paper at the workshop on *Context-Dependence, Perspective and Relativity in Language and Thought* in Paris at the *Ecole Normale Supérieure*. We had very useful feedback from the audience, and we thank Isidora and Neftali also as editors of this volume for their assistance in the process of finalizing the paper. For comments and suggestions at various stages of this work, we would additionally like to thank the following people: Lisa Cheng, Paul Elbourne, Ricardo Etxepare, Kai von Fintel, Fernando García-Murga, Chris Kennedy, Brenda Laca, Louise McNally, Jason Merchant, Javier Ormazabal, Beñat Oihartzabal, Monika Rathert, Jason Stanley, Melita Stavrou, and Zoltan Szabó, Anna Szabolcsi, Myriam Uribe-

Etxeberria. The first author's research was supported by the following projects: the Basque Government GIC07/144-IT-210-07, and Hm-2008-1-10 projects; the CNRS Fédération Typologie et Universaux Linguistiques FR2559 project; the ANR TSABL (ANR-07-CORP-033) project; and the MCI FFI2008-00240 project.

2. The SS definite determiner consists of two discontinuous parts, a proclitic (*ti* for singulars; *i* for plurals), which encodes deictic and number information, and an enclitic ...*a* which attaches to the first lexical element in the phrase. See Matthewson (1998) for details.
3. Others too, have made the claim that SS DP are always linked to the *here and now* of current discourse (Demirdache 1997), a property that may also be used, we think, to explain why SS DPs have the peculiar property of always taking the widest scope (Matthewson 1998, 1999). We will not discuss this ultrawide scope property here, but we should note that if the SS D is a definite such a behavior is expected.
4. Many other languages show the same behavior, e.g. Dutch or Catalan.
5. Cf. Matthewson (2005) where it is argued that the reanalysis of SS data offered by Giannakidou does not account for the facts since Giannakidou's (2004) analysis predicts that DPs in St'át'imcets are definite, and according to Matthewson they are not. Cf. Giannakidou (2004) and Matthewson (2005) for discussion. Cf. also fn.2.
6. Matthewson (to appear-b) argues against the possibility of having the covert type-shifter BE in SS because, it is claimed, there is no language-internal evidence for it; assuming that BE exists in the language would make incorrect predictions, e.g. that main predicates could have Ds on them, which they cannot. However, claiming that BE doesn't apply in SS would be a strange gap in the language. The type shifting approach (including the modifications by Chierchia in terms of covert versus overt type shifters) would allow BE and block it only if there is an overt element doing what BE does. The question to answer then is: do we have evidence that perhaps D, or something else, does this in SS? This is our perspective here; cf. §3.
7. Lisa Matthewson (p.c.) mentions that in SS there is a preposition that may perform (along side other functions; there are only four prepositions in this language) the function that a designated preposition (*of*) or a case-marker assumes in other languages. However, this preposition is not required (as *of* is in English, or *de* 'of' in Spanish). The examples that are cited in the literature as SS partitives (see Matthewson 1998, 2001) resort to the familiar structures "D weak NP". Hence, it seems safe to continue to assume that SS lacks a partitive *of* element (and a partitive structure) of the English, Romance, Greek, Basque type.
8. Whether or not the domain is nonempty has been shown to be crucial in NPI-licensing: veridical determiners do not allow NPIs to be licensed in their re-

striction (Giannakidou 1998, 1999, 2006). We will not focus on this property here, though.

9. See Etxeberria (2005, 2007) for a possible analysis of the Basque D.
10. *Bakoitz* is additionally distributive, hence grammatical only if there is a *Share* element (other than the event variable) in the structure over which to distribute (see Etxeberria 2002a, 2008).
11. We put aside definite reduplication (or polydefinite) cases since these involve two DPs (Alexiadou and Wilder 1998, Campos and Stavrou 2004, Kolliakou 2004), which agree in case:

- (i) **o** kokinos **o** tixos (Greek)
 the red.nom the wall.nom
 ‘the wall that is red’

Such phrases have an underlying structure [DP plus DP], and one of the DPs is thought to correspond semantically and syntactically to a relative clause (see especially Alexiadou and Wilder), or to express a predication relation towards the other DP (Campos and Stavrou), e.g. in the example above. It should be clear, then, that this is a different phenomenon. Similar examples in Malagasy (discussed in Keenan 2008), we think, also manifest cases of definite reduplication, which should not be confused with domain restriction via D. We will have to leave discussion of such cases for a future occasion.

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The model theory for words with context-sensitive implicit arguments

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Abstract: Words with implicit, context sensitive arguments are abundant in English as well as in many other languages, occurring in each major lexical category. The verb to leave provides an example of such words. Bill spent the day at the office. He left (there) at 7 pm or Bill just left (here). Lexical items with implicit arguments, or of variable polyadicity, must be treated as ambiguous by standard model theory. However, with a slight enrichment of the subcategorization frames of such words, together with a suitable model theoretic interpretation of the enrichment, these words can be treated as unambiguous, desirable on a priori as well as empirical grounds. The enrichment proposed avoids any projection of hidden syntactic positions.

1. Introduction

Consider the sentences in (1.1) and (1.2) below.

- (1) a. Bill lived in **an apartment on Front Street** for ten years.
- b. *He finally moved out last month.*
- c. *He finally moved out of **it** last month.*

(Bold type indicates the relata of the antecedence relation.)

Relative to having the sentence in (1a) as its co-text, the sentences in (1b) and (1c) are construed as synonymous. A similar observation applies to the sentences in (2b) and (2c). Relative to a setting, or circumstance of utterance, where someone asks the question in (2a), the sentences in (2b) and (2c) are also construed as synonymous.

- (2) a. A: *Does Bill live here?*
- b. B: *No. He moved out yesterday.*
- c. B: *No. He moved out of here yesterday.*

Next, consider how the verb *to vacate*, a near synonym to *to move out*, fares in the same sentences.

- (3) a. *Bill had lived in **an apartment on Front Street** for ten years.*
 b. **He finally vacated last month.*
 c. *He finally vacated **it** last month.*
- (4) a. *A: Does Bill live here?*
 b. *B: No. *He vacated yesterday.*
 c. *B: No. He vacated here yesterday.*

We notice that the sentences in (3b) and (4b) are unacceptable, while their counterparts in (1b) and (2b) are acceptable. The verb *to move out* permits having an implicit, definite argument, as Fillmore (1986) termed such arguments, while the verb *to vacate* does not. (See also Partee 1989 as well as Condoravdi and Gawron 1996.)

Verbs which tolerate implicit arguments, such as the verb *to move out*, present a problem for their model theoretic treatment. On the one hand, when they are used intransitively, as in (1b) and in (2b), they must be assigned a set of elements from a structure's universe. On the other hand, when they are used transitively, as in (1c) and in (2c), they must be assigned a set of ordered pairs of elements from the structure's universe. But model theory does not permit a structure to assign to the very same word both a set of elements from its universe and a set of ordered pairs. At the same time, however, should one hypothesize that the transitive usage and the intransitive usage correspond to two verbs, one transitive and one intransitive, one can no longer explain why the sentences in (1b) and (1c) are synonymous, and hence entail each other, as do the sentences (2b) and (2c). After all, it is easy to concoct a structure in which the sentence in (1b) is true, while the one in (1c) is false, or inversely, one in which the sentence in (1c) is true, while the one in (1b) is false.

Of course, one could invoke meaning postulates to rule out such offending structures, thereby safeguarding the equivalence by fiat. But even proponents of meaning postulates find them wanting as an explanation of linguistic entailment (Dowty et al. 1981: 225).

Another tack is to maintain that there is only one verb, the transitive verb, and that its complement is filled by a phonetically null pronoun. But the hypothesis of a phonetically null pronoun has direct empirical discon-

firmation. Why can the same null pronoun, invoked as a silent direct object for the verb *to move out* in its apparent intransitive usage, not occur as a silent direct object for the verb *to vacate*, permitting it to have an apparent intransitive usage, thereby rendering the sentences in (3b) and in (4b) acceptable? Inversely, why can the same null pronoun not be put in redundantly after verbs occurring with their direct object, thereby rendering the overtly acceptable sentences in (1c), (2c), (3c) and (4c) unacceptable?

The fact that the verbs *to move out* and *to vacate* are nearly synonymous yet differ insofar as the former tolerates a definite implicit argument while the latter does not, suggests that this difference is a simple fact about the words. What I shall show below is that this puzzle about words tolerating implicit definite arguments can be simply and elegantly resolved by an ever so slight enrichment of subcategorization frames. In what follows, I shall explain what subcategorization is and then show how subcategorization frames can be enriched so as to address the problem at hand. I shall also indicate the range of cases of implicit definite arguments to which the solution proposed extends easily.

2. Subcategorization

Subcategorization refers to the subcategories of the various lexical categories. English nouns, for example, have the subcategories of proper noun, pronoun and common noun, which itself has the subcategories of mass noun and count noun. English verbs also have subcategories. Traditional grammar recognized the distinction between transitive and intransitive verbs. Early in the development of generative grammar, several linguists¹ noticed that the division of lexical categories into subcategories poses a problem for the treatment of languages by means of context free grammars. Chomsky, drawing on their work, suggested that the rewrite rules of a context free grammar which rewrite non-terminal symbols into terminal symbols be permitted to be context sensitive rules. (See Chomsky 1965: 90–106, 120–123) He referred to such rules as context sensitive subcategorization rules. After the view of the rules of formal grammars being rewrite rules was abandoned in favor of a view of them as a structural conditions on well-formedness (McCawley 1968), subcategorization rules were recast as features and dubbed subcategorization frames. I now turn to explaining what subcategorization frames are and how they can be put to work in providing a model theory for context free grammars thus enriched.

2.1. Subcategorization and syntactic types

Let us recall some elementary facts about model theory in classical quantificational logic. In classical quantificational logic, the set of predicates are partitioned into cells of the same degree, or adicity. Thus, all monadic, or one-place, predicates are in one cell; all dyadic, or two-place, predicates are in another cell; and, in general, all n -adic, or n -place, predicates are in still another cell. This partitioning of the predicates is used to determine which string of symbols is a well-formed formula and which is not. In particular, an atomic formula is a string which begins with an n -ary predicate followed by n terms. Thus, if one is told that P is a dyadic predicate and that a , b and c are terms, then one knows that Pab is an atomic formula and that neither Pa nor $Pcba$ is. At the same time, the partitioning of the predicates also serves a model theoretic end. Which kind of value is assigned to a predicate depends on which cell the predicate belongs to. A monadic predicate is assigned a subset of a structure's domain. Let us call this subset a unary relation on the structure's domain. A dyadic predicate is assigned a subset of the set of ordered pairs of the structure's domain. Let us call this subset a binary relation on the structure's domain. And, in general, an n -adic predicate is assigned a subset of the set of n -tuples of the structure's domain, that is, an n -ary relation on the structure's domain. In short, the requirement of any structure is that the adicity of a predicate must be the arity of the relation it is assigned: an n -adic predicate is assigned an n -ary relation.

Furthermore, it is crucial that the proper correspondence be established between the order of the terms following a predicate and the order of the values in the n -tuple in the set which is the value assigned to the predicate by the structure. To see why, consider the following example. Let R be a binary predicate and let a and b be individual constants. Let M be a structure whose domain is $\{1, 2, 3\}$ and whose interpretation function i assigns 1 to a , 2 to b and the set of ordered pairs $\{\langle 1, 2 \rangle, \langle 2, 3 \rangle, \langle 3, 1 \rangle\}$ to R . The clause of the truth definition of an atomic formula guarantees the following: Rab is true if and only if $\langle i(a), i(b) \rangle \in i(R)$. It is essential that the order of appearance of the individual constants a and b in the formula Rab be correlated with the ordered pair $\langle i(a), i(b) \rangle$, not with the ordered pair $\langle i(b), i(a) \rangle$. As the reader can easily verify, the ordered pair $\langle i(a), i(b) \rangle$ is a member of $i(R)$, but not the ordered pair $\langle i(b), i(a) \rangle$.

The subcategorization frame can be used to serve the same role for an enriched context free grammar as the one which the classification of predicates by adicity serves for the formation rules of classical quantificational

logic, namely, to help ensure that expressions are suitably formed. Here is how. Let a word corresponding to a one-place predicate of logic be assigned the label $\langle _ \rangle$; a word corresponding to a two-place predicate the label $\langle _ ; _ \rangle$; and in general, a word corresponding to an n -place predicate a sequence of $\langle _ ; \dots ; _ \rangle$, containing n slots. (Let us refer to the number of slots in a word's subcategorization frame as its adicity.) As a result of the syntactic complexity of natural language expressions, it is necessary to supplement the indication of a word's adicity with an indication whereby the argument corresponding to a subject noun phrase is distinguished from one corresponding to an object noun phrase and with indications whereby to distinguish noun phrase complements, from prepositional phrase complements and from various clausal complements. The latter can be accomplished by replacing the underscore by an appropriate label of the corresponding syntactic category. Moreover, to distinguish the argument corresponding to the subject noun phrase from one corresponding to the object noun phrase, we shall underline the syntactic label for the former and not underline the syntactic label for the latter. Thus, for example, the subcategorization frame for the verb *to die* is $\langle \underline{NP} \rangle$, while that of the verb *to admire* is $\langle \underline{NP}; NP \rangle$. These verbs, together with their subcategorization frames, account for the contrasts in acceptability of the sentences given below.

- (5) a. Bill died.
 b. **Bill died Alan.*
- (6) a. *Alan admires.
 b. Alan admires Beth.

The subcategorization frame can also be used to ensure that words are assigned a suitable set theoretic object, just as a predicate of a given adicity is assigned a relation of the same arity, so a word of a given adicity is assigned a relation of the same arity. Thus, the verb *to die*, whose subcategorization frame is $\langle \underline{NP} \rangle$, is assigned a unary relation from a structure's domain (that is, a subset of the domain), while the verb *to admire*, whose subcategorization frame is $\langle \underline{NP}; NP \rangle$, is assigned a binary relation (that is, a set of ordered pairs taken from the structure's domain).

Furthermore, the counterpart of the problem in classical quantificational logic of establishing the proper correspondence between the order of the terms following a predicate and the order of the values in the n -tuple in the set which is the value assigned to the predicate by the structure, arises

equally for the expressions of natural language. Consider the verb *to admire*. Let it be interpreted as the admiration relation, comprising the set of ordered pairs where the first coordinate is an admirer and the second coordinate is the person or thing admired by the first coordinate. Now, if the sentence in (6b) is true, it should be because the ordered pair of $\langle i(\text{Alan}), i(\text{Beth}) \rangle$ is in the set of ordered pairs determined by the admiration relation, and not because the ordered pair $\langle i(\text{Beth}), i(\text{Alan}) \rangle$ is in the set of ordered pairs. In other words, we intend that the sentence in (6b) be true if and only if Alan admires Beth, and not, for example, that it be true if and only if Beth admires Alan. For this reason, it is imperative that the first coordinate of an ordered pair in the set of ordered pairs interpreting the verb be correlated with the value assigned to the subject noun phrase and that the second coordinate in the ordered pair in the set of ordered pairs be correlated with the value assigned to the object noun phrase.

It is customary for syntacticians using some form of constituency grammar to prefer so-called strict subcategorization frames over subcategorization frames. A strict subcategorization frame is like a subcategorization frame, except that the categories listed are all and only the complements. The subject of a clause is not a complement to the clause's verb. Now a little reflection makes it obvious that every verb's subcategorization frame contains NP in its first position. Its syntactic effect is to require that the simple main clause the verb have a subject noun phrase. But this follows from the context free rule for simple main clauses: namely, $S \rightarrow NP VP$. Thus, the intransitive verb *to die* has the strict subcategorization frame $\langle \rangle$, while the transitive verb *to admire* has the strict subcategorization frame $\langle NP \rangle$.

This change from subcategorization frames to strict subcategorization frames to label words requires a change in the correspondence between the adicity of a word and the arity of the relation assigned to it, for the adicity of a strict subcategorization frame is always one less than that of the corresponding subcategorization frame. Therefore, when a word has a strict subcategorization frame, the arity of the relation assigned to it must be one greater than its adicity.

The constituency trees below² (see figures 1 and 2) illustrate how the features assigned to the verbs *to die* and *to admire* work. Since the syntax of subcategorization frames is widely known, I shall not take up space here laying out the precise rules of how the subcategorization frame is transmitted from node to node. Suffice it to say that it works in essentially the same

way as cancellation, as found both in categorial grammar³ and in pregroup grammar.

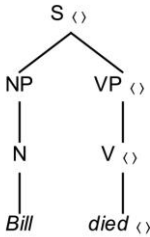


Figure 1

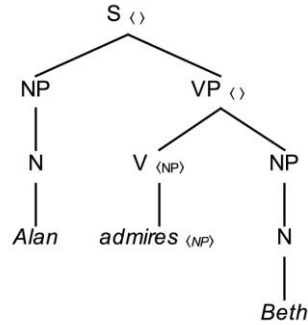


Figure 2

The structure theory for these structures follows the usual pairing of each syntactic rule with a semantic rule: in other words, for each pair comprising a mother node and its daughter nodes, there is a rule stating how the value of the mother node is to be computed from those of its daughter nodes. In the case of mother nodes with unique daughter nodes, the rule is the identity function. In addition, to cover the data reviewed so far, we also require two more rules, the familiar rule for the *S* node and the familiar rule for the *VP* node.

- (7) a. semantic rule for $S_{\langle \rangle}$ node:
 Let M , or $\langle D, i \rangle$, be a structure; let $[_{S_{\langle \rangle}} NP VP]$ be a syntactic configuration. Then, $v_i(S_{\langle \rangle}) = T$ if and only if $v_i(NP) \in v_i(VP_{\langle \rangle})$.
- b. SEMANTIC RULE FOR VP NODE DOMINATING $V_{\langle NP \rangle}$ NODE:
 Let M , or $\langle D, i \rangle$, be a structure; let $[_{VP_{\langle \rangle}} V_{\langle NP \rangle} NP]$ be a syntactic configuration. Then, $v_i(VP_{\langle \rangle}) = \{x: \langle x, y \rangle \in v_i(V) \text{ and } y = v_i(NP)\}$.

For readers who are familiar with model theoretic assignments done indirectly through the assignment of formulae in some canonical higher order intentional logic, not with model theoretic assignments done directly, as it

is done above in the rules in (7), I shall illustrate their application to the sentence *Alan admires Beth*, where *Alan* denotes *a*, *Beth* denotes *b* and *admires* denotes the set of ordered pairs $\{\langle a, c \rangle, \langle a, b \rangle, \langle c, b \rangle\}$, abbreviated in the constituency tree below as *A*.⁴

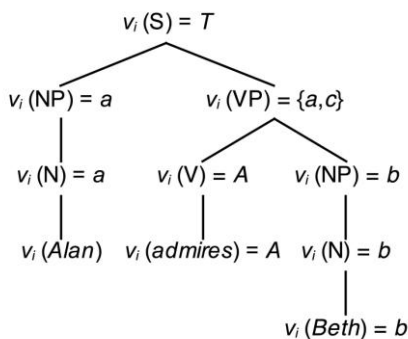


Figure 3

(The strict subcategorization frames are suppressed to enhance readability.)

2.2. Enriching subcategorization frames

We have now seen how subcategorization frames, originally added to context free grammars to satisfy empirically determined syntactic requirements, lend themselves to the additional role of providing syntactic types, as a result of which model theoretic structures, not definable for expressions generated by context free grammar, are definable for context free grammars enriched with subcategorization frames. Let us now see how subcategorization frames, slightly enriched, can be used to treat the paradox for the semantics of natural language occasioned by definite implicit arguments.

Let us begin with the case of verbs with optional direct objects. These verbs are assigned the strict subcategorization frame of $\langle NP, a \rangle$. Since the subcategorization frame is a strict one and it contains no semicolon, any verb to which it is assigned has an adicity of two. The single position in the frame contains two labels separated by a comma. One label is a categorial label, the other a non-categorial label.⁵ Now, any given position in a frame will contain at most one categorial label. Here, the sole position contains, in addition to the categorial label *NP*, a non-categorial label *a*. This complex

notation in the frame's sole position serves both a syntactic function and a semantic function. Let us consider each in turn.

The syntactic function of coupling the label “*a*” with the label “*NP*” in the sole position in the frame is this: if the verb has a sister, the sister must be a noun phrase. In other words, the notation “*NP, a*” signals the optionality of the direct object for the verb, just as the more familiar notation “(*NP*)” does. While the latter notation could be used for the treating the data discussed in this section, it does not generalize to the treatment of other kinds of implicit arguments. As is well known, and as we shall see in the next section, different implicit arguments have associated with them different semantic values. Parentheses do not track this variation in meaning. However, the notation introduced here does.

To illustrate how the strict subcategorization frame works, I have given constituency trees for the sentences in (8).

- (8) a. Bill left Cairo.
b. *Bill left.*

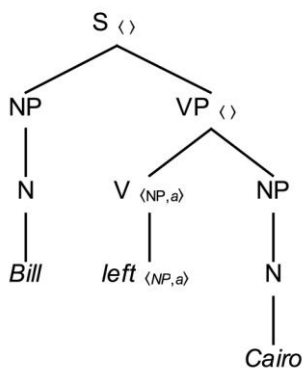


Figure 4

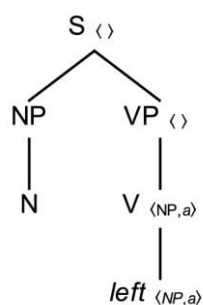


Figure 5

What is the semantic function of the label “*NP, a*”? Should the verb have an *NP* sister, then the value of the mother node is determined in the same way as it is done in the semantic rule in (7b) above; and should the verb have no sister, then everything works just as it has above, except that *a* is associated with a function which maps the set of ordered pairs assigned to the verb to the set of first co-ordinates which are paired with some fixed value.⁶ That fixed value is determined either by the setting or by the co-

text. The value is the value which would be assigned to a suitable pronoun, were the verb to have a pronoun as a sister. Here is a more precise formulation.

(9) Semantic rule for VP node dominating $V_{\langle NP, a \rangle}$:

Let M , or $\langle D, i \rangle$, be a structure; let d be an assignment of values to the contextually sensitive symbols; let $[_{VP\langle \rangle} V_{\langle NP, a \rangle} \dots]$ be a syntactic configuration. Then,

- (1) if $VP_{\langle \rangle}$ immediately dominates an NP, then $v_i(VP) = \{ x: \langle x, y \rangle \in v_i(V_{\langle NP, a \rangle}) \text{ and } y = v_i(NP) \}$;
- (2) otherwise, $v_i(VP) = \{ x: \langle x, y \rangle \text{ and } \langle y, x \rangle \in v_i(V_{\langle NP, a \rangle}) \text{ for some } y = d(a) \}$.

To illustrate how the rule in (9) works, let *Bill* denote b , *Cairo* denote c and let *left* denote the set of ordered pairs $\{\langle a, c \rangle, \langle b, c \rangle, \langle b, d \rangle\}$, abbreviated in the constituency tree below as R . (Again, the strict subcategorization frames are suppressed to enhance readability.)

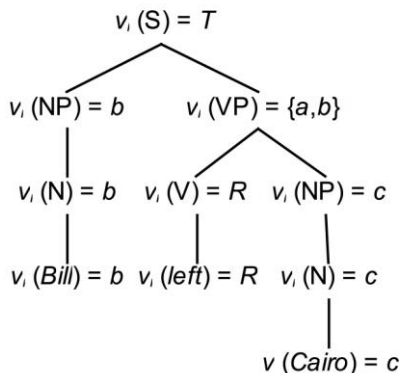


Figure 6

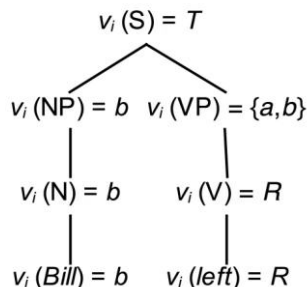


Figure 7

3. The range of data

Definite implicit arguments are not confined to verbs with optional direct objects. They are also found with verbs taking as complements, not only noun phrases and prepositional phrases but also all varieties of clausal

complements. Moreover, definite implicit arguments also occur with nouns, adjectives and prepositions. I shall now outline the data. It should be evident that enriched subcategorization frames of the kind set out above can be applied in these cases as well.

The verb *to arrive* is an example of a verb which may take a prepositional phrase as a complement and which, when absent, is understood to have a definite implicit argument. The value of its implicit argument is either determined by its co-text, as in (10a), or by the setting in which it is uttered, as in (10b).

- (10) a. *Hilary walked to **his office**. He arrived (**there**) at noon.*
 b. *Has Hilary arrived (**here**)?*

(The parentheses in an example sentence indicate a phrase which is optional and whose omission from the sentence does not change the sentence's meaning.)

The same is true of the clausal complement of the verb *to notice* and the gerundive clausal complement of the verb *to finish*.

- (11) *Bill was sleeping. Carol noticed (that he was).*
 (12) *Bill has been washing the car. He just finished (doing it).*

Turning from verbs to nouns, we note that nouns such as *friend* and *neighbor* are liable to tolerating definite implicit arguments whose values are determined by the setting, or circumstances of utterance. Thus, in sentences such as the one in (13a), the implicit argument is understood to be the speaker, whereas in sentences such as the one in (13b), the implicit argument is understood to be the person spoken to.

- (13) a. *Bill is a friend (of mine).*
 b. *Is Bill is a friend (of yours)?*

Nouns for kinship, such as *mom*, *dad*, *grandma*, *grandpa*, etc., also tolerate definite implicit arguments the value of whose implicit arguments are typically either the speaker or the person spoken to.

Next we come to adjectives. Many adjectives permit optional prepositional phrase complements which, when their complements are omitted, are understood as having definite implicit arguments, again whose values are either found in the co-text or in the setting.

- (14) a. *Even though his parents live faraway (from **him**), Bill visits them regularly.*
 b. *Bill lives faraway (from here).*

Adjectives also permit optional clausal complements.

- (15) *Mary left. Bill is glad (that she did).*

Finally, it was known even in traditional English grammar that some prepositions can occur without their noun phrase complements. Prepositions, when so used, were called in traditional grammar prepositional adverbs (Jespersen 1924). Early generative linguists such as Klima (1965) dubbed them intransitive prepositions. Emonds (1972) and Jackendoff (1973) also investigated such prepositions. A list of a hundred such prepositions can be found in (QUIRK et al. 1985: ch.9.65-66). Here is but one example, the preposition *over*.

- (16) a. *Bill walked up to **the edge** and jumped over (it).*
 b. *Come on. Jump over (this).*

4. Conclusion

English abounds in relational words tolerating implicit arguments whose values are determined contextually. In many cases, these same words permit an explicit pronominal argument which, relative to a context, provides a nearly perfectly synonymous expression. As we saw at the outset, such words pose a problem. Either there are two words or there is one word. If there are two words, we cannot explain how such words give rise to synonymous sentences which differ only by whether or not the word in question has a pronominal like element in its optional complement. If there is but one word, what kind of value should a model theoretic structure assign to it?

The solution, as we saw, is to enrich the subcategorization frames of such words with a feature, which signals the optionality of the explicit argument and to furnish a clause to ensure that suitable values are associated with the node dominating the word tolerating the implicit argument.

In conclusion, let me point out that there are cases of words tolerating implicit arguments other than those with definite implicit arguments. They include indefinite implicit arguments (Fillmore 1986; Partee 1989) as well as reflexive and reciprocal implicit arguments. These words pose the same problem and are liable to similar solutions.

Notes

1. Chomsky (1965: 79, 213 fn 13) cites unpublished work by George H. Matthews, an unpublished manuscript by Robert P. Stockwell et al. (1962) and two published works, one by Emmon Bach (1964) and another by Paul Schachter (1962).
2. The constituency trees here are the usual ones used by linguists; and though they are not, in fact, perfectly accurate, they will do for our purposes.
3. I am anticipated in this observation by Levine and Meurers 2006: 4.
4. It might be useful to remind some readers that translation of English expressions into higher order intensional logic does not ipso facto provide the model theory of English. It does so only because higher order intensional logic itself has a model theory. This translation step is entirely dispensable; and I have dispensed with it here. Readers unfamiliar with what has just been said might want to consult the very lucid discussion of these points by Dowty et al. (1981, chap. 8, especially 263-265).
5. Notice that we are using the semi-colon to distinguish co-ordinates in an ordered set; the comma, customarily used for that purpose, is being used for a different one, which is about to be described.
6. What I call ambiphoric implicit arguments is the subject of an important article by Condoravdi and Gawron (1996). This article is concerned, not with the lexical structure of such words, nor with how values, once assigned, are determined in the larger syntactic structure, but with showing that these arguments, however they are represented, can be brought within the purview of a dynamic treatment of variable assignments. The assignments accruing the diacritic *a* can also be treated dynamically.

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Three types of ellipsis^{*}

Jason Merchant

Abstract: The term “ellipsis” can be used to refer to a variety of phenomena: syntactic, semantic, and pragmatic. In this article, I discuss the recent comprehensive survey by Stainton 2006 of these kinds of ellipsis with respect to the analysis of nonsententials and try to show that despite his trenchant criticisms and insightful proposal, some of the criticisms can be evaded and the insights incorporated into a semantic ellipsis analysis, making a “divide-and-conquer” strategy to the properties of nonsententials feasible after all.

1. Introduction

A character in Carlos Fuentes’s 2002 novel *The Eagle’s Throne* (trans. Kristina Cordero; Random House: New York, 2006: 93) says with self-disdain and melancholy:

Did you know I’ve learned to speak like an Anglo-Saxon, without articles or context?

“Exactly.”

“Done.”

“Nothing.”

“Careful.”

“Perfect.”

“Warned.”

“Face consequences.”

I say these things, nothing else.

As it turns out, such seemingly telegraphic speech is by no means limited to the Anglo-Saxon world. The question is just what such utterances could and do mean “without context” and with, and what exactly a speaker who utters such phrases says, means, and conveys.

Speakers convey information by a variety of means: the one studied most by those of interest in language and meaning is the content conveyed with linguistic means, a content whose nature is determined by the context of an utterance and the meaning of the elements used in the

utterance, by virtue of their form and other factors. One of the most interesting current questions regarding this fact is where and how to draw the boundary line between pragmatics and semantics. A standard approach is to distinguish between speaker's meaning and sentence meaning, but the latter term – sentence – has a number of uses (and the former isn't simple either) that must be distinguished.

A very salutary typology of things we call “sentences” is provided by Stainton 2006, as in (1):¹

- (1) Three senses of “sentence” (Stainton 2006:31)
 - a. sentence_{syntactic}: an expression with a certain kind of structure/form
 - b. sentence_{semantic}: an expression with a certain kind of content/meaning
 - c. sentence_{pragmatic}: an expression with a certain kind of use

We standardly conceive of an utterance of for example (2a) as consisting of a 4-tuple of the form in (2b), which follows the general pattern given in (2c), where the first member of the 4-tuple is the phonological representation P , the second the syntactic S , the third the semantic M , and the fourth the “speech act content” C_{SA} (the particular representations used here for illustrative purposes are of course in their details immaterial).

- (2) a. Abby left.
 - b. $\langle /æbi \text{ lɛft/}, [{}_S [{}_{NP} \text{ Abby }] [{}_{VP} \text{ left }]], \text{left}(\text{abby}), \llbracket \text{left}(\text{abby}) \rrbracket^{M,g,w,i} = 1 \rangle$
 - c. $\langle P, S, M, C_{SA} \rangle$

In the standard case, the three final members of the 4-tuple correspond to sentences in the syntactic, semantic, and pragmatic sense intended, and have characteristic types: for sentences_{syntactic}, this type is S (or its modern descendants in some theories, TP , IP , or CP), for sentences_{semantic}, the type is $\langle t \rangle$ (or $\langle s, t \rangle$), and for speech acts, the type has no standard name known to me (nor representation, for that matter – that in (2b) is just roughly sketched as the kind of thing that could be the argument of an “assertion” operator), but it ranges over things like assertion, command, question – call it type SA .

The main task of natural language theorists is to give a general account of how the four members of such tuples are related to one another. One widely adopted view takes it that there are mappings between the

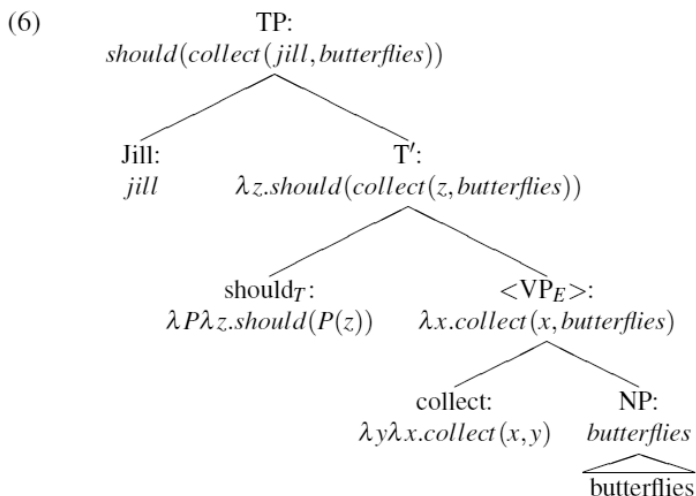
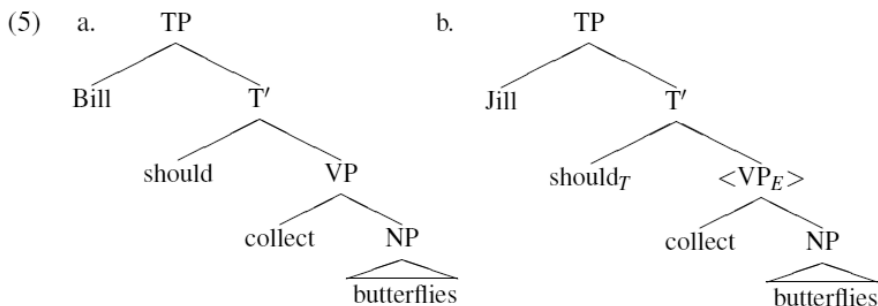
representations as follows (other views have also been proposed, that allow direct interactions between the phonology and semantics, for instance):

- (3) a. $P \Leftrightarrow_{phon} S$
 b. $S \Leftrightarrow_{sem} M$
 c. $M \Leftrightarrow_{prag} A$

On this view, the equivalence between both the propositional content and illocutionary force of (4a) and those of (4b) gives rise to various analytical options, all of which have the common goal of capturing the fact that a speaker can use (4a) to assert that Jill should collect butterflies, just as much as she could use (4b), and that this is a contingent fact about English.

- (4) VP ellipsis in English
 a. Bill should collect butterflies. Jill should, too.
 b. Bill should collect butterflies. Jill should collect butterflies, too.

The first possibility is what Stainton perspicuously calls *ellipsis_{syntactic}*, which involves positing an unusual mapping between the syntax and phonology, but claims that otherwise (4a) and (4b) are identical. In particular, the phrase structure and lexical insertion rules of English work in both cases as usual (illustrated with the structures in (5a,b), the semantic combinatorics work as usual (say, via functional application, as in (6)), but there is something special about the pronunciation of the unheard VP. One (lexicalist) way of cashing this out is the following: posit a special feature, E (for Ellipsis), which, when added to a phrase's feature matrix, triggers the special pronunciation rule in (7c). (For present purposes, we could equally well suppose that the mapping algorithm itself were sensitive to some aspect of the structure, or that there were a "construction" where this special phonology is stated.) On this approach, the speaker who utters (4a) has produced a sentence_{syntactic}, a sentence_{semantic}, and a sentence_{pragmatic}.

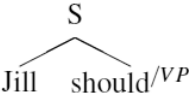


(7) Rules

- Syntactic combinatoric rules: *should* [_ VP] (equivalently, $T' \rightarrow \text{should VP}$), etc.
- Semantic combinatoric rules: (β -reduction / λ -conversion) If f is an expression of type τ containing one or more instances of a free variable h of type σ and g is an expression of type σ and h is free for g in f , then $\lambda h_{\sigma} [f_{\tau}](g_{\sigma}) \rightsquigarrow f_{\tau}^{g/h}$.
- Phonological interpretation rules: $\llbracket \text{should} \rrbracket^P \rightsquigarrow /f_{\Delta}d/, \llbracket X_E \rrbracket^P \rightsquigarrow \emptyset$, etc.

A second possibility, which Stainton calls *ellipsis_{semantic}*, posits no unpronounced syntactic structure at all. This view is compatible with complicating the mapping $S \Leftrightarrow_{sem} M$ in the appropriate way. One specific proposal along these lines is given in Culicover and Jackendoff 2005: they

posit syntactic representations such as (8a) for examples like (4a), as part of their program for “Simpler Syntax”. This is simpler in the sense that there are no syntactic nodes that lack pronunciation. It is more complex, however, in that the subcategorization requirements of auxiliaries like *should* must be modified by some rule, presumably operating on the lexical entry of *should* to produce a new lexical item *should*^{/VP}, indicated in (8a). (Equivalently, the phrase-structure rules for expanding S or VP, which normally require that a clause contain a VP, could be suspended or altered. Their hypothesis is compatible with either route.) The semantic representations for the nonelliptical (4a) and elliptical (4b) would be equivalent, given in a standard notation in (8b).

- (8) a. 
- b. *should*(*collect*(*jill*, *butterflies*))

Culicover and Jackendoff (2005) use a slightly different semantic representation, called *conceptual structure* (CS) (see their work for details). Culicover 2008 uses a representation of CS which is similar to predicate logic formulae supplemented by thematic role annotations on the arguments of certain predicates. The usual mapping between a nonelliptical syntactic structure and its corresponding CS is given in the lower half of Figure 1. Each arrow represents a mapping rule, and it is clear that there is no necessary connection between the hierarchical structure in the semantics and that in the syntax; for this clause, four mapping rules are needed. The resulting rule system is given in (9); they give a rule for Bare Argument Ellipsis (BAE), which I return to in much more detail below, not for VP-ellipsis, but the mechanism (so-called “Indirect Licensing” plus pragmatic establishment of the value for *f*) is presumably the same in both cases. (Their system is merely the most recent and well-worked-out of a range of similar proposals; cf. Hardt 1993, Dalrymple et al. 1991, Ginzburg and Sag 2000, and Schlagen 2003.) On this approach, a sentence_{semantic} is produced without a correspondingly complete sentence_{syntactic}.

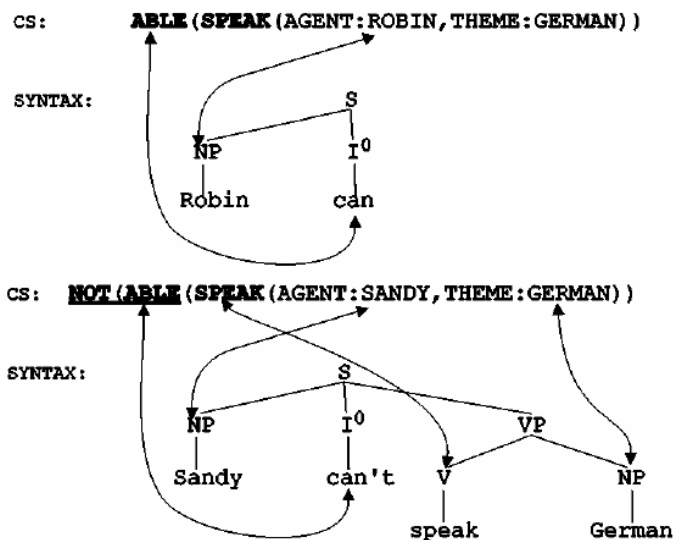


Figure 1. A “missing” VP and its antecedent for Culicover and Jackendoff

(9) Rules

- a. Syntactic combinatoric rules: $S \rightarrow NP I^0 (VP)$, etc. *should* [$_ (VP)$], etc.
- b. Semantic combinatoric rules:
 - i. **Argument/Modifier Rule**
 CS: $[F \dots X_i \dots] \Leftrightarrow_{\text{default}} \text{Syntax: } \{\dots, YP_i, \dots\}$
 - ii. R1': If X is the meaning of the NP-daughter-of-S whose predicate meaning is PRED, then let $\text{PRED}(\text{AGENT:}_, \dots) = \text{PRED}(\text{AGENT:X}, \dots)$
 - iii. **Bare Argument Ellipsis** (CandJ 2005:265)
 Syntax: $[_U XP_i^{\text{ORPH}}]_{\text{IL}}$ Semantics: $[f(X_i)]$
 - iv. If f is an expression in CS_a and f cannot be determined from SYNTAX_a by application of Rules $R_1 \dots R_n$, then “ f amounts to the presupposition of the antecedent, constructed by substituting variables for the [necessary elements] in the CS of the antecedent” (Culicover and Jackendoff 2005:276)
- c. Phonological interpretation rules: $\llbracket \text{should} \rrbracket^p \rightsquigarrow /f_{\Delta d}/$, etc.

Finally, one could imagine that the speaker who utters the sounds corresponding to *Jill should, too* has produced a defective syntactic structure and something with a non-type- $\langle t \rangle$ meaning (perhaps something of type $\langle \text{et}, t \rangle$), and the hearer arrives at the assertion made and the

proposition meant by means of a pragmatic process. On such an approach, only a sentence_{pragmatic} is produced.

The picture that emerges can be conveniently viewed in the following diagram adapted from Stainton 2006:37; the various types of ellipses can be seen as operating at various levels or mappings.

- (10) a. Sound pattern (P) \Leftrightarrow_{phon} Syntax (S) \Leftrightarrow_{sem} Encoded content (M)
 \Leftrightarrow_{prag} Speech act content (A) b. $P \Leftarrow_{ellipsis_{syntactic}} S$
 $\Leftarrow_{ellipsis_{semantic}} M \Leftarrow_{ellipsis_{pragmatic}} A$

Stainton's project in his 2006 book and in a great many articles leading up to it is to defend the following premises:

- (11) Premise 1: Speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts.
 Premise 2: If speakers genuinely can utter ordinary words and phrase in isolation, and thereby perform full-fledged speech acts, then such- and-such implications obtain. (Stainton 2006:3)

Premise 1 (P1) can also be stated in the terms introduced above:

- (12) "ordinary words and phrases, with the syntax of words and phrases, are not [always, JM] sentences_{syntactic} or sentences_{semantic}, but they are[sometimes, JM] nevertheless sentences_{pragmatic}."
 (Stainton 2006:32)

Stainton has set the bar very high for anyone who wishes to dispute him in his carefully argued and excellent (in many senses – methodological, exegetical, analytical, and empirical) book. Here I wish mostly to concentrate on the data he adduces to establish P1 and his discussion of it and of the various responses to it. The reason he is so persuasive in his claiming of P1 is exactly because of the wide range of data he considers, the kinds of sophisticated views he has of it, and of the ecumenical nature of the data sources he brings to bear on the question.

He is primarily interested in three sets of cases (all examples except the ones from Mason's novel are from Stainton 2006 in various places, occasionally slightly modified; a convenient listing of them can be found on 83), depending on what kind of phrase gets pronounced.

The first group consists of the pronunciation of sounds corresponding to predicates which denote properties. (Stainton is admirably careful about his

phrasing of these things, which I'll try to emulate, though I may fall into sloppy ways at times when the details shouldn't matter.)

- (13) Properties applied to a manifest object
- a. Sanjay and Silvia are loading up a van. Silvia is looking for a missing table leg. Sanjay says, "On the stoop."
 - b. Anita and Sheryl are at the cottage, looking out over the lake. Watching a boat go by, Anita says, "Moving pretty fast!"
 - c. Jack holds up a letter and says, "From Spain!"
 - d. A car dealer points at a car and says, "Driven exactly 10,000km."
 - e. On a bottle of cold medicine: "Recommended for ages 6 and older."
 - f. She looked up at Nok Lek, who watched the forest nervously. "I told you, one of Anthony Carroll's best men." (Daniel Mason, *The piano tuner*, Vintage: New York, 2002: 159)

In this first case, consider (13a). In it, Stainton claims (and I concur) that Sanjay can be taken as having asserted of the table leg a *de re* proposition, namely that it, the table leg, is on the stoop. The criterion used for judging whether an assertion of a proposition has occurred is whether or not we have an intuition that Sanjay can be right or wrong, whether the proposition expressed can be true or false, and hence whether or not Sanjay can lie. Here, Stainton rightly claims that we have the strong intuition that if Sanjay knew that the table leg was not on the stoop, his utterance of (13a) would count as a lie. Stainton claims that Sanjay makes his assertion by virtue of the meaning of the phrase uttered, which has the syntax merely of a prepositional phrase PP, not embedded in further, unpronounced, syntactic structure, and has the meaning of a property of type $\langle e, t \rangle$. This property is semantically unsaturated, but needs an argument to be the content of an assertion. This argument is provided by the actual table leg, here *manifest* in Sperber and Wilson's 1986 sense (though not necessarily the object of direct perception), combined with the content of the uttered phrase. This "combining" is by function-argument application not to items of particular types in the type-theoretic sense of (7b) above, but of mental representations (in Mentalese). These mental representations come about, in this case, through two different mechanisms: the representation of the property comes about through the decoding of the linguistic signal and is the output of the language faculty; the representation of the object comes about through other faculties of the mind, be they memory, vision, systems that regulate planning, goal-setting, understanding intentions of agents, etc.

The second subcase is that of the pronunciation of sounds corresponding to noun phrases which denote individuals, such as names and definite descriptions as in the following.

- (14) Individuals as arguments of a manifest property
- a. A woman is coming through a door, and a linguist turns to her friend and identifies the new arrival by saying, “Barbara Partee.”
 - b. A girl is doling out jam and says, “Chunks of strawberries.” Her mother nods and says, “Rob’s mom.”
 - c. After some weeks one summer of unusually cold weather in Manitoba (a part of Canada where the summers are usually warm), Alice, looking at the sky, says to Bruce (who has just returned from a trip to Spain), “Nova Scotia.”
 - d. Edgar didn’t have time to ask what this was, for at that instant, from behind the stage rose a plaintive wail. He caught his breath. It was the same tune he had heard that night when the steamer had stopped on the river. He had forgotten it until now. “The *ngo-gyin*, the song of mourning,” said Nash-Burnham at his side. (Daniel Mason, *The piano tuner*, Vintage: New York, 2002: 140)

In these cases, the relevant property may be something like “(is) the identity of the person coming through the door,” “(is) the person responsible for there being chunks of strawberries in the jam,” or “(is) the song being heard.” These properties, in their Mentalese representations, are combined by function-argument application to the Mentalese representation which is generated by an understanding of the linguistic phrase used. The only difference with the previous subcase is that here the linguistic material supplies the argument, not the function.

The final subcase discussed at some length (for two other more marginal, but important cases, see section 5 below) comes from the pronunciation of sounds corresponding to noun phrases which denote quantifiers:

- (15) Quantifiers as arguments of a manifest property
- a. I’m at a linguistics meeting, talking with Andy. There are some empty seats around a table. I point at one and say, “An editor of *Natural Language Semantics*”. (209)
 - b. At a bar: “Three pints of lager.”

- c. He continued to walk, the children following at a distance. ... At the side of the road, a pair of men [who are Shan, and know no English, –JM] sat... One of the men pointed to the group of children and said something, and Edgar answered, “Yes, quite a lot of children,” and they both laughed although neither understood a word the other had said. (Daniel Mason, *The piano tuner*, Vintage: New York, 2002: 235)

As in the second subcase, the quantifier combines with a property supplied by nonlinguistic means, but as in the first subcase, the linguistic material supplies the functor (quantifiers being type $\langle et, t \rangle$).

Before criticizing this account, let us take stock of its advantages. First, it has the virtue of simplicity. The pragmatic-inferential mechanisms are already in place, and they are merely put to a somewhat new use here. And the syntax and semantics of words and phrases seem to survive intact, with no unpronounced structures or hidden variables or type-shifters necessary.

Second, it plausibly decouples the act of assertion from particular linguistic types, claiming that assertions can be performed with semantic expressions of non-propositional (non- $\langle t \rangle$) types. To the extent that I understand what is meant in the technical sense of “assert”, I would agree that assertions can be made without declarative sentences_{syntactic} being involved. In fact, they can be made without linguistic material on the part of the asserter being employed at all. For example, imagine that someone asks me “How many children do you have?” If I then hold up three fingers, what is communicated – and, I would think, asserted – is that I have three children, in this context. What is *said*, in Grice’s and others’ sense, however, is nothing. (The fact that “I have three children” could be claimed to have been “said” by theorists who use this term to mean “what is asserted, stated, or claimed” (Stainton 2006:225) just seems to me to point up the unnecessary use of the verb “say” for these other notions. Keeping them apart is necessary and useful.)

We can also imagine a severe Broca’s aphasic who has retained some ability to understand questions, but none at all to speak. Such an individual, nonetheless, may be able to answer questions in a nonverbal and presumably nonlinguistic way (that is, not merely by pointing to cards with English words on them). For example, if asked how many children he has, he can raise three fingers and thereby assert that he has three children (accordingly to my intuitions about what assertion is). Did he access some dormant and otherwise unusable part of his mind to formulate this answer in English, thinking of the proposition denoted by the English

sentence_{syntactic} *I have three children*, then applying ellipsis to all but *three*, then using this word as his guide to raise the equivalent (and, by the way, iconic) number of fingers? One might imagine this as a pathway, but it is less likely in the case of deaf children at the age of two who have not been exposed to any sign language (the “home-signers” studied by Susan Goldin-Meadow and others) but who nonetheless perform age-nominal on conservation of number tasks and who communicate entirely nonverbally in a non-conventionalized code of their own devising. It seems ludicrous to me to claim that such individuals are incapable of assertion by virtue of their linguistic inabilities. Such examples show that assertion is an act *tout court*, not necessarily a *speech* act; this isn’t to deny that linguistic means can’t be brought to bear in performing this act – of course they are the prototypical cases we think of when we think of assertion.

This concession must come with a large caveat, however: it’s not clear to me that the basis of this debate rests on much more than different theorists’ interpretations of the word “assert” and the kinds of things they’re willing to use it with – the attempted definitions of assertion from Dummett (1973: 214–215) are roundly criticized (as being based too closely on declarative sentences_{syntactic}², but nothing is put in their place. So I simply don’t know if I can agree that a speaker employing a bare utterance of “Chunks of strawberries” *asserts* that the jam contains chunks of strawberries.

I certainly can’t agree with Davidson 1979, who writes that “It is easy to see that merely speaking a sentence in the strengthened mood cannot be counted on to result in an assertion; every joker, storyteller, and actor will immediately take advantage of the strengthened mood to simulate assertion” (quoted in Stainton 2006:217). In fact, it’s easy to see that Davidson has missed the crucial point of the conventionalist element of assertion, namely that it can occur only in conventionally specified circumstances. Within these circumstances the assertion of an actor speaking the line, “Jack is dead!” *does* assert, in the fictional circumstances of the play, that Jack is dead. The fact that this assertion fails to hold in the larger set of circumstances in which the fictional circumstances of the play take place is irrelevant: successful assertion is relativized to circumstances, just as successful acts of naming, handing down verdicts, marrying, and the like. Second, Davidson is simply wrong (or, to put it more mildly, using the word “assert” in some way that I cannot) to suggest (1979:110, cited in Stainton 2006) that someone who says “Did you notice that Joan is wearing her purple hat again?” can assert that Joan is wearing her purple hat again. The speaker of such a sentence *presupposes* (by virtue of the factivity of

notice) that Joan is wearing her purple hat again, but doesn't assert it, at least not as I am accustomed to using the word "assert". Again, I'm willing to ascribe these differences in opinions to different lexical semantics for this verb, but that just makes it all the more urgent for a definition to test our intuitions against which doesn't make use of the word itself. Until such is forthcoming, we may just be talking past each other while agreeing on essentials. So if this expansive use of "assert" is what is at issue, we don't need recourse to nonsententials to establish this point.

Stainton's real goal here is to show that at least "moderate" contextualism is correct: to put it in terms most familiar to linguists, this is the claim that context (and pragmatics) determines at least part of what is *said* (or "sentence meaning") in addition to what is *meant* (or "speaker meaning"). This is a highly contentious claim, of course, with ongoing debates in the literature, and Stainton has succeeded in putting nonsententials and their properties at the front lines of this debate.

A fully successful account of the phenomenon needs two ingredients: first, to show that alternatives that deny P1 ("Speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts") are false, and second, to produce an analysis that captures the facts. Additionally, as Stanley 2000 points out, it is not enough merely to show that any given alternative cannot account for all the phenomena: it must be shown that the union of all alternatives cannot account for all relevant data. In what follows, I first examine critically Stainton's proposal as I understand it, then turn to the alternatives, and what it would take to resurrect them from Stainton's criticisms.

2. The "representational-pragmatic" view

Recall Stainton's basic proposal, in general terms: a speaker produces a word or phrase whose content is combined with "an appropriate 'completing entity' ... to yield a proposition" (2006: 156); this "completing entity" is given by the context and it is "never 'translated into' natural language format." "Interpreters grasp worldly objects, properties, and so on ... and combine these, by function-argument application, with the contents of the phrase uttered" (173). To see what this means, some examples are worked through in chapter 8, which presents the heart of the proposal (I return below to the third main example in that chapter, which has different properties).

The first example was given in (14c) above and is repeated here:

- (16) After some weeks one summer of unusually cold weather in Manitoba (a part of Canada where the summers are usually warm), Alice, looking at the sky, says to Bruce (who has just returned from a trip to Spain), “Nova Scotia.”

Assuming that “Nova Scotia” stands for an object, it must be the argument to a contextually arrived-at function, which is taken to be

something along the lines of THE WEATHER HERE IS SIMILAR TO . The output of this function, given NOVA SCOTIA as argument, is the proposition that THE WEATHER HERE IS SIMILAR TO NOVA SCOTIA. This is what was asserted. (Stainton 2006:156)

The next example is that of a property applied to a manifest object:

[S]uppose the speaker produces the word “Reserved”, pointing at a chair. here, the thing uttered has a propositional function as its content. That is what language proper contributes. The context then provides, as argument to that function, the indicated chair. The hearer applies the function to the indicated chair, and arrives at a neo-Russellian proposition. That is the thing-asserted. (Stainton 2006:157)

Elsewhere, Stainton discusses the example given in (13d) above, repeated here, where he claims that a judge could throw out a contract if the car had in fact been driven 1,010,000km (with the odometer having turned over, a fact known only to the car dealer). This is because what is asserted is that the property holds of the manifest object (the car), which in this situation is a falsehood known to the car dealer.³

- (17) A car dealer points at a car and says, “Driven exactly 10,000km.”

Stainton takes pains to separate his general claims, which could potentially be implemented in a number of ways, from his specific one, which involves positing Mentalese representations (indicated by capital letters) which can combine with each other via function application.

The basic problem with such a general account is overgeneralization. It is unclear what the limits on “manifest” objects and properties are, and so it’s unclear how to rein in the power of the proposed mechanisms. For example:

- (18) [Abby and Ben are on their balcony looking out over a parade of

school children passing by in perfect marching rhythm. The children's right hands are at their sides, not visible from the balcony (their left hands are visible, and empty). At the command of the bandleader, every child in synchrony raises their right hand above their head and is revealed to be holding a small flag with the school colors on it. Abby exclaims:] Wow!

- a. Every child has a flag!
- b. #A flag!
- c. #Every child has flags!
- d. Flags!

The puzzle is why (18a) is possible in this situation but (18b) is not. The flip side of the puzzle is why (18c) is odd, but (18d) is not. In this situation, the property of being something that each child has one of (namely, $\lambda\mathcal{Q} \langle et, t \rangle [\forall x(child(x) \rightarrow \mathcal{Q}[\lambda y(have(y)(x))])]$) would seem to be manifest in the requisite sense, and so an utterance of (18b) should lead the hearer to be able to combine this contextually given property with the representation of $\lambda P\exists z[flag(z) \wedge P(z)]$ – yet (18b) is odd. Stainton makes a suggestive remark about how to rein in the power of the system: “[w]hat is asserted when a sub-sentence is used communicatively ... is that proposition (and only that proposition) which results from *minimally* adding to the content of the bare phrase actually uttered” (p. 161, emphasis added). The crucial part of this statement is the condition that a *minimal* addition be made. What does this mean? One reasonable way of taking it is in the sense of Asher et al. 2001, who compute contextual minimal common denominators for situations. One rough definition would be that a proposition p is minimal wrt all other propositions q in a contextually given set P if all q, q entails p . (The obvious problem with this definition is that fact that in an actual situation, many propositions may not stand in any entailment relation to one another.) In the example with flags, perhaps the minimal proposition would be something along the lines of *There are x*, where $x = flags$. If the minimal addition is merely the assertion of existence, then the oddity of the singular in (18b) is the same as the oddity of asserting in the same situation *There is a flag!* (it's not false, it's just massively under informative and, well, an odd thing to say⁴).

3. Ellipsis_{syntactic}

One strategy to avoid the conclusion that P1 (“Speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts”) is true would be to analyze some of the cases as involving syntactic ellipsis. The question would be just how would one implement a theory of ellipsis that would be consonant with other properties of elliptical structures and able to capture (at least some of) the data discussed above. The crucial data that are of interest here are all cases in which there is no linguistic antecedent in the discourse. These are exactly the most challenging to any attempt to extend an ellipsis_{syntactic} account to these cases.

In order to see what would need to be done, it is instructive to review a case of ellipsis which could serve as a potential model, namely short answers to questions (as analyzed in Merchant 2004a; see also Arregui 2007 for similar arguments from Spanish and Basque; see Johnson 2001, 2004 for the case of VP-ellipsis).

3.1. Short or “fragment” answers

Short answers to questions have all the properties of fully declarative, propositional, assertoric utterances; in the following example, the speaker who utters (19b) as a response to the question in (19a) will be making a true statement in exactly the same conditions that one who utters (19c) does.

- (19) a. Mit wem hast du gesprochen?
 with whom.DAT have you spoken
 ‘With whom did you speak?’
 b. Mit Hans.
 with Hans
 c. Ich habe mit Hans gesprochen.
 I have with Hans spoken
 ‘I spoke with Hans.’

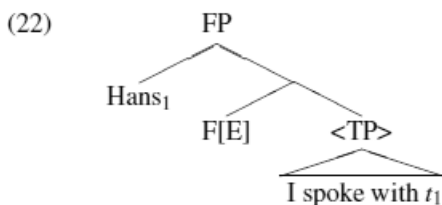
In German, unlike in English, short answers to questions whose *wh*-elements are governed by a preposition cannot omit repeating the preposition (in other words, the short answer shows a grammatical “connection” to the form of the question; in general such effects are known as connectivity effects):

- (20) a. Mit wem hast du gesprochen?
 with whom.DAT have you spoken
 ‘With whom did you speak?’
 b. * Hans.
 Hans

This is because German, unlike English, does not permit preposition-stranding under leftwards movement:

- (21) a. * Wem hast du mit gesprochen?
 whom.DAT have you with spoken
 (lit.) ‘Who did you speak with?’
 b. * Hans habe ich mit gesprochen.
 Hans have I with spoken
 (lit.) ‘Hans, I spoke with.’

The correlation between the obligatory presence of the preposition in (19b) and the necessity of pied-piping the preposition in overt movements such as in (21) is directly captured on the ellipsis account in Merchant 2004a, where it’s proposed that the short answer consists of a fragment which had undergone a kind of movement to a clause-peripheral position with concomitant ellipsis of the clausal node under the landing site of the fragment. The resulting sentence_{syntactic} is given in (22), where F is a functional head which hosts the E(llipsis) feature which triggers the nonpronunciation of its complement, here the clausal node TP.



For such cases, Stainton tends to agree (though he hedges a bit) that ellipsis is involved, writing “some of [this] data reinforce my standing view that direct answers to immediately prior interrogatives may well involve genuine syntactic ellipsis” (2006:137, with similar remarks on 144 and in Stainton 1997).

It’s important to note that to date, no-one has even hinted at how to account for these facts without using a theory of preposition-stranding, and no-one has ever proposed a theory of preposition-stranding that

distinguishes German from English on anything but morphosyntactic grounds. In other words, whether the grammar of a language makes available preposition-stranding is an irreducibly syntactic fact about the language, not a semantic one, or a pragmatic one. (Whether a speaker in a given context will choose to make use of P-stranding of course is dependent on nonsyntactic factors; but even factors that favor P-stranding will be powerless in a language like German.) There is a language-internal effect of connectivity between the grammatical form of the short answer and some aspect of the form of the question.

Another striking connectivity effect in short answers involves voice: whatever voice is used by the questioner must underlie the answer, determining the form of the short answer. In German, this can be seen in both directions (passive voice in the question, active in the answer and vice versa); in English, in only one direction.

(23) Voice connectivity in short answers

a. English

Q: Who is sending you to Iraq? A: *By Bush.

b. German

- i. Q: Wer hat den Jungen untersucht? A: * Von einer
who.NOM has the boy examined? by a
 Psychologin.
psychologist

Q: 'Who examined the boy? A: [intended:] '(He was examined) by a psychologist.'

- ii. Q: Von wem wurde der Junge untersucht? A: * Eine
by who.DAT was the boy examined A a
 Psychologin.
psychologist.NOM

Q: 'Who was the boy examined by?' A: [intended:] 'A psychologist (examined him).'

It is crucial to note that these effects emerge only when ellipsis is involved, and are not due to more general conditions on felicitous answers or discourse coherence, as the following control cases demonstrate.

(24) No voice connectivity in nonelliptical answers

a. English

Q: Who is sending you to Iraq? A: I'm being sent by Bush.

b. German

- i. Q: Wer hat den Jungen untersucht? A: Er wurde
who.NOM has the boy examined? A he was

von einer Psychologin untersucht.

by a psychologist examined

Q: 'Who examined the boy?' A: 'He was examined by a psychologist.'

ii. Q: Von wem wurde der Junge untersucht? A: Eine
by who.DAT was the boy examined A a
 Psychologin hat ihn untersucht.
psychologist.NOM examined him

Q: 'Who was the boy examined by?' A: 'A psychologist examined him.'

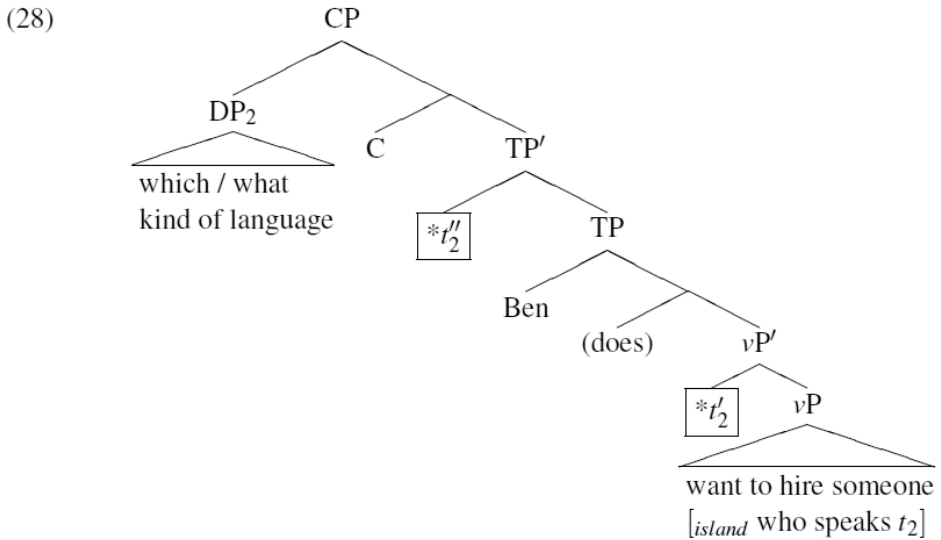
Such connectivity effects form the best argument that there is syntactic ellipsis involved in fragment answers, and that the unpronounced syntax must be identical in some way to the syntax in the question asked. These effects tell strongly against approaches like Ginzburg and Sag's 2000 and Culicover and Jackendoff's 2005, which posit no syntax internal ellipsis sites at all (see Merchant 2008b for discussion). While this conclusion continues to appear to me to be inescapable, there remain certain issues with fragment answers that have to be addressed on this analysis as well.

The first and in my view most serious issue concerns the lack of island effects in certain contexts. Apparent movement sensitivities to islands are variable under ellipsis. So while (25) shows a standard island effect (namely illicit *wh*-extraction out of a relative clause), and this effect persists when VP-ellipsis is applied to the higher VP as in (27), it is famously absent in an equivalent sluicing case like (26) (see Merchant 2001 for discussion and references). In Merchant 2008a I propose to capture this distinction by making reference to the variable amount of structure elided in the two cases: in sluicing, more, in VP ellipsis, less. If the grammatical mechanisms that trigger island deviancies are encoded along the path of extraction (for example, through the use of illicit intermediate traces, here marked **t*), then ellipsis can variably eliminate these from representation that is pronounced. If a higher node is elided (as in sluicing), so will all **ts* be; while if a lower node is elided (as in VP-ellipsis), one of more **ts* will remain in the structure, triggering deviance. The structure in (28) illustrates these two possibilities.

(25) * Ben wants to hire someone who speaks a Balkan language, but I don't remember which he wants to hire someone who speaks.

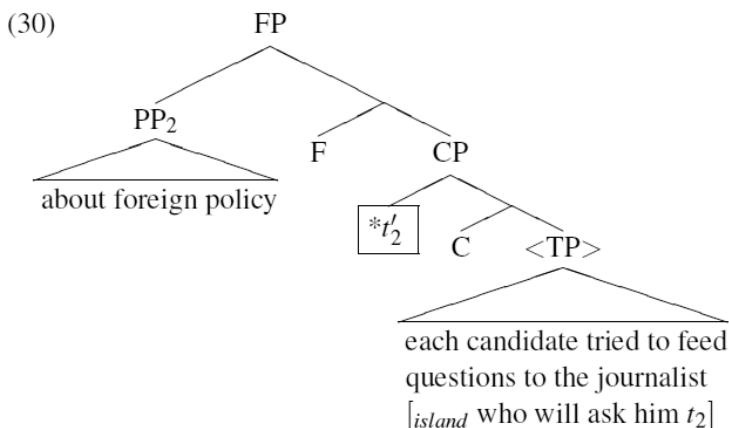
(26) Ben wants to hire someone who speaks a Balkan language, but I don't remember which.

- (27) * Abby wants to hire someone who speaks a Balkan language, but I don't remember what kind of language Ben does.
 (= <want to hire someone who speaks>)



This account can be extended to observed island effects in fragment answers, as in (29) by positing an unelided **t* in the final structure, as in (30).

- (29) a. A: Did each candidate₁ try to feed questions to the journalist who will ask him₁ *about abortion* (at the debate)?
 b. B: *No, [about foreign policy].
 c. cf. B: No, each candidate₁ tried to feed questions to the journalist who will ask him₁ *about foreign policy*.



But the empirical picture appears to be less uniform than the data in Morgan 1973 and Merchant 2004a would indicate. Both Culicover and Jackendoff 2005:244ff. and Stainton 2006:138 produce examples which they judge acceptable. Culicover and Jackendoff's examples include (31a) and (32a), whose putative unelided counterparts (under the movement+deletion analysis) are given in (31b) and (32b) and are unacceptable.

- (31) Is Sviatoslav pro-communist or anti-communist these days?
- Pro.
 - *Pro, Sviatoslav is [*t*-communist these days.]
- (32) A: John met a woman who speaks French.
- B: And Bengali?
 - *And Bengali, did John meet a woman who speaks French *t*?

For Culicover and Jackendoff, such “fragments” (or “Bare Argument Ellipsis”) have no clausal syntactic source: instead, such items are generated directly by the syntax as “orphans” whose properties (such as case, gender, etc.) are determined by an algorithm of “indirect licensing” and whose meaning is given by the rule in (33b) subject to the algorithm in (33c), repeated from above:

- (33) Bare Argument Ellipsis
- Syntax: [_U XP_{*i*}^{ORPH₁IL}]
 - Semantics: [*f*(X_{*i*})]
 - If *f* is an expression in CS_{*a*} and *f* cannot be determined from

SYNTAX_a by application of Rules R₁...R_n, then “*f* amounts to the presupposition of the antecedent, constructed by substituting variables for the [necessary elements] in the CS of the antecedent” (Culicover and Jackendoff 2005: 276)

They show that “indirect licensing” is useful for accounting for why an English speaker, pointing at a pair of scissors, will say, “Please hand me those” with a semantically otiose plural demonstrative whose morphological plural form is determined by the fact that the English word “scissors” is *pluralia tantum*. But they give no account of the form connectivity facts in (20) above (let alone connect such an account to the ill-formedness of (21)) or in (23). While I’m happy to admit that language-specific linguistic aspects of the objects in a context can influence choice of demonstrative (the alternative being that the demonstrative itself contains an instance of NP-ellipsis of *scissors*, as on Elbourne’s 2005 account), doing so does not make sense of the voice or P-stranding facts.⁵

In any event, a closer look at some of Culicover and Jackendoff’s data is in order. First, the fact that (31a) is acceptable seems irrelevant, given that (34) is also acceptable: under some circumstances, even bound prefixes can be used without their usual hosts. Whatever accounts for this fact will allow a maximal projection to be moved in (31a). Second, consider carefully the range of interpretations available to (32a); these are sketched in (35).

- (34) Sviatslav is anti-communist and Derzhinsky is pro-.
- (35) a.= Did John meet a woman who speaks French and Bengali?
 b.= Does she speak French and Bengali?
 c.= And does she speak Bengali (too)?
 d.≠ And did John also meet a different woman who speaks Bengali (in addition to meeting the woman who speaks French)?

The crucial thing to notice is that the reading given in (35d) is absent from B’s “fragment” utterance in (32a). On my account, this is because to generate this reading would normally require raising *Bengali* out of the relative clause headed by the existential quantifier (in order to introduce another woman). The mutually equivalent readings in (35a-c) are straightforwardly derived not by extraction out of an island, but by extraction out of a simple clause whose subject (e.g. *she* as in (35c) is assigned the same value as the woman who speaks French (see Merchant 2001:ch. 5 for extensive discussion of such E-type readings under sluicing). Culicover and Jackendoff have no obvious explanation for this pattern of

judgments, since their account builds on the intuition that the value of *f* in indirect licensing contexts follows the same route that gives us interpretations for idioms like the following:

- (36) a. And what about Bengali?
b. And how about Bengali?

In (36), the interpretation of *what/how about X?* does seem to allow a wider range of possibilities, including, crucially but damningly, a reading like that in (35d). So their proposal, while perhaps appropriate for examples like (36), overgenerates if applied to (32a).

Stainton 2006:138 provides more challenging examples, namely the following (though he doesn't try to address the difference between these examples and the island-sensitive ones like (29) and (32a), I will below):

- (37) Q: The Pope likes beer and what?
A: Tomato juice.
(38) Q: The Pope sleeps on a hard what in the story?
A: Bed.

Short answers to sluicing also void islands:⁶

- (39) A: They want to hire someone who speaks a Balkan language.
B: Really? Which one?
A: Albanian.

In this latter example, what is voiding the island-violating movement of the fragment is apparently the fact that the question itself involves island-violating *wh*-movement. One way to implement this would be to encode this difference in the ellipsis in the fragment answer in some way, allowing for deletion of the higher, CP, node just in case the antecedent involved sluicing (making it sensitive to the fact that an E feature was present in the antecedent, in other words). A less mechanical solution would be to follow Fox and Lasnik's 2003 analysis of variable island effects: they claim that island-violating sluicing involves long *wh*-movement without intermediate traces, and that this is licensed just in case the correlate is an indefinite bound by a choice-function existential closure operator (meaning there are no intermediate traces of QR in the antecedent), satisfying a structural parallelism requirement. For (39), this would mean that *Albanian* could move in one-fellswoop, violating islands, but only if the antecedent to the

ellipsis still satisfies parallelism – and this will only be possible if the antecedent contains islandviolating wh-movement itself, as in sluicing. (But see Agüero-Bautista 2007 for complications in this picture.)

If the example in (39) is indicative of what is going on in the Pope examples, then we have to posit that such “quizmaster” questions (like the “reprise” questions of Ginzburg and Sag 2000, sometimes called “echo” questions) can involve covert long movement. Such a conclusion makes most sense on a theory of islandhood which takes it to be primarily a consequence of PF considerations. (Other locality effects of covert movement, such as those found for scoping in QR and for multiple questions as in Dayal 2002, must have another source: they are not merely sensitive to islands, but to stricter locality conditions, in fact.)

The truth is that none of this matters too much for Stainton. He’s interested in antecedentless cases, not short answers. The main point of this discussion is to show how a particular theory of ellipsis_{syntactic} can be implemented. It is the possible extension of this implementation to Stainton’s cases that is of most interest next.

3.2. The limits of the “limited ellipsis_{syntactic}” strategy

3.2.1. <That’s> X and labels

A syntactic ellipsis analysis could be given of some antecedentless subsentences if one is allowed to elide syntactic structure in certain circumstances with no linguistic antecedent. Merchant 2004a proposes such a “limited ellipsis” strategy for some examples, claiming that an expletive, deictic, or demonstrative subject (*there/it, he/she/it, this/these/that/those*) and an appropriate form of the verb *be* (appropriate in person, number, aspect, and tense) can be elided if a referent for the deictic or demonstrative is salient enough to resolve it (in other words, in the same circumstances that such elements can be used without linguistic antecedents, period). Representative proposed structures are the following, before movement of the remnant and with the unpronounced material in angled brackets.

- (40) Properties applied to a manifest object
- a. <It’s> On the stoop.
 - b. <That’s> Moving pretty fast!
 - c. <It’s> From Spain!
 - d. <It’s been> Driven exactly 10,000km.
 - e. <It’s> Recommended for ages 6 and older.

- f. <He's> one of Anthony Carroll's best men.
- (41) Individuals as arguments of a manifest property
 - a. <That's> Barbara Partee.
 - b. <It's> Rob's mom.
 - c. <It's> Nova Scotia.
 - d. <It's> The *ngo-gyin*, the song of mourning.

Compare these to uses of the copula with a demonstrative subject like the following:

- (42) That's Max (all right, all over again, for sure, for you).

Such a phrase does not indicate identity, but rather that something in the present context has raised Max to a high degree of salience. (Such an example could be used on seeing walls painted with Max's typical style, a messy bedroom, an extremely neat bookshelf, a special smell, or almost anything thing else that would make Max salient to the speaker.)

Recall next the minimality condition proposed by Stainton to rein in over-generation, discussed on p. 15 above. The difficulty with this absolutely necessary minimality condition is that it brings Stainton's account dangerously close to mine, making it look almost indistinguishable. If the minimal proposition that can be gotten with a property *P* is that *P* is instantiated in some salient object, then it's awfully close to saying that we end up with the equivalent to <*That/It is*> *P* as in (40).

One possible difference is with respect to individuals. When "Barbara Partee" is uttered as in (14a) above, I claimed that the sentence_{syntactic} that was actually produced was *That is Barbara Partee*, but with *That is* elided, as in (41a). There are good reasons not to think this is a predicative use of the name, but rather an identity statement (or "specificational", in the common terminology; see Mikkelsen 2005 for an extensive recent treatment). On my account, as long as the reference for *that* can be recovered, ellipsis is possible. For Stainton's account, the question is whether this is the minimal proposition developable. One serious competitor for minimal status would be an existential predicate applied to the individual: *Barbara Partee exists*. But this doesn't seem to be a good parse of (14a). So in this case, the conventional ellipsis of *That is* does a better job of accounting for our intuitions about this example than the grasping of the minimal manifest property and application of it to Barbara Partee.

The major apparent syntactic advantage of this line of analysis is that it straightforwardly accounts for the presence of the nominative case on

nominal expressions in case-marking languages. In Greek or German equivalents to (41), we would find only the nominative. If case assignment is effected by an asymmetric agreement relation between the NP (which by hypothesis lacks a case value inherently) and some case assigner (for nominative, typically taken to be the head of the clause itself, T), then T must be present to assign nominative.

The difficulty with taking this line of reasoning at face value is that nominative⁷ case is also the case used for all kinds of labeling, from street signs, traffic signs, book and movie titles, store names, product names, etc. In all such cases, the nominative must be available extra-sententially (presumably by virtue of being in such a “label” environment or construction) and there is therefore little deep reason to insist on T as the only source of nominative. (Note that I am not claiming that nominative is a “default” case in these languages: allowing for “default” case assignment would void all Case Filter violations, and make incorrect predictions in structures with resumptive pronouns as well; see Merchant 2004b, to appear for discussion.)

In any event, the above approach, whatever its merits, is difficult to extend to the following examples.

- (43) Quantifiers as arguments of a manifest property
- a. An editor of *Linguistics and Philosophy*
 - b. Three pints of lager.
 - c. <There/they are> quite a lot of children.

While the “limited ellipsis” analysis gives a reasonable paraphrase for (43c), it is less felicitous with (43a,b): <That’s> *an editor of Linguistics and Philosophy* and <That’s> *three pints of lager*. The latter example is a special subcase I return to in detail in section 5. The problem with the first example is that there is nothing in the context (besides the chair) that could easily be construed as providing a referent for a deictic or demonstrative. The intended assertion, according to Stainton, is something like THIS CHAIR IS FOR [an editor of *Linguistics and Philosophy*]. The problem is fully general: if I am instructing you where to put name cards at a wedding dinner beforehand, I can look at the seating chart, walk around the table and point at successive empty chairs, saying “Sam’s mom,” “The bride’s best friend,” “Laura Skottegaard,” “Some random guy Susan is bringing as her date,” etc. and thereby assert that each of the indicated chairs is intended for the named or described person. Such a content is hardly available to equivalent uses of “That’s Sam’s mom,” “That’s the bride’s best friend,”

etc. Instead, I would appeal here to the labeling function: there is some construction in which a situational deixis can be linked to a nominative DP “label”, where the label can be the name of the object so labeled or stand in some pragmatic relation to it (as in “I-94 Minneapolis/St. Paul” on an interstate highway sign – this sign appearing outside Madison merely indicates that the so-labeled road goes to Minneapolis/St. Paul, of course).

Is this enough to establish Stainton’s desired point? It all depends on whether we take the utterance of (43a) to assert that THIS CHAIR IS FOR [an editor of *Linguistics and Philosophy*], or whether this content is merely implicated (perhaps conventionally) as part of the meaning of the labeling-function (assuming the latter is in play here as well). Such considerations apply also to most of the examples in (41). Is the act of labeling something an assertion in the desired sense? If it is, then the debate is over, for me, at least – I have no reason to think that every label has a TP structure subject to elision. (Though even if this debate ends here, the hard work of sorting out the linguistic facts continues). If not, it’s not clear just what the debate is about: if I label something conventionally (such as by putting a title on my paper, or wearing a nametag, or pointing at myself and saying “Tarzan”), but knowingly mislabel, have I lied? What exactly is the difference between lying and misleading when applied to such cases? Imagine a criminal, Sam, who wants to rob a train and whose plan is to make the train engineer stop the train in a field by mounting a sign at the side of the railroad tracks:

(44) End of track

Imagine that in fact the track does not end near where Sam has placed the sign. Does the sign “lie”? (Intuition says no: lies need intentional agents.) Has Sam thereby “lied”? Certainly his intent was to mislead, and he used appropriate linguistic means to do this (posting the sign in Greek in Kansas would do little for his schemes). While we have clear intuitions that someone who says or writes an intentional falsehood has lied (committed libel or perjury, etc.), it’s less clear that “lying” applies to (44). This is one of the reasons that laws recognize degrees, and that there are different laws in different jurisdictions.

3.2.2. *Other syntactic questions*

Other technical questions arise for a syntactic ellipsis analysis. The first involves the inability of “fragments” to be embedded (unlike for example VP-ellipsis and sluicing, which are not limited to matrix clauses):

- (45) Even though it is obviously true,
- no-one noticed that *(it's) on the stoop!
 - Jack didn't exclaim that *(it was) moving pretty fast!
 - few mail carriers recognized that *(it is) from Spain!
 - she said that *(he is) one of Anthony Carroll's best men.
- (46) a. Jenny told us that *(that is) Barbara Partee.
 b. Anita hinted that *(it was) Rob's mom.
 c. Katerina complained that *(it was) Nova Scotia.

On a syntactic account, this fact would have to be captured by positing a feature dependence between the E trigger for ellipsis and the matrix clause, such as [Clause-type:Matrix], using the notation of Adger 2002. The question is whether it is independently plausible to believe that certain operations, rules, or items are restricted in just this way: as Stainton 2006:116 puts it, "if these posited expressions really do have sentential structures, they should embed in all sentential frames." In fact there are many phenomena across languages that are limited in exactly this way, a fact that can be captured in a variety of ways (such as with a lexical featural mechanism, as Adger proposes), but whose existence is in no doubt. The asymmetry between matrix (or "root") clauses and embedded ones traditionally goes under the rubric of the "Penthouse Principle" (so named in Ross 1973; see de Haan 2001 for a recent discussion), whose generalization we can state informally but memorably as "the rules are different if you live on the top floor." Examples of matrix-only phenomena are legion; I list here just a few.

- (47) Phenomena occurring only in matrix clauses
- German and Dutch verb second (Vikner 1995):

Das	Buch	hat	er	gelesen
<i>the</i>	<i>book</i>	<i>has</i>	<i>he</i>	<i>read</i>

 'He read the book.'
 - Hidatsa declarative clause marker *-c* (Boyle 2007):

puušihke-š	mašúka-š	éekaa-c
<i>cat-DET.DEF</i>	<i>dog-DET.DEF</i>	<i>see-DECL</i>

 'The cat sees the dog.'
 - Imperatives (in many, perhaps all, languages; Postdam 1998):

Ánikse	tin	porta! (Greek)
<i>open.IMP.2s</i>	<i>the</i>	<i>door</i>

 'Open the door!'
 - Subject-auxiliary inversion in English questions (McCloskey 2006): How many presents did he get? vs.

- *How many presents he got? We were surprised at {*how many presents did he get. | how many presents he got.}
- e. Albanian polar interrogative particle *a*:
- A je ti tē lodhur?
 Q are you AGR tired
 ‘Are you tired?’
- f. Greek dubitative interrogative particle *araje* (Giannakidou to appear):
- Tha perasi araje tin eksetasi?
 FUT pass.3s PRT the exam
 ‘Will he pass the exam, I wonder?’
- g. English question-modifying ‘so:’
- So who came?
 I wonder (*so) who came?
- h. English tag-questions:
- He’ll pass, won’t he?
 I wonder if he’ll pass (*won’t he).

It is at best unclear whether the idiosyncratic syntactic restrictions that the analysis of such phenomena require are the kind that would be naturally extended to capturing the matrix-only nature of fragments. Since there is to my knowledge no overall understanding of what, if any, commonalities such phenomena have, there is no good way to know whether the “fragment” restriction falls into a natural class with them.⁸

The second major technical question involves the movement involved. Recall that the movement was entirely motivated by the theory-internal decision to elide only constituents (on a par with VP-ellipsis and sluicing) – maintaining this claim necessitated moving the remnant to a clause-external position so that what remained could be elided as a phrase. The difficulty here comes from mismatches between the kinds of leftward movements seen in nonelliptical structures and the ones needed to make this account work. The asymmetry can be seen in the oddity of the following examples compared to their putatively elliptical descendants in (40) and (41).

- (48) a. On the stoop it is!
 b. Moving pretty fast that is!
 c. From Spain it is!
 d. Driven exactly 10,000km it’s been.
 e. Recommended for ages 6 and older it is.
 f. One of Anthony Carroll’s best men he is.

- (49) a. Barbara Partee that is.
 b. Rob's mom it is.
 c. Nova Scotia it is.
 d. The *ngo-gyin*, the song of mourning it is.

Stainton correctly points out that these sound like “Yoda-speak” (141). One response to this objection would simply be to drop the requirement that only constituents be elided: all we’d need is a different implementation of the syntax-semantics interface requirements for ellipsis. (Though Stainton rightly objects that this would make the putative ellipsis less like better understood elliptical phenomena; the question is of course how serious we would like to take this nonparallelism – one can point to other “elliptical” phenomena such as gapping and possibly Right Node Raising which have very different properties from sluicing and VP-ellipsis.) A second response would be to deny the relevance of the status of the above moved examples to (40) and (41) at all: after all, the argument could run, there are lots of differences in acceptability between apparently optional versions of the same structures (#*There are some men tall* vs. *Some men are tall*; *I saw the book* vs. ?*The book was seen by me*, etc.). In the area of ellipsis, in fact, it has been claimed that some movements necessarily feed ellipsis. This claim is best known applied to pseudo-gapping (see Lasnik 1999, Merchant 2008a), where the remnant movement must cooccur with VP-ellipsis, but it has also been claimed for the obligatory presence of VP-ellipsis in subject-aux-inverted comparatives (Merchant 2003, but see Culicover and Winkler 2007 for a more refined picture).⁹

3.2.3. *Final problems with syntactic ellipsis*

Even if all the above is correct, and one wishes to accept that there is syntactic ellipsis for the above cases, there remains a subset of examples that are problematic (I set aside the “ordering” examples until section 5). The first problematic example is the following, adapted from Stainton 2006:107:

Hans and Franz are playing a boring game one day in which each person takes turns naming an object which reminds him of a particular person. Their conversation consists of sentences such as

- (50) Die Lampe erinnert mich an meinen Onkel Wolfram.
the lamp.NOM reminds me on my.ACC uncle Wolfram
 ‘The lamp reminds me of my uncle Wolfram.’

They go their separate ways and a few days later, Hans is sitting in a bar when Franz walks in the door. Hans points at a nearby beer-stained old wooden table and says,

- (51) Mein Vater!
my.NOM father (‘My father!’)

In the same context, it would be odd to say either (52a) or (52b):

- (52) a. Das ist mein Vater!
that is my.NOM father
 ‘That is my father!’
 b. Meinen Vater!
my.ACC father
 ‘My father!’

Stainton raises this example as a failure of connectivity, since in German, the object of the preposition *an*, which is required by the verb *erinnern* (“remind”) must appear in the accusative case. Nonetheless, (52b) is impossible in this situation: instead, we find the nominative as in (51). Stainton posits that what can be asserted by (51) in this context is that same as what (53) would assert in this context (or more strictly speaking, the speaker asserts THAT REMINDS ME OF MY FATHER):

- (53) Das erinnert mich an meinen Vater.
that.NOM reminds me on my.ACC father
 ‘That reminds me of my father.’

Stainton points out that if the asserted content is generated by German words corresponding to those appearing in (53), we would expect (52b) to be fine, and (51) to be odd. I agree that this example is challenging for the syntactic ellipsis account, but not for the reason stated. The limited syntactic ellipsis account does not suppose that the asserted content derives from German words syntactic connectivity effects are predicted only in short answers and the like, where the “fragment” is based on a structure with an accessible *linguistic* antecedent. It is reasonable to suppose that such accessibility to linguistic structure in the above game has eroded over the intervening days (in fact, linguistic cues erode much more quickly than

that, generally within a clause or two, as the psycholinguistic literature explores; see Arregui et al. 2006). So the puzzle is not that the accusative is unacceptable here (which would also violate the ban on P-stranding in German); the puzzle is why the nominative can be used, given the oddity of (52a).¹⁰

The problem is that in German, the demonstrative *das* appears to be less useable for abstract properties of individuals in copular sentences than *that* is in English, apparently. (Though *das* certainly has such property or situational uses in general, as the subject of verbs meaning “bother”, “surprise” etc. and in similar nonsubject contexts as well.) Instead, what one would like is something more along the lines of the following:

- (54) Derjenige, der in der gegebenen Beziehung zu dem gerade
the.one who in the given relationship to the just
 angedeuteten Tisch steht, ist mein Vater.
indicated table stand is my father
 ‘The one who stands in the given relationship to the just indicated
 table is my father.’

This example has the desired syntactic property of having *Mein Vater* in the nominative case, here as the subject in an inverted specificational copular clause. There is however no hope for a theory that would allow such a syntactic object to be deleted on the basis of the context, linguistic or otherwise. The example therefore stands as a datum that cannot be accounted for under the limited ellipsis account discussed above.

The second problematic example has the same basic difficulty: it simply fails to be equivalent in the given context to any possible reading of *That is X*.

- (55) A father is worried that his daughter will spill her chocolate milk. The glass is very full, and she is quite young, and prone to accident. He says, “Both hands!”

In this context, one cannot say, “That’s both hands!” or “Those are both hands!” and expect the child to understand this as a command to use both hands to hold her glass. Nor, as Stainton points out, does it help to think that there is an elided verb “use” here – doing so is equivalent, he shows, to abandoning the *limited* syntactic ellipsis account for one that is unconstrained and ultimately untenable. For Stainton, the property needed here (namely USE) is given by the context, and *both hands* supplies its

argument, but there is no syntactic or semantic representation of USE present.¹¹

In sum, there are simply some examples that the syntactic ellipsis analysis cannot accommodate.

3.2.4. *Summary*

The above discussion has shown that for almost every kind of example, some more or less plausible syntactic ellipsis story can be told. But at the end of the day, I feel like the boy with his thumb in the dike: the dike is going to keep springing leaks, and while I may not run out of theoretical thumbs, one can't help but feel tired trying to plug all the leaks. Theorists with more syntactic leanings than I have may feel this strategy is worth pursuing to more extremes than I do. I'm willing to concede that syntactic ellipsis is required only when connectivity effects are observed, and that this holds only in two subcases: first, when there is a linguistic antecedent as in short answers, and second, when there is a syntactic slot to be filled, as discussed in section 5 below. For the rest, including the many "bare nominative" examples, a syntactic solution seems to me to be less attractive on the whole than the alternatives.

This means that the syntactic conclusions of Shopen 1972 and Barton 1990 cannot be escaped: "bare" phrases must be generable on their own, with no local syntactic embedding of any kind. Once we accept this conclusion, we must begin to explore its consequences for the models of grammatical competence we construct (see the papers in Progovac et al. 2006 for several relevant proposals). The urgent task becomes what to make of the mechanisms for handling what otherwise look like syntactic dependencies, in form (case, number, gender, person, anaphoricity, aspectual marking, etc.). Only some, not all, of the cases of interest can even possibly be handled under a syntactic ellipsis analysis.

4. Ellipsis_{semantic} as "slot-filling"

The question, then, given a *divisa et impera* strategy, is whether the remaining cases can be handled with a semantic ellipsis analysis. In this section, I concentrate in particular on the three main subcases: phrases that pick out individuals, properties, and quantifiers. There is a way of construing the semantics of such expressions which I believe is fully

consonant with Stainton's points about their interpretations in context, but which makes use solely of commonly assumed, independently posited, semantic combinatorics. The basic idea is to let the semantic value of these expressions (what they "say") include a variable over the relevant kind of object, and to let this variable receive its value in the usual way, namely by an assignment function (or its equivalent in variable-free treatments) whose content is of course itself entirely determined by context in the Gricean pragmatic way.

The core of the debate seems to come down to whether Stainton is right when he writes that "what is asserted ... is fully propositional; but what is meta-physically determined by slot-filling and disambiguated expression-meaning is something less than propositional" (2006:228) and that ordinary words and phrases used in isolation "don't have "slots" that yield something propositional when they are used in context" (2006:158). Here I think that there is a reasonable reading of slot-filling under which the large majority of examples adduced can be handled as propositional after all.

By "slot-filling", Stainton means the contextually determined values of items like indexicals and pronouns, as well as other elements whose semantic value is generally taken to be a variable. As usual, the paradigm case is that of a pronoun. An example like (56a) has the semantic value in (56b) (setting aside the number and gender contributions of *he*), which, under the variable assignment in (56c), has the truth conditions in (56d).

- (56) a. He_2 left.
 b. $\text{leave}(x_2)$
 c. $g = [x_2 \mapsto \text{sam}]$
 d. $\llbracket \text{leave}(x_2) \rrbracket^g = 1$ iff Sam left

The case of pronouns is the simplest one, especially when these pick out individuals, type $\langle e \rangle$. On widespread conceptions of the semantic component of the grammar, such variables are put to a variety of uses. Consider the following expressions:

- | | | |
|------|------------------------------------|------------------------|
| (57) | expression | type |
| | a. <i>sick</i> | $\langle e, t \rangle$ |
| | b. <i>sick(john)</i> | $\langle t \rangle$ |
| | c. <i>sick(x₃)</i> | $\langle t \rangle$ |
| | d. $\lambda x_3[\text{sick}(x_3)]$ | $\langle e, t \rangle$ |

In (57a), we posit that a predicative expression like *sick* denotes the characteristic function of a set of individuals. When applied to an individual such as *john* in (57b), we have a proposition of type $\langle t \rangle$. This holds equally if the property is applied to a variable like x_3 as in (57c): in this case, the truth of the proposition is evaluated relative to the value of x_3 in the context-determined assignment function g . But crucially the expression itself is of the same type, namely $\langle t \rangle$, that (57b) is. Last, we can bind the variable with a λ -operator as in (57d), yielding again a characteristic function of a set. These expressions are interpreted in a model theory using a model $M = \langle U, I \rangle$ and a denotation function.

The above represents a typical way of modeling meanings in a typed system, using standard definitions such as the following (from Bernardi 2002:16):

(58) DEFINITION [Typed λ -terms]. Let VAR_a be a countably infinite set of variables of type a and CON_a a collection of *constants* of type a . The set TERM_a of λ -terms of type a is defined by mutual recursion as the smallest set such that the following holds:

- i. $\text{VAR}_a \subseteq \text{TERM}_a$
- ii. $\text{CON}_a \subseteq \text{TERM}_a$
- iii. $(\alpha(\beta)) \in \text{TERM}_a$ if $\alpha \in \text{TERM}_{\langle a, b \rangle}$ and $\beta \in \text{TERM}_b$,
- iv. $\lambda x. \alpha \in \text{TERM}_{\langle a, b \rangle}$, if $x \in \text{VAR}_a$ and $\alpha \in \text{TERM}_b$.

A common practice in work in natural language semantics is to assign λ -terms as the translation of lexical items, such as the following.

- (59) a. $\llbracket \text{every} \rrbracket = \lambda P_{et} \lambda Q_{et} [\forall x_e (P(x) \rightarrow Q(x))]$
 b. $\llbracket \text{boy} \rrbracket = \lambda x_e [\text{boy}(x)]$
 c. $\llbracket \text{see} \rrbracket = \lambda x_e \lambda y_e [\text{see}(x)(y)]$

But this use of the λ -operator is not a necessary one. Imagine instead that λ -abstraction occurs in the course of or as part of the semantic composition, not as stipulated in lexical entries. This is in fact a common view: Carpenter 1997 for example uses a system that can apply variables and λ binders separately to terms, and systems like Heim and Kratzer's 1998 introduce λ -binders as the result of certain movement operations. On this view, then, λ -abstraction occurs as necessary to enable semantic composition, but not otherwise. It is a possible precursor to function

application (other systems are conceivable, of course: see Chung and Ladusaw 2004 for an explicit proposal for other semantic composition operations in addition to function application, and recall that Heim and Kratzer 1998 also use an operation of function “identification” as well as application). The result of this view of the semantics is that predicates have a variable in them, but no λ -binder. When used in isolation, they will therefore have a free variable.

This is all that needs to be said to account for two of Stainton’s three main subcases. Stainton assumes that the semantic value of a phrase like *on the stoop* or *quite a lot of children*, used in isolation, will be either what the interpretation function I returns or an appropriate λ -translation: in either case, *on the stoop* will be $\langle e, t \rangle$ (as in (57a,d) above) and *quite a lot of children* will be $\langle et, t \rangle$, as follows, for example (assuming for simplicity that the PP denotes a predicate and that *quite a lot**_C is predicate true of plural individuals x iff the cardinality of x exceeds some contextually given amount C):

- (60) a. $\lambda x_2[on.the.stoop(x_2)]$
 b. $\lambda Q_{et}[\exists z[quite.a.lot*_C(z) \wedge children(z) \wedge Q(z)]]$

But if introduction of variables – here x_3 and P , with β -reduction – is an available option (as in (58iii) above), then there is a further possibility:

- (61) a. *on.the.stoop*(x_3)
 b. $\lambda z[\exists z[quite.a.lot*_C(z) \wedge children(z) \wedge P(z)]]$

These expressions have free variables – x_3 and P : “slots”, in other words. What the values of these variables will be is determined by the assignment function. So Stainton is right that the pragmatics is crucial, and that our intuitions require that it be the context that determines what individual or property is used, but once we admit that the assignment function is responsible for “slot-filling” of unbound variables, we already have in place the semantic mechanism needed.

One additional assumption is needed to account for the third major subcase, that of individual-denoting phrases like *Barbara Partee*. For such expressions, we have to assume, with Partee and Rooth 1983, Jacobson 1999, Barker to appear, and many others, that an individual-denoting expression can lift into a generalized quantifier type (whether freely so or due to requirements of the context is immaterial: this seems necessary for the interpretation of conjunctions like *John and every woman*, etc.). Given

this option, *Barbara Partee* can lift into the expression in (62a), to which variable introduction and β -reduction apply, yielding (62c).

- (62) a. $\lambda P_{et}[P(\textit{partee})]$
 b. $\lambda P_{et}[P(\textit{partee})] \rightsquigarrow$
 c. $Q(\textit{partee})$

(62c) is an expression of type $\langle t \rangle$, whose truth will be evaluated relative to what the assignment function gives for the value of the variable Q .

One might object that this is asking too much of the assignment function. But such complex semantic objects determined by the assignment function are not needed merely in the cases at hand. They are also required to account for the meaning of anaphoric elements like *that* and *it* and their null counterpart in the following kinds of examples:

- (63) a. Every patient was told that he was sick. But then most of them forgot it.
 b. Most reservists found out by mail that they were being sent to Iraq and that pissed them off.
 c. Everyone remembered to bring their swimsuit. No one forgot.
 d. Everyone remembered that they wanted to marry their cousin. No-one forgot.

These have readings that are equivalent to the following.

- (64) a. Every patient was told that he was sick. But then [most of them] forgot that they were sick.
 b. Most reservists found out by mail that they were being sent to Iraq and the fact that they found out by mail pissed them off.
 c. Everyone remembered to bring their swimsuit. No one forgot to bring their swimsuit.
 d. Everyone remembered that they wanted to marry their cousin. No one₇ forgot that they wanted to marry their cousin.

For these and similar cases, we seem to need the assignment function to be able to assign pronouns like *it* values like $[x_5_was_sick]$, allowing the variable x_5 to be bound by a higher quantifier to capture the attested covariance with the quantificational elements. So it seems plausible that such objects in the semantic representation are available to the assignment

function, and can therefore serve as possible values for higher-type variables in “slot-filling.”

Stainton anticipates something like this account in a paragraph on 185 (and also on 55), where he discusses the idea that Alice holding up a pen and saying “Red” to Bruce can be translated as $Red(x_3)$, where, assuming an assignment function g where $g(x_3) = \text{the pen Alice held up}$, $Red(x_3)$ does express what Alice asserted. To this idea he writes that “it is absurd to suggest that the thought Alice got across is grasped via $[Red(x_3)]$, since Bruce, *qua* ordinary English speaker, could not have used the latter to understand the proposition – this being a made-up language.” But this is precisely what’s at issue: on the claim pursued here, the English word *red* can have the semantic value $red(x)$, where the variable x can be bound or not. If free, the assignment function (whose values *are* determined by pragmatics) must yield a value.

On this approach, then, there really are more “slots” to be filled: these slots, by design, cover exactly the same ground that Stainton’s three subcases cover. This is no accident: this account is quite close to previous versions, which differ however from this in introducing the variable as part of the ellipsis resolution algorithm (Dalrymple et al. 1991; Culicover and Jackendoff 2005). Here the variables are already there, as parts of the meaning of the items used. What their *values* are is determined by context, just as the actual content of the assignment function or accessibility relation is. So this has precisely the same effect as Stainton’s account in this way, since it is the pragmatics that does this. But it “semanticizes” the variables in a familiar way. The difference between this account and Stainton’s is pretty tiny indeed: the only real difference is that by having the semantic “slots” in the meaning (semantic value) of the phrase uttered, they can all be type $\langle t \rangle$, propositional. The pragmatics does its work in the same way it does in determining the denotations in a context of other kinds of variables, nothing more.

This proposal comes very close in spirit to that of Culicover and Jackendoff 2005; it differs in its implementation. For them, the variable over contextually specified meanings (which they posit is part of the semantic representation “Conceptual Structure” of the utterance, as here and *pace* Stainton) is introduced by a special rule that is the grammatically specified interpretation rule for the Bare Argument Ellipsis construction. In the present view, on the other hand, no special or construction-specific rules are employed: only the regular semantic mechanisms independently needed.¹²

With the appropriate semantic analysis, then, it seems that no extraordinary appeal to pragmatics is necessary beyond what we already assume: namely that the assignment function is set by the context, not the semantics, but is used to determine the semantic value of an expression in a context. Having seen that there is at least one interpretation of “slot-filling” which does seem to satisfy the requirements for reaching a proposition without the representational-pragmatic view Stainton proposes, we have slain most of the dragon, I think. Nevertheless, there still remains a small minority of left-over cases, which appear somewhat heterogeneous. The question then becomes whether, on the basis of at least one of these examples, Stainton’s conclusion can be established. It is to these, then, that I now turn at last.

5. Scripts, contexts, and syntactic “slots”

Every account needs to say something special about the following kind of data (from Merchant 2004a, and parallel to the *Three pints of lager* case in English above). In many languages, objects of certain verbs are marked with particular cases: in Greek, the object of most transitive verbs is accusative, and in Russian, the object of certain transitive verbs in certain circumstances appears in the genitive (in its “partitive” use). This is in particular the case in ordering food and drinks. In Greece or Russia, to order a coffee or water, one could say the following:

- (65) a. Ferte mu (enan) kafe (parakalo)! (Greek)
 bring.IMP me a coffee.ACC please
 ‘Bring me (a) coffee (please)!’
 b. Dajte mne vody (požalujsta)! (Russian)
 give.IMP me water.GEN please
 ‘Give me (some) water (please)!’

In exactly the same circumstances, a Greek or Russian speaker could just as well use the following:

- (66) a. (Enan) kafe (parakalo)! (Greek)
 a coffee.ACC please
 ‘(A) coffee (please)!’
 b. Vody (požalujsta)! (Russian)
 water.GEN please
 ‘(Some) water (please)!’

The very real question in these cases is, where does the case come from? What determines that the speaker uses the accusative here in German, and the genitive in Russian? Whatever the vocabulary of Mentalese might look like, if it is to be plausible as a candidate for the language of thought independent of language, it is very unlikely to have anything like the partitive genitive in it. Instead, a plausible manifest property may be something like λx [I WANT x], as Stainton suggests on p. 157. Such properties in Mentalese do not contain the actual Russian verb *xoču* “I want” or the like, however. But it is only such particular verbs that assign (or govern, or determine) this case in this context – without the actual verb, there’s no obvious reason the speaker should choose the case she does, especially over the nominative, which is the case used in all the above instances of nonsentential assertion in these languages. Therefore, there is no way on Stainton’s analysis to account for the accusative and partitive genitive in (66). What makes these contexts special is their formulaic, conventional character, in which particular linguistic elements are made manifest and license ellipsis. Exactly because they are limited in number and kind, learned explicitly (a competent foreign learner of Greek for example, who had never been in a Greek restaurant, may mistakenly use the nominative here), and seem to reflect syntactic properties of particular lexical items in the languages, it seems most likely that this is an instance of syntactic “slot-filling”, where the “slot” here is the item being ordered, and there is a context-dependent linguistic construction that employs the relevant verb with its case-assigning properties. Whether this verb has been uttered (though unpronounced) by a speaker is a different question – this is the question of whether such syntactic slot-filling is to be analyzed as ellipsis_{syntactic}.

Two other such cases can also be mentioned briefly. The first comes from Dutch: in Dutch, when you answer a ringing phone, you pick it up and say ‘*Met*’ (lit. ‘with’) followed by your name. So I answer phones in Holland by saying, ‘*Met Jason*’. This is short for ‘*U spreekt met Jason*’ (‘You are speaking with Jason’). The preposition *met* is simply part of the conventionalized means of answering a phone, but the whole phrase contains a variable (over names) and is short for something else (which a pedantic or otherwise garrulous person is free to use as well). There’s no way to predict this behavior or interpretation on general principles, linguistic or otherwise. The second such case comes from Greek, where the names of addressees on envelopes appear in the accusative, not nominative, case; a letter to my father-in-law is labeled as in (67a), not (67b):

- (67) a. Dimitri Giannakidi (accusative)
 b. #Dimitris Giannakidis (nominative)

This is not because the accusative carries some inherent directional meaning (recipients and the like are marked with the genitive, in fact), but because there is a conventional ellipsis of the preposition *pros* ‘to’, which assigns the accusative. Again, this preposition could be written on the envelope as well, but need not be.

A final such example is the taxi example, which Stainton gives in (68a)¹³ and which is similar in its properties to the exophoric sluice in (68b) discussed by Ginzburg 1992 and Chung, Ladusaw, and McCloskey 1995.

- (68) a. Marco gets into a taxi and says, “To Segovia. To the jail.”
 b. A passenger gets into a cab and the driver turns and asks,
 “Where to?”

The main point I wish to make with respect to such examples is that their form, again, is determined entirely by linguistic elements in what Schank and Abelson 1977 called the “script” of the situation. In following a script, the participants know and can anticipate the actions (including the utterances) of the others following the same script, and can plan accordingly (the notion of script was developed for artificial intelligence purposes, but is familiar from automated phone booking systems etc.). In such a context, certain particular linguistic phrases can be expected: they are “given”, though not by the immediate actually spoken linguistic precedents, but rather by mutual knowledge of the script being followed. If Marco stands in the middle of a square and shouts “To Segovia!”, we have a hard time construing his utterance (as hard as we try, it is difficult to construe this as an instruction that we take him to Segovia); the same phrase on entering a taxi is perfectly understandable. This is why, in exactly such constrained, scripted circumstances, we also find regular elliptical structures such as sluicing, as in (68b).¹⁴ The sluicing case is illuminating, and raises the same set of questions: does it make sense to claim that there is syntactic ellipsis in such cases? If so, can it be determined exactly what it being elided, and why is such “surface” anaphora (in Hankamer and Sag’s 1976 sense) licensed with no linguistic antecedent? If not, what *is* going on? The idea behind the use of the script is that there is a conventionally determined (syntactic) sentential expression which is used in some reduced form, but where the reduction is not licensed

by regular grammatical mechanisms for (syntactic) ellipsis (such as E or its equivalent), but is more similar to just reading “prompts” for lines to an actor. If both parties aren’t familiar with the script, the prompt will fail. No general mechanism is used in these cases, and that’s why they can and do have sensitivities to linguistic form: those forms found in the (linguistic part of the) script.

Is this idea incoherent? Stainton claims that the notion of script is irrelevant since “surely it is the speaker, not her grammar, that determines which script is in play” (n). But this is equally true for the choice of words themselves, and it is the grammatical features of particular words that can determine properties of even antecedentless anaphoric elements, such as those discussed by Culicover and Jackendoff 2005:261:

- (69) a. Viltu rétta mér hana? (Icelandic)
 will.you hand me.DAT it.FEM.ACC
 ‘Will you hand me that?’ [pointing at a book = *bókina*
 (fem.acc)]
- b. Vy mogli by mne dat’ ètu? (Russian)
 you could conditional me.DAT give.inf that.FEM.ACC
 ‘Could you give me that?’ [pointing toward a herring =
 seljetku (fem.acc)]

A similar effect can be seen in English when a choice can be made between two equivalent descriptions of the same object, whose linguistic coding however differs in grammatical number, as is the case with the pair (grammatically plural) *swim trunks* and (the grammatically singular) *swimsuit*. Culicover and Jackendoff 2005:262 fn. 20 point out that either of the following is possible:

- (70) a. That looks good on you.
 b. Those look good on you.

All these data point to the fact that particular peculiarities of linguistic form can influence the form of an antecedentless anaphoric element. So even if the entirely “pragmatic” story is correct, it appears that Mentalese (in which the speaker presumably formulates such thoughts) must have access to language-particular facts to choose the correct form. (Obviously, one may also simply take this as a reduction.) But if that’s the case, then that fact that the speaker “chooses” a script to follow in a given situation, and has concomitant access to particulars of the linguistic forms of the elements in

the script, is no more challenging for this view than the examples in (69) and (70) are.

Besides, no workable alternative seems available. Stainton discusses cases like (66) briefly on 108–109, where he claims that “case marking *plays a semantic role*” (emphasis his). Applied to (66a), he says that such an example “exhibits the accusative marking because of the content of the speech act.” Working backwards, in other words, he wants to maintain the position that the content of the speech act consists in asserting a proposition, not doing something with some syntactic object. This forces him to conclude that the accusative case in Greek has some semantics, and is not merely a reflection of an object standing in a certain syntactic relation to a certain verb. Instead, the predicate or property that the verb denotes must be such that it can only combine with arguments whose denotations arise from NPs marked in a certain case. But this idea is well known to be false: structural cases, as they are called, in particular the nominative and accusative (and certain genitives in languages like Russian) cannot be assigned a consistent semantics. The most obvious semantics to assign is something like Nominative=Agent and Accusative= Theme, but this fails in passives, in which the semantics is the same but the case assignment reversed (*She saw him* = *He was seen by her*). So the claim that “this alternative story about case can explain the facts” (109) is wrong.¹⁵

If anything deserves the name “shorthand,” it is probably such examples. But they are shorthand for particular syntactic configurations (“constructions” if you will), with language-specific properties that must be learned individually. They are not the result of general purpose mechanisms, which would in fact produce the wrong result here (namely nominative) and must be blocked by an elsewhere principle.

6. Ellipsis_{pragmatic}

The third and last kind of “ellipsis” that Stainton discusses in describing the lay of the land is “pragmatic ellipsis”. He is appropriately hesitant to use this phrase (38), and its use is mostly for rhetorical balance: we have syntactic, semantic, and therefore also pragmatic “ellipses”. But Stainton makes quite clear that there is no sense of the word “ellipsis” which applies in the pragmatics, so to speak: it only describes his own proposal by process of elimination, and doesn’t add any clarity. Just the opposite, in fact: the term denotes nothing at all, and I also have no use for it. To say that one of the cases of interest here is just “pragmatic ellipsis” (whatever

that might mean) is to concede Stainton's point, and is not a coherent alternative to it.

7. Conclusions

The proposed semantic ellipsis account here shares, by design, both the strengths and weaknesses of Stainton's insightful discussions – the primary difference being in where the labor is situated. For the primary cases of interest, the predictions are identical; in other words, a “slot-filling” approach with appropriate semantic objects seems to work just as well in precisely the same manner as Stainton's “pragmatic-representational” account. By the same token, it inherits the weaknesses of the latter as well: questions about what kinds of elements or representations the assignment function really assigns to the values of variables (a variant on the internal-representations of Mentalese or something else?), and runs risks of overgeneralization in the same cases (the “flags” example). It seems to me, therefore, an empirical draw. At such a point, the predilections of the theorist are determinative: those who wish to maintain the Gricean division of labor between semantics and pragmatics will favor my account and presumably feel comfortable positing the requisite variables in the semantic representations, while those analysts who favor other accounts of meaning will opt for Stainton's approach.

For both accounts, there remains a matter of division of labor: for some data, a direct semantic ellipsis analysis applies to a “bare” DP which appears in the unmarked nominative case by virtue of some sentence_{syntactic}-independent mechanism of case determination, but for other data, we need access to a linguistic antecedent (overt, as in sluicing and fragment answers, or implicit, as in the syntactic slot-filling cases of section 5.) If both strategies are in principle available, how does one decide? What leads to the attested judgments, in other words? The experimental results are that speakers of e.g. German reject and do not produce the “wrong” (nonaccusative) case on sluiced wh-phrases or fragment answers when they occur in contexts like the following:

- (71) a. Sie hat jemanden eingeladen, aber ich weiss nicht,
 she has someone.ACC invited but I know not
 {wen | *wer}.
 who.ACC who.NOM
 ‘She invited someone, but I don't know who.’
 b. Q: Wen hat sie eingeladen? A: { Einen | *Ein } Freund.
 who.ACC has she invited a.ACC a.NOM friend

Q: 'Who did she invite?' A: 'A friend.'

But by the same token, there seems to have to be some way for their grammars to generate and accept (72) as well.

- (72) Mein Vater!
 my.NOM father
 'My father!'

One possibility is to resurrect the notion of "sentence grammar" vs. "discourse grammar" (Williams 1977; see Fiengo and May 1994, Clifton and Frazier 2006 and others for recent variants). The "sentence grammar" takes the narrow option of matching the antecedent, leading to the grammatical connectivity effects like case when there is an antecedent. As Culicover and Jackendoff 2005 point out, categorial features of linguistic expressions can sometimes be accessed by anaphoric devices in the absence of explicit linguistic mention of the objects denoted (as discussed in section 5 above).

I think the basic intuition is that when there is a parallel syntactic antecedent available, it must be used (leading to the case and voice effects discussed). When a script is available, its modes must be used. When none is available, then and only then can other mechanisms (for case assignment, etc.) be used, and then and only then is the semantic ellipsis device triggered.

This reasoning patterns after the "semantic economy" story of Kennedy 2007, who proposes a principle of Interpretive Economy: "Maximize the contribution of the conventional meanings of the elements of a sentence to the computation of its truth conditions." If such a principle is extended to the present cases, it would be stated to require that one maximize the conventional aspects of a context, where "conventional" includes linguistic antecedents.

In sum, I think that Stainton is right in his basic claims, and that theories of linguistic structure should take these data as explicanda, but I think there is a way of construing the semantic composition rules that permits his account to be accommodated in a semantic ellipsis approach.

Notes

- * This paper owes an enormous debt to a large number of people over the years since I first began working on it, but special mention must be made of Rob Stainton, whose work was the original impetus for it and whose comments at

Rutgers and in Paris in 2007 led to numerous improvements. Thanks also to Ernie Lepore, François Recanati, Jason Stanley, and the participants in the Leverhulme Foundation workshop organized by Laurence Goldstein at Canterbury in 2008.

1. See also Bloomfield 1914 for a tracing of the notion ‘sentence’ in ancient and 19th c. grammarians and for critical discussion.
2. Stainton expresses a worry that there is no way to identify declarative sentencesyntactic but by their use in assertions, and rightly points out that if this were true, Dummett’s definition would be circular. But this worry is misplaced: there is certainly a way to identify declaratives in terms of their form (the fact that these ways differ across languages is irrelevant). Declaratives, interrogatives, imperatives, and exclamatives are all different in their syntax and other features, and these sentencesyntactic types are often marked with language-particular morphology as well. In English, imperatives use a special verb form, interrogatives have a fronted wh-phrase with subject-auxiliary inversion, a non-fronted wh-phrase, or just subject-auxiliary inversion, exclamatives have a subset of fronted wh-phrases without subject-auxiliary inversion, and declaratives are the rest (no wh-phrase, no auxiliary-initial subject-aux inversion, no special imperative morphology). And examples in other languages are abundant: interrogatives are marked in Japanese with clause-final *-ka* or *-no*, polar interrogatives in Albanian are marked with clause-initial *a*, declaratives in Hidatsa are marked by clause-final *-c*, etc. All such categorizations are based purely on language-internal alternations, just as the difference between the phonemes /t/ and /d/ in English is; the fact that we *name* this difference [+/- voice] is irrelevant, of course, just as the label ‘declarative’ is.
3. Note that we would be equally willing to call the car dealer a liar in this context if, in answer to a question like *How many thousands of kilometers has this car been driven?*, he holds up 10 fingers.
4. This also points up why minimality defined in terms of entailment patterns won’t work: *There are flags* entails *There is a flag*, so the latter should preempt the former, on this notion of minimality.
5. And note that it’s unclear that Stainton would be too happy about their conclusion either, as it seems to require, even for discourse-initial uses, that speakers can make use of peculiarities of linguistic coding for ‘deep’ anaphora as well – Culicover and Jackendoff give examples with nonsemantic gender features in several languages as well. See section 5 below for more discussion.
6. To these we can add examples like the following (the first is odd for some speakers):
 - (i) Q: Did she say he was going to marry Marsha WaxHEIMer or WaxBURGer?
A: HEIMer. (Cf. # HEIM.)
 - (ii) Q: Do you pronounce it Can[kun] or Can[kAn]? A: kun.

Note that these examples are not merely a speaker practicing his pronunciation or the like. The first involves focus on a subpart of a word (see Artstein 2004 for a semantics for these), and the second of an aspect of the linguistic form itself. These examples might be the best candidates for a 'replacive' or 'completive' construction with the properties Stainton seeks. Its use in these contexts would be licensed by the fact that the fragment answer could not have been moved in the regular construction. This seems like the only way to block this construction from overapplying and voiding all sorts of connectivity effects.

7. While I am concentrating on the nominative as found in typical analytic case system languages like those in western Europe, I mean all these remarks about the 'nominative' to apply to the least marked case in a given language. In analytic nominative/accusative languages such as Japanese or Korean, an entirely caseless form is the least marked, and is used for labels. In ergative/absolutive languages like Basque, it is the absolutive that appears. See Merchant to appear for discussion of split languages: I expect that in split languages, the absolutive will be used in the labeling function as well (as it is in Hindi/Urdu, for example, and Georgian).
8. Particularly interesting in this regard is the case of imperatives, which have no good semantic reason for not being embeddable under predicates like 'command' or 'order' (and in some languages – Spanish, Greek, etc.– imperatives can't even be embedded under negation). Most analyses of imperatives take the problem to be one of the morphosyntax; an approach that might link the 'fragments' restriction with that on imperatives might seek an answer in their illocutionary force instead, in particular in its syntactic realization (see for example Speas and Tenny 2003).
9. Stainton 2006:140 also mentions the utterance of 'Moronic jerk!' at a passing motorist as unassimilable to **<That's> moronic jerk*, given the lack of an article. I think that the key to understanding such examples is to realize that they occur in a 'calling' function (as Stainton mentions in his fn. 17 on p. 140), which requires the vocative case in many languages. As usual, Greek is particularly illuminating, since it always requires a definite article with names used as arguments, but disallows an article when the name is used in the vocative (and it shows a morphological difference): to call to Alexandros, one says, *Alexandre!* (vocative), not *o Alexandros* (nominative); to call someone a jerk, one says, *Vre iliθie!* (*vre* = vocative particle indicating impatience) where *iliθie* is in the vocative, not the nominative *iliθios*.
10. My own investigations with German speakers has led me to believe that the empirical situation is somewhat more complicated than this: for many speakers, (51) and (52a) have approximately the same degree of felicity in the given situation (some report low felicity, others higher, but with no intraspeaker variation). Obviously, for such speakers, there is no problem to be addressed. But for the sake of the discussion, I concentrate on speakers that share the judgments Stainton reports.

11. I merely note that in a language like Russian that has instrumental case, such an example appears necessarily in the instrumental, which is also the case assigned by the Russian verb *pol'zovat'sja* ('use'):

(i) *dvumja rukami!*

two.INSTR hands.INSTR

(ii) **dve ruki!*

two.NOM/ACC hand.GEN

This may be a case where the case itself contributes some semantic restriction on the kinds of predicates it can be combined with; such a strategy fails in general for structural cases, however, and so can't be used to account for accusatives, as discussed in section 5.

12. And unlike Culicover and Jackendoff, I emphatically do not intend for the present account to also apply to syntactic ellipsis structures. Doing so I believe overgenerates. If there is no syntax internal to an ellipsis site (and its meaning is the product of a special interpretation rule), there is no explanation for the ill-formedness of pseudogapping in (iii) on a reading where it's synonymous with (ii) (compare the well-formed (i), and the nonelliptical (ii)):

(i) Some met Susan, and others did Jessica.

(ii) Some met a man who knows Susan, and others met a man who knows Jessica.

(iii) **Some met a man who knows Susan, and others did Jessica.*

For Culicover and Jackendoff, there's no particular reason why the meaning of the missing VP in the pseudogapped second clause of (iii) can't be filled in to mean, on their rule for interpreting *f*, *as meet a man who knows*. This absence follows from a structural theory of pseudogapping and VP-ellipsis (see Merchant 2008a for references) on the assumption that Jessica has to move to a VP-external position, and in (iii), such movement would violate an island. See also Lasnik 2007 for further arguments against Culicover and Jackendoff 2005.

13. Stainton gives this example with the subject 'Benigno', but this is clearly a typo for 'Marco', since Benigno was in the jail and it was his friend the Argentinian journalist Marco who was going to visit him, as fans of Almodóvar will recall.

14. Note that while much rarer than their antecedentless VP-ellipsis cousins, antecedentless 'bare' wh-phrases as in sluices do seem occasionally to be found:

(i) The real problem of the presidential succession is not who, but how.

Do such examples call entirely into question the idea that sluicing structures are syntactically elliptical, as Ginzburg claims they do? No. They simply show that even in English, wh-words can sometimes be used (or coerced) as indefinite restrictions on implicit definites, as they are regularly in many languages (Chinese, German, etc.: see Giannakidou and Cheng 2006). This can be seen clearly by the fact that (i) could equally well be expressed as (iia) or (iib):

- (ii) a. The real problem of the presidential succession is not the who, but the how.
 - b. The real problem of the presidential succession is not the person, but the manner.
15. Worse, the only uses of apparently ‘free’ accusative (without obvious governor) in Greek (as in German and Russian) are in time expressions, indicating time at or during (for example, in *Imastan eki tin Kyriaki/oli tin proigumeni evdhomadha* (lit.) ‘We.were there the Sundayacc/all the last weekacc’)

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3. Relativism, knowledge ascriptions, and predicates of personal taste

Relativism, disagreement and predicates of personal taste

Barry C. Smith

Abstract: Disagreements about what is delicious, what is funny, what is morally acceptable can lead to intractable disputes between parties holding opposing views of a given subject. How should we think of such disputes? Do they always amount to genuine disagreements? The answer will depend on how we understand disagreement and how we should think about the meaning and truth of statements in these areas of discourse. I shall consider cases of dispute and disagreement where relativism about truth appears to give the best explanation of the phenomena. I will argue that that we cannot explain the relativist option merely by relativizing truth to an extra parameter, such as a standard of taste, or a sense of humor. Instead, I will focus on cases where the dispute concerns whether either of the two opposing parties is judging in accordance with an existing standard, and I shall suggest that how we should think of these cases bears important affinities with rule-following considerations found in the later Wittgenstein's work.

1. An intelligible form of relativism. Locke on the idea of place

For the purpose of fixing issues let us begin with an obviously intelligible form of relativism, first set out by John Locke in *An Essay Concerning Human Understanding*. Locke's case for relativism concerns judgments about whether or not an object has been moved. Nowadays, we would say that such judgments are made with respect to a spatial frame of reference. Here is what Locke says:

...in our *idea of place*, we consider the relation of distance betwixt anything, and any two or more points, which are considered as keeping the same distance one with another, and so considered as at rest.

Thus, a company of chess-men standing on the same squares of the chess board where we left them, we say they are all in the *same place*, or unmoved, though perhaps the chess-board hath been in the meantime carried out of one room into another; because we compared them only to the parts of the chess-board which keep the same distance with one another. The chess-board, we also say, is in the same place it was, if it remain in the

same part of the cabin, though perhaps the ship which it is in sails all the while. And the ship is said to be in the same place, supposing it kept the same distance with the parts of the neighboring land, though perhaps the earth hath turned round; and so both chess-men, and board, and ship, have everyone changed place in respect of remoter bodies, which have kept the same distance from one another. But yet the distance from certain parts of the board being that which determines the place of the chess-men; and the distance from the fixed parts of the cabin (with which we made the comparison) being that which determined the place of the chess-board; and the fixed parts of the earth that by which we determined the place of the ship; these things may be said properly to be in the same place in those respects; though their distance from some other things which in this matter we did not consider, being varied, they have undoubtedly changed place in that respect; and we ourselves shall think so, when we have occasion to compare them with those other. (*An Essay Concerning Human Understanding*, Bk II, Ch. XIII: 96-97)

The morals to be drawn from Locke's nice example are these:

- (i) All claims about the movement of objects are relative to some spatial frame of reference.
- (ii) Which spatial frame of reference we have in view will make a difference either to the *meaning* or *truth* of the claims we make about an object's location.

I say "meaning *or* truth" because we can see the variability as entering the picture in different ways. For instance, we can treat the content of a claim about movement as varying from one spatial frame of reference to another, or we can keep the content of the claim the same from one context to another and see the truth or falsity varying with respect to the relevant the frame of reference. Thus the claim we make about an object being in the same location either *means* that it is in the same place relative to a particular frame of reference; or simply means the object is in the same location and is evaluated for *truth* or *falsity* relative to a particular frame of reference. As we shall see, the difference between meaning and truth matters when considering other cases.

The spatial frame of reference relevant to the meaning or truth of a statement in a given discourse is either *implicit* or *explicit*. Usually it is implicit, and context makes it clear which frame of reference is in play, without interlocutors having to mention it. Note, however, that disagree-

ments about whether an object has remained in the same place or has moved make sense *only if* both parties consider the contested claim with respect to the *same* spatial frame of reference.

Initially, two parties who implicitly relativize their claims to different frames of reference appear to be disagreeing about whether or not a chess piece has moved. But this way of making sense of the dispute will not preserve *genuine* disagreement. Once we factor in the different settings of the additional parameter affecting their claims, we can see that they are not really disagreeing with one another. Both interlocutors are right, but about (or, with respect to) different things.

2. Relativity to standards of taste, senses of humor, moral codes, etc.

By contrast, disagreements about what is delicious, what is funny, what is morally acceptable, can lead to intractable disputes between parties holding opposing views in a given case. So how, then, should we think of such disputes? Do they amount to genuine disagreements in every case? That depends, of course, on how we understand the notion of disagreement, and since it is the purpose of this paper arrive at an understanding of disagreement in the case of claims involving taste predicates, no account of disagreement will be attempted at this stage. First, we need to review the possibilities.

One option –the one we have just been considering– is that the parties to certain disputes are not really disagreeing with one another once we factor in additional parameters for their claims to concern, or relativize the truth of what each claims to the different perspectives from which their respective claims are made. In such cases, both parties can be right, but right about slightly different subject matters. So why should disputes about morals, matters of taste, or what is funny, not similarly disappear when it is pointed out that each speaker is assessing those claims relative to his or her own perspective, own sense of humor, standard of taste or moral sensibility?

A second, more controversial, option is where interlocutors *are* disagreeing, where neither has made a mistake, and where they are both right. If there are any such cases of so-called “faultless disagreements” we may have made out a plausible case for relativism about judgments of taste, humor, or morals.¹ But are there any such cases? In what follows, I will cast doubt on whether there are. However, even if there are no such cases,

is there still a plausible version of relativism about truth in the offing here, or do such cases simply descend into subjective claims made by each speaker talking past the other?

3. Diagnosing the disputes

As John MacFarlane has pointed out, the truth of claims about what is funny, or delicious, or good, seem to depend not only on how things are with *objects* but how things are with *subjects*.² They depend, that is, on the subjectivity of the person making the judgment. Simon Blackburn, borrowing a phrase from Ronald de Sousa, has spoken about judgments in the ethical sphere possibly involving a variety of subjectivities³. And if this is right for judgments in discourse about taste, morals, or humor, and if our subjective natures or responses enter into the constitution of what we are judging to be the case in these areas—i.e., our subjectivities enter into its being the case that something is delicious, good or funny—then variation in subjectivities across individuals or groups may lead to a relativism about the truth of claims made with respect to these areas of discourse.

But do such varieties in our subjectivities lead straightway to relativism? Our subjective natures could enter into the making of judgments about what is delicious, or funny, or right in such a way that they merely give rise to relativity in the *content* of the claims made by individuals or populations with different subjective responses. In this way, differences in their subjectivities may account for different understandings of the terms or concepts they use in making their respective judgments: the subjective contribution would enter into the *content* of the claims they make rather than contributing to what makes those claims true.

However, if not just the nature of the judgments, but also the *truths* we aim at are partly constituted by our responses, then we may think that variation in those responses do lead to there being different *facts* about what is funny or delicious (or red for that matter). Does this lead to relativism about the truth of such judgments?

Not obviously. At this point, we need to take care to distinguish among several possible positions. The situation just countenanced might amount to a form of pluralism rather than relativism. For there might be a range of different facts about what is funny or delicious, or red, where such facts are available only to those with the requisite sensibilities. Pluralism along these lines would be a form of realism not relativism.

Yet again, another possibility is that if our subjective responses enter into the conditions for saying something is funny, this might lead us to wonder whether there was any real fact of the matter in this area at all. Thus, more is needed if we are to make out a plausible case for relativism just on the basis of different facts of the matter involving a contribution from our natures.

Are there any cases that call for a relativist treatment? I think there could be but I also think that these cases may be restricted to cases involving predicate of personal taste; in particular cases involving taste predicates proper.⁴ It is unlikely that debates about matters as diverse as what is morally right, what is beautiful, what is delicious or disgusting, what is fun or funny, will have the same character. Perhaps we need very different treatments for each of these areas of discourse, and no single relativist treatment of truth will apply equally to all. For this reason, I shall concentrate, in what follows, on taste predicates, which may from a special case and may call uniquely for a relativist treatment. To make things more concrete I shall look in detail at a particular example.

4. Intractable disputes about “delicious”

Consider two wine critics, A and B, disputing the merits of a bottle they are sharing at dinner. A says:

(1) *This 2004 Denis Mortet Gevrey Chambertin is a delicious effort.*

And B says:

(2) *I disagree. It shows all the signs of a poor vintage in Burgundy*

Each thinks he is right and the other is wrong.⁵ Neither will concede, and even if they cease arguing, each continues to believe he has made a better judgment than the other. How should we diagnose their dispute? Could they be faultlessly disagreeing?

We could appeal in our diagnosis to any of the following, familiar options.⁶

Expressivism – Neither A nor B is making an assertion. Each is expressing an attitude or inclination towards the wine. So there is no genuine dispute. Of course, there is still a clash of attitudes or inclinations. But each

critic's view is answerable to nothing more than his own opinion or inclination. The problems with such a view should be equally familiar. Expressivist views that the statements are not truth functional face problems with logical embedding. A could say to a friend, "If you think that is delicious, you'll think this is fabulous" Or B could opine "If this is delicious, then Mortet's 2004 Marsanny must be delicious too since it is made in the same style." and then, going in for a little reasoning, continue: "But you agree that his 2004 Marsanny is not delicious, so how can you find this wine delicious?" Without treating the embedded statements as truth-evaluable, or at least assertions, we have no account of the validity of B's reasoning, or the workings of the logical connectives. A new logical notion of validity for non-truth evaluable statements would need to be furnished and it is far from clear how this would work in full generality.⁷ Alternatives include using a minimal truth predicate to render such statements truth-apt and thereby amenable to logic.⁸ However, this strategy utilizes a distinction between genuine factual claims and other, more minimal ones, and since genuine disagreement would seem to need there to be genuine facts about which to disagree, this option appears to leave (informed) parties merely trading insubstantial counter claims. Under such circumstances, it is hard to see why participants would persist in disputing one another's claims: the dispute would hardly be intractable.

Realism—A and B do make truth-apt assertions, but only one of them is right, and there may be no way of telling who is right. One of them has made a mistake and neither we, nor they, may ever be in a position to know which of them it is. This is the least palatable option, so to speak, since it supposes that the truth of judgments of taste is settled by reference to matters of fact which may forever elude us. However, matters of taste, being so closely bound up with sensory experiences, are the least plausible candidates for verification-transcendent claims. Judgments of taste engage with a subject matter that is, in so far as it is objective, epistemically accessible. (More plausible forms of realism may be possible.)

Contextualism (varieties of) —A and B make subtly different claims, or claims whose truth depends on features of the context of utterance, and must be evaluated by reference to different perspectives, or standards of taste. The disputed claims are truth-evaluable but they concern different subject matters. So, while contextualism may help diagnose the taking of different stands by the participants, it cannot save the possibility of genuine or intractable disagreement.

Relativism – A and B make truth apt assertions, one asserts and the other denies the same proposition. Neither has made a mistake and they are both right. Truth is relative. The key question is whether this option is really intelligible.

Notice that pluralism appears to be ruled out in this case in virtue of each party disputing the other's claims. Were one critic to call the wine earthy and short on fruit, and the other to say, it is sharp and acidic, showing signs of dilution, characteristic of the 2004 vintage, the pluralist account could say they were both right. This is real moral of Hume's story from *Don Quixote* in his celebrated essay, "On the Standard of Taste" (Hume 1758), where the two critics dispute whether the wine they drink from the hogshead tastes of iron or of leather. When they find the key with the leather thong at the bottom of the barrel we, and they, should conclude that they were both right. Pluralism follows, not skepticism or relativism. Their positive claims are not contradictory. Both are right but each critic is sensitive to only one of the two flavors the key and leather thong imparts to the wine. However, in the case of A and B above since they disagree about the deliciousness of the same wine there is no room for such happy coexistence.

Having reviewed the options what should we plump for? We must, it seems, opt for one of the first three positions, or else we find ourselves on course for *Relativism*. The problem is that if we wish to keep alive the possibility of genuine disagreement, then each of (a) to (c) will be unacceptable. And it is worth noting that *Relativism* has the prima facie advantage of being the only of these options that accommodates the *decidability of taste judgments* while treating them as *genuinely disputable matters of fact*. However, the idea of the same claim –the same content– being assessed as true or false, depending on one's standards of taste has yet to be made intelligible, and there are plenty who will want to resist what seems to be relativism's contradictory nature: namely that the two critics are talking about one and the same state of affairs, forming opposing views of it, but both being right. Surely, if one of them is right, the other must be wrong; there is no way for both parties to the dispute to be right. However, resisting *Relativism* for the case at hand would mean choosing one of the other options. So which should it be?

5. Refining options (a) to (c)

We said that unfettered *Realism* in the area of taste judgments is implausible. We judge such matters on the basis of experience, and our concepts of taste are experiential concepts.⁹ On the other hand, *Expressivism* fails to capture what is at stake in matters of taste. In claiming that a wine is delicious, one is aspiring to make a claim with some objectivity: a claim about the wine itself; not just a claim about one's attitude to it. One is not merely, as John McDowell has put it, "sounding-off." Or else, one would be able to retreat to avowing, "I don't know what everyone else thinks, but I think this is delicious." People do say this, but they are not participants in the kinds of disputes we are interested in here. The trouble is that in taking the Expressivist's escape route we lose sight of the intractability of such disputes.

6. A better form of expressivism?

It maybe that Expressivism can be fixed up. Perhaps what happens in such cases is that we judge on the basis of our experience and according to our inclinations, and then, in urging our own view on others, we expect them to share our inclinations. Thus A could be taking himself to be saying both (3) and (4):

(3) *According to my standards/inclinations, W is delicious.*

(4) *According to our standards/inclinations, W is delicious.*

A assumes, there are standards and that everyone (in some respected set of tasters, say) shares. Notice that (3) and (4) are truth-evaluable. So an implication of what A asserts is:

(5) *There is a standard, it is shared by us, and according to it, W is delicious.*

However, since there is no agreement, and assuming that neither side has overlooked any features of the case, clearly what A says is false, and there is no standard of taste shared by both parties. In judging according to his own standard, A is recommending the adoption of that standard by B. Is this the aimed for objectivity in judgments of taste: see things my way? There would be nothing wrong with what A asserts on the basis of his ex-

perience, but he would be guilty of a factual mistake; namely, he is wrong to suppose that B and others do share his standards of taste. Beyond this mistaken assumption, there is the Expressivist's point about him urging others to accept his standards. This could lead to a contest about who gets to set the standard. But we need not look that far since the diagnosis is already faulty. If the dispute is about standards, it is a dispute about which standard we *should* accept, it is not one about which standards *have been* accepted. Factual errors do not lead to *intractable* disputes. And if real disagreement remains a live option then relativism beckons.

7. Contextualist treatments

In the face of such disputes, we could turn to one of the many kinds of contextualist construals of the discourse. But first we need to distinguish between treatments. Their differences concern whether claims like those made in (1) and (2), repeated here:

- (1) This 2004 Denis Mortet Gevrey Chambertin is a delicious effort.
- (2) I disagree. It shows all the signs of a poor vintage in Burgundy

Claims like (1) can be construed as:

- (i) containing a hidden variable like "for x" where the contextually determined value of such a variable is given by the value of an additional parameter such as a standard of taste, or sense of humor¹⁰; or as containing a hidden indexical such as "for me";
- (ii) being "freely enriched" in context to bring in a variable not in the underlying logical form of the sentence uttered, and whose value is given by the setting of the additional parameter.¹¹
- (iii) evaluated for truth by reference to certain non-standard parameters – the position known as non-indexical contextualism¹²

The first of these options, in the case of first-person utterances, would treat (6) and (7) as equivalent:

- (6) *This wine tastes/is delicious.*
- (7) *This wine tastes/is delicious to me.*

Where I am the person uttering (6) I can treat (7) as equivalent to, or, at any rate, entirely based upon the judgment:

(7') *I like the taste of this wine.*

However, this cannot be right analysis of (6) because (6) and (7) can differ in truth conditions. Relative to my current context of evaluation, where I look back at judgments made earlier in my wine drinking career, I can see that I was warranted then in saying (7) or (7') but was wrong, as it happened, at that time, about (6). As children we once thought Fish Fingers were delicious but now we say they were not really delicious. However much we liked them at the time, we were just mistaken.¹³ The converse is also possible, where someone who has lost his sense of taste due to radical surgery may say, "Why don't you drink the rest of my 1993 La Tâche? It's really delicious but it's no longer delicious to me." Thus claims about what *we* find delicious *at a time*, and claims about what *is* delicious *at that time* do not always coincide. The upshot is that if A is really asserting (7) when he utters (6), and B in denying (6) is actually asserting the negation of (7) when taking himself to be the reference of the hidden variable or indexical, then there is no way to preserve disagreement: A and B would not be asserting and denying something with the same propositional content. Each would be saying sincerely what was delicious for them and neither would have the right to criticize the other. Notice that this problem will equally affect the second contextualist option, where we suppose that all utterances of (6) provide a content fixed not only by the syntax and semantics of the sentence uttered but also by pragmatic processes of free enrichment deployed by speaker and hearer to augment the linguistically encoded content with an unarticulated constituent like "to me" or "to x" to fill out what is said.

Non-indexical contextualism provides a much more interesting option. Here the truth of the proposition expressed by (1), or (6) would be assessed for truth relative to each speaker's perspective, and the speakers would be asserting or denying the same content. However, the non-indexical contextualist still has more explaining to do. Simply to say that a complete proposition with no hidden indexicals or variables is true from one perspective but not from another, does not automatically show us why there should be a conflict between speakers occupying these different perspectives. Compare the situation to the case where two speakers hold different views about the truth of the sentence "It's raining" due to their different situations they are

in. The same sentence may express a single proposition without an underlying slot for a variable or hidden indexical. It can be evaluated for truth relative to a further place parameter involving the (different) locations of speakers.¹⁴ If you say “It is raining” when in London, and I say “It is not raining” when in Paris, you might be right and so might I. But no one would think there is any real conflict between the claims each of us makes.¹⁵ Therefore, we cannot straightforwardly use this analysis to diagnose the dispute between A and B as intractable, or as involving genuine disagreement. So why should the non-indexical contextualist think there is a genuine dispute in the case of A and B’s dispute about the wines if the claims made by A and by B are to be evaluated for truth, differently, with respect to the setting of a further standard of taste parameter? Unless A and B share the same standard of taste and evaluate A’s claim about the wine with respect to that same standard surely there can be no factual disagreement between them. In this respect, different standards of taste would be like different frames of reference in the case of Locke’s question of whether the chess piece moved. Genuine disagreement requires us to evaluate the contested claim for truth or falsity with respect to the *same* frame of reference, or standard. Thus it seems that we have still to find a satisfactory diagnosis of the dispute between A and B, which respects their disagreement. More has to be done to make out an interesting position with a claim to relativism than merely adverting to claims about what is tasty or delicious being said or evaluated relative to one or another speaker’s perspective or standard of taste.

8. Other options?

Are there other options we have overlooked? I think there are. Suppose we treat ‘delicious’ as a gradable adjective: something whose application is to be judged relative to a comparative class.¹⁶ The obvious examples are with cases like: *big* for a Scot, or, *good* for a gangster. Now we can treat “delicious” in a similar way: e.g., *delicious* for a generic Bourgogne, or *delicious* for a 2004 Premier Cru. So suppose A and B agree on the *extension of the class* with respect to which they are judging; i.e., the kind of wine by reference to which they should be comparing Mortet’s 2004 Gevrey Chambertin: e.g., as a Cote de Nuits village wine from 2004. The comparison class serves an analogous role to the frame of reference in the case of judgments of movement. Disagreement would be possible *only if* the same

comparison class was in play. The relevant comparison class with respect to which their judgments should be made would be left implicit by their talk, but the context of their discussion would settle which was the relevant comparison class, just as in the spatial case the relevant frame of reference is left implicit but is often fixed by context.

In the dispute we are considering, how might both parties appeal to the same comparison class, disagree over a given instance, and yet both be entitled to their verdicts? One option is that while both parties agree on the extension of the comparison class, they *conceive* the class differently. This would leave room for disagreement because they could use different standards for sorting items in the class, or apply the same standard rather differently within the same class.

How would this work? Let us suppose that A and B take as the comparative class for the wine they are assessing 2004 Cote de Nuits village wines. Nevertheless, A could think this was a delicious for 2004 red village wines from the Cote de Nuits because from all the samples of the class he has tasted so far, this is the most pleasurable. B may not have sampled many, or any, wines from this range, but could assess the current sample negatively by reference to how he thinks wines from that class *should* taste. They may even have different views about the overall strengths of the comparison class. A could think what is in his glass is a pretty good sample from a pretty poor year, while B may think that the 2004 vintage was *classique* and *typique* and that the wine he samples should be expressing more of the *terroir* and vintage characteristics than it actually does. The key difference is that while A may be judging statistically –better than average– B could be judging normatively –in terms of how things of that class should be.¹⁷ Does this constitute a crucial difference between the content of what A is asserting and B is denying? It is not clear that it does. And yet both opposing judgments could be said to be correct. However, we have still not made out a case for relativism since each party could acknowledge that the other's verdict was correct with respect to their way of measuring the sample against items in the comparison class. No incompatibility would remain and the disagreement would dissolve.

Another source of disagreement may be due to the different experiences each person has of 2004 red Cote de Nuits village wines. A has sampled few wines and found them to be of poor quality being dilute and acidic. He tastes the Denis Mortet Gevrey Chambertin and believes that this is much finer than anything else he has tasted within the comparison class. Believing that this is as good as it gets and that nothing else he tastes will better it,

he judges this to be delicious for a wine of this category; i.e., that this wine is better than wines typical of this class. B on the other hand may have sampled few wines and yet having tasted at least two wines finer than the one he now samples, he judges this wine to be less appealing or delicious than the typical wines in this class. Here, there may be a fact of the matter that is overlooked by both A and B without it being the case that the facts about what it is right to say will always outstrip their ability to judge. Having limited experience of the comparison class but forming opinions about how the rest of the class will turn out on that basis makes sense of their disagreement about a particular example while leaving room for a resolution in favor of one or the other with respect to a full sampling of wines from the relevant comparison class.

For relativism to enter the picture in the face of disagreement, there must be a case where, A and B understand the semantics of the gradable adjective in the same way –i.e., both believing that for “delicious” to apply to a wine from an agreed comparison class C should be a matter of whether this wine ranks highly with respect to items in C– but disagree on the application of the adjective in the given case. That is, there must be room to disagree about whether the example is, or should be, so highly ranked. By not understanding each other’s way of applying a standard within the comparative class there is scope for disagreement. However, both parties could be warranted given their own way of assessing or applying standards within that class.¹⁸ The question of whether this is a form of relativism shifts to whether there is an irresolvable disagreement about how to apply a standard. If each recognizes the accuracy of the other’s way of judging but simply does not adopt that way of judging himself, there is no case for relativism. If however they continue to disagree about this sample when they both know how the other is applying the standard there may be a case for relativism about what it is to apply a standard in the right way. Though if disagreement did persist, we may wonder whether they are adopting subtly different standards. Why shouldn’t the disputants assume that their interlocutor is operating with different standards? Let us leave such questions open at this stage. I shall return to them once we have considered more cases.

As we have just seen, the way in which people disagree may be less to do with having the same or a different propositional content to assess and more to do with divergence about how they appeal to a comparative class, or make judgments with respect to that class. Appeals to comparative classes in the use of gradable adjectives may increase the chances of disput-

ing parties coming to have compatible judgments because the means of ranking within the class may remain the only room for variation once other differences are expressed or resolved. And it may be that when the appeals each side makes to the comparison class are spelled out and followed through the parties may come to converge in their verdicts about the same wines. The remaining question is whether the sorts of appeals to standards each side makes when comparing exemplars within a class can lead to incompatible judgments when all the facts are in. If so, the prospects for relativism look promising.

9. Is relativism about taste intelligible?

The relativist option was put to one side earlier because we had difficulties making sense of the idea of two people talking about the same thing, disagreeing, and both saying something true. If both parties are right when they say what is delicious, what is funny, or what is good, how can they really be genuinely disagreeing? If one is right, surely the other must be wrong. How can it be intelligible to say they are both right?

To get a fix on the details and the possibilities here, let us look at some actual cases:

- (i) one concerning a pair of wine critics,
- (ii) the other concerning different populations of tasters.

This idea that nothing is factually overlooked but that irreconcilable differences remain over what it is correct to say can quickly descend into subjectivism about what is at stake here. Once all the facts are in, isn't each side's view of things answerable to nothing more than their own opinion about how different things compare? If so, where is the objectivity they aim for in their respective judgments? Can we do better?

Remember, that in claiming that a wine is delicious or excellent, one is aspiring to make a claim with some degree of objectivity. Otherwise, one might as well retreat to, "I don't know what everyone else thinks, but I think this is delicious". And this is certainly not the situation when wine critics compare bottles from particular vintages or regions. The attempt to make an objective claim requires one to fix a standard that provides conditions a wine has to meet to be assessed accurately as delicious. But what establishes the relevant standard? If disputes of the sort we are considering

merely amount to assertions that one be entitled to fix one's own standard, or say which standard should be accepted, this is no longer a troubling dispute. Instead, one holds one's claim to be open to challenge or confirmation by others—one takes oneself to be subjectively taking in what is objectively the case for creatures like us— and one expects (some) others to be capable of recognizing how things are. In a sense, one is laying claim to (certain) others' endorsement of the judgment made.¹⁹ Yet, the mere fact of disagreement ought to make one question the wider applicability of one's claim and the right to invoke others in making such a judgment. Why should one cling to the idea that everyone is required to come to the same verdict in the face of so much evidence to the contrary? It seems to depend on who is disagreeing with us and how strong their grounds for disagreement are thought to be. When challenged by someone one recognizes as a good judge it may give one pause and require one to think again. But others will be recognized as poor judges and not well placed to make an accurate assessment. Should we all be ready to discount the testimony of our senses and defer when confronted with an expert's opinion? It is less easy to see that we would be willing to do so in the case of taste. Besides, one may begin to exercise enough judgment to count as an expert oneself. So what are we to say when seasoned critics disagree with one another? Who is to serve as arbiter in that case? Let us consider a real case: the dispute between wine critics Robert Parker and Jancis Robinson about the 2003 Chateau Pavie from St Emilion.

Robert Parker and Jancis Robinson regularly assess young Bordeaux wines and rank them for quality. Their judgments usually converge, though famously they had a fierce disagreement over the 2003 Chateau Pavie. Here it may be clear that there are standards each critic is adhering to, but it may not be so clear which standard is operative in their respective judgments, or even which comparison class is involved, or even how the comparison classes invoked are being appealed to. Consider the 2003 Chateau Pavie. The respective judgments by Parker and Robinson about this right bank Bordeaux wine were as follows:

RP: (8) *2003 Ch.Pavie is an excellent Bordeaux.*

JR: (9) *2003 Ch.Pavie is not an excellent Bordeaux.*

We could analyze (8) as:

(8') *It is excellent for a wine and it is a Bordeaux wine*

Or we could analyze it as:

(8'') *It is excellent for a Bordeaux wine*

Whereas, we could analyze (9) as:

(9') *It is not an excellent wine in the category of Bordeaux wines*

Or

(9'') *It is not an excellent wine and it is a Bordeaux wine*

Readings (8') and (9') are, I think, closest to the understanding each of them had of their own judgments. We could analyze further:

(10) *This is excellent in the class of wines made in Bordeaux in 2003.*

Or:

(10') *This is excellent given what a wine from Bordeaux ought to taste like*

It may be that Ch. Pavie could be considered as in (10) good in purely a statistical rating of the wines from Bordeaux that year but not good normatively as in (10'). Robinson seems to have judged the wine to have failed the normative condition (10'), saying it was not like a Bordeaux but more like a zinfandel. (A very bad thing for a Bordeaux wine.)

We could analyze the first conjunct of (8') as depending on the claim:

(11) *Wines should be judged by some absolute standard.*

Does this mean some Platonic standard? No, there may be no such thing. But relative to some larger class such as red wines, or cabernet based wines, or Bordeaux blends, this may be judged an excellent wine, though atypical for Bordeaux. This would make the standard other than that of (10) or (10'). Is it the view of Robert Parker that all wines, including Bordeaux wines, ought to aspire to the same standard operating in the largest possible class? Not obviously. Parker knows and admires many Bordeaux wines not of the style of other Cabernets. But when a sample wine stands out as atypical he may switch to another standard for assessment: one for which he has a penchant, namely, his famous the across the board 100 point scale, which purports to give him the means to compare any wine with any other. Robinson, on the other hand, may still look for wines within category and

when they stand out will not switch; or if she does, will judge by a wider standard on which such powerful, rich and alcoholic wines are still not favored.²⁰

Different frames of reference for sorting and for evaluating wines seem to underlie the judgments of our two critics in (8) and (9). Parker deems some Bordeaux wines to come high within the class of all wines, or red wines, or wines that are exceptional. But the larger category is indexed to his own personal standard of taste. By contrast, the wines in the classes of Bordeaux, California, Burgundy, etc. are very clearly separated for Robinson. So whereas Parker can judge a wine as exceptional –relative to his standard of taste– and as a Bordeaux, Robinson can only regard excellence in a wine as a matter of coming top of *its* class; i.e., highly ranked as a Bordeaux. Thereafter, comparatives will be due to personal preference but these may not be fixed. They may vary from occasion to occasion depending on features of context or other factors.

Do our critics disagree on personal taste? Do they disagree at all? Are they making different claims? It's complicated to say.

- (i) They disagree about whether ChPavie2003 is an excellent wine.
- (ii) It is an excellent wine for RP because it is excellent in the larger category of red cabernet sauvignon/merlot blends.
- (iii) It is not excellent for JR because it ought to be excellent within its category, of being a Bordeaux wine.
- (iv) JR may rate it reasonably well were it in a comparative rating with Zinfandels
- (v) They disagree not over personal taste but over which standard to apply in judging excellence. JR has no such category as all cabernet sauvignon reds, but if she did personal preference would probably militate against judging this excellent.
- (vi) If RP were right about the applicable standard for comparison would Ch. Pavie be excellent? Not necessarily. Since the issue of his personal preference would seem to be operating here. Though he may be right.
- (vii) If JR were right about the standard then she may well be right to deny that this is an excellent wine since judging within category is hard without norms.
- (viii) The way JR organizes her categories and their standards lead her to draw conclusions quite differently from RP.

- (ix) There is no standpoint from which to judge who is right. Residual relativism enters here.
- (x) Though it is not just a matter of personal taste.
- (xi) We switch categories for convenience, to make appropriate judgments, because one seems more appropriate at one time than another.
- (xii) Judging the best wine for an occasion, for the food, for the temperature, for the mood, for another, etc. This may mean looking for a simpler wine. Not as much complexity, finesse or elegance, but one which is a better bet for a summer's day, or for the charcuterie, or for lunchtime. The *best* wine is therefore relative in this sense too. It needs a frame of reference.
- (xiii) By his 100 point scale RP is aspiring to have first equals across all wines. JR may insist on wines coming top of their categories, and so come to similar verdicts for different reasons. But she may insist the tops of each category cannot be compared, not even to be roughly equated as considerable drinking experiences. It depends on further judgments, as to what one is looking for, why one is choosing a bottle, and for what occasion.

People may say "This wine is delicious" for different reasons. And we may be tempted to say they mean something different by their claims. But why should that be the right response either in that case, or where there is *prima facie* disagreement? And remember if there cannot be disagreement, there cannot be agreement either.²¹ Agreement must be accounted for too, and if we too quickly conclude that people who have *prima facie* disagreements must mean different things by their claims, then we may have to conclude that even in cases where they do not disagree, they do not express agreement either.

People may find themselves agreeing for different reasons. Both say the wine is balanced. Both say the leaves are green, (in Travis-like cases). They can both agree the sentence uttered is true but for different reasons. Should this lead us to conclude they mean something different by what they say?

Consider a case where RP and JR both agree.

(12) *This is an excellent Bordeaux.*

But RP agrees because it is good in a class of wines and is a Bordeaux, and JR agrees because it is good in its class. Here we have agreement for different reasons and by reference to different criteria so it cannot straightforwardly

wardly be concluded that the same judgment is being made by JR and RP. Do they agree? Surely, there is *a sense* in which they do and another sense in which they don't. Whatever lessons can be learned and whatever there is to capture here may be applied in the analogous case of disagreement. More worrying seems to be the case where two people are both right and yet accept different verdicts. Yet, in the agreement case, people may be unable to accept the same verdict despite accepting or assenting to the same statement on the same occasion. The case of agreement has an easy resolution and may also give some clues to disagreement but can it cover all the cases?

We can see (12) as being analyzed along the lines of:

- (12a) *This is excellent for a wine and it is a Bordeaux*
- (12b) *This is excellent within the class of Bordeaux wines*
- (12c) *This is excellent for a Bordeaux wine,*
- (12d) *This is excellent given how Bordeaux wines ought to be.*

If one critic is reading (12) according to (12a) and the other according to (12b) or (12c) then they may not be adhering to the same judgment at all, unless there is sufficiently great overlap in what makes any of these statements true for us to say that they make the less demanding claim (12) true. After all, the statement in (12) does not make explicit what is being asserting and it may tolerate *all* these readings and hence all of these ways of making it true. And so long as there are at least three or four ways of making (12) true, any of them may count, and so each of the speakers will be saying something true but thinking of that truth in a different way, in terms of what, for each of them, makes that claim true. There will be more than one way for (12) to be made true and speakers will often selectively attend to, or focus on, just one way of making that sentence true and imagine or hear the sentence, when uttered by others, as saying what they take it to mean: i.e., (12a) or (12d). That means that we could accept RP and JR as agreeing to the truth of (12) even though they have different reasons for thinking or accepting it as true.

What about disagreement? Can we make similar moves? We could try saying that when RP accepts (8) and JR denies it, they are disagreeing about different ways in which (8) could be true and so there is room for them to be both right and wrong. RP is right if he is judging it along the lines analogous to (12a). And whether he is right or wrong after that may depend on whether he is right or wrong in exercising his personal prefe-

rences. This may be hard to determine. But JR may be denying (8) in a way analogous to (12c) or (12d) or denying (12b) because she denies (12c) or (12d). This would make her say that (8) was false because it wasn't true in the way she thought (8) ought to be evaluated, indeed, according to what *she* took (8) to be saying. But this is not the only way of (8) being true and so she cannot rule it out on other grounds. She could say something explicitly like (12d) and then she may be right, depending on how we evaluate normative statements like this for truth. But she is disputing (8) and there it simply doesn't follow that (8) is false, if it is not true on the grounds she *thinks* would make it true. It could still be true for other reasons, but whether those other reasons are valid depends on a view about whether such standards or categories are valid and this is a larger dispute.

JR and RP disagree about the relevant comparative class: not Bordeaux but all red cabernet based wines. Or they disagree about how to judge within the comparative class: best example of a wine –any wine– in a ranking of better or worse wines restricted to that class; or some normative standard by reference to which samples in that class are compared. Alternatively, they may even disagree about there being a single invariant standard within any comparative class, accepting instead that there will be different verdicts for which is the best in a class on different occasions, or in relations to different people, foods, etc. An inspired judgment will often alight on features others recognize as entirely apt. We may judge in favor of lighter reds, more minerally Bordeaux on one occasion and not another. A Rhone for some occasions may be best, and a Loire for another. The choice would be best because of, or relative to some further factor X.

In the end, do any of these analyses offer a form of relativism? Perhaps. When we switch standards or norms, or weigh them differently, we may get different verdicts on the truth-value of the same statement – a statement made with the help of a gradable adjective. The same statement, making the same claim, would be true relative to one criterion of assessment but false relative to another. The disagreements are about the same claim and the grounds for disagreement are not contained in the original statement, they belong to issues in the background, but unlike frames of reference in spatial judgments, there is no shift in comparison class. Does this mean that parties making appeal to different means of assessing are talking about different things, as in the spatial case? No. They are just seeing the same thing differently: like seeing the same thing from different perspectives. Mark Richard puts the point well when he says:

Suppose that I assertively utter ‘Mary is rich’, when it is not antecedently settled for conversational purposes whether Mary is in the term’s extension. My statement, that Mary is rich, is as much an invitation to look at things in a certain way, as it is a representation of how things are. In saying that Mary is rich, I am inviting you to think of being rich in such a way that Mary counts as rich. If you accept my invitation – that is, if you don’t demur, and carry on the conversation – that sets the standards for wealth, for the purposes of the conversation, so as to make what I say true. (Richard 2004: 226)

10. Separating the descriptive and evaluative?

A further option is analyzing the notion of seeing the same facts differently to try separating out the descriptive and evaluative components. After all, Robert Parker and Jancis Robinson agree, near enough, in their descriptions of the qualities and characteristics of the taste of 2003 Ch Pavie, but while Parker rates those qualities highly (in any wine), Robinson does not.

We could adopt a Humean view of the different components here by pointing to Hume’s distinction between what he called “sensory impressions” had in response to a perceptible substance and “impressions of reflection” that immediately accompany them, and express our approbation or aversion. The latter evaluative component follows so swiftly as to be nearly confused with the former. However if we separate impressions of sensation and reflection we could say that tastes are objectively characterizable by expert tasters but their evaluative talk is nonfactual. So while there are facts about what the 2003 Ch. Pavie tastes like there are no fact of the matter about its quality. This could be an expressivist line on evaluative talk such as “good” or “excellent”. Alternatively, realism could re-enter, with the evaluative part being settled by something beyond our ken. Either way, the threat of relativism recedes.

However, we must now consider another real case of tasting judgments where it is hard to separate out the evaluative and non-evaluative components. The case is documented by Chollet and Valentin (2000) and concerns respective sweetness/saltiness judgments by a group of Australian and Japanese subjects.

With respect to the same food samples they were asked to judge whether the sample tasted salty, sweet, or just right. The results were a crossing over of verdicts on sweet and salty by Japanese and Australians. What Australians found salty the Japanese found just right, and what the Japanese found

sweet the Australians thought just right. Take O and J as subjects. We get the following pattern of verdicts.

- (O) *Sample 1 is salty.*
- (J) *Sample 1 is just right.*
- (J) *Sample 2 is too sweet.*
- (O) *Sample 2 is just right.*

The important thing to note for our purposes is that one can't parse the adjective "salty" into descriptive and evaluative components. Whether something counts as "salty" can't be a matter of the absolute level of salt compounds found in the substance. "Salty" is a taste predicate, not a chemical descriptor, and taste properties does not correlate in any precise way with chemical compounds. Can tastes still be objective properties involving subjects and their responses? I think they can. And yet, for the same substance we have the utterance by O:

- (13) *Sample 1 is salty*

Is the utterance true or false? O will judge it true, while J will judge it false. Who is right? Is Sample 1 salty? According to O, yes; according to J, no. Is there just no fact of the matter? That's too quick.

To save the claim about the objectivity of tastes we need a Relativist treatment of the application of the predicate. Why? Well, Pluralism won't do: something can't be both salty and not salty. Rather, the facts are assessor relative. It is simply an Absolutist prejudice to suppose that the sample must be either salty or not salty absolutely.

The relativist option was put in doubt because we could not see how two people could be talking about the same thing, come up with a different view of it, and both be right. If both parties are right when they say whether something is salty, how can they be genuinely disagreeing? Surely what one person says rules out what the other one says. So if one person is right, the other has to be wrong. But this is precisely what relativism seems to deny in claiming that both parties can be right. So if relativism *is* the claim that both parties to a dispute are right there appears to be no way to save the incompatibility of their claims: i.e., if one is right, the other is wrong. And if there is no incompatibility there is no dispute of the sort that invites a relativist solution.²² Relativism seems to require both genuine disagreement between parties to a dispute and a way of regarding both parties as saying

something true. But doesn't one speaker's being right entail that the other is wrong, if they are disputing the very same claim? The problem of formulation here should make us suspicious that relativism should be expressed as the view that parties to an intractable dispute can both be right. In fact, to say both are right is utterly misleading, and assumes a perspective from which we can neutrally observe both points of view. But this is just what the relativist denies.

11. A better formulation of relativism?

Progress can be made and we can get some purchase on the idea of genuine disagreement of the sort the relativist should espouse if we follow John MacFarlane's suggestion of making the notion of incompatibility of claims itself perspectival. MacFarlane proposed that we must evaluate assertions made by a speaker (in uttering a sentence at a context of utterance) by reference to not just a circumstance of evaluation (the relevant worldly facts) but also a context of assessment. This may be the context of assessment of the speaker or hearer or some third party. On this view, facts are assessor-relative, and the incompatibility of their claims must be judged from a perspective: incompatibility is a perspective-relative notion.

The claims made by A and B cannot both be accurate from the same perspective, or when assessed relative to the same context of assessment. From each person's perspective (even that of a third party) only one of A or B can be right and the other must be wrong. But notice this does not mean that either one or other is *absolutely* right. A and B will assess each other's claims from their own perspectives and take opposing stands on who is speaking truly and who is speaking falsely. Each accepts that they cannot both be right, but who is right and who is wrong differs from one perspective to another or from one context of assessment to the next. Each can speak truly *from where he or she stands*. Relativism is the claim that there is only truth from a context of assessment (which may be the same as the context of utterance, though not necessarily.)

Contexts of assessment are *not* just further parameters with respect to which we evaluate a claim, along with, e.g., worlds and times by treating contexts of assessment as if they functioned like contexts of utterance. E.g.,

S at C is true at a $\langle w_c, t_c, s_c \rangle$ iff the proposition expressed by S in C is true at the world, time and standard of taste of the context of utterance

moves to:

S at C is true at a $\langle w, t, s \rangle$ iff the proposition expressed by S in C is true at world w , time t , and standard of taste s of the assessor

Worlds and times shift the context of evaluation, but the context of assessment provides a different perspective or way of evaluating a claim with respect to the *same* circumstances of evaluation.

So what of disagreement? Is A's judgment incompatible with B's? We can cast their disagreement in the way MacFarlane suggests by evaluating the claim each makes relative to a context of assessment. In each context, their claims will be incompatible, but the incompatibility of their claims will not be fixed in one determinate way. We must assess the incompatibility of a pair of claims *relative to a perspective*:

Perspectival Incompatibilism:

An assertion of a claim that p at a context C is accurate iff p is true at W_c and S_c , where W_c is the world of the context C and S_c is the standard of the speaker at C .

This would make it the case that a speaker/population of tasters says something accurate about a wine just in case it is true given the standard of taste of the speaker/population of tasters subscribed to within the comparative class explicitly or implicitly appealed to in the context (not of utterance but) of assessment. At any context A and B can't both be accurate. What a speaker says about a wine is accurate just in case it is true given the standard of taste of the speaker, or relative to the application of the standard the speaker invokes within the comparative class implicitly appealed to in the context. The objectivity of perceptually accessible tastes is assured and is compatible with (requires) relativism. Relativism and objectivity can be combined (see Williams 1985 on ethical judgments). There is something it is right for members of the population of tasters to say, and they can get it wrong with respect to that population or their own best judgments.

But do we really have the kind of disagreement that is intractable? Yes, if due to training, experience, etc. members of one population cannot access the other's perspective and some cannot recognize their judgments as true, we may have relativism about truth. However, if one's judgment is open to revision, and can always be revised on the basis of experience, with one's own later judgment or another's more discriminating one forcing a revision

until we can occupy the other's perspective, this will not be relativism and the disputes will not be intractable. The perspectives in question must be entrenched. However, the inability to either the other's perspective or find the reasons for their judgment leave the option of subjectivism in the differences between individuals or communities as a live option.

12. Relativism and rule-following

The question all along has been whether the sorts of appeals to standards each side can make when judging cases, even within a class, can lead to incompatible judgments when all the facts are in. Are there such irreconcilable judgments? The idea that nothing is factually overlooked but that irreconcilable differences remain over what it is correct to say is what threatens to descend into subjectivism about there being no fact of the matter in such disputes. Isn't each side's view answerable to nothing more than their own opinion about how things should be compared? If so, where is the objectivity they aim for in their respective judgments?

Can a better case be made out? *Perhaps it can.* Consider a case where two critics have hitherto coincided in all their judgments of taste, have offered the same reason for doing so, and assumed they are using the same standard, but on presentation of a new case they diverge in their judgments. Each claims to be continuing to apply the same standard they have previously applied hitherto. Each sees the other as departing from that standard

How should we describe the case? The following options are open to us:

- (a) Divergence shows that they were not following the same standard up till now
- (b) Divergence shows one has departed from the standard previously in play
- (c) Divergence show both are operating with a new standard
- (d) Both are continuing to judge in the same way: both continuations count as legitimate extensions of that standard. Both make legitimate but incompatible judgments.

Here, there is a close parallel between the issue of relativism and the rule-following considerations. This should be no surprise since we are taking about judging in accordance with a standard (of taste). Going on in the same way in applying that standard may be open at the point where we

experience a new and surprising exemplar in a given class. With a *stand-out* case to consider what may be required at this point is, as Wittgenstein says, a decision not a judgment. Think of judging a new architectural or new musical style, or a new fashion or a controversial art work. Whether we decide to include it in the list of aesthetic or fashionable objects, or whether we decide to embrace atonal music as music sets out one's stall on continuities or otherwise with past assessments. Critics are frequently asked to make a judgment call about a new fashion, new musical style, and rare taste. We feel that we try to "get it right"; we even revise our decisions in the light of others' persuasive remarks. Each is an invitation to see it one way and not another. What we decide settles the matter and extends the standard to this case, or excludes it.

Each party asserts that he is applying the existing standard to the new stand-out case by either including it, or rejecting it. Each thinks the other mistaken in failing to apply the standard (of taste) they both aim to adhere to, and that only one is right as to whether the standard can be extended to this new case or not. It is assessor relative whether the standard does encompass this new case. For each it is a matter of decision that sets up the relevant context of assessment.²³ Notice that these decisions are not arbitrary. There are better and worse decisions. Consider decisions by Supreme Court or Law Lords. Plus our initial decisions could be revised in the light of further reflection.

The question of interest for relativism is whether there two equally legitimate ways to extend the standard? But notice this is the wrong way to put the question, as we saw above. We can't and shouldn't put things this way since we can only have an assessor relative view of the matter. We can't claim, in absolutist terms, that both ways of going on constitute extending the standard. To say this is not to appreciate or understand the pull of the standard, and is thus to rob it of its objective credentials. But just as in the rule-following case, we can ask whether anything, other than judgment, settles what counts as extending the rule to a new case. There may be no judgments-independent fact, but each judgment, when made in accordance with some conditions for ideal judgment count as legitimating the extension of the same standard. Though, from any context of assessment only one way of extending to the new case counts as adhering to the operative standard. The other way counts as departing from it. This is relativism and it is linked to delicate issues of objectivity and rule-following. I suggest that further investigation of the possibilities sketched here may open up the most fruitful avenue for the relativism about taste to pursue.

Notes

1. The term “faultless disagreement” has featured prominently in the recent relativist literature, but whatever the term, there is room for dispute about where the notion came from. I’ll leave resolution of this matter to others. The notion features most notably in the work of Crispin Wright (1992, 1995, 2006) and Max Kobel (2003).
2. See MacFarlane 2007, Relativism and Disagreement, *Philosophical Studies* 132: 17–31.
3. See Roland de Sousa, *The Rationality of Emotion* (MIT 1990: 149).
4. The term “predicates of personal taste” was coined by Peter Lasershon (2005) and includes predicates like “fun”, “tasty”, etc. I shall be concerned more narrowly with predicates that apply solely to tastes and tasting; i.e., taste predicates.
5. It should be obvious from these more realistic examples that the speakers are attempting to talk about and justify their opinions *about the wine*.
6. These options overlap with the four views offered by Wright 2006 (39–40) and MacFarlane (2007). I gratefully borrow their strategy for setting up the alternative options, even though I have taken a different way with the options.
7. The most promising attempt to fashion something along these lines is Allan Gibbard’s *Wise Choices, Apt Feelings*.
8. Simon Blackburn suggests that there is room to use the truth-schema to apply to ethical propositions: “X is good” is true iff X is good. According to Blackburn, “Anyone understanding the sentence will be prepared to assert right-hand side if and only if they are prepared to assert the left, in each case voicing the attitude of approval to X” (Blackburn 1998, 79).
9. There may be more nuanced, response-dependent, realist views in the offing; however, in the face of intractable dispute between two parties about a matter of taste, we may have to settle for the view that experience does not ensure a way of either party’s decidedly knowing that he is right. The facts about taste may fall within our experiential range but we may not know that they have. No doubt each party believes he is in receipt of the real facts of the matter. But since each believes the other is mistaken about the nature of his experience, each should also be prepared to entertain the idea that *he* may be the one who is mistaken about his experience. Thus even if, for the realist, the facts about taste fall within our experience, the nature of those experiences may elude us. Isidora Stojanovic (2008) adopts a realist view of taste but diagnoses apparent disagreements as failures of speakers to understand their own discourse. This is not the cases I am interested in here.
10. Additional to worlds and times, perhaps.
11. Options along these lines are explained in Recanati 2004.
12. A clear statement of position and the name for it was first provided by John MacFarlane 2008.

13. The example is due to John MacFarlane. Further examples like these were discussed in a talk he gave at the Pacific APA in April 2007.
14. The parameter is further to the parameters for times and worlds.
15. I owe this comparison with the case of “It’s raining” to Isidora Stojanovic, as relayed to me by François Recanati.
16. The application of this semantic option to debates about relativism was first tried, to the best of my knowledge, by Mark Richard in his “Contextualism and Relativism” in *Philosophical Studies* 2004.
17. I owe the distinction between applying standards statistically or normatively within a comparison class to Delia Graff Fara.
18. A similar diagnosis could be given for Crispin Wright’s example of a surgeon who says, “The scalpel is dangerously blunt” while the assistant handing it to someone to clean says, “Watch out, the scalpel is dangerously sharp.” Each means the same by “blunt” and “sharp”, and each has the same comparison class of surgical scalpels in mind. The notion of sharp for a scalpel may vary according to the shifting standards, or application of a standard within the given class. See Wright 2006: 53.
19. For a discussion of this idea that appeals to but ultimately rejects Kant’s doctrine about aesthetic judgments as generalizable claims see Smith 2005.
20. Interestingly, both critics use similar descriptors for the wine, regarding it as rich, alcoholic, extracted, viscous, with sweet and jammy fruit flavors, and lots of polished oak. They disagree over whether this is admirable.
21. Agreement and disagreement are not entirely symmetrical as is brought out well by the very striking case of overlapping judgments of tall by two judges operating with different standards. This nicely described case is due to Herman Cappelen and John Hawthorne in their 2009 book.
22. As Bernard Williams once put it, adopting relativism appears to make the very problem relativism was designed to solve disappear.
23. Why not see all cases, “tall”, “red” in the same way, and adopt relativism throughout? I think this is not warranted and that different considerations are brought to bear in the cases under discussion. Space prevents me from offering more, save to say that we should look at matters case by case.

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Knowledge attributions and relevant epistemic standards

Dan Zeman

Abstract: The paper is concerned with the semantics of knowledge attributions (K-claims, for short) and proposes a position holding that K-claims are context-sensitive that differs from extant views on the market. First I lay down the data a semantic theory for K-claims needs to explain. Next I present and assess three views purporting to give the semantics for K-claims: contextualism, subject-sensitive invariantism and relativism. All three views are found wanting with respect to their accounting for the data. I then propose a hybrid view according to which the relevant epistemic standards for making/evaluating K-claims are neither those at the context of the subject (subject-sensitive invariantism), nor those at the context of the assessor (relativism), but it is itself an open matter. However, given that we need a principled way of deciding which epistemic standards are the relevant ones, I provide a principle according to which the relevant standards are those that are the highest between those at the context of the subject and those at the context of the assessor/attributor. In the end I consider some objections to the view and offer some answers.

1. Invariantism versus context-sensitivity

It is a fairly widespread view in epistemology today that knowledge attributions (K-claims, for short¹) are context-sensitive. Epistemic terms such as “know” introduce variability in the sentences in which they appear in such a way that different utterances of the same sentence in different contexts get to have different truth values. This variability in truth value is due to factors that pertain, in ways that I will explore shortly, to context. On an intuitive level, such variability is brought to the fore by examples such as Keith DeRose’s (1992) famous Bank Cases, in which the issue is whether someone, driving by the bank on a Friday afternoon in order to deposit her paycheck, finding the lines very long and thus considering postponing the deposit for the next day, knows or doesn’t know that the bank will be open on Saturday. While in the first case there is not much of a difference between the deposit being made the next day or on one of the following days,

because there is nothing at stake for the person making it, in the second case, since there is a lot at stake for the person making the deposit, it is really important that the deposit is made on Saturday. It is thus very important that in the second case the person knows that the bank is open on Saturday. Under the assumption that, as a matter of fact, the bank is indeed open on Saturday, the example is supposed to elicit the intuition that “what is at stake” for the person in the two cases makes the difference between the person knowing that the bank will be open tomorrow and not knowing it. Since “what is at stake” is a contextual matter, we have here a clear example of context influencing the truth value of K-claims.

One important issue that arises in connection to the variability in truth value of K-claims across contexts concerns the nature of the factors responsible for the variability in question. These factors have been thought of in many ways: as possibilities that need to be ruled out, as possibility that could be safely ignored, as a specific amount of evidence that needs to be possessed, as the practical interests or “what is at stake” for the relevant individual (the attributor, the subject or the assessor – according to different views that I am going to explore below). In DeRose’s example above, the factor responsible for the variability in truth value was “what is at stake”. However, I don’t want to commit myself to the claim that stakes are the only contextual factor to which variability of K-claims could be traced down. Thus, when talking more abstractly I will use the term “epistemic standards” to denote whatever one takes these factors to be; I will follow DeRose (and later Jason Stanley) in speaking about stakes as the way in which epistemic standards governing our use of K-claims are influenced by context only as a mere convenience, hoping that both the data to be presented and what I have to say about the data will hold even on other ways of thinking about the factors responsible for the variability of K-claims.²

Any view holding that K-claims are context-sensitive, in the above sense, contrasts with *invariantism*. Invariantism is the view that there is no variation in the truth value of K-claims across contexts. Correlatively, invariantists claim that epistemic terms such as “know” have constant semantic values across contexts.³ However, invariantists have to face the appearance of such a variation, which is vividly brought to the fore by common examples employed by contextualists, like the Bank Cases presented above. Therefore, invariantists need to explain away the appearance of variability. One common strategy used by invariantists was to retort to what has come to be known as “warranted assertibility maneuvers”. According to such maneuvers, what varies with context is not the truth value of sentences, but

the assertability conditions for those sentences: K-claims are either true or false in any context, and the fact that we are warranted in asserting them doesn't have any influence on their truth value. However, the "warranted assertability maneuvers" have been seriously discredited by pointing out, as Keith DeRose (2002) does, that one could employ such maneuvers in order to illegitimately evade serious objections and that, in most cases, the way in which the strategy is supposed to work is ad-hoc.

There might be other ways to hold an invariantist position, without appealing to "warranted assertability maneuvers" (Bach [2005] seems to be an example). Be that as it may, I won't be concerned with invariantism's strategies in this paper. Instead, my aim is to lay down the possible positions which commonly hold that K-claims are context-sensitive and then assess them with respect to the data they purport to explain. The data I will use are the cases presented by Jason Stanley in the Introduction to his book *Knowledge and Practical Interests*. I will present these cases, in quite a bit of detail, in section 2. Then in section 3 I will present the competing views and some criticisms, at the same time evaluating them with respect to the data put forward in section 2. The fact that, as it will turn out, each view has problems squaring with the data might give one reason to renounce the idea that K-claims are context-sensitive in any way. In the last section, however, instead of handing over the game to the invariantist, I will put forward an alternative that combines the virtues of all the views examined, but arguably does not inherit their vices.

2. The data: "The Stanley cases"

In the Introduction to his book *Knowledge and Practical Interests*, Stanley presents a battery of cases against which he tests the views he considers later in the book. I will proceed in exactly the same way here. I think that accounting for those cases ("the Stanley cases", as I will call them) constitutes a fair test for any view about knowledge attributions. Any semantic theory that purports to account for how we make knowledge attributions, I claim, should match with the intuitions we have regarding the truth values of K-claims in the specific cases in which those are made. Furthermore, I will claim that the intuitions Stanley presents us as having in the cases that will be put forward are, indeed, "the right ones." Both these two claims are highly controversial. Regarding the first, one might point out that intuitions are too shaky and confused to form the basis for claims about the semantics

of natural language expressions. That is certainly true, but one thing should not pass unnoticed: in the debate about the semantic of knowledge attributions each participant starts with presenting some specific cases that are meant to elicit in us some intuitions. Then it is argued that a specific view, the one the participant in the debate defends, is to be preferred over the competing views precisely because it does a better job in capturing those intuitions. Discarding intuitions in general would be thus like going to war against your most precious ally. However, one might not be prepared to accept the intuitions I claim we have in *all* the cases. That is, philosophers would deny that they have certain intuitions, in specific cases – usually, in exactly those cases that turn out to be problematic for their own views. Here I have nothing else to say except that I hope that the specific intuitions I claim we have in the specific cases I will present will coincide with those of the reader. Besides, I think it is a good general methodological rule that if one starts trusting intuitions, one shouldn't give them up when one's preferred theory enters in conflict with them. I will thus take any view that respects the intuitions as I present them as being more adequate than one that disregards them or renders them in any way inappropriate.

Let us now move to the description of the cases. The first two cases involve a person attributing knowledge to herself in different contexts. To put a bit more flesh on the bones, I will present the cases as they can be found in Stanley's book and then explain my terminology in connection with them. The first case is

Low Stakes (L). Hannah and her wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. It is not important that they do so, as they have no impending bills. But as they drive past the bank, they notice that the lines inside are long, as they often are on Friday afternoons. Realizing that it isn't very important that their paychecks are deposited right away, Hannah says, "I know the bank will be open tomorrow, since I was there just two weeks ago on Saturday morning. So we can deposit our paychecks tomorrow morning."

So in this case the attributor/subject is Hannah, who is in a context in which epistemic standards are low.⁴ She makes a positive K-claim about herself ("I know the bank will be open tomorrow"), which we intuitively think is *true* in the given case. The second case is

High Stakes (H). Hannah and her wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. Since they have an impending bill coming due, and very little in their account, it is very important that they deposit their paychecks by Saturday. Hannah notes that she was at the bank two weeks before on a Saturday morning, and it was open. But, as Sarah points out, banks do change their hours. Hannah says, “I guess you’re right. I don’t know that the bank will be open tomorrow.”

In this case the attributor/subject is again Hannah, who is now in a context in which epistemic standards are high. She makes a negative K-claim about herself (“I don’t know that the bank will be open tomorrow”), which we intuitively think is, again, *true* in the case given.

Now, the two cases in which the attributor coincides with the subject are cases that already raise problems for the invariantist, making her owe us an explanation for the coincidence in truth value of the two K-claims. Whatever strategy she will adopt, the invariantist will eventually end up saying that our intuitions are misleading in (at least) one of the cases. (The same result can be obtained by distinguishing the attributor from the subject, but make them share the epistemic standards that prevail in a given context.) Since I prefer views that do justice to all intuitions, I take this to be an unacceptable result. However, the fact that the attributor and the subject are the same person (or that they share the epistemic standards) also serves to blur the difference between distinctively different views that commonly hold that K-claims are context-sensitive. For, as we will see in the next section, all these views account equally well for the two cases mentioned above. Therefore, in order to better assess the views, we should consider more complicated cases that, instead of obscuring the problems those views might have, bring them to the fore. It is thus a good idea to supplement the data with more complex cases, such as those in which the attributor and the subject of a K-claim are different people, situated in contexts in which the epistemic standards are different. The first such more complex case is

Low Attributor – High Subject Stakes (LA-HS). Hannah and her wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. Since they have an impending bill coming due, and very little in their account, it is very important that they deposit their paychecks by Saturday. Two week earlier, on a Saturday, Hannah went to the bank, where Jill saw her. Sarah points out to Hannah that banks do change their

hours. Hannah utters, “That’s a good point. I guess I don’t really know that the bank will be open on Saturday.” Coincidentally, Jill is thinking of going to the bank on Saturday, just for fun, to see if she meets Hannah there. Nothing is at stake for Jill, and she knows nothing of Hannah’s situation. Wondering whether Hannah will be there, Jill utters to a friend, “Well, Hannah was at the bank two weeks ago on a Saturday. So she knows the bank will be open on Saturday.”

Here, we have an attributor, Jill, who is in a context in which epistemic standards are low, and a subject, Hannah, who is in a context in which epistemic standards are high. The attributor, Jill, makes a positive K-claim about the subject, Hannah (“she knows the bank will be open on Saturday”), which we think is *false* in the case given.

The second more complex case that needs to be accounted for is

High Attributor – Low Subject Stakes (HA-LS). Hannah and her wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. Since they have an impending bill coming due, and very little in their account, it is very important that they deposit their paychecks by Saturday. Hannah calls up Bill on her cell phone, and asks Bill whether the bank will be open on Saturday. Bill replies by telling Hannah, “Well, I was there two weeks ago on a Saturday, and it was open.” After reporting the discussion to Sarah, Hannah concludes that, since banks do occasionally change their hours, “Bill doesn’t really know that the bank will be open on Saturday.”

In this final case, we have an attributor, Hannah, who is in a context in which epistemic standards are high, and a subject, Bill, who is in a context in which epistemic standards are low. The attributor, Hannah, makes a negative K-claim about the subject, Bill (“Bill doesn’t really know that the bank will be open on Saturday”), which we think is *true* in the case given.

The following table summarizes the intuitions we have in the cases presented:

Case	K-claim	Truth-value
L	<i>Positive</i>	T
H	<i>Negative</i>	T
LA-HS	<i>Positive</i>	F
HA-LS	<i>Negative</i>	T

With these results in front of us, I can now proceed to present and assess the competing views.

3. The views and their problems

There is more than one way in which K-claims can be context-sensitive. In this section I will briefly describe three views incorporating the thesis that the truth value of K-claims varies across contexts. After presenting each view, I will mention some common objections and then confront it with the data presented in the preceding section. How well each view comes out from this confrontation will be the criterion on the basis of which we should choose the best view.

3.1. Contextualism

According to epistemic contextualism, terms like “know” denote different relations in different contexts of utterance. This has the consequence that, as DeRose puts it in his pioneering article, “the truth conditions of [K-claims] vary in certain ways according to the context in which the sentences are uttered” (DeRose 1992: 914). This variation in semantic value across contexts is in turn responsible for the variation in truth value (that is, for K-claims being context-sensitive in my sense of the term). Contextualists differ in conceiving the “certain ways” DeRose speaks about, but their main claim is quite straightforward.

Thinking of “know” as denoting different relations in different contexts of utterance is not the only way to hold that K-claims have different semantic values in different contexts. Bach (2005) distinguishes between two varieties of epistemic contextualism: “the indexed version” and “the relativized version”. The difference between these varieties lies in the way the epistemic standard plays a role in establishing the semantic content of K-claims. Thus, according to the first version, K-claims are elliptical for sentences in which epistemic standards (e) are indexed to the verb “know” (like in “S knows_e that p”); according to the second version, K-claims are elliptical for sentences in which “know” is relativized to epistemic standards (like in “S knows relative to e that p”). However, it is arguable that both these versions will have to face some serious objections. Let me mention some of these in what follows.

Contextualism in general faces some notorious problems which transfer also to epistemic contextualism. The first is that, as it stands, contextualism cannot account for the sense of disagreement we detect in exchanges like the following: A utters the sentence “Avocado is tasty,” and B replies with

“No, it is not.” Disagreement is a thorny issue, and I’m not going to address it here,⁵ but one might legitimately grant that in exchanges like these we at least have the intuition that A and B disagree.⁶ Now, the same seems to happen in the epistemic case: if, say, the dogmatic utters “Moore knows he has hands” and the skeptic replies “No, Moore does not know he has hands,” there is a strong intuition that the skeptic and the dogmatic disagree.⁷ But if contextualism were right, there won’t be any disagreement in such a case: since the skeptic and the dogmatic are in different contexts, in which different epistemic standards prevail, the semantic values of the two sentences will not be contradictory. So, contextualism cannot account for disagreement. Of course, the contextualist is free to deny that such cases really *are* cases of disagreement, but this comes with a cost: to maintain that ordinary speakers don’t know the workings of their own language, that they are semantically “blind”. And semantic blindness has been found by many, including Schiffer (1996) and Hawthorne (2004), to be too hard a pill to swallow.⁸

Second, there is the problem of reporting K-claims. As Mark Richard (2004) has asked, what exactly is one saying in reporting a debate between two people to the effect that one subject knows something? According to contextualism, since the semantic value of K-claims depends on the context in which they are uttered, it is the context of the reporter that establishes the semantic value of the reported K-claim. Thus, when one is reporting an exchange between a dogmatist and a skeptic pertaining to the issue whether the dogmatic knows she has hands, the K-claim will have the semantic value it has in the reporter’s context, which might well be different from that it has in both the dogmatic and the skeptic’s context. Yet it is quite unreasonable to suppose that what was initially said could differ radically from what it is said by the reporter. Contextualism predicts a totally unintuitive result in cases like these.

Finally, as John MacFarlane (2005a) has forcefully argued, epistemic contextualism has another unpleasant consequence: namely, admitting that we were wrong and therefore retracting an earlier K-claim when we come to know better becomes meaningless. To see this clearer, imagine the following situation: we are both in a cab that carries us from the city to the airport. When the cab passes by the beautiful medieval city center, I utter “It is very nice around here.” Twenty minutes later, when we are approaching the airport, you say “It is not very nice around here;” your claim doesn’t make me retract my earlier remark. If “know” would be context-sensitive in the way “here” is, the same would happen with K-claims; but in their case

it is different. When I move from a context in which epistemic standards are low to one in which they are high, I will admit that I was wrong and therefore retract my earlier K-claim that I knew. Retraction seems to be a common practice among (rational) agents; yet, contextualism renders it totally meaningless.⁹

I don't take these objections to lead to a definitive rejection of contextualism, but they do indeed pile up a certain amount of evidence against the view.¹⁰ There is, however, a closely related but still significantly different view that evades some of the objections presented. *Non-indexical contextualism*¹¹ (NIC), as MacFarlane (2009) calls it, is a view according to which K-claims are context-sensitive, but their semantic value is constant across contexts of utterance. NIC is a development of the Kaplanian framework in which the crucial distinction is that between contexts of utterance and circumstances of evaluation.¹² A context of utterance is the particular situation in which an utterance of a sentence is produced, whereas circumstances of evaluation are "both actual and counterfactual situations with respect to which is appropriate to ask for the extensions of a given well-formed expression" (Kaplan 1989: 502). Kaplan's claim was that circumstances of evaluation comprise, besides possible worlds, also times and (maybe) locations. Following this model, a number of non-indexical contextualist views have been proposed for a number of discourses. According to the work done by Kölbel (2004) and Lasersohn (2005) in the evaluative sphere, in order to evaluate sentences containing evaluative terms, we need to introduce new parameters into the circumstances of evaluation ("perspectives" in Kölbel's view, a "judge" parameter in Lasersohn's), because the traditional parameters (world and time) are not enough to yield a definite truth value for those sentences. The newly introduced parameters get activated, as in the case of contextualism, by features of the context in which an evaluative sentence is uttered; the difference is that this time, instead of providing elements that will be part of the semantic value of the sentences, these features provide parameters in the circumstance of evaluation that is operative in the context. In the same vein, a non-indexical contextualist about knowledge attributions will hold that circumstances of evaluation will comprise, besides possible worlds, also epistemic standards (and maybe other unorthodox parameters as well, although she is not committed to that). K-claims will be evaluated with respect to such enriched circumstances, and epistemic features of the context in which a K-claim is uttered will provide a parameter in the circumstance of evaluation (an epistemic

standard), and not an element in the sentence's semantic value in that context.¹³

Although, from a semantic point of view, there are significant differences between these two views, they both face the same problem with respect to the Stanley cases. Let me illustrate with considering in detail how contextualism fares with respect to them. Note first that contextualism easily explains the coincidence in truth value of the K-claims made in the **L** and **H** cases. Since the positive and the negative K-claim are uttered in different contexts, they will have different semantic values; therefore, there is no problem with both being true. Moreover, the **HA-LS** case is also accounted for: since the relevant epistemic standards are those at the context in which the K-claim is uttered, and since in the attributor's context the epistemic standards are high, this will make her negative K-claim true. And this is also what our intuitions tell. However, the problem appears in the **LA-HS** case. Since the relevant epistemic standards are those at the context in which the K-claim is uttered, and since in the attributor's context the epistemic standards are low, this will make her positive K-claim true. But this is *not* what our intuitions tell. Therefore, contextualism has problems squaring with the data.

It is easy to see that NIC will follow the same pattern as contextualism in all the four cases. The only difference, as already explained above, stems from the role different factors play in arriving at the truth values of sentences in contexts. Thus, the coincidence in truth value of the two K-claims made in the **L** and **H** case, respectively (one positive, the other negative) is explained under the current view not by a difference in semantic content, but by the fact that the two sentences get evaluated with respect to different circumstances: one in which epistemic standards are low (case **L**), the other in which epistemic standards are high (case **H**). Thus, although one K-claim is the negation of the other, there is no problem with both being true, since they get evaluated with respect to different circumstances. The same considerations are true in the other two cases: what the context of the attributor contributes is not an element in the semantic value of the sentence uttered, but an element in the circumstance. However, this does not prevent NIC having the same problem as contextualism: the troublesome case is **LA-HS**. I thus conclude that both views fall short of accounting for the Stanley cases.

3.2. Subject-sensitive invariantism

One might hold a view about the context-sensitivity of K-claims which, instead of focusing on the attributor of a K-claim, focuses on its subject. Such a subject-centered view is the view known under the label *subject-sensitive invariantism* (SSI).¹⁴ SSI's main claim is that whether a subject knows something crucially depends on the subject's epistemic standards, with these standards being in turn dependent on non-standards features of the subject itself and its context. Those non-standard features of the subject have to do with the subject's interests, with "what is at stake" for the subject – the variation of those factors across contexts being responsible for the variation in the subject's epistemic standards. Although SSI's main insight is into the nature of knowledge, linking it with practical interests and action, the view has also direct consequences for semantics. Thus, one of the semantic claims supported by SSI is that epistemic terms' semantic value does not change with the context of their utterance. Consequently, the K-claims in which they appear also have constant semantic values across contexts of utterance. In this, SSI agrees with invariantism and NIC, and contrast with contextualism. However, from this fact we shouldn't conclude that K-claims also have constant truth values across contexts. Given that the subject's epistemic standards vary from context to context, whether a subject knows something will be a context-dependent matter as well. The variation in epistemic standards clearly affects the truth value of K-claims, allowing that the same K-claim could be true in one context and false in another.

The fact that, according to SSI, K-claims have constant semantic values across contexts might provide the view with better answers to the problems encountered by contextualism. But that is not to say that SSI has no problems of its own. Schaffer (2006), for example, argues that an important drawback of the view is that it doesn't square very well with extremely plausible views about those aspects of knowledge that pertain to its social role: activities such as inquiry, expertise, testimony, conversational norms and the fact that we take knowledge to have a high value. Blaauw (2008) argues that SSI has severe problems with embracing a widely accepted principle concerning transmission of knowledge through memory. Finally, MacFarlane (2005b), although not explicitly rejecting SSI, accuses the view of "knowledge laundering" and of clashing with a fairly entrenched view about testimony.

Let us see, however, how SSI accounts for the Stanley cases. First, let us note that SSI has no problem with the **L** and **H** cases: since the positive and the negative K-claim are made in different contexts, and since the relevant standards are those at the context of the subject (either identical with the attributor, or having the same epistemic standards as the attributor), each K-claim comes out true. Further, SSI nicely accounts for the **LA-HS** case: since the relevant epistemic standards are those at the context of the subject, and since in the subject's context the epistemic standards are high, this will make the attributor's positive K-claim false. And this is also what our intuitions tell. However, as MacFarlane (2005a) points out and DeRose (2004) explicitly argues, SSI fares badly with respect to the **HA-LS** case. Since the relevant epistemic standards are those at the context of the subject, and since in the subject's context the epistemic standards are low, this will make the attributor's negative K-claim false. But this is *not* what our intuitions tell. Therefore, SSI fails the test too.¹⁵

3.3. Relativism

A third view which purports to give a semantic account of K-claims is the one recently proposed by MacFarlane (2005a)¹⁶: relativism. MacFarlane holds that K-claims are "assessment-sensitive", a new phenomenon that he claims to have unveiled for a number of discourses. As well as SSI and NIC, relativism agrees with invariantism that epistemic terms and the sentences containing them have constant semantic values across contexts. But, in opposition to invariantism, relativism claims (together with SSI and NIC) that the truth values of K-claims in different contexts are not constant. However, the reasons why this is so are entirely different from those invoked by NIC and SSI. Let me spend a while presenting in detail the relativist framework.

Recall the Kaplanian distinction, which played an important role in NIC, between context of utterance and circumstance of evaluation. In Kaplan's framework, the truth of sentences is relativized to both these factors: a sentence is true relative to a context *and* to a circumstance of evaluation. However, this is consistent with utterances having truth values absolutely: given a context, and given that any sentence uttered in that context has to be evaluated at the circumstance operative in that context, that utterance of the sentence will be true or false absolutely. Thus, not only that a context of utterance already comprises all that is necessary for the evaluation of a

sentence in that context, but it also necessarily *determines* the circumstance with respect to which the sentence has to be evaluated.¹⁷ Now, in MacFarlane's view, sentences are also doubly relativized, but this time to contexts of utterance and *contexts of assessment*. A context of assessment is simply a context from which a sentence, uttered at a (possibly different) context, is evaluated for its truth. The context of assessment supplies the circumstance with respect to which the sentence is evaluated. The context of utterance can coincide with the context of assessment, but in the case in which it doesn't, there is nothing in the context of utterance that determines the circumstances with respect to which the sentence has to be evaluated. The circumstance operative in the context of assessment trumps, so to speak, the circumstance operative in the context of utterance. This has the consequence that utterance-truth is *not* absolute, in contrast with NIC. The same utterance could thus get different truth values, depending on the context from which it is assessed, with the circumstances of that context now playing the crucial role in arriving at the truth value of the sentence.¹⁸ In order to get relativism about knowledge attributions, all we have to add to this machinery is the claim that circumstances comprise, besides possible worlds, epistemic standards (and maybe other unorthodox parameters if one is relativist about other domains as well).

Now, it is arguable that relativism does not encounter the problems that the other views did. But the data that motivated the move towards relativism could and have been disputed. However, I will not pursue this issue here; I think that, even granting the solidity of the data MacFarlane relies on, his view is still not trouble-free. To see this, let us again consider how the view squares with the Stanley cases. Now, in order to be able to compare relativism with the other views in how well it squares with the data, I have to make the following simplification: I will consider that, in the scenarios considered, the assessor is the attributor herself. In other words, I will consider only the case in which the context of assessment and the context of utterance coincide. This simplification might be thought of as belittling relativism. But it is not: first, note that the case in which the context of assessment coincides with the context of utterance is certainly one that the relativist has to, and as we have seen, does indeed allow. This, of course, is not to deny that there is a distinction between them. Second, my point can be made even if we introduce more complicated cases featuring three distinct characters: the attributor, the subject and the assessor, each being in different context in which different epistemic standards prevail. However,

this would only complicate matters and make the comparison between the competing views more cumbersome. Thus, my simplification is harmless.

Now, let us see how the view comes out when confronted with the data. Let us first note that relativism handles easily the **L** and **H** cases: since the positive and the negative K-claim are made (and assessed) in different contexts, different epistemic standards are part of their respective contexts of assessment/utterance; thus, each K-claim is true relative to the epistemic standard that is operative in the context of the assessor/attributor. Further, unlike SSI, relativism handles nicely the **HA-LS** case: since the relevant epistemic standards are those at the context of the assessor/attributor, and since in the assessor/attributor's context the epistemic standards are high, this will make the assessor/attributor's negative K-claim true. And this is in line with what our intuitions tell. In contrast, consider the **LA-HS** case: since, again, the relevant epistemic standards are those at the context of the assessor/attributor, and since in the assessor/attributor's context epistemic standards are low, this will make the assessor/attributor's positive K-claim true. But this is *not* what our intuitions tell us. Therefore, relativism has troubles with accounting for the Stanley cases.¹⁹

Before proceeding to the next section, let me first address an objection that I have been presented with on several occasions. One might oppose the above diagnosis on the following grounds: One of the core claims of relativism is that there is no absolute utterance-truth. This claim, I take it, could be put in more mundane words as the claim that there is no neutral perspective, something like a God's-eye view from which our utterances get an established truth-value once and for all. But – and this is the answer to the diagnosis – the Stanley cases, as I have presented them, presuppose exactly such a neutral view. That is, we have the intuitions (I claim) we have just because we situate ourselves (or we are, as readers, asked to situate ourselves) in a neutral, all-encompassing position; in fact, we are never in a position to judge from outside, being instead confined to judge only from within our own particular perspective. Since presenting the data in the way I presented them implies reliance on the God's-eye view, this simply begs the question against relativism.

Despite its initial plausibility, the objection is misguided. It is certainly true that in presenting the cases as I did I gave the reader substantial information about the contexts in which the characters of the cases were situated. Whether this amounts to tacitly relying on a God's-eye view or not I'm not entirely sure, but the point is that I cannot see how else I could even describe such cases without giving the reader such kind of information. If

one wants to elicit some intuitions, the more information is given about a case, the likelier to have a clearer intuition about it. Moreover, this kind of information about the context of hypothetical attributors, subjects or assessors of K-claims has to be given by *any* of the participants in the debate – including the relativist. The result that relativism has troubles with the Stanley cases, I therefore conclude, is not endangered by the objection just considered.

4. Going invariantist?

The problems for the three views discussed above may motivate one to shy away from the idea that K-claims are context-sensitive in any of the ways I described above. The following table synthesizes how well the views coped with the data:

	L	H	LA-HS	HA-LS
Contextualism/ NIC	OK	OK	Not OK	OK
SSI	OK	OK	OK	Not OK
Relativism	OK	OK	Not OK	OK

I haven't discussed invariantism's problems in detail, but the results in the table above don't seem to situate the context-sensitivity views in a much better position than invariantism. However, before giving up the idea that K-claims are context-sensitive, let me try to spell out a way to modify one of the views that holds on to this idea so that it would get the right results in the Stanley cases.

In reply to some objections to contextualism, DeRose has argued that the view is not committed to always considering the attributor's context as "calling the shots". The contextualist is free to say that sometimes the epistemic standards at the context of the *subject* are those which settle the semantic value of "know". Thus, "[t]here's nothing in contextualism to prevent a speaker's context from selecting epistemic standards appropriate to the subject's context, even when the subject being discussed is no party to the speaker's conversations" (DeRose 2004: 348). This move does indeed save contextualism from predicting the wrong results in the problematic Stanley case (namely, the **LA-HS** case). However, the move does not save contextualism from the other objections I mentioned in section 3.

It is not my intention to claim that contextualism will not eventually be able to provide acceptable solutions to the problems mentioned. But instead of working out a suitable version of contextualism, what I want to do is to see whether one of the other views presented – namely, relativism – cannot be modified such that to be able to account for all the intuitions in the Stanley cases. To that end, I will start from DeRose’s insight above. Thus, the proposal I want to put forward will consist in incorporating this insight into a view that is not contextualist but still holds that K-claims are context-sensitive. What I want to claim is that the flexibility that contextualism gains by allowing the subject’s standards to settle the semantic value of “know” in the attributor’s context is also available to relativism (although not by the same means, of course). In this connection, it is instructive to have a look on the debate surrounding epistemic modals. Here, too, we find basically the same contenders, with relativism being one of them (due to the work of MacFarlane (forthcoming) and others). However, as Dietz (2007) has noted, relativism about epistemic modals has problems with what he calls “ignorant assessor cases” – cases structurally similar to with my **LA-HS** case. Now, interestingly, in the case of epistemic modals MacFarlane has acknowledged the problem and has agreed that what is needed is more flexibility. The solution, he says, must be one in which

[t]he semantics must track both what is known by the asserter and what is known by the assessor, and then amalgamate these two bodies of knowledge into a single body of known facts with respect to which the epistemic modal is to be evaluated. (MacFarlane forthcoming: 53)

So, my claim is that we need to allow for such flexibility within a relativist view about knowledge attributions. How exactly we should design the details of such a flexible relativism is a tricky issue. What we want is a view holding that K-claims have constant semantic values across contexts, but allowing their truth-value to vary; moreover, sentence-truth will be doubly relativized, both to contexts of utterance and to contexts of assessment. Epistemic standards, as in the case of NIC, will be part of the circumstances of evaluation. Now, since the context of assessment provides the circumstance with respect to which K-claims will be evaluated, the key point in order to gain more flexibility will be to allow contexts of assessment to be trumped by other contexts, in the sense that it will be the circumstances at those other contexts that will be relevant for evaluating a K-claim. Paraphrasing DeRose’s claim, there is nothing in relativism to prevent an assessor’s context from selecting epistemic standards appropriate to other contexts. In the simplified version of relativism I was operating so far (in

which the context of assessment and the context of utterance coincide), this flexible approach will allow for the epistemic standards of the subject to be the relevant ones in evaluating a certain K-claim *in a given context of assessment*. Thus, the view remains relativist, but with the twist of being able to allow for the desired flexibility.

Now, this flexibility must not be confounded with arbitrariness. It would be too easy if allowing for flexibility within a relativist framework (or, for that matter, in any framework) would be enough. I take it that in order to have a solid and coherent view, something must be said about how this flexibility should be implemented. This surely is a quite demanding task, and I'm not taking myself to be able to provide a solution to such an important problem. However, in the remainder of the paper I will try to flesh out a way to implement flexibility in a principled way.

Since the modification of the relativist view to the point of allowing more flexibility was motivated by the failure to account for all the Stanley cases, it might be a good idea to follow closely the intuitions we had in those cases. Reflecting on the case that created the problem (the **LA-HS** case), one immediate feature of it stands out: the problem came from the fact that the epistemic standards in the subject's context were high. On the other hand, the case that relativism handled successfully (besides the simple **L** and **H** cases – namely, the **HA-LS** case) was the one in which the epistemic standards in the assessor/attribution's context were high. This suggests the following principle (aimed as guiding an assessor in evaluating K-claims):

Highest Standards Principle (HSP): In assessing a K-claim, the relevant epistemic standards are those at the context in which the epistemic standards are the highest.

What is important to note right away is that “highest” here is intended to mean “highest between the context of the assessor and the context of the subject”.²⁰ This prevents HSP from collapsing into a skeptical invariantist view, in which “highest” would always mean the skeptic's standards. That is, “highest” is comparative and contextual, not absolute – even if “contextual” now means taking into account more than one context. Assessment-sensitivity allows K-claims to get different truth values according to the epistemic standards operative in the context of the assessor; since the assessor's context changes, so do the truth values of K-claims. According to HSP, the same holds: K-claims still change their truth value as a function of

the context of assessment; the only difference now is that the assessor is allowed to retort to the standards at the context of the subject when she assesses a given K-claim.

It is easy to see that simply by following HSP the Stanley cases are satisfactorily handled. Since the assessor/attributor is the same as the subject, the **L** and **H** cases don't pose any problem. In the **HA-LS** case, since the highest epistemic standards are those at the context of the assessor/attributor, they will be the ones selected as relevant by the HSP. This will make the assessor/attributor's negative K-claim true. And this also what our intuitions tell. In the **LA-HS** case, since the highest standards are those at the context of the subject, they will be selected as the relevant ones by the HSP. This will make the assessor/attributor's positive K-claim false. And, here too, this is also what our intuitions tell.

Let us now survey some objections to the account just given. One problem that immediately springs to mind is related to cases in which the assessor and the subject are in different contexts. The view implies that, whatever her context is, the assessor will be able to decide in which of the two contexts (her own or the subject's) the epistemic standards are the highest. That is, it is presupposed that in any situation the assessor could have a glance into the subject's context, compare the epistemic standards found there with those in her own context, and then decide which epistemic standards are the highest. Yet, nothing guarantees that this is possible. In fact, for various reasons, there are plenty of cases in which this is actually impossible. The frequency of such cases might undermine the view, rendering it if not incoherent, then practically useless.

I have to admit that this is a problem for the view, but I don't think the situation is hopeless. One first try to fix this problem would be to note that, as in general with interpreting other human beings, one's own situation might function as a guide for judging others' situation. In order for one to apply the principle, sometimes all what is needed is being aware of one's own epistemic situation. And this kind of awareness, although not always guaranteed either²¹, is nevertheless more common than that of the situation of others. Thus, if the assessor is in a context in which epistemic standards are low, she should automatically privilege the subject's standards; conversely, if the assessor is in a context in which epistemic standards are high, she should automatically privilege her own standards. Although this strategy might work in some situations, it certainly has its limitations: for it would only work on the premises that the assessor is at the extreme limits of a series of standards – that her standards are either the lowest or the

highest in this series. And, even if the idea of a strict ordering of epistemic standards seems hard to defend, there is at least some plausibility in the idea that there are more than two contexts with different epistemic standards in which assessors could find themselves. So this solution cannot entirely assuage the worry.

However, I think that even accepting that assessors will mistakenly evaluate K-claims for reasons having to do with the opacity of the subject's context is not disruptive for the view. First, let me note that there being situations in which the assessor has no access to the subject's context is a kind of limitation that applies to us as human beings, and which manifests itself in any area in which we behave as interpreters. "For all the data about knowledge attributions show, it could well be that we often attribute knowledge to people who don't have it and often resist attributing it to people who do have it" (Bach 2005: 86). Bach himself is an invariantist, but I don't see any reason why someone embracing context-sensitivity couldn't avail herself of such fallibility. Second, the fact that assessors would make mistakes in assessing K-claims, for reasons having to do with the opacity of the subject's context, should not count against the theory. Consider the view we have about demonstratives like "this". The semantic value of an utterance of "this" is supposed to be the object that is intended, or is pointed to, by the speaker. Now, imagine the following situation: you overhear a dialogue taking place in a room in which you have no access, in which the expression "this" occurs. Not being able to see what has been pointed to, or not having a clue about what the speaker intended to refer to, you are not able to fully understand what has been said. Is this a reason to modify our theory about demonstratives? No. Whatever weaknesses that theory might have, it certainly doesn't come from the failure, in some cases, to identify the referent of demonstratives. The same, it seems to me, applies to the case of knowledge attributions: the impossibility to glance in the subject's context in some situations should not count against the theory.

Another complaint might be voiced at this point, in connection with the **LA-HS** case. Suppose assessors follow HSP in assessing K-claims; also, suppose there is no barrier for the assessor to glance into the subject's context and retrieve the relevant information. Everything goes well, and the assessment of a K-claim about the subject conforms to the intuitions we have in such a case. But, the objections goes, it is precisely because the assessor has followed the principle that she has actually managed to change her own context so that the case won't count as a **LA-HS** case anymore! This is a fair complaint, but I think it is not as unpalatable as it might seem

at a first glance. For, I take it, the destruction of the **LA-HS** case is a desirable consequence of the fact that, at least in some situations, it is rational to inquire into the subject's context in order to gather information about her standards before assessing a given K-claim. Situations in which, for example, it is very important for the assessor to know whether the subject knows something would presumably be of this kind. Of course, the (rational) assessor might not succeed in retrieving the required information, but the point remains. Thus, although the view cannot totally prevent assessors from making mistakes in assessing K-claims, it renders them rational, as in fact they are.²²

Summing up: I've proposed a way to modify relativism such as to avoid the problems posed by one of the Stanley cases. The view proposed is committed to the following claims: epistemic terms and K-claims have constant semantic values across contexts of utterance; the truth-value of K-claims varies across contexts of assessment; the relevant epistemic standards for assessing a K-claim are not necessarily those of the assessor (the idea of flexibility). The HSP fleshes out the view, with the result of portraying a knowledge-attributor that is fallible but rational. Moreover –and this is supposed to be the view's strong point– unlike the other views scrutinized, the view proposed leaves the intuitions with which we started intact. If indeed coherent, it provides a serious alternative to those views, without having to succumb to invariantism.

Notes

1. More precisely, I will use the term "K-claim" to denote any *sentence* involving the attribution or denial of knowledge to a subject. I will also speak both of *positive* K-claims, when knowledge is attributed to a subject (sentences of the form "X knows that p") and of *negative* K-claims, when knowledge is denied to a subject (sentences of the form "X does not know that p" – in both cases X signifying the subject and p a proposition).
2. Schaffer (2005) argues that "what shifts" (that is, what is different from context to context) must be what he calls "epistemic alternatives" – basically, relevant possibilities that need to be ruled out by a subject in order to count as a knower. Schaffer rejects the view that it is "epistemic standards" that shift, but his use is different from mine. As I said, I will use "epistemic standards" as a blanket term, and use stakes as a particular way of thinking about the factors responsible for the variability.
3. I'm using the term "semantic value" to not prejudge the issue whether what is expressed by sentences in contexts are propositions, in the traditional sense

(contents that are true or false relative to possible worlds), or “relativized propositions” (contents that are true or false relative to possible worlds and other unorthodox parameters, such as time, location, various standards, etc.). Although I will not directly address this issue here, some arguments for or against the positions I will discuss are arguments for or against one of these ways of conceiving semantic content. I thus use “semantic value” as a blanket term for whatever one might think is expressed by sentences in contexts.

4. I’m not presupposing, in what follows, that there is a strict ordering of epistemic standards: all I need is a clear contrast between two sets of epistemic standards: “low” and “high”. Think of “low” and “high”, if you wish, as describing ordinary contexts and skeptical contexts, respectively.
5. I am going to assume, though, that a necessary condition for two people to disagree is for them to endorse sentences having contradictory semantic values.
6. For talk about the intuition of disagreement in matters of taste, see Lasersohn (2005).
7. The same point is made by Richard (2004) and Kompa (2005). That the dogmatist and the skeptic don’t seem to talk past each other has been enough reason for Bach (2005) to conclude that contextualism doesn’t really provide the much-trumpeted solution to the skeptical puzzle.
8. See, though, (DeRose 2006) for an attempt to assuage this worry.
9. One might reply to the last objection that the analogy with indexicals is not a fortunate one. Contextualists have been keen on taking as models for epistemic terms other context-sensitive expressions than indexicals. Thus, one common contextualist claim was that “know” is similar to gradable adjectives (for example, (Cohen 1999)). But as Stanley (2004) and Partee (2004) have forcefully argued, this analogy is worse than the one with indexicals, because epistemic terms fail two main tests for gradability: they don’t allow modifiers like “very” or “really” and they don’t allow for comparatives. (See though (Ludlow 2005) for the claim that “know”, being a verb, cannot pass these tests which are designed for adjectives. Ludlow finds Stanley’s arguments correct, but misplaced.) But even if these arguments eventually fail, the analogy between gradable adjectives and epistemic terms is of no help: people don’t seem to retract sentences containing gradable adjectives.
10. There are other objections to contextualism that I didn’t consider, such as those in Williamson (2005) to the effect that contextualism cannot account for the preservation of information through memory and testimony, that it cannot give a coherent picture of our practical reasoning, or that it violates the factivity of knowledge.
11. NIC has been present on the market under different names. Thus, the view is identical with what Kölbel (2004) has called “genuine relativism” (in contrast with “indexical relativism”). Lasersohn (2005) refers to it simply as “relativism”. However, MacFarlane (2009) has claimed that NIC is not relativism in

its true sense: the difference between the views lies in the different kind of relativization each view takes to be essential. The difference will become clear in my discussion of relativism below.

12. Compare also with (Lewis 1998) distinction between context and index. There are significant differences between Lewis' view and Kaplan's, but they are irrelevant for my purposes here.
13. Kompa (2002, 2005) seems to defend NIC for knowledge attributions.
14. There are two prominent versions of SSI in the literature: Stanley's (2005) Interest-Relative Invariantism and Hawthorne's (2004) Sensitive Moderate Invariantism. For the purposes of this paper, I will count these two views as equivalent.
15. As far as Interest-Relative Invariantism is concerned, Stanley is well aware of this difficulty for his view. This is why he argues at length (2005, chapter 5) that, after all, the intuition we have in the **HA-LS** case is not the one we should have. Hawthorne is also aware of the problem cases like **HA-LS** pose for his Sensitive Moderate Invariantism. His strategy is to explain away the intuition we have in such cases, by employing the idea of projection: people tend to project their own epistemic standards to the subjects of the K-claims they are evaluating. Thus, both authors are thus willing to give up the task of accounting for all the intuitions. As I said before, my position is that a view that accounts for all the intuitions is to be preferred over a view that explains (some of) them away.
16. See also (Richard 2004). It is not clear, however, to what extent Richard's view overlaps with MacFarlane's.
17. This is not to say that we don't need other circumstances to evaluate a given sentence in a context. Complex sentences sometimes comprise other sentences whose truth value must be evaluated at other circumstances than those of the context of their utterance. But such complex sentences also comprise expressions whose unique role is precisely that of shifting the circumstance: operators. The existence of operators in language has been used by Kaplan (1989) as a premise in an argument in favor of introducing unorthodox parameters in the circumstances, such as times and (perhaps) locations.

However, this general argument, known as "the operator argument", has been questioned. First, one might doubt, as Stanley (2005) does in his criticism of both relativism and NIC, that there is not enough evidence that there are expressions in English that could play the role of operators shifting epistemic standards. But as Ludlow (2005) has pointed out, there seem to be plenty of natural language expressions of the kind Stanley looks for: expressions like "for X", "according to Y's standards" or "by the standards of science" are just some examples. However, there is a deeper worry lurking here, and a number of authors have been prone to forcefully point it out. The worry, as Stanley (2005), King (2003) and, more recently, Cappelen and Hawthorne (2009) claim, is whether the expressions that the relativist takes as circumstance-

shifting operators are rightfully interpreted as such. King (2003), following the lead in contemporary linguistics, argues that time, for example, should not be part of the circumstances with respect to which we evaluate tensed sentences, because tense and temporal expressions such as “yesterday” are better interpreted as quantifiers operating on times. A similar point could be made with respect to the introduction of other unorthodox parameters in the circumstances (for all the authors mentioned, the only acceptable parameter is the world). Cappelen and Hawthorne (2009) dedicate an entire chapter to the operator argument, and argue against it on a number of scores. In the face of such challenges, the relativist (as well as the non-indexical contextualist) has two options. The first is to try to show, as Recanati (2007) does, that the interpretation of tense and temporal expressions as quantifying over times is not forced on us, and thus that the operator argument could be employed to argue for the introduction of time in the circumstances. Similar considerations might then be used to argue that the operator argument works for other unorthodox parameters as well (in our case, epistemic standards). The second option is to point out, as MacFarlane does, that the introduction of unorthodox parameters in the circumstances is not dependent of the existence of operators in the language and is thus independently motivated. One such independent motivation is connected to the kind of contents one needs in a broader theory of communication. Another motivation could come from the fact that postulating such contents simply gives us a better explanation of the data to be accounted for. I take myself to follow this last strategy here. So, although this discussion is by far not conclusive, and much more needs to be said to substantiate these claims, I will take it that the introduction of unorthodox parameters in the circumstances such as epistemic standards is not a theoretically unacceptable move.

18. Although non-absoluteness of utterance truth is the main feature of relativism, what I will say below does not trade on this feature. The reason is that in the way I constructed the cases, there will never be an assessment of the same utterance in two different contexts of assessment; instead, in each case a different sentence will be used. However, I could have constructed the cases in such a way to put this feature of the view at work; the results I claim we get would have been exactly the same. See below.
19. How do things look in the more complex cases alluded to above, in which the context of assessment is different from the context of utterance? Let us imagine such a scenario. Let attributor AT make a K-claim about subject S, and let them be in different contexts in which different epistemic standards prevail. Now, let assessor AS, situated in a context in which epistemic standards are different from those in AT and S’s contexts (or at least different from one of those), evaluate AT’s utterance. Imagine now that AS is in a context in which epistemic standards are low, whereas S is in a context in which epistemic standards are high. It is my intuition that any assessment by AS of a

positive K-claim about S as true is incorrect in such a scenario. Moreover, this seems to me to be the case regardless of the prevailing standards at AT's context. But even if this last claim is debatable, imagine that AT is also in a context in which epistemic standards are low. Here the intuition I have certainly goes in the direction I mentioned. So, there seems to be at least one case (call it **LAS-LAT-HS**), quite similar to **LA-HS** above, that creates problems for the relativist.

20. What about the more complicated case in which the attributor, the subject and the assessor are all in different contexts? HSP instructs the assessor to go for the highest standard. The difference between this case and the simpler one is that now the attributor's context might be the one in which the epistemic standards are the highest, and not that of the subject. Does that have any influence on the view? I don't think so. For it seems to me that a positive K-claim assessed by an assessor in a context in which epistemic standards are low, K-claim made by an attributor in a context in which epistemic standards are high, even if those in the subject's context are low (case **LAS-HAT-LS**), is still false. But intuitions are shakier in such complicated cases.
21. Stanley (2005) includes in his original battery of cases one in which the subject is unaware of the epistemic standards in play in her own context (the case he dubs "Ignorant High Stakes"). I haven't considered that case in presenting the data because my case against the three views presented could be made without it.
22. Compare this idea with what Wright (2007) has to say in reply to Dietz's (2008) objection to relativism in the case of epistemic modals. Wright's point is highly significant in that the case he is responding to is one structurally similar to my **LA-HS** case.

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4. Perspectival shifts

On words and thoughts about oneself

James Higginbotham

Abstract: In (Higginbotham 2003) the peculiar nature of first-personal or *de se* contents (including thoughts, memories, and utterances) was attributed to their reflexive character, where a content for an agent *x* is reflexive to the extent that it presents *x* as the bearer *s(e)* of the state or action *e* of thinking or saying it, and it registers in logical form the roles *r(e')* that *x* would play in events *e'* classified by its predicates. Here I extend the discussion so as to take into account critical remarks in Recanati (2007) and Morgan (2009), and to explain how I see the account going within a modal conception of the nature of (structured) propositions. On the linguistic side, I am specifically critical of the view that human languages with first-personal or other indexicals that are sensitive to embedding involve “context shift” in the sense of Schlenker (2003) or Anand (2006), rather than being special cases of anaphora. Departing also from Lewis (1979), whose internalist views did not permit a robust sense of *de re* thought, I argue for an account that rules out context shift; pins the *de se* on reflexivity of content; and restores *de re* content along standard proof-theoretic lines, as in Hintikka (1962). Finally, using examples from English and Norwegian, I observe (with Castañeda [1987], I believe) that the distinction between truly *de se* and merely *de re* thoughts about oneself extends to certain extensional as well as intensional simple sentences, where the question of context shift evidently cannot arise, but where the distinction between reflexive and non-reflexive thoughts can be made out in logical form.

1. Introduction

Indexical singular terms are understood as they are used by their speakers to refer to things; moreover, their behavior, their contribution to what is said, is not in general dependent upon their sentential position, or their depth of embedding. On the other hand, there are a number of cases in human languages, such as those surveyed in Anand (2006 and references cited there, where the same forms when embedded do not behave as they would in isolation. One way of looking at these phenomena, advanced in particular in Schlenker (2003), is to hold that they involve “context shift.”

It has been very useful to consider these phenomena, and their sophisticated discussion by the above authors has advanced both linguistics and

philosophy. In this note, however, I shall expand upon some considerations sketched in Higginbotham (2003, 2008), suggesting that context shift does not exist, and that having recourse to it is a misdiagnosis, in part an artifact of two aspects of the formalism of Intensional Logic, as adapted to the Logic of Demonstratives in Kaplan (1977), or its “extensionalization,” as in Schlenker (2003). The first aspect is the view that the fundamental task for semantics is the characterization of the notion of truth in a context (at a possible world, or relative to another such parameter), so that contexts are taken up as manipulable objects of modification or quantification. The second is the confinement of anaphoric relations to explicit arguments, as explained more fully below. If, contrary to these assumptions, the object of inquiry is the target truth conditions of potential utterances by competent speakers, and implicit arguments (as in the case of Tense) are brought into the anaphoric picture, then context shift is out of the question (the context of an utterance is whatever it is). But the phenomena given in the literature fall out straightforwardly through the anaphoric use of indexicals; or so I shall argue, looking here through the narrow, but I believe representative, prism of the first person.

The difference in perspective that I consider below is not just a matter of rewriting, or of producing a “notational variant” of another survey of the data. Rather, the difference brings with it a distinct conception of first-personal thought, of first-personal thought as reflected in language, and of language as properly expressive of first-personal thought. The formalism of context-shift and the anaphoric system that I outline below do indeed have many points of analogy. But only the anaphoric system relates first-personal thought to perceptual experience; or so I shall argue.

2. Elements

The first person singular pronouns of English are used, and are to be used, by speakers x with the intention that x thereby refer to x . The rule of use is constant across contexts and depth of embedding. But human languages can show other rules at work. For basic data, consider the case of Amharic, as summarized in Schlenker (2003). In that language, the word that serves as the first-person pronoun in root (unembedded) clauses can take on reference to the higher subject in a subordinate clause. Representing this word by “ \bar{I} ”, we would have (1) as spoken by Mary, meaning that she, Mary, is

happy, but (2), as spoken by Mary, would assert that John said that he, John, was happy:

- (1) *I am happy.*
- (2) *John said that I am happy.*

Moreover, the content to be attributed to John is, in some sense to be clarified, first-personal, or as one says following Lewis (1979), *de se*: thus the speaker's report will not be faithful to John's content if what John said was, "He is happy," intending to refer to *x*, but failing to recognize that *x* is John himself, or if he said, "The man in the mirror is happy," failing to recognize that he himself is the man in the mirror.

We thus have at least three questions. First, what interpretation is to be assigned to "I" that it should exhibit such behavior? Second, how does it happen that the content of (2) is necessarily first-personal (with respect to John)? And third, what is first-personal content anyway? My third question is evidently prior to the other two, more properly logico-linguistic, issues. In responding to it I shall draw upon earlier work (Higginbotham 2003), elaborating somewhat on the view taken there.

The case of embedded first-personal content in English is well illustrated by the behavior of the "understood subjects" of reports of propositional attitudes, such as (3):

- (3) *John wants to eat the hamburger.*

We assume that the subject of "eat" is PRO, an unpronounced anaphor, and (3) is a case of obligatory control, in this case control of PRO by the subject "John". Then there is an important sense (whatever it turns out to amount to, exactly) in which (3), now more fully represented as (4), contrasts with (5):

- (4) John wants [PRO to eat the hamburger].
- (5) John wants [himself to eat the hamburger].

For: an assertion of (5) can be defended on the ground that (a) John wants the hungriest person to eat the hamburger; and (b) John himself is the hungriest person (even if John does not realize that he is the hungriest person). But (4) cannot be defended on these grounds alone. Rather, (4) can only be true if John's desire is conceived of as his own.

As remarked briefly in Higginbotham (1980) and Morgan (1970), which so far as I know is the earliest observation of this type, the properties of (4) versus (5) and the like extend to other cases of control. Chierchia (1990) extensively mapped the same case in Italian, where the context of control differs from that of the understood subject of a finite complement, apparently just as (6) differs from (7) in English:

(6) John expects [PRO to win].

(7) John expects [he will win].

Again, (7) might be asserted on the ground that John expects the person who trained hardest to win, and he is the person who trained hardest (even if he does not appreciate the fact); but (6) requires John's willingness to make the first-personal affirmation, "I will win." Chierchia (1990) also remarks the important point that the contrast between (6) and (7) obtains even with quantificational antecedents for the pronoun and PRO, so with "every contestant" in place of "John", for instance.

In rehearsing the contrasts (4)-(5) and (6)-(7) above, I have spoken only of the grounds on which assertions of these examples may be made, and I have deliberately avoided any tendentious description of the difference in content, if any, between the controlled complements in (4) and (6) and the pronominal/reflexive complements in (5) and (7). Naturally, both (5) and (7) may be asserted on ordinary grounds (John wants himself to eat the hamburger because he's a greedy kind of guy; John expects he will win because he always has high expectations of himself). In these cases they do not contrast at all with (4) and (6), respectively. The contrast comes, rather, because assertions of (5) and (7) may be *justified through identity with the reference of a description*, in sense of the schema (8):

(8) John *Rs* [α is *F*], because α =the *G*, and John *Rs* [the *G* is *F*].

where *R* is replaced by the relevant relational predicate, "the *G*" is replaced by a definite description, and " α is *F*" indicates the content to which John is said to bear *R*. What we observe, then, is that whereas (5) with "himself"= α , and (7) with "he"= α , may be justified in this way, neither (4) nor (6), with PRO= α , can be so justified.

The observation just made extends itself to a variety of cases, so for instance to Castañeda's amnesiac war hero (Castañeda 1966), who is reading about himself and thinks, as it were, "That guy is a hero," unknowingly

referring to himself; that is, Castañeda's description of the case as involving a belief *de re*, but not a first-personal or *de se* belief, depends upon being able to justify that statement through identity with the reference of a description. (The description may, to be sure, involve other objects, including the subject herself.)

In Higginbotham (2003) (extending some earlier work on tense, as in Higginbotham [1995]) I advanced the view that *de se* belief (or speech, etc.) was a special case of *reflexive* belief, where the state of belief itself was a constituent of the thought believed. There were, I suggested, other cases of reflexive thoughts. In the case of remembering a past perceptual experience, for example, as in (9) below, Mary is given to herself just as the subject of experience *e*, as in (10):

(9) Mary is remembering [PRO kicking a football].

(10) $[\exists e]$ Remember(Mary, *e*, experiencer of *e* kicking a football).

More formally, taking the objects of perceptual memory to be properties of events, in the sense of the notion of properties derived from Intensional Logic (Montague 1974); that is, as the intensions of predicates, we would have (11):

(11) $[\exists e]$ Remember(Mary, *e*, $\wedge \lambda e'$ (kick a football(experiencer of *e*, *e'*))).

Since remembering (unlike imagining or conceiving, which otherwise have the same formal structure when they appear with gerundive complements) is factive, (12) follows from (11):

(12) $[\exists e']$ kick a football(experiencer of \in , *e'*).

where \in satisfies “Remember[Mary, *e*, $\wedge \lambda e'$ (kick a football [experiencer of *e*, *e'*])]”. For my purposes, the significant point was that the identity of the subject of the complement in (9) is *immune to error through misidentification*, in a sense that I derive from Shoemaker (1968) and elsewhere; that is, things cannot seem to Mary as in (9), whilst at the same time she wonders whether it is *her* kicking a football that she remembers. For, according to the account above, she conceives of herself just as *the experiencer of the memorial episode*, the one that she is undergoing at the time of remembering.

On the side of the thought, then, we can distinguish the content of (12) from that of (13), where μ is the person Mary:

(13) $[\exists e']$ kick a football(μ, e').

even where μ =experiencer of \in . Furthermore, the judgements that guide examples such as Castañeda's and others, of allegedly *de re* thoughts that are not *de se*, can be recruited so that, e.g., (14) is true while (9) is false:

(14) Mary is remembering [her (Mary's) kicking a football].

(she remembers a certain person kicking a football, but not that she herself was that person).

On the linguistic side, both (9) and (14) involve anaphora, leading from the subject position of the complement back to the subject of the sentence. But the anaphoric relation is realized in different ways. In the case of (14), the antecedent of the formative “her” is another formative, namely the subject “Mary”, and the principle of interpretation is: the reference of the pronoun is inherited from the reference of its antecedent. Mary's thought is therefore rendered *de re*, as in (15):

(15) For x =Mary, $[\exists e]$ Remember($x, e, \lambda e'$ kick a football(x, e')).

But in (9) the antecedent is *within the verb* “remember”, which requires a bearer or experiencer for any event that it classifies, and it is the relation of this bearer to the event of remembering that is picked up by the understood subject PRO. That relation, for which I used the notion of an experiencer above, drives content in (9) that is absent in (14).

Whether Mary remembers as in (12), or only as in (13), she remembers the same event. Events, as I am construing them here following Davidson (1967) and elsewhere, are individual things, not kinds of things or instantiations of universals. They have participants (the things that we either must or may speak of in using predicates that range over them). It is a natural supposition that these participants are essential to the events in which they participate, and therefore that not only do we have that μ =experiencer of \in , but even that this identity is metaphysically necessary. That being so, the properties (in the sense of Montague (1960) and (1974)) appealed to in (11) and (15) are necessarily identical as well; that is, we would have (16):

- (16) $\lambda e' \text{ kick a football}(\mu, e') = \lambda e' \text{ kick a football}(\text{experiencer of } \epsilon, e')$

If that is so, then how are Mary's memories to be distinguished? They can indeed be distinguished if we depart from the modal individuation of properties and propositions (as in fact I do, though I do not argue the point here); or if, cleaving to modal individuation, we are generous about admitting possible worlds that are not metaphysically possible. I discuss this latter view in section 3 below.

Returning to the contrast between the unambiguous (6) and the open-ended (7), repeated here, we have that in (6) the antecedent of PRO is given as *the bearer of e*, or *s(e)*, as in (17); but in (7) it may be given just as bound by the subject "John", as in (18):

- (6) John expects [PRO to win].
 (7) John expects [he will win].
 (17) For $x = \text{John}$, x expects [*s(e)* to win].
 (18) For $x = \text{John}$, x expects [x to win].

It is in the sense of (17) that John's expectation is first-personal, the one to be expressed by, "I will win," for it uses in the complement clause the type of conception John has of himself (namely, subject of his own utterance) in saying, "I will win."

I believe that the distinctions that I have sketched can be supported through a number of types of examples, including particularly those surveyed in Anand (2006) and elsewhere. In this article, however, I will confine the discussion to the particular case of first-personal thought and speech, and specifically to the issues of immunity to error through misidentification; analogies and disanalogies between the account offered here and views that have been suggested, particularly as in Schlenker (2003), stemming from a revision of Intensional Logic with Demonstratives as suggested in Kaplan (1977); and some extensions to other constructions, including extensional constructions that are formally distinct in languages other than English.

3. Reflexivity and immunity to error

Shoemaker (1968) held that statements (or thoughts) such as (19), themselves based upon observations like (20), were "circumstantially" immune

to error through misidentification. The qualifier is added because one could certainly conceive of situations in which one knew that someone, or of some particular object x , that it was facing a table, and legitimately wonder whether the one facing a table, or that particular object, was oneself (it might for instance be known to be the man in the mirror, who I take to be me):

(19) *I am facing a table.*

(20) *There is a table in the center of my field of vision.*

Thoughts such as that expressed by “I am in pain” were said by Shoemaker to be “absolutely” immune to error, because they were not only based upon current (in this case sensory) experience, but just reports of it. (The experience does not have to be sensory, as of something outside oneself: I assume that when I come to regret lying to my mother there is also no question of misidentification, either about who is regretting or who I think did the lying; see also the discussion below of the feeling of shame.) Taking Shoemaker's cases as paradigmatic, the account that I propose here would have it that John, in coming to believe (19), comes to be as in (21):

(21) $[\exists e]$ Believe(John, e ,that $[\exists e']$ facing a table[bearer of e,e']).

that is, there is no question of misidentification, because John is given to himself in the complement simply as the bearer of the experience. (I do not attribute the interpretation that I have supplied for Shoemaker's examples, leading to the thesis just expressed, to Shoemaker himself; but the interpretation is, I believe, supported by those examples.)

Notice that, on the view just expressed, if John's experiential state is ϵ , so that John believes the content that the bearer of ϵ is facing a table, then that content could not have been derived from another content t *is facing a table* for any t . For, the thought is not entertained until it is believed, tied as its existence is to the existence of that state. On the other hand, any thought with the content that the bearer of ϵ is facing a table, where ϵ is an occurrent episode or state of the subject, and the thought is just a classification of the subject's state, will make for immunity to error: I don't have experiences and wonder whether they are mine; hence can't wonder whether it is the bearer of ϵ who is facing a table.

There are two kinds of reflexive thoughts, and so of immunity to error through misidentification, namely those in which the content is reflexive at

the root, as in (19), and those in which it is reflexive in a complement clause as in (6), or a gerundive complement as in (9). On the view under consideration here, these two cases reduce to one. For the embedded or complement case, the states or assertions to the effect that *a* bears a relation *R* to a content in which *a* figures have that property either because (i) *a* himself or herself figures in that content, or (ii) *a* is given to himself or herself just as the thing that bears a certain relation to the state or episode classified by *R* (or, of course, both). By my lights the former are *de re*, the latter first-personal or *de se*. Likewise, the root thoughts or assertions of *a* that *a* is *F* can be (i) just thoughts that contain *a* himself or herself as constituents or (ii) thoughts in which *a* is given as the bearer of some superordinate experience *e* (or, again, both).¹ In the cases that support the attribution of *de re* objects of thought, belief, or assertion, but are not *de se*, the subject of the complement is identified with the external subject on grounds that the subject does not recognize; e.g., the amnesiac war hero is a hero, but does not identify the person he is reading about as himself. Similarly, my belief that I am facing a table, if derived from the belief that the man in the mirror is facing a table, and that I am the man in the mirror, is so far just *de re* and falls under (i), whereas my belief insofar as I am given just as the subject of that state, the belief I come to have when I face a table with my eyes open in the normal way, is *de se*, and falls under (ii). In either case, I have both beliefs, the *de se* and the *de re*. For myself=*x*, I believe that the subject in each of these experiential situations is *x*, and that the subject is facing a table; so I do believe both *de se* and *de re* that I am facing a table. In case (i), I would withdraw both beliefs if I came to believe that I was not the man in the mirror; but in case (ii) no such grounds exist.

In saying that the reflexive thought is *de se*, and in contrasting it with *de re* as above, I do not mean to suggest that reflexive thoughts are hard to come by. On the contrary, they represent the ordinary state of things. If I think that I am *F* because I think that man (the man in the picture, the man they are talking about, the man who forgot to buy the milk) is *F* and I have identified myself as that man, then in coming to be in the state *e* of believing that *x* is *F* for myself as value of "*x*", I will also come to be in the state *e'* of believing that the subject of *e'*=*x* and is *F*, a state whose object is a reflexive thought. But my confidence in its truth depends upon my confidence in the assumption that I am that man, and I must therefore allow for the possibility of error in that content (though I am immune from error in judging that I have concluded that I am *F*). The contents that are free from that possibility (where that possibility is foreclosed) are those in which the

belief in the reflexive thought that the subject of e is F arises just from the classification of the perceptual or other experience e itself.

The classification that I have just given opens the door, however, to two distinct possibilities of error, both of which were briefly mentioned in Higginbotham (2003), and critically discussed in Recanati (2007: chapters 21 and 25). First, I have assumed to this point that the subject's experience is, so to speak, properly recognized as his own. But, in an example I took from John Campbell (1999), might there not be a kind of pathology whereby the subject, who doubts or wonders whether the subject of \in is himself, doubts or wonders whether he is thinking that he himself is F ? Second, whenever a subject remembers a property of events, there must (because perceptual memory, like knowledge, has a factive component) be a past event with the property in question; however, as in Shoemaker's (1970) discussion of "quasi-memories," it could be that a subject's experience as of remembering (say) visiting Paris are in fact grounded in the perceptual experiences of someone else (bits of whose memorial apparatus have been transplanted into me). In that case, the subject might say, "Well, someone visited Paris, but was it me?" I consider these possibilities in reverse order.

Suppose, then, that things are as in (22):

(22) I seem to remember (or quasi-remember) [PRO kissing Mary]

and suppose that I know that I am either remembering or quasi-remembering. Then there is an experience \in which is either remembering or quasi-remembering, and whose content, on the system we have adopted, is $\wedge \lambda e'$ kiss Mary(experiencer of \in, e'), where \in is my memorial (or quasi-memorial) experience. I can, however, wonder whether it was I who kissed Mary. This possibility evidently turns on the factivity of memory (extended to quasi-memory). It does not count against the *de se* status of the thought content, or threaten immunity to error through misidentification. For: the content of my memory or quasi-memory is about myself, but I do not entertain it because I have in any way identified myself as the so-and-so; and if I come to take the content as a memory rather than a quasi-memory, it will not be because of an identification of the person presented in that content with myself, but rather because I come, rightly or wrongly, to believe that the causal background to my having that content before me makes it a genuine memory.

Another way of illustrating the point is to observe that it can apply also to cases of occurrent perception.² In the short story, "The Remarkable Case

of Davidson's Eyes" (Wells 1895), H.G. Wells allows a man Davidson= x to have the visual experiences appropriate to someone else, hence for it to seem to Davidson that he – he himself – is facing a table, under the circumstance that, for all he knows, his experience is physically grounded in what is before another's eyes. If we add that x knows that his experience is veridical, but does not know whether it is his or someone else's, then the case is one of quasi-perception, exactly analogous to that of quasi-memory. Again, the thought that x would express by saying, "I am facing a table" is immune from error due to misidentification, in the sense that there is no identification of himself as the subject facing the table; the possibility of error comes from x 's knowledge that there is some subject y or other such that y is indeed facing a table, which is extrinsic to the content of the thought.

I conclude, then, that these cases, quasi-memory and quasi-perception, do not threaten immunity to error due to misidentification in the sense in which it is peculiar to *de se* thought; for they do not involve the misidentification of anything, but rather the grounding of the experience of thinking the thought in the implicated truth of another thought.

Turning now to the pathological case mentioned by Campbell, and discussed at some length by Recanati, the picture is different, inasmuch as it is only the ownership of experience that is at stake, and the factivity of the complement is not presupposed. Consider in this respect utterances, which are self-conscious actions, performed by people who know that they are performing them. To say, "I am F ," on any grounds whatever, is to perform an action conforming to the rule of use that governs the first person; namely, that it is to be used with the intention that one refer to oneself thereby.³ But suppose that John thinks that he is, or may be, channeling Alexander the Great, who chooses to speak through his, John's, mouth. Words escape John's lips: "I cut the Gordian knot." Then there is an utterance u whose subject x =the utterer of u said that x cut the Gordian knot. John may conceive himself to know that either he himself said it, or Alexander said it, but wonder which it is. Then John may legitimately say, "Well, someone said that he himself cut the Gordian knot, but was it me?" For the reference of the content of *utterer of u* may, for all John thinks he knows, be himself or Alexander. Likewise (taking this to be conceivable) if John has the experience of thinking that the person whose experience it is affirmed cutting the Gordian knot, but wonders whether that experience belongs properly to Alexander.

The cases just sketched, and similar cases discussed in Recanati (2007: 186-190), do show that a person may have a reflexive, and so *de se*, thought that the person does not recognize as *de se*, a thought that therefore, as Recanati notes, falls short of what we would expect of full self-knowledge. But they do not show a possibility of error due to misidentification, or to the extent that they do I believe that they deserve a different label; for it is not that it seems to the subject that he said or thought that he cut the Gordian knot, but he can wonder whether what he said was to the effect that *he* cut the Gordian knot, but rather that it seems to the subject that he said or thought that he himself cut the Gordian knot, and the speaker wonders whether it was *he* that said or thought it.

The above two cases, then, do involve in their different ways the possibility of error, one depending upon the factivity of the object of thought, or the truth of a proposition that having that kind of thought implies, and the other depending only upon the recognition of the state or episode of thought as one's own. The two cases may of course be combined: Wells's Davidson might wonder whether the visual experience is his own, and at the same time be skeptical as to whether, whoever it is it belongs to, it is grounded in the perceptual apparatus of that agent. Indeed, the pathological property of the subject, that he does not recognize his thoughts and actions as his own, could be advanced as a possibility even for the cases that for Shoemaker are absolutely immune from error: "I feel pain", for instance. Partly on those grounds, and partly on the grounds that the case of Davidson's Eyes, or quasi-memory, depend upon factivity, I distinguish both types from the type of error that we have when an object is *identified as* the so-and-so; to the extent that this is a concession to critical discussion, I believe it is inessential to the distinction I now wish to draw, between the reflexive account as sketched above and accounts stemming from modal theories of the content of assertion, and of belief and the other attitudes.

4. Modal theories

Much of the contemporary semantics literature that discusses the propositional attitudes and related matters takes as its point of departure the modal theory first advanced in Hintikka (1962), and subsequently developed further by him and others. In this section I shall examine the prospects for an account of the *de se* within such theories, arguing the case that, even assuming the high degree of abstraction that is characteristic of them, it is

appropriate to distinguish the *de se* from the *de re* along the lines given above.

On the modal view of the attitudes, there is a logic of (for example) belief, to be construed as what Hintikka dubbed a “personal modality;” that is, a modality that is relative to the agent. For a fixed agent *a* (and holding fast any other parameters) the construction *believes p* is a modality with a neighborhood possible-world semantics, in the sense that for each possible world *w* there is a family of *doxastically accessible* worlds *w'* (intuitively, the worlds where everything that *a* believes in *w* is true), and *a* believes that *p* in *w* just in case *p* is true in all of them.

Other issues apart, in this setting the question at once arises: when is it legitimate to pass from a schema as in (23), where “*t*” is a descriptive singular term (perhaps a proper name), to (24)?

(23) *a* believes [$\varphi(t)$]

(24) [$\exists x$] *a* believes [$\varphi(x)$]

Hintikka's answer was: when, and in general only when (in the context), besides (23) we have the premise (25):

(25) [$\exists x$] *a* believes [$x=t$]

Given the semantics, (23) and (25) together imply (24). Moreover, given (23) and the negation of (25) it is easy to construct models where (24) fails. If, as it happens, “*t*” refers as things are to *a* then with the additional premise (25') we can infer (24'); without it, (24') will not in general follow:

(24') [$\exists x=a$] *x* believes [$\varphi(x)$]

(25') [$\exists x=a$] *x* believes [$x=t$]

Hintikka's account at first does not appear to permit beliefs about oneself that come about just on the basis of Castañeda's or similar examples, beliefs that are (said to be) *de re* but not self-conscious; for attribution of those beliefs depends upon the external identification of the *res* as the agent herself, although she does not herself register the identity (the war hero does not believe that he is the person he is reading about; so it can't be that in all his doxastically possible worlds he is a hero). Do we, then, just “get away with” such attributions, although they are not strictly speaking correct?⁴ Or is there a missing element somewhere?

One construction that is intended to supply the missing element is provided, in somewhat different forms, in (Schlenker 2003), (Anand 2006), and elsewhere.⁵ Abstracting from various differences in notation and background, it is as follows. The relevant domain for the modal evaluation of a statement to the effect that subject *a* believes (or bears some other attitude toward) so-and-so is the set of *ordered pairs* $\langle x, w \rangle$ with *x* an object (from a domain that includes in particular *a*) and *w* a possible world. The first coordinate plays a role in the question whether $\langle x, w \rangle$ is doxastically accessible to *a* only when the question whether *a*'s attitude *de se* is at stake.

Suppose I believe (in world @, say) that somebody has won the lottery, but I don't believe it is me (myself). The result has been announced by ticket number, and I therefore believe that the person with ticket 47 has won the lottery, but I don't have an opinion as whether I myself am the person with ticket 47. Then (as is said in these scenarios) you, commenting on me, can defend the statement that H has an opinion as to who has won the lottery, because H knows that the person with ticket 47 has won, and you know that he is that person. On the assumption that (26) is true the only doxastically accessible worlds for me from @ are those in which I have won the lottery:

$$(26) [\exists x=H] x \text{ believes } [x \text{ is the winner}]$$

Moreover, in all of these worlds I hold ticket 47, already announced as the winning ticket. Ignoring the distinctions amongst those worlds in which people other than me bought different losing tickets, the only world compatible with what I believe is @ itself. Let B be another ticket holder, say of ticket 45 as things are, and suppose that I know of myself=*x* that *x*≠B. There are worlds *w* in which it was B, not me, who bought ticket 47, and I who bought ticket 45. And, finally, there are worlds in which I bought ticket 45, and B ticket 47: in some of these I won, and in others B won. We then have four possibilities, as sketched in (27):

(27) @	<i>w</i>	<i>w'</i>	<i>w''</i>
H wins	B wins	H wins	B wins
H (47)	H (45)	H (45)	H (47)
B (45)	B (47)	B (47)	B (45)

The only doxastically accessible world for H is @ itself (up to the level of detail we are considering). For: *w* and *w''* are not accessible, because B

wins there; and w' is not accessible, because I believe that the winner is the holder of ticket 47, and that premise, together with (26), implies, contrary to what holds in w' , that I do not hold ticket 45. So there appears to be nothing left for me to learn.

Must we then withdraw the assertion that H believes he is the winner? That's possible, but then it is at the very least hard to see why *any* (apparently) *de re* reports that rest upon third-party knowledge should be allowed to stand. If, for example, Castañeda's amnesiac war hero really does believe *de re* that he is a hero, then there seems to be nothing left for him to learn either.

But on the modification suggested, this is not so. In the lottery case, if $W = \{ @, w, w', w'' \}$ and $A = \{ H, B \}$, then of the 8 elements in $A \times W$ those accessible to me are just $\langle H, @ \rangle$ and $\langle H, w \rangle$; for those are the worlds in which the holder of ticket 47 has won the lottery, and no world $\langle B, w^* \rangle$ is accessible, because I know that I (myself) am not B. The ordered pairs $\langle x, w \rangle$ are the *centered* possible worlds in the sense of Anand (2006) (borrowing a terminology due to Quine).

Similarly, consider the case of crazy Heimson (Perry 1977), who believes that he is David Hume. Just one (kind of) world w makes his belief true, namely that in which it is David Hume who is David Hume. So there is just one centered world, namely $\langle \text{David Hume}, w \rangle$ such that there is something such that everything Heimson believes of himself is true of that thing. In short, the proposal is that by taking the product $A \times W$ of agents and worlds we can specify the first-personal nature of some of our beliefs, whilst allowing that we may have beliefs about ourselves that are not first-personal.

But now, referring back to the case of the lottery, it's clear that the *de re* belief report, "H believes he is the winner" is not, in the sense of Hintikka (or in the sense of being a belief in which only the object H figures), the report of a *de re* belief after all; for it is allowed as a true report even though in some worlds compatible with everything H believes H does not satisfy " x is the winner". Similarly for the report, "The amnesiac war hero believes he is a hero," for he believes he is a hero only (as it were) *qua* person he is reading about. On the view just outlined, we would be back in the position of saying that the *de re* report is something that we indulge in, even where there is no such belief (or: our attribution of such a belief is relative to a descriptive identification of the bearer). Conversely, the *de se* reports would occupy the space taken by Hintikka's *de re*. But then no recourse to centered possible worlds is required.

Again, in Castañeda's (28) the pronoun is not deployed as simply inheriting its reference from the subject, but rather as allowed because there is some description or individual concept δ , which in fact denotes the amnesiac war hero, such that he believes that δ is a hero.

(28) The amnesiac war hero believes that he is a hero.

Castañeda proposed a special pronoun “he*” to play the anaphoric role appropriate to self-conscious belief, as in (29):

(29) The amnesiac war hero believes that he* is a hero.

But it is “he*” that behaves as an ordinary anaphor, inheriting its reference from the antecedent; the pronoun “he” as in (28) allows an interpretation that is mediated by δ , and what we really have is (30):

(30) For the war hero= x [$\exists\delta$: δ denotes x] x believes that δ is a hero.

No genuine sense in which the belief is *de re* is forthcoming.⁶ Consider again the Amharic cases (1) and (2), repeated here:

(1) *Ī am happy.*

(2) *John said that Ī am happy.*

We can now say simply that Amharic “Ī”, when used in a root clause as in (1), contributes just the speaker herself to the proposition expressed; but in (2) (unlike English) it is anaphoric to the overt subject “John”. In that case, the only situations compatible with John's statement are those in which the person John is happy. In sum, we have an ordinary case of anaphora.

Relativity of the *de re* report to a description could be injected, as it were, into the possible worlds. It's clear from the construction that one could have for each x a kind of “floating” singular term, call it SELF(x), whose identity was different in different worlds, and which therefore served to multiply the possibilities in the same way as centering them does. In the case of the lottery the SELF(H) concept will track the holder of ticket 47 (because “holder of ticket 47” is the description in virtue of which the report, “H believes he is the winner” is warranted—in general, there will be different SELF(H) concepts for different descriptions). The arrangement of possible worlds is then as in (31):

(31) @	w	w'	w''
H wins	B wins	H wins	B wins
H (47)	H (45)	H (45)	H (47)
B (45)	B (47)	B (47)	B (45)
SELF(H)=H	SELF(H)=B	SELF(H)=B	SELF(H)=H

Of these, w' and w'' are inaccessible as before, because the holder of ticket 47 is not the winner. But both @ and w are accessible. For H to believe *de re* that he is the winner, it is sufficient for him to believe that $\text{SELF}(H)=\text{the winner}$; but for him to believe that he himself is the winner he must also believe that $\text{SELF}(H)=H$. The semantics is then as in Hintikka's original construction. As for crazy Heimson, he believes that $x=\text{David Hume}$, for himself as value of x , a doxastic (though not a metaphysical) possibility.⁷

To the extent that we stick with "small" possible worlds, as in (31), we can say that $\langle x, w' \rangle$ is doxastically accessible for x at w if some object in w' satisfies every $\phi(y)$ such that x believes $\phi(x)$ in w . Referring back to (31), then, we would have that both $\langle H, @ \rangle$ and $\langle H, w \rangle$ are doxastically accessible for x , the latter because B both holds ticket 47 and is the winner, and that would allow that H's belief is *de re*. But this definition cannot be extended to larger situations, because it may be, and often will be, that x believes things that do sharply distinguish x from other candidates; e.g., in the case of (31) the belief *de re* that x is not B, or the belief *de re* that x is six feet tall, while x believes B to be shorter than that. The relativity to a supporting description is therefore essential.

Consider again the case of the lottery. I take my ticket out, and observe that it is ticket 47. I then rejoice at having won the lottery. What did I learn? On Hintikka's original view, the answer is supposed to be clear: I acquired the *de re* belief, which I did not formerly have, that I hold ticket 47. On the modal account in terms of centered possible worlds, the answer is the same. Formally speaking, we would say: the centered possible world $\langle H, w \rangle$ is inconsistent with my being the winner, because I am not the winner in w . But what is it about my experience that makes it so? Likewise, if we have the conception $\text{SELF}(H)$, then it could be proposed that I learn that $\text{SELF}(H)$, the holder of ticket 47, is H; but that is not a different view either, because $\text{SELF}(H)$ simply tracks the holder of ticket 47.

We can, however, propose a modal theory according to which a belief can be truly *de re* but not *de se*, one that moreover relates the experience of looking at the ticket to the belief that this experience occasions. On this view, we distinguish $s(e)$, the subject of the state of belief, from the person

(or other thing) x whose state it is. The possible worlds as in (27), whose diagram is repeated here, are as they are:

(27) @	w	w'	w''
H wins	B wins	H wins	B wins
H (47)	H (45)	H (45)	H (47)
B (45)	B (47)	B (47)	B (45)

When I look at my ticket, however, I have an experience e that gives rise to the belief: $s(e)$ holds ticket 47 (a belief that was *not around to be had* until I had the experience). I believe that $s(e)=H$, and so of myself= x that $s(e)=x \neq B$, where e is the experience of believing that $s(e)$ is not B and holds ticket 47. The world w , in addition to w' and w'' , then drops out of contention: the possible worlds are as in (32), and only @ survives.

(32) @	w	w'	w''
H wins	B wins	H wins	B wins
H (47)	H (45)	H (45)	H (47)
B (45)	B (47)	B (47)	B (45)
$s(e)=H$	$s(e)=H$	$s(e)=H$	$s(e)=H$
$s(e)$ (47)	$s(e)$ (47)	$s(e)$ (47)	$s(e)$ (47)

I conclude that the modal theory, as advocated in Schlenker (2003) or Anand (2006) and elsewhere, provides at best an account of the justification for *de rereports* of thoughts that are not in fact *de re* in the sense of the modal logic of belief (or in the sense familiar from discussions of *de re* necessity), and that the thoughts that are said in this literature to be *de se* are in fact just *de rethoughts* in the classic sense. There is then no genuine distinction between thoughts about oneself in the strong, first-personal way and thoughts literally about something that turns out to be oneself; for thoughts of the latter kind are in fact mediated by descriptive contents, hence merely *de dicto* thoughts that allow *de re* reports. On the other hand, the reflexive account, because it gives first-personal thoughts a particular content, does allow genuine *de re* thought that is not first-personal.

As noted briefly above, a reflexive thought or action, and a reflexive belief in particular, cannot in the nature of the case be the conclusion of an inference wherein the bearer of the thought or action is identified in some way; for the experience or state e , whose subject is given as $s(e)$ in the thought or action, isn't around until the reflexive thought is to hand. That is,

there are no inferences from $\phi(t)$ and $t=s(e)$ to conclusions $\phi(s(e))$. The state of concluding, or coming to believe, $\phi(s(e))$, draws upon e itself, which was not on the scene until $\phi(s(e))$ was concluded; so the alleged premise that $t=s(e)$ does not exist. That is not to deny that there may be an enduring concept of oneself that plays a role in similar inferences, but only to remark that in the scenario envisaged (and in like cases), as where I look at the ticket in my hand, and so come to believe that the subject of that experience holds ticket 47, the space of possibilities has altered, albeit in such a way that one of them (that the subject does not hold ticket 47) is thereby also eliminated. Indeed, I might have known beforehand that I would behold either ticket 47 or ticket 45, and so would either have an experience of seeing that the subject of that experience holds ticket 45, or an experience of seeing that the subject of that experience holds ticket 47. These, however, are different experiences. It is not that, before I looked at my ticket, I anticipated a certain definite experience \in , and wondered what it would tell me; rather, it's that I did not know what experience I would have.

On more general matters vocabularies may be traded, to some degree. It's agreed on all sides that not just *any* individual concept δ that happens to refer to x as things are licenses the assertion, by x or anyone else, that x , believing as she does that $F(\delta)$, may be reported as believing that $F(x)$. Let it be agreed also that there are cases where the *report* that x believes $F(x)$ is appropriate, even if the subject does not have the *de re* belief that $F(x)$. Three categories would then have been distinguished, namely: (i) cases that permit the *de re* report, but are not *de re*; (ii) cases that permit the report, and are *de re*; and (iii) cases that are *de se*. For example, it may be questionable whether the lottery case above really does license the assertion, "H believes that he has won the lottery" (because he just heard the announcement that ticket 47 has won, and that is the ticket he holds). But the particular example does not matter for the argument that I gave on the basis of it. The point is that, given that in the doxastically possible worlds all matters of individual identity are fixed (in contrast to Hintikka's original view; see note 4), it is not possible to make the *de se* distinct from the *de re*, and therefore not possible to treat any of the *de re* reports that are not reports of *de se* beliefs as anything other than tacitly relativized to individual concepts, hence not properly *de re* beliefs at all.

To put it another way, the view that I advance here recognizes four categories, whereas the accounts to which I have appealed have only three. On the former view, there are: (o) beliefs (or other thoughts) that are straightforwardly conceptual, in the sense that the subject, believing as she

does merely $F(\delta)$, cannot be said by an outside observer y to believe $F(x)$ for herself= x , even if y knows that $\delta=x$; and then there are the categories (i)-(iii) above. The accounts that I am criticizing have, however, only three categories, namely (o), (i), and (ii)-(iii); for (ii) and (iii) collapse, at least under the assumptions in force, which fix identity across possible worlds once for all.⁸

Of course, the reason that an account of the *de se* in terms of reflexive thoughts purchases the extra category (iii) is that it injects a special concept, *subject/experiencer/bearer of e* , into the *de se*. But that concept is crucial for relating sensory and other experiential states and intuitions to the beliefs about oneself that one acquires (or loses) on the basis of them; or so I suggest. To return to (my interpretation of) Shoemaker's point: when "in the normal way" I conclude, on the basis of my visual (and perhaps other) sensible intuitions that I am facing a table, I am given to myself, with respect to the proposition that I am facing a table, just as the subject of those intuitions. The same is true when I see that I am the holder of ticket 47. To be sure, the further step from seeing that to concluding that I am the winner of the lottery requires further premises, for instance that the ticket I am looking at is the ticket I bought. But the entering wedge, so to speak, is the reflexive thought, which will lead ultimately to the further reflexive thought that the subject of experience indeed won the lottery.

Conversely, absent the reflexive thought, what is the epistemic link supposed to be between my looking at ticket 47 there in my hand and my conclusion that I hold ticket 47? The experience must occasion the thought: but how does it do this? The answer does not appear to be forthcoming from a modal, or other, account of belief and the like that does not recognize some self-conception of x on the part of x . I have suggested here that the relevant minimal self-conception is: subject of the experience, a conception that is directly related to the occasioning experience, whilst at the same time immune to error through misidentification (*modulo* the remarks in section 2 above).

All of us have many experiences and states that we keep track of, and our routinely keeping track of them is both normal and expected. To that extent, perhaps a concept of oneself as an enduring subject s of experience should be attributed to individuals x (although here there may arise issues of misidentification along other lines, as for instance whether it is known that the subject of one experience e and the subject of another e' are the same). In any case, x 's thought that $F(x)$ and x 's thought concerning experience \in that $F(s(\in))$ would be distinguished.⁹

5. Singular term objects

Pavarotti is looking at one particular face amongst many that he sees in a mirror. He thinks, “What a handsome fellow!” referring to the person the image of whose face he is contemplating. Pavarotti does not know it, but the face is his own. Then Pavarotti is admiring himself, for he himself is that person.

My own judgement for the above and similar cases is just that of Castañeda's for the amnesiac war hero; that is, even though the use of the reflexive pronoun as in (33) below is in order, because, for Pavarotti= x , x is admiring x , he is conspicuously not in the state he would be in if he recognized himself in the mirror, the state of thinking, “What a handsome fellow I am!” or (as we might say) a state of active engagement in self-admiration.¹⁰

(33) *Pavarotti is admiring himself.*

The scenario for “admire” is matched by scenarios for several other English verbs that give rise to opacity in their singular-term objects, such as the notorious “conceives of”, “seeks”, “hunts”, “is looking for”, and the rest. But it extends much further, to include “disparages”, “praises”, “congratulates”, “is proud of”, and the like, inasmuch as we distinguish the act, for instance, of praising someone who turns out to be oneself from an act of unabashed self-praise. How should this distinction be understood?

Consider in this respect John Perry's tale of tracking down the shopper spilling sugar, who turns out to be Perry himself (Perry 1979). What does he come to know when he realizes, as Perry puts it, “I was the shopper I was trying to catch” (Perry 1979: 3)? All along Perry sought a person who turned out to be himself, and in that sense he sought himself; but he realizes only at the end that he is (so to speak) a seeker of self. Inasmuch as “seek”, “look for”, and so forth show true opacity with respect to the individuation of their objects, we can use the modal theory of *de se* attitudes as outlined above to distinguish the subject's beliefs before and after (the case is particularly straightforward if, as proposed in various places, and defended at length in Larson (2002), what appear as singular term objects are best understood as fragments of clausal complements—if seeking should be understood as endeavoring to find, for instance.) Likewise, given the distinction between the bare subject x and x 's conception of the target of his quest we might distinguish (34) from (35):

(34) x sought x (but only because x sought the F , and the $F=x$)

(35) x sought x (*simpliciter*)

That is to say, despite descriptions of cases like (34) that have become common, classifying them as “*de re* but not *de se*,” (34) is merely *de dicto*, and it is only (35) that is genuinely *de re*.¹¹

But then cases with “admires”, “congratulates”, “praises”, “disparages”, “discourages”, “detests”, “reads about”, and many, many others, which do not exhibit opacity in the object position, suggest that a genuine distinction between the *de re* and the *de se* should be recognized, even when there is no question that the relevant sentences are true just in case $R(x,x)$, where R is the relation in question: whether Pavarotti is aware that he is looking at himself or not, it is still true that for $\text{Pavarotti}=x$ $[\exists e]$ $\text{admires}(x,x,e)$.

We can then extend the account from the notorious handful of conceptions such as seeking and hunting to mental states such as admiring, praising, disparaging, and the like. When Pavarotti recognizes himself, he undergoes an episode e of reflexive thought to the effect that the experiencer of e is admiring the experiencer of e . (Of course, things can go the other way too: Pavarotti may have initially thought what he would express by, “What a fine fellow I am!” only to learn that the image is of someone else.)

In concluding, I turn briefly to some linguistic phenomena, first outlined so far as I know in (Hellan 1988), that underscore the distinction that needs to be made in the case of psychological conceptions such as admiration, disparagement, and others. In many Germanic (and other) languages there are distinct reflexive forms, a simple one and a complex one involving a ‘self’ morpheme. These have different distributions, and (Hellan 1988:104) noted with reference to Norwegian that the simple one may (though not in all uses) be in some way *de se*, the complex one not. Furthermore, Hellan (1988) notes that in Norwegian only the simple reflexive *seg* is compatible with the notion of shame, as in (36) (taken from [Dalrymple 1993:30]):

(36) *Jon skammer seg*

Jon shames self

‘Jon is ashamed’

Nothing – no other nominal at all – can substitute for *seg* in (36). These authors conclude therefrom that *seg* is not really an argument of the verb *skammer*, which (like English “perjure”, as Dalrymple notes) is inherently reflexive.

Although I shall not here be able to go further into detail, I would tentatively advance a different conclusion, namely that the reflexive forms do indeed refer, and are in fact arguments of the verb. But because the feeling of shame (that is, the feeling that causes blushing), and the act of perjury, are both of them not merely inherently reflexive but also necessarily self-conscious, only the *de se* thought or action is possible; hence only the reflexive in English, and the *de se* reflexive in Norwegian, can be used. I can commit perjury only by saying something that I myself, recognizing myself as the speaker, believe or know to be false; I can blush with shame only insofar as I believe that I myself, the subject of the feeling, have been found out to have behaved disgracefully. Both states, if I am right, involve reflexive thoughts.

The case is otherwise with notions such as admiring, disparaging, and the like. According as they are self-conscious or not, they may in a given language favor one or another reflexive form, or simply give rise to ambiguity (indeed, even in conveying as I have tried to do the distinction between Pavarotti's admiring himself and Pavarotti's being engaged in an act of self-admiration, I have likely taken advantage of such vestiges of the reflexive distinction as are available in contemporary English). Within the modal theory, as we have seen, one can (at best) paint the distinction in terms of centered possible worlds, by declaring that Pavarotti only admires the man that he is examining in the mirror, or by declaring that his admiration is just for the man in the mirror, or himself under that description. But all that seems wrong: by admiring the man in the mirror he *is*, willy-nilly, admiring himself, even if he does not realize it. On the proposal developed here, however, Pavarotti's state as reported in (33) will be as in (37) if he does not recognize himself as the experiencer *s(e)* of *e*, but (also, in normal circumstances) (38) if he does:

- (37) For Pavarotti= x $[\exists e]$ thinks $[x, e, \text{that } [\exists e'] \text{ admires}(s(e), x, e')]$
 (38) For Pavarotti= x $[\exists e]$ thinks $[x, e, \text{that } [\exists e'] \text{ admires}(s(e), s(e), e')]$

(37) arises when the antecedent of the reflexive is just the word "Pavarotti"; but (38) is read off the relation of that subject to the thought-episode. Both understandings are available for (33), even though, however things may actually be, it will have the same truth value on either.

6. Concluding remarks

In elaborating, with respect to the particular case of the first person, the point of view I outlined in the beginning, according to which contexts are constant, and cases that have been described as allowing shifts in context are better understood as anaphoric (though in a different way from ordinary anaphora, acquiring their reference through a superordinate clause or background assumption), I have been critical not only of context-shifting so as to accommodate the *de se*, but also of the thesis that the *de se*, as expounded in the works cited, is any different from the *de re* in a classical sense (including my own view from 1991, which said so explicitly). On the modal theory, which abstracts away from the details of the syntactic or conceptual structure of our statements and thoughts, and considers only their spectra of truth values around the possible worlds, or counterfactual (and in many cases metaphysically impossible) situations, it would be allowed that the relevant self-conceptions (ϵ), where ϵ is an experience, be distinct from the subject x whose conception it is. In the absence of that abstraction, the propositions that $F(s(\epsilon))$ and that $F(x)$ are distinct from the beginning.

When I think that I am F , or Mary thinks that she (herself) is F , just on the basis of how things appear to us in normal perceptual circumstances, there is immunity to error through misidentification. That much is part of the data to be accounted for. If indeed these thoughts are just *de re* (as I have argued is in fact the case for the accounts of the *de se* that have been promoted in the literature cited), then the subject is given through simple cross-reference with the thinker, and not through any description that the thinker believes she satisfies. But then no account has been offered of the role that the perceptual experience plays in bringing about the belief. I have suggested that the cross-reference is not simple, but rather goes via the thinker's conceiving of herself as the bearer or subject of the perceptual situation, so that there is after all a description of a sort (subject or bearer of experience or state e) through which the subject – myself, or Mary – passes in the thought. But that is not a description for which a possibility of misidentification can be conceived, assuming anyway that the experience is recognized as one's own. Furthermore, this understanding of first-personal thoughts reflects the interpretation of the first person singular pronoun, as to be used by the speaker of an utterance with the intention of thereby referring to herself. To accommodate Schlenker's examples and discussion, and many others in the literature, along these lines is to suppose that anaphoric

relations can be given between formatives and higher relations to events and states, and not just between the formatives themselves; but that possibility is provided for in language as well as thought.¹²

Notes

1. The categories (i) and (ii) constitute what is made here of the use of the first person "as object" and its use "as subject," as advanced in (Wittgenstein 1958).
2. I am indebted here to Christopher Peacocke for discussion. See also (Peacocke 2008, Chapter 3).
3. See (Higginbotham 1996) for some details.
4. This was, more or less, the view I defended in Higginbotham (1991). As I argue immediately below, it is also, once terminology is cleared away, close to the view taken in some of the literature that I discuss (the terminology in much of that literature seems to me inappropriate, inasmuch as the "*de re*" vocabulary is deployed, even for cases that are not *de re* in a classical sense). But the situation is in fact more complicated, as carefully noted in Castañeda (1967). Hintikka equated the truth value, for a given set of criteria, of statements such as (25) and (25') with the truth value of the subject's "having an opinion as to who *t* is" (or "knowing who *t* is," in the case of knowledge). But then if these criteria are strict (as in the first-personal case) we lose the assertibility of (25) and the like for the amnesiac war hero and other such examples (the "third-person" cases, in Castañeda's terminology). If they are loose, then the distinction vanishes between the first-person and the third-person cases as they are applied to *a* himself. And finally, if (25') is ambiguous independently of the criteria, then no account of the ambiguity has been provided.
Within the setting of possible-worlds semantics, Hintikka's criteria correspond to different models of identity across worlds. Hintikka did not allow "mixed" criteria (that would, at the very least, require an extensive revision of the model theory). In what follows, I shall assume that questions of identity across the doxastically possible worlds (or pieces of them, "small" possible worlds) are settled out once for all.
5. There are other constructions, and several variations on the theme. I use Schlenker's and Anand's methods, which I take to be representative, for ease of exposition. I intend to discuss variations on the explicit "property" view of the objects of thought such as Feit (2008) in other work in preparation.
6. There will be the question which δ , under which circumstances, justify the assertion (28), when it does not amount to (29). But that inquiry should not conceal the point that what is called *de se* in this terminology is nothing more than the *de re* in the original sense. See further below.

7. Lewis (1979) thought that the proposition the x =David Hume, for Heimson (or anyone else other than David Hume) $=x$ could not be what Heimson believed; indeed, that even for crazy Heimson it was, being impossible, "unfit to be believed" (Lewis 1979:524). On the other hand, a theory of belief in terms of doxastically possible worlds must allow a legion of serious impossibilities as objects of belief; must allow, that is, as doxastically possible many things that are metaphysically impossible in a very strong sense. One ingredient of Heimson's fantasy may be his belief that he is the author of *A Treatise of Human Nature*, and born in the 18th century. Such worlds will be doxastically accessible, however ridiculous (I myself think that they are impossible.) Lewis's argument depends upon disallowing the doxastic possibility of a world in which "David Hume" refers just to Heimson, as does "the author of *A Treatise of Human Nature*" in the worlds in which Heimson is that person. But why should the modal theorist, working with a system that doesn't allow belief *de se* as a separate phenomenon, accept this conclusion? Furthermore, even if Lewis is right, it should be sufficient for such a theorist to describe Heimson as *identifying himself* with David Hume. Unlike identity, identification in this sense is not symmetric. When I identify Mr Smith as the man in the corner, I answer the question, "Who is Mr Smith?" and I distinguish him from other Smith-candidates, such as the man who just stepped outside. But when I identify the man in the corner as Mr Smith, I answer the question, "Who is the man in the corner?" and I distinguish him from Mr Jones. Heimson may just identify himself with Hume in the sense of attributing to himself various Humean traits, without actually being David Hume in any world. In sum, the case for distinguishing, as Lewis does, between the *de se* and the merely *de re* is not decisively promoted by the example.

If we allow as I do a self-conception *s* on Heimson's part that he is David Hume, then that s =Hume will be (doxastically) possible. Of course Lewis recognized the point, but would have considered that no self-conception would do to register (say) the proposition that Heimson comes to believe when he comes out of his daze and recognizes that he is not David Hume. On the other hand, Lewis' remarks about the relation of what he calls "perceptual belief" to first-personal knowledge (Lewis 1979: 520) are not much developed, and I will not attempt to gloss them here.

8. Lewis (1979), inasmuch as his view explicitly disallowed a genuine *de re*, can indeed mark the distinction between (ii) and (iii), but then would not mark the distinction between (i) and (ii), or at least would not mark it in the terms I am suggesting. The alleged *de re* as in (ii) would always be relative to a description (in Lewis' broad sense of that term), and any difference between (i) and (ii) would therefore have to be marked in terms of the nature of the descriptions, their relations to the agent, and so forth. But it is doubtful that ordinary *de re* belief, as the beliefs that I have about the objects in the living room when I am able to walk around without bumping into the furniture, are

so conceptually sophisticated, or always involve concepts that individuate the objects given in perception. The perspective that Lewis adopts makes *de re* belief something of a conceptual achievement, passing over its involvement in the most commonplace perceptual experience and behavior. (On this point, see also the important considerations in Burge [1977].) True, in Postscript A to Lewis (1979) (published in Lewis [1983]) Lewis endeavors to build the perceptual *de re* back into the picture, via acquaintance relations. However, even apart from the question what such relations are (they involve ascribing properties to one's own perceptual system, of thinking of oneself as looking or staring at, for example, and in this sense they are conceptually sophisticated; they are also necessarily self-conscious, inasmuch as they involve the self-ascription of perceptual properties), talk of *de re* belief remains on Lewis' extended view a manner of speaking, since it is not a (purely or narrowly) psychological state in his sense.

9. Although his views are not to be tied to the modal theory of the attitudes, I note that Peacocke (1981) does propose a relativized self-conception in his account of (fully) first-personal thoughts. In some of the literature, and in Schlenker (2003) in particular, Kaplan's distinction between content and character is brought into the picture, distinguishing the nature of first-personal from third-personal utterances in a context even when they have the same content in the context. The distinction itself is fine: the character of "I am *F*" as said by *x* and "He is *F*" as said by *x* about himself will be different even where their content is the same (whether or not appreciated by *x* to be the same). Of course, the character of an utterance of "I am *F*" (keeping other elements constant) is the same no matter who says it. But the identity that plays a role in my inference on the basis of perceptual experience to the conclusion that I have won the lottery should be both first-personal and particular to me. Neither character nor content, however, can play both roles: the character is first-personal (the function that carries us from the speaker or perceiver in the context to the content), but not particular to any speaker or perceiver, whereas the content is particular (I myself am its subject), but not first-personal.
10. Castañeda (1987: 436–438) gives examples that go even further: where one is said not to recognize one's identity with oneself, for example. I am not aware that he explicitly considered examples of the far simpler type in the text, but it is to be assumed that he had something like them in mind.
11. Perry's example, then, belongs with "John wants himself to eat the hamburger" (where John doesn't realize that the person he wants to eat the hamburger is himself) and the like, as remarked above.
12. This article expands on a part of what I presented at the meeting on Context-Dependence, Perspective and Relativity at the École Normale Supérieure Paris, November 2007. I am grateful to the audience there for comments and questions, and I have profited much from comments on subsequent presenta-

tions of this and related material at University College London; CUNY Graduate Center; McGill University; the University of Quebec at Montreal; Harvard University; the University of Oxford; the University of Tromsø, Norway; the University of Warwick; and the University of Iceland. Besides specific acknowledgements in the text, I am particularly indebted to comments from and discussion with Gennaro Chierchia, Daniel Morgan, Christopher Peacocke, Graham Priest, François Recanati, Philippe Schlenker, Robert Stalnaker, Matthew Whelpton, Timothy Williamson, and the students who attended my Trinity Term lectures 2009.

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Indirect discourse, relativism, and contexts that point to other contexts

Christopher Gauker

Abstract: Some expressions, such as “all” and “might”, must be interpreted differently, relative to a single context, when embedded under “says that” than when unembedded. Egan, Hawthorne and Weatherson have appealed to that fact to argue that utterance-truth is relative to point of evaluation. This paper shows that the phenomena do not warrant this relativistic response. Instead, contexts may be defined as entities that assign other contexts to contextually relevant people, and context-relative truth conditions for indirect discourse sentences can be satisfactorily formulated in terms of such contexts.

1. Introduction

Indirect discourse is different from direct quotation. In an indirect discourse sentence, the sentence that follows the complementizer “that” need not be the very sentence that the speaker spoke. For instance, the sentence, “Silas said that everyone at the party was wearing a funny hat” might be true even if the sentence Silas actually uttered was “Everyone is wearing a funny hat”, not “Everyone *at the party* was wearing a funny hat.” A semantic theory of indirect discourse sentences ought to have something to say about how the wording in a true indirect discourse sentence may vary from the wording of the speech act that it reports.

In this paper I have four main tasks. First, I will illustrate the way in which inattention to this issue can produce fundamental confusions in semantics. I will do this by criticizing an attempt to defend a kind of relativism on the basis of claims about indirect discourse. Second, I will explain how a semantics for indirect discourse sentences may be formulated in terms of contexts in such a way that a context may *point* to other contexts. The context relative to which we evaluate an indirect discourse sentence will *point* to the context relative to which we evaluate the utterance used in the act of speech that the indirect discourse sentence reports. Third, I will highlight some of the assumptions about the nature of semantics and the nature of contexts that I will have made along the way. Fourth, in an ap-

pendix, I will sketch a precise semantics for a simple language that incorporates the semantics I will have described informally in the second part. A couple of related topics will be touched on along the way as well.

2. An unpersuasive argument for relativism

The right way to accommodate context-relativity in semantics, I will assume, is to formulate one's semantic theory as a recursive definition of the conditions under which sentences are true *relative to* a context. Thus, sentence truth is a *relation* defined recursively on an inductively defined set of pairs consisting of one sentence and one context.

Utterances of sentences, however, may be true or false simpliciter. That is, truth for utterances remains a *property* and is not a relation to a context. The relation between truth-in-a-context for sentences and truth simpliciter for utterances may be stated as follows:

An utterance of a sentence is true (simpliciter) if and only if the sentence uttered is true in the context that pertains to the utterance.

In view of this, one thing we will have to explain, if not as part of our *semantic* theory proper, then as part of our larger theory of *language*, will be what it takes for a given context to be *the* context that *pertains* to an utterance. (Instead of saying that a context pertains to an *utterance*, we can say that it pertains to the *conversation* in which the utterance occurs. We may individuate conversations in such a way that a context that pertains to an utterance pertains as well to every utterance that occurs in the same conversation.)

If this is the right way to look at things, then it is important to distinguish between *contexts* and *situations*. A *context* is a formal structure of some kind containing a value for each of a variety of parameters on which the truth value of a sentence may depend. A *situation* is a course of events and arrangement of objects containing one or more utterances of sentences. (Or at least, the only situations that we will care about will be those containing an utterance.) What we will look to in trying to decide which context is the one that pertains to a given utterance will be features of the situation in which it occurs.

One kind of *relativism* in semantics may be defined as the thesis that utterances too are not just true or false simpliciter but only relative to an evaluator. There are passages in Egan, Hawthorne, and Weatherson 2005 (131, 154; abbreviated EHW) and in Egan 2007 (2) that seem to define relativism

in just that way. The truth of an utterance, it is said, is relative to a *context of evaluation*. This does not have to be the kind of relativism that the friends of science will abjure, for the context of evaluation might make a difference only for certain kinds of sentence, and those kinds may exclude the verdicts of science, which we expect to be true in all contexts of evaluation if they are true in any.

Still, anyone who expects there to be a precise, recursive semantics for natural language must regard this “definition” of relativism as at best a derivative characterization, and not a definition. I take for granted that the set of utterances does not form an inductive set. Nor does it form an inductive set up to a maximum length or complexity of utterance. (Utterances cannot suitably be analyzed into uttered components. The negation of a sentence may be uttered though the sentence negated has never been uttered.) So it does not make sense to propose a recursive definition of truth relative to context of evaluation for utterances.

Rather, the relativist thesis should be defined as the claim that the contexts relative to which we evaluate *sentences* must include a parameter for point of evaluation. And then the relativist can maintain that what is special about this parameter is that no single point of evaluation uniquely *pertains* to a given utterance. So the semantic value of an *utterance* is irreducibly a relation between an utterance and a point of evaluation. The approach along these lines favored by EHW and Egan is to define (in Egan’s terminology) *centered-worlds propositions* as sets of triples, called *centered worlds*, $\langle w, t, i \rangle$, consisting of a world w , a time t , and an agent i (EHW: 157; Egan: 5). Although EHW and Egan do not do so, one could write a recursive semantics as a theory of the conditions under which a sentence expresses a centered-worlds proposition.¹ We can suppose that an utterance is true relative to an agent-time pair $\langle t, i \rangle$ if and only if the centered-worlds proposition that the sentence uttered expresses contains $\langle @, t, i \rangle$ (@ being the actual world). So if we identify contexts of evaluation with agent-time pairs, the first characterization of relativism, according to which utterance truth is relative to context of evaluation, follows from the second, according to which sentences express centered-world propositions.

Some popular arguments for a relativist-semantics turn on matters of indirect discourse. In particular, EHW and Egan tell “eavesdropping” stories such as the following: Moriarty, in London, says to his assistant,

- (1) Holmes might be in Paris.

Assuming that neither Moriarty nor his assistant knows that Holmes is not in Paris, and assuming that Moriarty has some reason to think that Holmes might be in Paris, we may suppose that Moriarty's utterance of (1) is true. Meanwhile, Holmes and Watson are listening in on the other side of the wall. Watson says to Holmes,

(2) *Moriarty says that you might be in Paris.*

Likewise, we may suppose that Watson's utterance of (2) is true. (EHW have "believes" in place of "says" in their version of [2], 155.)

The problem is that on a certain plausible understanding of "might" and a certain understanding of indirect discourse, (2) seems to be false. We may assume that "might"-sentences such as (1) are to be evaluated relative to contexts that specify domains of possibilities of some kind.² (1), then, is true in the context that pertains to Moriarty's utterance of it, since there is a possibility in the set of possibilities specified by that context such that Holmes is in Paris in that possibility. But the context that pertains to Moriarty's utterance of (1) is different from the context that pertains to Watson's utterance of (2). Since Holmes is right there in front of Watson in London, the set of possibilities pertinent to Watson's utterance presumably does not contain a possibility in which Holmes is in Paris. And likewise, we should not say that Moriarty *said* that there was such a possibility in that domain of possibilities. But if we take the domain of possibilities relative to which we evaluate the "that"-clause in (2) to be those that are pertinent to Watson, then, apparently, that is what we will interpret (2) as saying Moriarty said. So (2) will be false.

As relativists, EHW and Egan propose to avoid this result by taking the proposition a sentence expresses to be a centered-worlds proposition. Since the proposition that is expressed by the sentence that follows the "that"-clause contains not only triples $\langle w, t, i \rangle$ in which the center i is the speaker but also triples $\langle w, t, i \rangle$ in which i is the person to whom an act of saying is attributed, there is supposed to be the possibility of defining the saying-relation in such a way that what Watson's utterance of (2) means is that Moriarty said that for at least one of the possibilities pertinent to *Moriarty* (not Watson) Holmes is in Paris (EHW 158; Egan 9). The basic idea is that (somehow) the relativist can allow that the utterance of (2) is evaluated from the point of view of the speaker of (2) by deciding how the attributee, the subject of (2), Moriarty, evaluated the utterance of (1) from *his* point of view.

Actually, I am not at all confident that what EHW and Egan say even makes good sense. While I am focusing on “says”, EHW and Egan focus on “believes”. What EHW *say* about belief sentences is this:

When one says that *a believes that b might be F*, one says that *a* believes the proposition *b might be F*. And *a* believes that proposition iff *a* believes it is consistent with what they know that *b* is *F*. (EHW: 158)

And what Egan *says* is this:

When I believe that it might be that *P*, I believe something about my particular situation relative to the evidence – namely, that none of the evidence that’s within my epistemic reach rules out *P*. (Egan 9).

But as far as I can see, EHW and Egan have given us no clear basis for these conclusions. Since Egan’s solo paper is more explicit in its analysis of “might”-sentences, I will focus on what he says there.

Apparently, Egan thinks the account of belief expressed in the above quotations follows from three premises:

- (i) His account of “might”: “It might be the case that *p*” is true relative to a centered world $\langle w, t, i \rangle$ iff it’s compatible with everything that’s within *i*’s *epistemic reach* at *t* in *w* that *p* (Egan 8).
- (ii) His relativistic conception of propositions: Propositions are sets of centered worlds (Egan 5).
- (iii) The assumption that belief (and, I suppose, saying) is a relation between a subject and a proposition (Egan 6).

From these premises it is apparently supposed to follow that *S* believes (says) that *it might be that p* if and only if *S* believes (says) that it is compatible with everything within his or her epistemic reach that *p*.

In particular, Egan needs it to be the case that (a), below, is sufficient for (b):

- (a) *S* believes (says) that it is compatible with everything within his or her epistemic reach that *p*.
- (b) *S* believes (says) that *it might be that p*.

If (a) is sufficient for (b), then, as desired, it will be sufficient for the truth of (2) that what Moriarty says is, in effect, that there is a possibility within his epistemic reach in which Holmes is in Paris. Whereas, if (a) is not sufficient for (b), then we will still have no explanation of why (2) should not be

deemed false on the grounds that Moriarty did not say that it is compatible with everything within *Watson's* epistemic reach that Holmes is in Paris.

But on the contrary, from (i), (ii) and (iii) it does *not* follow that (a) is sufficient for (b). If (i), (ii) and (iii) hold, then what (b) says is much stronger than what (a) says. What *S* believes (says) according to (a) concerns only the epistemic reach of *S*. But by (i), (ii) and (iii), *S*, in believing (saying) that it might be that *p*, stands in the belief (saying) relation to a certain set of centered worlds, namely, the set of centered worlds $\langle w, t, i \rangle$ such that it is compatible with everything in the epistemic reach of *i* at *t* in *w* that *p*. So if (a) is sufficient for (b), then the fact that *S* believes that it is compatible with everything in his or her epistemic reach that *p*, as (a) says, tells us, for every *w*, *t* and *i*, whether or not $\langle w, t, i \rangle$ belongs to a set of centered worlds to which *S* stands in the belief relation. But how can that be? The proposition that it is compatible with everything in the epistemic reach of *S* that *p* - even if construed as a centered-worlds proposition - does not tell us anything about whether it is compatible with everything in the epistemic reach of *anyone else* that *p*. So *what S* believes according to (a) does not imply *what S* believes according to (b), given (i), (ii) and (iii). Since *what S* believes according to (a) does not imply *what S* believes according to (b), surely *S's believing* what *S* believes according to (a) also does not imply *S's believing* what *S* believes according to (b) either.

EHW are driven to their relativism in part by their belief that what they call contextualism cannot account for the phenomena. What they call contextualism is the thesis that the proposition expressed by a sentence is relative to the context in which it is uttered. The argument against contextualism is reduced to its essentials in Weatherson 2008. In that paper, Weatherson makes very explicit his assumption that if contextualism is true, then context-relative expressions such as "might" must be interpreted in the same way whether or not they are embedded in "that"-clauses. (In his argument on 535, this is the conjunction of premises 1 and 2, and in his argument on 537, this is the conjunction of premises 4 and 5.) Although the contextualism that I defend is not quite what EHW and Weatherson define contextualism to be (I will not formulate my account in terms of any kind of proposition), I will nonetheless show that Weatherson's basic assumption is false. Even when "Moriarty says that you might be in Paris" and "You might be in Paris" are evaluated with respect to a single context, it is not the case that the embedded "might" and the unembedded "might" have to be interpreted in the same way.

Nonetheless, I think that EHW, Egan and Weatherson have stumbled upon a semantic question of real interest, and I agree that it may motivate significant revisions to our conception of the semantics of natural language. Very roughly, the problem is that in some respects the “that”-clause in an indirect discourse sentence reflects the perspective of the speaker of the indirect discourse (the attributor), and in some respects it may reflect the perspective of the person to whom saying is attributed (the addressee). What the relativists are picking up on and trying to accommodate are the respects in which the “that”-clause reflects the perspective of the addressee, not the attributor. But as we will see, it is not necessary to resort to relativism to accommodate this distinction.

3. Universal quantifiers in indirect discourse

In this paper, I do not want to try to give a semantics for “might”, because that task raises all kinds of additional issues that I do not want to get into here. So let me shift to relatively straightforward quantifiers such as “every” and “everyone”. Like “might” in indirect discourse, “every” in indirect discourse can reflect the perspective of the addressee, as opposed to that of the attributor. But moreover, the attributor can add clarificatory modifiers to the quantifier, and this fact too needs to be accommodated in our semantics.

Suppose that Silas is at the birthday party of his friend Jonas. Silas’s sister Emma is at a different birthday party for a friend of her own. The party for Emma’s friend is a bit listless; so Emma calls Silas on her cell phone to see how things are going where he is. Silas is having a great time and tells Emma excitedly, “There’s a clown here; he’s making animal shapes with balloons!” Emma turns to her friend Dottie, who is also getting a bit bored and says,

(3) *Silas says that there’s a clown there.*

What Emma does not say to Dottie is,

(4) **Silas says that there’s a clown here.*

So the words that follow “that” in Emma’s utterance are not quite the words that Silas uttered. Emma substitutes “there” for Silas’s own “here”.

The next thing Silas says is “Everybody is a wearing a funny hat!” Emma turns to Dottie and says,

(5) *Silas says that everybody is wearing a funny hat.*

So the words that follow “that” in Emma’s utterance are the very words that Silas spoke. However, Emma might have reported what Silas said differently. She might have said,

(6) *Silas says that everybody at Jonas’ party is wearing a funny hat.*

She *might have* said (6), but if Dottie knows that Silas is at Jonas’ party, it is not necessary for her to specify in this way that the people Silas is talking about in saying “everybody” are the people at Jonas’ party. Even if Dottie does not know where Silas is, it would not really be wrong for Emma to utter (5) to Dottie, just less than optimally informative.

What the example suggests is that *here/there* and *everybody* are different sorts of cases. In Emma’s report to Dottie about Silas’s saying about the clown, she has to substitute “there” for Silas’s “here”. In other words, the sentence that follows “that” has to be altered to reflect her own point of view, or the context pertinent to her conversation with Dottie. But in Emma’s report to Dottie about Silas’s saying about the funny hats, Emma does not need to substitute anything for Silas’s “everybody” to reflect her own point of view, although she may do so for greater clarity. So it seems we can say at least this: There are two kinds of context-relativities, those that require adjustment to the speaker’s context in indirect discourse (“here” being adjusted to “there”) and those that do not require adjustment to the speaker’s context (“everybody” remaining as it is).

That we need to say something a little more complex than this becomes apparent when we consider *how* a speaker may modify the quantifier in case she chooses to modify it for clarity. One thing the speaker may do is “precisely subclassify the universal domain.” What I mean by that is that if the attributee’s actual words are of the form, “Every *F* is *G*” and the set of *FH*-things in the whole world equals the set of *FH*-things in the domain of discourse pertinent to the attributor’s utterance and also equals the set of *F*-things in domain pertinent to the attributee’s utterance, then the attributor may say, “*S* said that every *FH* is *G*”. That is what Emma would do if she uttered (6) instead of (5) (on the assumption that it is clear what the determiner phrase “Jonas’ party” refers to). For the set consisting of anyone in

the universe who is attending Jonas' party equals (we may suppose) the set of people in the domain pertinent to Emma's utterance who are at Jonas' party, and also equals the domain pertinent to Silas's utterance, which consists of the people at Jonas' party.

But a speaker does not have to choose between merely quoting the speaker's quantifier (adding no additional modifiers) and precisely subclassifying the universal domain in this sense. The material that the attributor adds to the words of the attributee may serve to clarify without precisely subclassifying the universal domain. Suppose that Julian is showing Ingrid his pottery collection. With a sweep of his hand, he says, "Everything is from Korea." In reporting what he said, we may say,

(7) *Julian said that every piece of pottery was from Korea.*

Thus, we add the words "piece of pottery" to his "every". But the phrase "every piece of pottery" does not precisely subclassify the universal domain, because the set of pieces of pottery (in the whole world) is not equal to the set of pieces of pottery in the domain pertinent to Julian's utterance, which is confined to the pottery in his collection. Or suppose that Mary is the chair of a committee at her workplace. At the start of the meeting, she looks around and declares, "Everyone is present." Later, one of Mary's co-worker's, may correctly assert,

(8) *Mary said that everyone working on a graphic interface was present.*

That is something the co-worker can say if the committee consists of the people at her workplace who are working on a graphic interface. The phrase "everyone working on a graphic interface" does not precisely subclassify the universal domain, because the set of people (in the world) working on a graphic interface (for a project somewhere) is not equal to the members of the domain of discourse pertinent to Mary's utterance.

Thus, the question arises, what determines what material can be added to a universal quantifier in an indirect discourse report on what another person as said? In the next section I will describe, informally, a semantics for indirect discourse that answers this question.

4. A semantics for indirect discourse, informally

For purposes of formulating a semantics of indirect discourse, we may conceive of a context as an entity that assigns other contexts to various pertinent people. In other words, contexts are identified in part by what other contexts they *point* to. (For a precise formulation of this and other definitions in this section, see the Appendix.) So a sentence of the form “*S* said that *p*” will be true in a context *c* *only if* *c* assigns a context *c*(*S*) to *S*. (This is only a weak necessary condition.) Call *c*(*S*) the *context determined for S by context c*. (Here I am using the variable “*S*” as a variable ranging over people’s names. However, for simplicity, I will frequently refer to people and their names interchangeably.)

Also, we will want to suppose that for each of the people to whom a context *c* assigns a context, the context *c* determines a domain of sentences such that relative to *c* that person is considered to have uttered those sentences. Call this the *utterance domain for S in c*. Moreover, we will want to define a relation between sentences such that “*S* said that *p*” will be true in a context *c* *only if* there is a sentence in the utterance domain for *S* in *c* such that that relation holds in *c* between *p* and the sentence uttered. Whether that relation holds in *c* will depend on the content of *c* and, in particular, will depend on the content of the context determined for *S* by *c*. Let us call this relation, still to be defined, *elevation to c from c*(*S*). So we may say that one sentence is an *elevation* of another sentence *to c from c*(*S*).

As I said at the start of section 1, our theory of language will include an account of the conditions under which a context *pertains* to a given utterance. We may impose as a condition that a context must meet in order to count as the context that pertains to an utterance that for each agent *S* to whom the context assigns an utterance domain, the sentences in the utterance domain assigned to *S* must be sentences that *S* has actually uttered. A further condition on *c*’s pertaining will be that the context determined for a speaker *S* by *c* must be the context that pertains to *S*’s utterances of the sentences in the utterance domain for *S*. (For simplicity, then, I am assuming that only a single context pertains to all of those utterances. In a fuller account, we might wish to allow that a speaker is associated with various sets of utterances, each associated with its own context.)

Putting these devices together, we may say that “*S* says that *p*” is true in a context *c* if and only if there is a sentence *q* such that *q* belongs to the utterance domain for *S* in *c* and *p* is an *elevation* of *q* to *c* from *S*(*c*). In view of the stated conditions on pertaining, this implies that an utterance of “*S*

says that p " will be *true (simpliciter)* only if S uttered a sentence q such that p is an elevation of q to the context pertaining to that utterance of " S says that p " from the context that pertains to S 's utterance of q . (This necessary condition is not also sufficient, because it may happen that not every one of S 's utterances is an utterance of a sentence in the utterance domain that c assigns to S .)

In these terms, here is how we can account for the fact that sentence (3), "Silas says that there's a clown there", is true in the context pertinent to Emma's utterance of it (Emma's context), and thus for the fact that Emma's utterance of (3) is true (*simpliciter*). First, we may suppose that Silas's utterance of "There's a clown here" belongs to the utterance domain for Silas in Emma's context, since Silas did utter that sentence. Second, we may suppose that the sentence "There's a clown there" is an elevation of "There's a clown here" to Emma's context from the context that Emma's context assigns to Silas. The basis for this assumption will be the fact that the place that "there" refers to in Emma's context is the place that "here" refers to in the context that Emma's context assigns to Silas. So the sentence (3), "Silas said that there's a clown there" is true in Emma's context, because the sentence "There's a clown here" is in the utterance domain for Silas in that context and "There's a clown there" is an elevation of the sentence "There's a clown here" to Emma's context from the context that Emma's context assigns to Silas. Since Emma's context is the context that pertains to her utterance of (3) and (3) is true in that context, her utterance of (3) is true.

Similarly, but even more simply, we can account for the fact that (5), "Silas says that everybody is wearing a funny hat", is true in the context that pertains to Emma's utterance. "Silas says that everybody is wearing a funny hat" is true in Emma's context, because "Everybody is wearing a funny hat" belongs to the utterance domain for Silas in that context and "Everybody is wearing a funny hat" is an elevation of *itself* to Emma's context from the context that Emma's context assigns to Silas. Likewise, (6), "Silas says that everybody at Jonas' party is wearing a funny hat", is true in the context that pertains to Emma's utterance, because "Everybody is wearing a funny hat" is in the utterance domain for Silas in that context and "Everybody at Jonas' party is wearing a funny hat", we may suppose, is an elevation of "Everybody is wearing a funny hat" to Emma's context from the context that Emma's context assigns to Silas. Both (5) and (6) can be true in the context that pertains to Emma's utterance, because "Everyone is wearing a funny hat" is in the utterance domain that Emma's context

assigns to Silas, and there are two different sentences that are both elevations of that sentence to Emma's context from the context that Emma's context assigns to Silas.

Often, whether one sentence is an elevation of another to c from $c(S)$ will depend both on the contents of $c(S)$ and on other elements of c . For example, the reason why "There's a clown there" is an elevation of "There's a clown here" to Emma's context from the context that Emma's context assigns to Silas is that there is a single location a , such that Emma's context assigns a to "there" and the context that Emma's context assigns to Silas assigns a to "here". Likewise, to explain the qualifications that may be added to a quantifier in indirect discourse, as in (6), (7) and (8), we need to define the elevation relation in a way that makes reference to both the context pertinent to the attributor's utterance and the context that that context assigns to the attributee, as I will presently explain.

Toward defining the pertinent principle of elevation, let us stipulate that every context contains a *domain of discourse*. I will suppose that, strictly speaking, the members of domains of discourse are singular terms, not objects such as terms might be thought to denote. (Think of them as demonstratives with subscripts: *that*₃₂.) But sometimes I will write as if domains of discourse were sets of nonlinguistic objects. So for each context c , there is a domain of discourse D_c , which is a nonempty set of singular terms. Moreover, an atomic sentence " t is F " is true or false in a context only if t belongs to the domain of discourse for that context. (It is neither true nor false if t is not a member of the domain. Our semantics is gappy, or three-valued. However, it is not in general true that if a term occurs in a sentence that is true in the context then the term is in the domain for the context. If " t_1 is F " is true in a context, then " t_1 is F or t_2 is F " might be true in that context whether or not t_2 is in the domain for the context.)

I contend that the following principle of elevation holds:

"Every FH is G " is an elevation of "Every F is G " to c from $c(S)$ if and only if both of the following conditions hold:

- (i) For every term t in $D_{c(S)}$, if " t is F " is true in $c(S)$ then " t is FH " is true in both c and $c(S)$.
- (ii) For every term t in D_c , if " t is FH " is true in c , then " t is FH " is true in $c(S)$.

What condition (i) says, loosely speaking, is that everything in the domain of $c(S)$ that is F in $c(S)$ is FH in both c and $c(S)$. Satisfaction of condition

(i) implies that the set of F -things in $D_{c(S)}$ is a subset of the set of F -things in D_c . What condition (ii) says, loosely speaking, is that everything in the domain of c that is FH in c is FH in $c(S)$. (This principle of elevation will fail in the case where H itself contains terms, such as “there”, that may be the products of elevation. But I will ignore that complication.)

In light of this detail regarding the elevation relation, we can understand the truth conditions of sentences (7) and (8). Let us focus just on (8), “Mary said that everyone working on a graphic interface was present”. I will adjust tenses as needed without further comment. Sentence (8) is true in the context that pertains to the co-worker’s utterance of that sentence, call it c , because the sentence “Everyone is present” is in the utterance domain that c assigns to Mary and, as I will explain presently, “Everyone working on a graphic interface was present” is an elevation of “Everyone is present” to c from c (“Mary”).

Condition (i) is satisfied, because (we may suppose) the domain of discourse for c (“Mary”) consists of (terms denoting) members of the committee that she chairs, and for each of them it is true in that context, as well as in c , that he or she is working on a graphic interface. (I am instantiating “Every F ” with “every *one*”.) To see the significance of this, suppose that (i) is not satisfied, because there is a member of the domain of the context c (“Mary”) who is not working on a graphic interface. In that case, (8) would not be true in the context pertinent to the utterance of (8) because (8) would in that case interpret Mary as having said something logically weaker than what she actually said. It would interpret her as having said only that everyone working on a graphic interface was present, when what she actually said was that everyone in a certain more extensive group than that was present. (In some cases, no doubt, but not in this one, we may report a person has having said something logically weaker than what the speaker has said.)

Condition (ii) is satisfied, because (we may suppose) for each person in the domain of c , which is the context pertinent to the utterance of (8), if it is true in c that that person is working on a graphic interface, then he or she is also in the domain of c (“Mary”) and it is true in c (“Mary”) that he or she is working on a graphic interface. To see the significance of condition (ii), suppose that it is not satisfied. Suppose that the domain for c is not included in the domain of c (“Mary”), so that there are some terms in the domain for c that are not in the domain of c (“Mary”). Let t be one of those terms. Suppose also that it is true in c that t is working on a graphic interface. But precisely because t is not in the domain of c (“Mary”), it is not true in

c ("Mary") that t is working on a graphic interface. (The sentence " t is working on a graphic interface" will be neither true nor false in c ("Mary").) Under these conditions we should not consider (8) to be true either, because it seems to interpret Mary as having said something about a person who is not even (denoted by any term in) the domain of discourse for the context that c assigns to her; it seems to interpret Mary as having said something about a person working on a graphic interface who was not in fact among the people that Mary was talking about.

I am not taking up here the question of how to define the elevation relation for the case of sentences in which "says that" is embedded under "says that". If the original utterance by Z was of the form "Every F is G ", X may say, " Y says that Z says that every FH is G ", but in this case, what amplification H may be added to the predicate F will depend on *three* contexts, the context pertinent to X , the context pertinent to Y , and the context pertinent to Z .

In short, my theory about indirect discourse attributions of A-form categorical sentences is that speakers have basically two options. They may simply quote, without modifying the quantifier, but making needed adjustments for words like "here" and "you". Or they may add modifiers to the quantifier. But in that case the modifier must meet certain conditions with respect to both the context pertinent to the utterance of the indirect discourse sentence and the context that that context assigns to the speaker of the original utterance. The case in which the indirect discourse sentence precisely subclassifies the universal domain of the original utterance ($FH = FH \cap D_c = F \cap D_{c(s)}$) is a special case of this second alternative.

5. Two kinds of expression

The examples we have considered demonstrate that a distinction may be drawn between two kinds of expression according to how they behave in indirect discourse. On the one hand, there are expressions like "here" and "there", which I will say *presume wide scope*. These are expressions that need to be rewritten or replaced whenever the context pertinent to the original utterance interprets them differently than the context pertinent to the indirect discourse utterance does. On the other hand, there are expressions like "every" and "everyone", which I will say *allow narrow scope*. These are expressions that can be left as they were in the original utterance used in the act of speech that the indirect discourse utterance reports on, even

when the value of the pertinent context parameter differs between the context pertinent to the original utterance and the context pertinent to the indirect discourse sentence that reports on that utterance.

The distinction between expressions that presume wide scope and expressions that allow narrow scope can be defined in terms of the relation of elevation. To say that an expression e presumes wide scope is to say that if p is an elevation of q to context c from context $c(S)$ and e occurs in q , then in place of the occurrence of e in q we must have in p an expression e' that is interpreted relative to the same value in c that e is interpreted relative to in $c(S)$. For example, “here” presumes wide scope because an elevation of “There is a clown here” must have in place of “here” an expression, possibly “there”, to which c assigns the same referent as the context that $c(S)$ assigns to “here”. On the other hand, to say that an expression e allows narrow scope is to say that for any pair of sentences p and q , though p is an elevation of q to c from $c(S)$ and e occurs in q , e may occur *without modification* in p , regardless of the differences between $c(S)$ and c .

Expressions that presume wide scope would include personal pronouns (“you” and “I”), temporal indexicals and demonstratives (“now” and “then”), and indexical adjectives (“local” and “recent”). In any conversation, whether or not such expressions occur in the “that”-clause of an indirect discourse sentence uttered in that conversation, their interpretation is that which is assigned to them *directly* by the context that pertains to the conversation, not the interpretation that might be assigned to them *indirectly* by the context that that context assigns to the speaker who made the original utterance used in the speech act that the utterance of the indirect discourse sentence reports on. (Alterations in tense may be due not to the difference between the context pertinent to the original utterance and the context pertinent to the indirect discourse utterance but due to the tense of “say” and sequence-of-tense rules.)

Expressions that allow narrow scope include expressions that are explicitly or implicitly quantificational. Explicitly quantificational expressions are quantifiers like “every”, “some” and “most”. Implicitly quantificational expressions are those such that when we formulate the truth conditions of sentences formed from them, we do so by quantifying over appropriate entities of some kind. “Might” and “must” are implicitly quantificational in this sense because we explicate “might” with an existential quantification over possibilities of some kind and explicate “must” with a universal quantification over possibilities of that kind. Another example might be conditional operators such as “if . . . then . . .”

I do not have a general explanation of *why* some expressions presume wide scope and others allow narrow scope. The fact that the expressions that presume wide scope are in some way demonstrative while the expressions that allow narrow scope are in some way quantificational provides perhaps a clue. In the case of demonstratives that are also indexicals, there are some porous semantic rules, such as that “here” refers to the place at which the utterance takes place. (The rule does not fix an interpretation, since it says nothing about the size of the region, and it is “porous” because there are exceptions, such as when one puts one’s finger on a map and says “here”.) In the case of demonstratives that are not indexicals, such as “this” and “that”, we can interpret distinct occurrences of those demonstratives differently within a single context (as when we say “*This* is bigger than *this*”) by exploiting a variety of external cues, such as pointing and parallel structures elsewhere in “the text” (Gauker 2008). The states of affairs is that the rules for indexicals direct us to always pertain immediately to the utterance being interpreted, not some remote time or place. And the cues that we go by in deciding how to interpret a nonindexical demonstrative are always cues surrounding the execution of the current utterance.

By contrast, our means of identifying the contextually determined domains of quantification pertinent to the interpretation of in-some-way quantificational expressions is not as tightly constrained by conventions. Here we usually have little more to go by than the consideration of what domain is most relevant under the circumstances of utterance (Gauker 1997). Since we are often in no position to identify the set of things that are relevant in this way to the act of speech being reported on, we allow ourselves the option of, in effect, simply quoting these expressions and leaving it just unclear what domain was pertinent to the act of speech being reported on. And if we are not going to simply quote but are going to try to capture, from the point of view of the context of attribution, what the speaker was saying in the different context in which he or she spoke, then because we have no conventional means of indicating any particular domain, we have to choose our words in a way that takes into account both the domain of the context pertinent to the attribution and the domain of the context pertinent to the speaker’s original utterance.

6. The paradox of indirect discourse

A semantics for indirect discourse ought to be able to tell us what is wrong with the following argument:

The paradox of indirect discourse

1. Silas says that everybody is wearing a funny hat. (Premise)
2. What Silas says is true. (Premise)
3. What Silas says is that everybody is wearing a funny hat. (From 1)
4. That everybody is wearing a funny hat is true. (From 2 and 3, by substitution of identicals)
5. Everybody is wearing a funny hat. (From 4, by semantic descent)

This a “paradox” because, while the premises appear to be true in the context in which Emma is speaking, the conclusion is false in that context, and yet each of the inferences appears to be valid in the sense that it preserves truth-in-a-context. My diagnosis of the error in this argument will not turn on the details of my semantics for indirect discourse, but I want to say something about this because relativists might offer a diagnosis of this argument in support of their own analysis.

The relativist diagnosis will be that Premise 2 is false. This is what EHW and Egan say, in effect (EHW: 145; Egan: 3), although they do not consider the paradox in exactly this form. (EHW pose a very similar paradox on 133–134). What the subject term of Premise 2 denotes, they in effect say, is Silas’s *utterance*, which from the point of view of Emma’s context of evaluation is false. My answer to this is that they are wrong in asserting that from Emma’s point of view Silas’s utterance is false. Silas’s utterance is *true simpliciter*, since the sentence he utters is true in the context pertinent to his utterance, and so *a fortiori* it is true from every point of view. What we can say is that the *sentence* Silas utters would not be true in the context pertinent to Emma’s conversation; so if what Premise 2 means is that the *sentence* Silas uttered is true in Emma’s context, then Premise 2 is false.

Egan acknowledges (3, note 3) that someone might diagnose his evaluation (of his analogue to [2]) as the product of mistaking the falsehood of Silas’s *sentence* in Emma’s context for the falsehood of Silas’s *utterance* of that sentence. His answer is that people can perfectly well distinguish between evaluating the truth value of an utterance and evaluating the truth

value of the sentence uttered relative to their own context. But having said that, he does nothing to show that our ability to draw that distinction would be misapplied in evaluating “what Silas said” as referring to Silas’s utterance and evaluating that utterance as true.

There might be some temptation to say that the conclusion of the argument is not actually false relative to Emma’s context. Not everybody in the domain of discourse pertinent to Emma’s context is wearing a funny hat, to be sure. But in view of its provenance, as a conclusion from the argument that precedes, it might be said that even in Emma’s situation, the sentence has to be evaluated with respect to “projected” values of the contextual parameters, namely, the parameters determined by Silas’s situation (cf., EHW: 162; Weatherson 2008: 536). However, I think this answer is indefensible. For a case in which parameters may indeed be projected in this way, suppose Emma utters the following sentences:

- (9) *Silas says that there is a clown there. Everybody is wearing a funny hat.*

In (9), we can take Emma’s utterance of “Everybody is wearing a funny hat” to be part of what she says Silas says and evaluate her utterance by evaluating the sentence uttered relative to the parameters of the context pertinent to Silas. But when we are evaluating the validity of the argument from 1 and 2 to 5 in the paradox of indirect discourse, we should not evaluate the conclusion relative to a context different from the one relative to which we evaluate the premises, and the evaluation of the conclusion in that context does not call for appealing to the values that the contextual parameters have according to some other context (such as the one pertaining to Silas).

Here is what is really wrong with the argument. If 2 means that the *sentence* Silas uttered is true in Emma’s context, then 2 is false, and, moreover, on that reading 3 does not even make sense. If 2 means that Silas’s *utterance* is true, then 2 may be true in Emma’s context, but in that case the “is” in 3 is not the “is” of identity but the “is” of predication, and what 3 says about that utterance is that it belongs to a certain type, the type of utterance characterizable as *that everybody is wearing a funny hat*. But in that case, 4 does not follow from 2 and 3 by substitution of identicals or by any other valid rule of inference.

Someone might think that yet another possible meaning of 2 is that the *proposition* that Silas expresses is true. That is the reading on which 3

might look like a true identity statement. However, I myself have not explicated the “that”-clauses of indirect discourse sentences as denoting propositions, and I do not see any persuasive reason to do so. (Various sources of the proposition idea are identified and dismissed in my 2003.) I do not deny that there is a perfectly good use for the term “proposition” in ordinary language. But that fact should not encourage us to read 2 in this way either. If it is ordinary language that warrants this reading, then, by the same token, ordinary language should warrant us in asserting, “What Silas says is the proposition that Silas expresses.” But as a piece of ordinary language, that sentence does even not quite make sense.

7. The basis for a semantics for indirect discourse

A commonplace conception of the task of semantic theory is that it has to account for our linguistic understanding. That is, it has to explain what it is we understand about a language that puts us in a position to understand any given utterance of that sentence. My own view is that this is not a very satisfactory characterization of the job of a semantic theory, because it begs the question: What is it that we have to understand in order to understand a sentence?

A partial conception that does not beg the question is that part of the task of a semantic theory for an expression is to enable us to define the class of logically valid arguments involving that expression. (This was the primary criterion by which I defended a semantics for conditionals in my 2005.) In the case of indirect discourse sentences, however, this test does no work since the “that”-clauses are logically completely inert. If p and q are different sentences, then, whatever the logical relation between them, there is simply no logical relation, other than logical consistency, between “ S says that p ” and “ S says that q ”. They will not be logically inconsistent, and neither logically implies the other. Perhaps the sentence “Silas says that a clown and a pony are there” logically implies “Silas says that a clown is there”, but even that is questionable. Going by logic alone, then, we could not have any reason to treat the denotation of a “that”-clause in an indirect discourse sentence as anything other than an unstructured atom distinct from the denotation of every other “that”-clause in an indirect discourse sentence but not differentiated from those other atoms in any particular way.

Another conception of the task of semantic theory might be that it has to tell us how sentences correspond to reality when they are true. In the case of indirect discourse sentences, then, we would need to identify the sorts of states of affairs in the world that would make an indirect discourse sentence true and try to explain how the elements of the indirect discourse sentence relate to the elements of those states of affairs. For instance, we might think that *saying* is a three-place relation between speaker, a sentence (or utterance) and a proposition and try to build all three of those into our account of the truth conditions of an indirect discourse sentence. The main problem with this approach is that it presumes that we understand the denotation relation, which supposedly holds between words and things (relative to a context), whereas, as a matter of fact, despite a long effort, no one has ever been able to give a plausible and reasonably comprehensive account of what that relation might be.

There is, however, at least one other possible kind of datum that we can put to use in defending a semantics for indirect discourse, namely, the kind of datum that I have employed in this essay concerning the way in which the “that”-clause by means of which we report an act of speech has to differ from the sentence uttered in the act of speech on which we are reporting. For example, from the fact that Emma has to substitute “there” for “here” when she reports Silas’s act of speech in (3), we learn that our semantic account has to say something specifically about the interpretation of “there” as it occurs in the “that”-clause. In particular, our semantics has to provide for the possibility that the interpretation of “there”, as it occurs in the “that”-clause, is identical to the interpretation of “here”, as it occurs in Silas’s original utterance. And from the fact that we can substitute “everyone who is working on a graphic interface” in the “that”-clause in (8) for the bare “everyone” in Mary’s original utterance, we learn that our semantic account has to provide for a domain of discourse for the sentence in the “that”-clause that is potentially distinct from the domain of discourse for the indirect discourse sentence itself.

These sorts of data are special cases of a more general kind of datum that we can appeal to in defending a semantic theory. Roughly speaking, these data have to do with the ways in which we can use language to *transmit information*. It is not only in indirect discourse that we may be called upon to alter a speaker’s own words. We also have to do this when we accept another person’s testimony and go to pass it on to someone else. Instead of telling Dottie what Silas said, Emma might have decided to accept Silas’s assertion and make the same assertion for herself. However, in

that case, she could not have said to Dottie, "Everyone is wearing a funny hat." In that case, she would have had to know enough about the context of Silas's utterance in order to modify it in way that would make clear to Dottie whom she was talking about. So she might have said, "Everyone at Jonas' party is wearing a funny hat". Indeed, indirect discourse might be conceived as a special case of such episodes of information transmission. It is the special case in which the speaker ascribes responsibility for the saying to the previous speaker rather than accept responsibility for it him- or herself. The more general area of concern, which a semantic theory can address, is the ways in which a sentence may or must be transformed when it is grounded in an utterance to which a different context pertains than the context that pertains to the present conversation.

8. Against a pragmatic theory

In part, our question has been: In what ways may the "that"-clause in an indirect discourse sentence elaborate on the words that the attributee actually spoke? Many people, confronted with this question, would be inclined to answer as follows: We may add to the "that"-clause whatever words we need to add in order to *clarify the speaker's meaning*. But that, I now wish to argue, while fine as folk linguistics, is a flatly question-begging answer, if taken as theoretically fundamental.

First of all, not everything a speaker *means* by what he or she says is something he or she *says*. So though in saying "It's getting a bit chilly in here, don't you think?" you may *mean* that I should get up and close the window, we should not characterize you as having *said* that I should close the window. Rather, we should say that you *implied* as much. But I am not sure that we could draw the needed distinctions without switching to some kind of truth-conditional account such as I have offered here in terms of contexts that point to other contexts. In getting clear about the kind of meaning expressed in the "that"-clauses of indirect discourse sentences, we may find ourselves undertaking precisely the kind of semantic project that I have been executing in this paper.

What else, if not the kind of project I am engaged in here, could tell us the ways in which in indirect discourse we may "clarify" what the speaker *said*? The thought might be that the speaker had a definite proposition in mind and that what it takes to express that proposition in the situation that the attributor is in is different from what was required of the speaker in

order to express that proposition in the situation in which the speaker spoke. So what we have to do, in choosing the wording of the “that”-clause in an indirect discourse sentence, is find words that express that same thought in the new situation that the speaker’s own words expressed in his or her own situation.

Thus we are led to the question, how does a speaker manage to express a thought using words, and how do we interpreters manage to express that thought in our own situation? Much contemporary theorizing concerning the nature of linguistic communication unrealistically presupposes that interlocutors have the ability to detect one another’s intentions and other states of minds independently of the interpretation of what they say so that they may then appeal to those states of mind in identifying the thoughts that the speaker’s words express. I have criticized this presupposition in a number of prior publications (Gauker 1997, 2001, 2003, 2008), and I will not rehearse those criticisms here. The moral I draw is that our access to people’s thoughts is primarily an understanding of what they *say* that does not depend on a prior understanding of what they have in mind. Normally, the hearer can do no more than try to understand what the speaker has said independently from any assumptions about what the speaker has in mind. Normally, the question of what the speaker has in mind, potentially distinct from what he or she says in this sense, does not even arise. When it does arise, if the answer is not just that what the speaker has in mind is the same as what he or she said, then the process of discerning that difference will begin with an independent identification of what the speaker has said.

On such grounds I conclude that clarifying what the speaker said can only mean finding a sentence such that the conditions under which it is true-in-a-context are suitably related to the conditions under which the sentence the speaker uttered is true-in-a-context. The partial account of the elevation relation in section 3 above illustrates an approach to explicating precisely this relation. Thus we are led back to the kind of semantic theory that I have been developing in this paper.

These observations bring to light an important fact about the concept of context that I have been employing here: Contexts have to be thought of as something objective. That is, what belongs to the context pertinent to an utterance is not determined by what the speaker thinks it is. Otherwise the hearer would be in the position of having to read the speaker’s mind in order to understand what the speaker has said, which I have claimed is not usually possible. Whereas, if the content of the context is determined objectively by the state of the world in which the conversation takes place, the

hearer can (fallibly) use his or her knowledge of that state of the world to draw conclusions about the pertinent context and on that basis draw conclusions about what the speaker has said.

If, as I suppose, but have not argued here, the truth of an utterance depends on *nothing but* the content of the context that pertains to that utterance (as well, of course, on semantic facts concerning the conditions a context must meet in order for the sentence uttered to be true in it), then there is another reason too to suppose that the content of the pertinent context is an objective matter. We think that speaking the truth is something a speaker has to strive to do and can succeed in doing only by taking account of the way the world is around him or her. But if truth depended on nothing but context and context depended entirely on what the speaker had in mind, then speaking the truth would not be something that required that kind of striving. (The toy semantics in the appendix will embody my assumption that the truth of a sentence in a context depends on nothing but the content of the context.)

Though the context that pertains to a conversation is objective, and not determined by the states of mind of speaker or hearer, a speaker's choice of words may reflect the speaker's representation of the hearer's representation of the context, when there is some basis for making assumptions about this. We have seen that indirect discourse sentences may approximate to quotations. Thus Emma may say to Dottie, (5) "Silas says that everyone is wearing a funny hat" - that is, that sentence may be true in the context pertaining to Emma's conversation with Dottie - even if Dottie does not know where Silas is. But if Emma knows that Dottie does not know where Silas is - that is, Emma's representation of Dottie's representation of the context pertinent to their conversation shows that Dottie does not represent that context as assigning to Silas a context in which the domain of discourse is people at Jonas' party - then she will have reason to say, instead, (6) "Silas says that everyone *at Jonas' party* is wearing a funny hat". The latter will do more than the former to enable Dottie to correctly represent the context that pertains to their conversation (inasmuch as that context assigns to Silas a context pertinent to his utterance).

None of this is an objection to the claim that in formulating an indirect discourse sentence we need to choose the words of the "that"-clause in a way that clarifies what the speaker said. That is a perfectly fine piece of folk linguistics. We might help our children formulate their indirect discourse sentences by telling them to choose their words in a way that clarifies what the attributee said. But that does not mean that we theorists can

avoid the sort of semantic theory of indirect discourse that I have been engaging in here. This is just the kind of theory we will need to develop when we go to explain in detail what “clarifying what the speaker said” really amounts to.

9. Extending the account to other propositional attitude sentences

The present semantics for indirect discourse does not in any obvious way extend to other sorts of sentences containing “that”-clauses, such as sentences that attribute beliefs. The problem in the case of belief is that when we attribute a belief our attribution may not be grounded in any overt utterance in the way in which an indirect discourse statement may be.

However, in view of the *way* in which the account of indirect discourse depended on the attributee’s having uttered something, I think the obstacles may not be so high. A context, as here defined, assigns to each of a number of people (strictly speaking, to their names) an *utterance* domain. The utterance domain for a person is a set of *sentences*. It is not a set of *utterances*. Actual utterances come into the account only insofar as we may expect that in order for a context to be the one that pertains to a given conversation, the sentences in the utterance domain for a speaker must be sentences that that speaker has actually uttered. So similarly, in formulating a semantics for belief sentences, we could suppose that a context assigns to each of the people to whom beliefs can be attributed a set of sentences, the *belief set* for that person, representing that person’s *beliefs*. In this case, the requirement that a context would have to meet in order for the context to pertain to a given conversation would not be that each of the sentences in the belief set for a person be a sentence that that person actually have uttered, but only that for a certain other relation, the person stand in that relation to each of the sentences in the set.

The big question will be: What is the relation that a person must stand in to each of the sentences in the belief set that a context assigns to that person in order for the context to pertain to a conversation? One possibility would be that each of those sentences is a “direct translation” of a sentence written in the “belief box” in the person’s brain. Within this option we could distinguish different theories about the nature of the language of brain writing. (It could be a form of the same language that the believer speaks, or it could be a special kind of mentalese.) More precisely, to allow for inexpli-

cit beliefs, we might say that it is a translation of a logical consequence of sentences written in the belief box. A different possibility would be to say that the sentences in the belief set for a person are sentences that that person would be disposed to speak if he or she were asked to state his or her beliefs and had no fear of retribution or other reason to dissemble. Probably neither of these answers is correct quite as it stands. But they perhaps give us hope of being able to formulate a semantics for belief sentences analogous to the present semantics for indirect discourse sentences.

I should emphasize that such an account of the semantics of belief attributions would *not* entail analyzing *belief* as a relation between a person and a sentence. The present approach to the semantics of “believes” does not proceed by analyzing the relation of belief and then assigning that relation to the word “belief” as its denotation.

10. The *de dicto/de re* distinction

So far I have not had anything to say about the *de dicto/de re* distinction, which is usually a large part of what is at issue in philosophical discussions of indirect discourse and attributions of propositional attitudes. Here I will merely state a couple of opinions on the subject without attempting to defend them.

Most philosophers and semanticists (but not all) will grant that the components of “that”-clauses in indirect discourse sentences are normally referentially opaque in the sense that substitution of co-extensional phrases does not preserve truth. However, it is often supposed that there is a special kind of indirect discourse sentence, the *de re* kind, in which one or more of the components is referentially transparent. So we may regard “*S* said that *a* is *F*” and “*a* = *b*” as logically implying “*S* said that *b* is *F*”, and in that case, “*S* said that *a* is *F*” is said to be *de re*, as opposed to *de dicto*. Moreover, it is often supposed that there is a special syntactic form that can be used to make it explicit that an indirect discourse statement is *de re*. If we say, “*S* said *of a* that it [he/she] is *F*”, then that is supposed to show that the occurrence of “*a*” is referentially transparent. It does so by placing the referentially transparent term outside of the “that”-clause.

The first opinion I would like to record is that the *de re* indirect discourse statement is an entirely fictitious beast. “*S* said that *a* is *F*” and “*a* = *b*” *never* logically imply “*S* said that *b* is *F*”, not even when the supposedly dedicated syntax is used. That is, “*S* said *of a* that he is *F*” and “*a* = *b*” does

not imply “ S said of b that he is F ”. The “said of a that” locution is merely a device by which we may put the focus on a (as I said in my 2003: 269–70). Consider the following dialogue:

- Mom:* Billy said that Santa Claus would bring him a bicycle.
Dad: Billy doesn’t think we’re giving him a bicycle.
Mom: No, Billy said of *Santa Claus* that he would bring him a bicycle.

Mom, in her second statement, clearly is not committing herself to the existence of Santa Claus. She is merely putting the focus on “Santa Claus” in order to emphasize to Dad that it is not they, the parents, who Billy thinks will bring him a bicycle.

Though “ S said that a is F ” and “ $a = b$ ” do not logically imply “ S said that b is F ”, there are cases in which we are prepared to *accept* both “ S said that a is F ” and “ S said that b is F ” and in which the truth of “ $a = b$ ” is part of the reason why both are acceptable. And that fact may be part of the reason why some people believe in the existence of *de re* indirect discourse statements. The second opinion that I would like to record is that these cases may be treated as cases in which “ b is F ” is an elevation, in my sense, of “ a is F ” to the context pertinent to the utterance of “ S said that b is F ” from the context pertinent to S ’s utterance of “ a is F ”. What I would need to do next is work out the conditions that a context must meet in order for this elevation relation to hold in it, but I will not try to do that here.

Appendix

The purpose of this appendix is to describe precisely a semantics for a simple language permitting indirect discourse. I will use a sans-serif font both for expressions in the object language and for metalinguistic variables ranging over such expressions. I will “leave it to context”, as they say, to distinguish which is which.

Syntax

First, we define a language L without **says that** and, then, in terms of that, define a language $L+$ containing **says that**. The syntax of the language L will be like the usual syntax of the languages of logical studies. Atomic formulae will be formed from predicates and individual variables and singular terms in the usual way. The singular terms of L include **here** and **there**. The two-place predicates of L include

the identity sign $=$. Compound formulae will be built up from atomic formulae, negation symbols, disjunction symbols and parentheses in the usual way. However, I will assume that all quantifications have the form: $\forall x(F: G)$, where F and G are formulae of L . *Sentences* are formulae with no free variables. Every sentence of L is a sentence of $L+$, and if n is a singular term of L and p is a sentence of L , then n **says that** p is a sentence of $L+$. (Since p has to be a sentence of L , **says that** will not be embedded under **says that**.) $(F \text{ and } H)$ abbreviates $\neg(\neg F \vee \neg G)$. If p is a sentence and n and m are singular terms or individual variables of L , then $p[n/m]$ is the result of substituting an occurrence of n for every occurrence of m in p .

Contexts

The set of contexts for $L+$ will be defined recursively. For the basis, we define *basic* contexts as contexts that assign only the empty set as the context determined for an agent by the context. (These are contexts relative to which, as it were, nobody says anything.) Then in terms of these we define contexts proper. Say that two singular terms c and d are *identity-linked* in a set S if and only if either $c = d \in S$ or there is a term e such that c is identity-linked to e in S and e is identity-linked to d in S . Where S is a set the members of which are either atomic sentences of L or negations of atomic sentences of L , say that S is a *consistent set of literals* if and only if (a) there is no sentence p such that both p and $\neg p$ are in S , and (b), where v_1, v_2, \dots, v_n are individual variables in p , if for each i , $1 \leq i \leq n$, c_i and d_i are identity-linked, then not both $p[c_1/v_1] \dots [c_n/v_n]$ and $\neg p[d_1/v_1] \dots [d_n/v_n]$ are in B_Γ .

A *basic context* $\Gamma = \langle B_\Gamma, N_\Gamma, S_\Gamma, \delta_\Gamma, \sigma_\Gamma \rangle$, where

B_Γ = (the base of Γ) a consistent set of literals (not necessarily maximal),

N_Γ = (the domain for Γ) a set of singular terms containing at least every singular term that occurs in any member of B_Γ ,

S_Γ = (the speaker domain for Γ) a set of names (names of people to whom discourse may be attributed in Γ),

δ_Γ = a function that assigns to each member of S_Γ a set of sentences of L , and

σ_Γ = a function that assigns the empty set to each member of S_Γ .

A *context* $\Gamma = \langle B_\Gamma, N_\Gamma, S_\Gamma, \delta_\Gamma, \sigma_\Gamma \rangle$, where B_Γ , N_Γ , S_Γ , and δ_Γ are defined as before, but

σ_Γ = a function that assigns to each member of S_Γ either a basic context or a context.

(See figure 1.) (Since **says that** is never embedded under **says that** in $L+$, we could confine our attention to contexts that assign only *basic* contexts to the names in the speaker domain.)

In order to avoid writing subscripts on subscripts, I will sometimes omit subscripts. Thus it may be understood that $B_{\sigma(n)}$ is the base of the context that σ_Γ assigns to n .

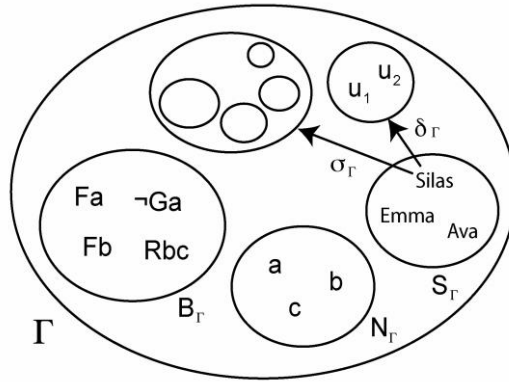


Figure 1: A schematic picture of a context.

The elevation relation

The elevation relation is a four-place relation that holds between two sentences and two contexts. We define it in two stages. First, we define several different kinds of elevation, one for each modification that may have to be made. Then we define the elevation relation as the product of a sequence of partial elevations.

p is a *here-only-elevation* of q to Γ from $\sigma_\Gamma(n)$ if and only if either:

- (a) q contains **here** but not **there** and $p = q$, and for some singular term t of L , $t = \text{here}$ (or $\text{here} = t$) is a member of both $B_{\sigma(n)}$ and B_Γ , or
- (b) q contains **here** but not **there** and p is the result of substituting **there** for every occurrence of **here** in p , and for some singular term t of L , $t = \text{here}$ (or $\text{here} = t$) is a member of $B_{\sigma(n)}$ and $t = \text{there}$ (or $\text{there} = t$) is a member of B_Γ .

p is a *there-only-elevation* of q to Γ from $\sigma_\Gamma(n)$ if and only if either . . . (similarly, but with **here** and **there** reversed).

p is a *here-and-there-elevation* of q to Γ from $\sigma_\Gamma(n)$ if and only if either:

- (a) q contains both **here** and **there**, and $p = q$, and for some singular term t_1 of L , $t_1 = \text{here}$ (or $\text{here} = t_1$) is a member of both $B_{\sigma(n)}$ and B_Γ , and for some singular term t_2 of L , $t_2 = \text{there}$ (or $\text{there} = t_2$) is a member of both $B_{\sigma(n)}$ and B_Γ , or
- (b) q contains **here** and **there** and p is the result of simultaneously substituting **there** for every occurrence of **here** and **here** for every occurrence of **there** in

q , and for some singular term t_1 of L , $t_1 = \text{here}$ (or $\text{here} = t_1$) is a member of $B_{\sigma(n)}$ and $t_1 = \text{there}$ (or $\text{there} = t_1$) is a member of B_Γ , and for some singular term t_2 of L , $t_2 = \text{there}$ (or $\text{there} = t_2$) is a member of $B_{\sigma(n)}$ and $t_2 = \text{here}$ (or $\text{here} = t_2$) is a member of B_Γ .

For each expression of the form $\forall x(F$: of L , $\forall x((F \text{ and } H)$: is an *expansion* of $\forall x(F$: relative to Γ and $\sigma_\Gamma(n)$ if and only if:

- (a) for every term t in $N_{\sigma(n)}$, if $F[t/x]$ is true in $\sigma_\Gamma(n)$, then $(F \text{ and } H)[t/x]$ is true in both Γ and $\sigma_\Gamma(n)$, and
- (b) for every term t in N_Γ , if $(F \text{ and } H)[t/x]$ is true in Γ , then $(F \text{ and } H)[t/x]$ is true in $\sigma_\Gamma(n)$.

p is a *quantifier-elevation* of q to Γ from $\sigma_\Gamma(n)$ if and only if:

- (a) q contains an expression of the form $\forall x(F$:, and
- (b) p is the result of replacing each expression of the form $\forall x(F$: in q with an expansion of that expression relative to Γ and $\sigma_\Gamma(n)$.

The here-only-, there-only-, and here-and-there-elevations are *obligatory* elevations, and the quantifier-elevation is an *optional* elevation.

Now we can define the elevation relation for $L+$ as follows: p is an *elevation* of q to Γ from $\sigma_\Gamma(n)$ if and only if there is a sentence s such that (a) either q contains no occurrence of *here* or *there* and $q = s$, or s is an obligatory elevation of q to Γ from $\sigma_\Gamma(n)$, and (b) either $s = p$ or p is an optional elevation of s . In other words, we obtain an elevation of q to Γ from $\sigma_\Gamma(n)$ by applying to q whatever obligatory elevation applies and then optionally applying the quantifier-elevation. The definitions are written in such a way that if a sentence contains more than one expression of the form $\forall x(F$:, then if any one is expanded, then all of them must be expanded.

For example, $\forall x((F \text{ and } H): R(x, \text{there}))$ may qualify as an elevation of $\forall x(F: R(x, \text{here}))$ to Γ from $\sigma_\Gamma(n)$, because $\forall x(F: R(x, \text{there}))$ may be a here-only-elevation of $\forall x(F: R(x, \text{here}))$ to Γ from $\sigma_\Gamma(n)$, and $\forall x((F \text{ and } H): R(x, \text{there}))$ may be a quantifier-elevation of a sentence of the form $\forall x(F: R(x, \text{there}))$ to Γ from $\sigma_\Gamma(n)$.

Truth conditions

Some sentences will be neither true nor false in some contexts. So we will provide separate formulations of truth and falsehood conditions for sentences of $L+$.

- (T0) If $p \in B_\Gamma$, then p is true in Γ .
- (T \neg) If p is false in Γ , then $\neg p$ is true in Γ .
- (T \vee) If p is true in Γ or q is true in Γ , then $(p \vee q)$ is true in Γ .
- (T \forall) If, for every $n \in N_\Gamma$ such that $F[n/x]$ is true in Γ , $G[n/x]$ is true in Γ , then $\forall x(F: G)$ is true in Γ .

- (TID) If for some sentence $q \in \delta_\Gamma(n)$, p is an elevation of q to Γ from $\sigma_\Gamma(n)$, then n says that p is true in Γ .
- (TCI) No other sentence is true in Γ .
- (F0) If $\neg p \in B_\Gamma$, then p is false in Γ .
- (F \neg) If p is true in Γ , then $\neg p$ is false in Γ .
- (F \vee) If p is false in Γ and q is false in Γ , then $(p \vee q)$ is false in Γ .
- (F \forall) If for some n such that $F[n/x]$ is true in Γ , $G[n/x]$ is false in Γ , then $\forall x(F: G)$ is false in Γ .
- (FID) If for every sentence $q \in \delta_\Gamma(n)$, p is not an elevation of q to Γ from $\sigma_\Gamma(n)$, then n said that p is false in Γ .
- (FCI) No other sentence is false in Γ .

Note that in (F \forall) we might have written “for some $n \in N_\Gamma$ ”, but in view of the stipulation that N_Γ contain every singular term in any member of B_Γ , doing so would have been redundant.

Acknowledgements

This research was supported by grants from the Taft Research Center of the University of Cincinnati. A discussion with Michael Glanzberg in Oslo provoked me to get clearer about some of the matters discussed in this paper, and I am grateful to him for it.

Notes

1. EHW want to say that a sentence expresses the same “proposition” in every context but that “the truth-value of that proposition is contextually variable” (EHW: 154). But the varieties of context-relativity they actually discuss are very limited - only those that they want to redesign as relativity to points of evaluation. For instance, they do not discuss demonstratives, or the context-relativity of quantifiers, or standards for comparative adjectives. Perhaps they think that all of these are determined by the choice of world, time and agent. Alternatively, they might be prepared to build additional parameters into the n -tuples that propositions are supposed to be sets of, or they might be prepared to say that in other respects even the expression of centered-worlds propositions may be relative to a context.
2. EHW and Egan call the kind of “might”-sentence they are interested in *epistemic modals*. I myself am not so sure that there is a special class of sentences

or modal operators that deserve to be called “epistemic”. Rather, it may be that every sentence of the form “It might be that p ” is true or false only relative to a contextually determined set of possibilities. In some conversations, the context that pertains to that conversation determines a set of possibilities comprising all and only those that are compatible with what the speaker knows or with what any member of a certain set of people, including perhaps the speaker, knows (so that a possibility is not included if there is someone in the set such that it is incompatible with what he or she knows). But on other occasions, the context pertinent to a conversation will determine a set of possibilities in a different way. For instance, it might be the set of possibilities compatible with the interlocutors’ carrying out some plan that they have made (“We might wait until next week to get started”) or the set of possibilities compatible with their conforming to some rules they have laid down (“We might vote on this before the committee reports”).

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5. Perspectival facts

Is relativity a requirement for mind-dependence?

Eyja M. Brynjarsdóttir

Abstract: According to a common intuition, a property is subjective or mind-dependent if it is a matter of taste whether an object possesses it or not, and such matters are open to so-called faultless disagreement. For instance, assuming that funniness is subjective, two people may disagree about whether something is funny, yet both be right. If this intuition is correct, the possibility of subjective properties seems to depend on the possibility of faultless disagreement, which again seems to rely on some type of relativism about truth or facts. Given that relativism is a contested view, this reliance is not a fortunate one for subjective properties. Those rejecting the possibility of faultless disagreement include indexical relativists. In this paper, I argue that the mind-dependence of properties does not require faultless disagreement and that indexical relativism, or contextualism, has the resources needed for a coherent notion of subjective property. While contextualism may have its flaws, failure to account for subjective properties is not one of them.

1. Introduction

Suppose that two friends, Emma and Harriet, are watching a puppet show. Their senses of humor differ and they do not find the same puppets funny. Emma says “Grover is funny” while Harriet says “Grover is not funny.” According to a common intuition, neither Emma nor Harriet is wrong because funniness is a subjective property. The intuition about objective properties is different; if Emma says “Grover is 1 meter tall” and Harriet says “Grover is not 1 meter tall,” then one of them must be wrong. This is frequently considered one of the main differences between subjective and objective properties. If a property p is subjective, it allegedly means that subjects A and B can disagree about whether p is instantiated, yet both be right.

Generally speaking, a subjective property is mind-dependent in some important sense in which an objective property is mind-independent. As there are several different ways in which something can be mind-dependent, more precise formulations of this distinction vary. The kind I have in mind are ontologically subjective. The main idea is that what makes it so that an object has an objective property is significantly different from

that which makes it so that an object (even the same object) has a subjective property. The instantiation of the subjective property is ontologically dependent on the mental state of a subject (or a group of subjects) in some significant sense that does not apply to the instantiation of an objective property.¹

There is something intuitively compelling about the idea that the explanation for Grover's funniness being a subjective property is that Emma and Harriet can disagree about its instantiation and both of them still be right about it. But does this intuition make sense when examined more closely? And if not, what are our options? Do we have to abandon the idea of subjective properties altogether?

If it is true that the possibility of faultless disagreement about a property is what makes it subjective then ontological subjectivity relies on faultless disagreement. In other words, if faultless disagreement is impossible, which some have claimed, then subjective properties cannot exist. Although described somewhat differently, this seems to be the position taken by Gideon Rosen in his paper "Objectivity and Modern Idealism: What Is The Question?"² There, Rosen gives an argument that boils down to the claim that since faultless disagreement, or the associated relativism, does not make sense, there is no basis for ontological subjectivity.

I will argue that this worry is unfounded. While faultless disagreement, and the kind of relativism that seems to be required to justify faultless disagreement, may be one way to give an account of ontological subjectivity, I believe contextualism or indexical relativism has room for subjectivity as well. In fact, the relativity itself is not what constitutes the subjectivity. Therefore, relativity is not a necessary precondition of subjectivity or mind-dependence.

2. Disagreement with fault

Let us consider the options concerning Emma and Harriet's disagreement about Grover's funniness. Either it is a genuine case of disagreement or it is not. If it is a case of disagreement, there are two further options: a) It is faultless, and b) it is not faultless. If the apparent disagreement is not a genuine disagreement, an explanation must be given of why it appears to be.

First, let us assume that Emma and Harriet have a genuine disagreement; that they are endorsing mutually exclusive claims. This disagreement is either faultless, or one of them is wrong. Let us first assume the latter.

How could this be? How could one of them be wrong? A possible explanation could be based on objectivism or realism about funniness. On such a view, the instantiation of funniness is objective or mind-independent: It is a fact that Grover is funny and what Emma and Harriet think of it has no effect on it. Grover's state of funniness has nothing to do with the judgments of Emma and Harriet, just as Grover's height has nothing to do with their judgments. If Emma says "Grover is 1 meter tall" and Harriet says "Grover is not 1 meter tall," we can assume that one of them must be wrong because the facts of the matter about Grover's height are independent from what Emma and Harriet think of it. Similarly, as the facts of the matter about Grover's state of funniness are independent from what Emma and Harriet think of it, we can assume that one of them is wrong when they disagree about whether Grover is funny.

The main flaw of objectivism about funniness is that it does not seem very plausible. Funniness *does* somehow seem dependent on people's reactions. Could a joke that nobody ever felt compelled to laugh at possibly be funny? Furthermore, even though we accepted objectivism about funniness, some other potentially subjective properties would remain. Stopping here and now with the words "all properties are objective" is hardly a useful strategy, given that the task at hand is to contribute to an account of subjective properties. So let us assume that there are subjective properties, and that funniness is one of them.

There is another way to explain how the disagreement might not be faultless. Let us suppose that Emma is the queen and define funniness as a property possessed by whatever the queen finds amusing and judges to be funny. Then Grover is funny if and only if Emma considers him funny. In this case, whether Grover is funny has everything to do with Emma's judgments but nothing with Harriet's. Emma's judgments about funniness are infallible and by definition everyone who disagrees with her about the instantiation of funniness is wrong. I call this kind of account *monarchy*.

Monarchy seems to hold for various properties, such as "being fashionable." Although there are cases of things gaining popularity and becoming fashionable in an unorganized manner from the bottom up, so to speak, there is at least a kind of fashionableness that is authority-based. Every now and then, we (or those of us who care to listen) hear news from Milan about what is fashionable this coming season. We are told that green clothes are

in this year, and that last year's red hues are *out*. If we keep insisting on wearing red, we are deciding to wear unfashionable clothing. For that matter, each and every one of us has the power to be a monarch in this sense. I can come up with a property, plunkness, that I attribute to things on the basis of some whim of mine, possibly changing from one day to another. It is, of course, up to others whether they care at all about plunkness.

Monarchy should not be confused with the deference to expert associated with social externalism about meaning. According to social externalism, we may defer to a fashion expert when it comes to the content of fashion-related terms that we non-experts do not understand well. Hence, a fashionista may correct me when I describe a dress as having a shawl-collar if I fail to apply the term "shawl-collar" in accordance with its use as approved by those in the know. Whether the dress actually has a shawl-collar is not a question of monarchy in the sense I have described. It is a matter of the cut and make of the dress (or more exactly, its collar) and what is up to the experts is not whether the dress has the property of having a shawl-collar but only when the term "shawl-collar" is being correctly applied. If, however, the fashionistas were to decide that shawl-collars were *in* this coming season, it would be a matter of monarchy that pieces of clothing with shawl-collars were fashionable (assuming the fashion experts had the power to make such decisions). In other words, a monarchic property is a property that is possessed by an object because a subject (the monarch) unilaterally declares that the object has it. Social externalism, on the other hand, does not concern whether an object has a given property but whether a particular term is being used appropriately.

Monarchic properties seem to be mind-dependent in the sense that their instantiation is dependent on the monarch's state of mind. Dresses with shawl-collars are fashionable just because the fashionistas say so, and cease to be fashionable when the same people cease to think of them as such. If this is so, it is a case of subjective properties that does not require faultless disagreement. However, I do not believe the issue can be fully solved with monarchy. Even though there seem to be some subjective properties about which monarchy holds, it is implausible that it holds of all subjective properties. Take funniness, the property that seems to be the focus of Emma and Harriet's disagreement. Monarchy may hold of fashionableness, but my suggestion that Emma could be a monarch of funniness is hardly reasonable. Funniness seems to be the kind of property regarding which our leanings are more egalitarian. It is characteristic for funniness as well as many other subjective properties that there is not one simple answer to a question

about whether an object possesses it and that one person's opinion about it seems to be as good as another's.

Hence, the option of Emma and Harriet's (apparent?) disagreement being such that one of them must be wrong is not viable for an exploration of all subjective properties. The intuition I mentioned at the beginning is that neither Emma nor Harriet is wrong when it comes to whether Grover is funny. That possibility must be fully explored.

3. Faultless disagreement

Let us now consider the case in which Emma and Harriet have a genuine faultless disagreement about whether Grover is funny. Accounts of genuine disagreement differ to some extent but I am assuming that this means that Emma is stating that it is a fact that Grover is funny while Harriet is stating that it is a fact that Grover is not funny. In other words, Emma and Harriet's respective statements are mutually exclusive; they contradict one another. However, both statements are true. How can this be?

To make this possible, some kind of relativist account seems inevitable; i.e., some account that makes it possible for two mutually exclusive statements to be true. Such accounts have been proposed, both in terms of the relativity of the truth of an utterance to circumstance³ and in terms of the relativity of facts to perspective.⁴ What such accounts all share is that they include two "layers" of contexts or perspectives under which a proposition can be evaluated; an idea that can be traced back to David Kaplan's distinction between context of use and circumstance of evaluation.⁵

A relativist account explains faultless disagreement between Emma and Harriet in the following way: Emma's claim "Grover is funny" and Harriet's claim "Grover is not funny" are mutually exclusive given the same context of use. This is what makes the case a genuine disagreement. However, the claims can be evaluated in different contexts, and that evaluation determines their truth value. Hence, these contradictory claims can both be true if they are not evaluated in the same context.

On this account, the truth value of the sentence "Grover is funny" is relative to the context of evaluation. Faultless disagreement is made possible by separating the two levels of context so that Emma and Harriet's claims can be incompatible yet both true. Some have claimed that this strategy is unsuccessful. For instance, Stojanovic (2007) argues that the attempts of relativism to account for faultless disagreement about taste predicates col-

lapse into contextualism or objectivism and thus fail to save faultless disagreement. I will not consider here whether that critique is merited but let it suffice to say that if faultless disagreement is not saved by relativism, it is unclear what could save it.

4. Contextualism

Let us now switch to the second option; the one according to which Emma and Harriet do not really have a disagreement. If they do not really disagree with one another, i.e., their claims are not really mutually exclusive, then it should be possible for both of them to be right. Getting rid of the disagreement makes it possible for both Emma and Harriet to be right. Even though Emma and Harriet *appear* to disagree, they do not really because they are not really making mutually exclusive claims. But how do we get rid of the disagreement?

One option here is to adopt some version of non-cognitivism about attributions of funniness. For instance, we could be emotivists and say that Emma and Harriet are not really making any factual claims but merely expressing their own emotional states. This does not give us any subjective properties; Emma and Harriet are not really ascribing *any* property to Grover, so the question of whether the property is subjective or objective does not even apply.

A more fruitful option is a contextualist version, one that can also be called indexical relativism. This is a semantic view, according to which the meaning of Emma and Harriet's respective claims is relative to the context of the speaker. When Emma says "Grover is funny," the real meaning is "Grover is funny-for-Emma", whereas the meaning of Harriet's "Grover is not funny" is "Grover is not funny-for-Harriet." There are no contradictory beliefs involved here; there is nothing inconsistent about being-funny-to-Emma at the same time as not being-funny-to-Harriet. Hence, this is no more a case of genuine disagreement than when Emma says "My name is Emma" and Harriet says "My name is not Emma." In the latter case, it seems obvious that Emma and Harriet are not referring to the same name when using the phrase "my name."⁶

On this account, *funniness* is an indexical term; just as Emma and Harriet refer to different people when they use the word "I", they refer to different properties when they use the word "funny". While this involves a relativism of sorts by making meaning relative to context, it is not proper

relativism entailing the relativity of truth or facts; i.e., the relativity involved is not metaphysical. Some philosophers have adopted a similar view about color. Because of variations in color perception, both among humans and between animal species, they claim that shades of color are relative to perceivers and circumstances. One such example is Brian McLaughlin's account: "*Relativized Colours*. Redness for a visual perceiver of type P in circumstances of visual observation C is that property which disposes its bearers to look red to P in C, and which had by everything so disposed."⁷ The idea is that there is no such thing as redness; only redness-for-P-in-C. Redness is not one property, but as many properties as there are perceiver/circumstance combinations.

If a contextualist account can be given of any property we might want to consider subjective, we do away with the notion of faultless disagreement. Of course, there are some who consider this a flaw because they think the intuition about faultless disagreement in matters such as those concerning taste should be saved. And this brings us to the question I want to consider: Is faultless disagreement, and the kind of relativity about truth or facts it requires, a requirement for subjective properties? Can we have an account of subjective properties that does not rely on relativity of truth or facts?

5. Rosen's objections

Although it is not exactly how he presents it, the above question seems to be one of the questions Gideon Rosen is answering in his paper "Objectivity and Modern Idealism: What is the Question?"⁸ and his answer is "no". Rosen claims that no properties can be subjective in the sense he considers relevant for a distinction between realism and idealism. The reason, he says, is that subjective facts are nowhere to be found, and it takes a subjective fact to make a subjective property. Facts about the properties people might think of as subjective are, after all, no different from any other facts; therefore the properties are not subjective in the relevant sense. Given Rosen's premises, he seems to be right. That is, if it is the case both that facts about the instantiation of subjective properties must be subjective, and that the candidates Rosen considers for such properties are the best candidates, he must be right. However, both of these premises can be questioned.

Rosen claims that there is no motivation to be found for realism, or for a conflict between realists (about any given subject matter) and those to

whom he refers as modern idealists. He describes the core of the realists' project as a claim to objectivity in the relevant sense:

We can epitomize the realist's basic commitment by saying that for the realist as against his opponents, the target discourse describes a domain of genuine, objective fact. The basic foundational question is then: What is objectivity in the relevant sense, and what are the alternatives? Can we find a definite and debatable thesis upon whose truth the legitimacy of the rhetoric of objectivity depends?⁹

The task of the antirealists or idealists is to reject this sense of objectivity that the realists propose. Rosen claims that the kind of objectivity that must be relevant to the conflict is nowhere to be found. And since we are missing the relevant objectivity, there can be no real dispute between realists and anti-realists. Hence, Rosen proposes a quietism concerning the matter, "a rejection of the question to which 'realism' was supposed to be the answer" (1994: 279). It follows that there can be no interesting ontological distinction between objective and subjective properties as there is only one ontological kind to which properties can belong. The relevant kind of objectivity to which a meaningful sense of subjectivity could be contrasted does not exist.

Even though Rosen is out to show the lack of a relevant kind of objectivity, the focus of his arguments is to show that there is no relevant sense of subjectivity, or mind-dependence, against which objectivity can be contrasted. Objectivity in the relevant sense is a kind of mind-independence, to be contrasted with the relevant sense of mind-dependence. Rosen discusses a few candidates for the position of mind-dependent property and rejects them one by one. His arguments for doing so share the following structure: A candidate for a subjective property is considered. Rosen then shows how facts about the instantiation of this property are no different from other facts, i.e., that there is nothing distinctively subjective about them. Since a property is subjective only if facts about its instantiation are subjective, the property in question is disqualified as a subjective property candidate in this case. Rosen goes through a list of what he considers the most suitable candidates and reaches the conclusion that since there are no subjective facts, there can be no subjective properties. The upshot seems to be that mind-dependent properties are nowhere to be found, which makes any distinction between subjective and objective properties pointless. Therefore, the basis for realism is missing.

Rosen does not offer a definition of subjective fact, but it seems clear from his paper that what he has in mind is that the obtaining of a subjective

fact is dependent on the mind of a subject who is speaking of the fact or somehow making a judgment about it. This seems similar to the notion of *subjective fact* found in Iris Einheuser's (2008) paper "Three Forms of Truth-Relativism".¹⁰ Einheuser argues that certain kinds of facts are subjective facts. They are determined not only by the way the world is but additionally by the perspective of a subject (or a similarly minded group of subjects). Hence, they are perceiver-relative or subject-relative and thereby different from objective, absolute facts that are determined solely by the way the world is independently of a subjective perspective. What makes faultless disagreement about them possible is that we can distinguish between the perspective from which the obtaining of a fact is asserted and the perspective from which it is evaluated. If we apply this to our example, we get this: Emma and Harriet disagree when one says "Grover is funny" and the other says "Grover is not funny" because if evaluated from the same perspective, their statements are mutually exclusive. But neither Emma nor Harriet is wrong because their statements are asserted from different perspectives and given *those* perspectives, they are both correct.

Einheuser's account seems roughly analogous to the accounts of relative truth described above; even though it concerns facts rather than truth, the results are similar. Funniness is a subjective property because facts about its instantiation are subjective. It can both be a fact that funniness is instantiated in Grover and a fact that funniness is not instantiated in Grover at the same time because those facts are relative to a judge's perspective. On the other hand, we might say that facts about the instantiation of objective properties are absolute.

I think we can safely assume that the subjective facts on which the subjective properties must be based according to Rosen are not absolute but relativistic. And it seems clear that a subjective fact on this account is one about which there can be faultless disagreement. From the start, Rosen is skeptical of the possibility of a distinction between subjective and objective facts: "So far as I can see, it adds nothing to the claim that a certain state of affairs obtains to say that it obtains objectively" (1994: 279). Rosen then shows how facts about the properties he picks out as potentially subjective are just as any ordinary facts and concludes that there are no subjective facts and thus no subjective properties.

Of the examples Rosen measures against this notion of fact, the most prominent ones are Crispin Wright's (1992) notion of judgment dependence¹¹ and Mark Johnston's notion of response-dependence.¹² First, take Wright's judgment dependence. The definition as characterized by Rosen is

“that a concept *F* is *judgment-dependent* if and only if [...] It is a priori that : *x* is *F* iff certain subjects *S* would judge that *x* is *F* under conditions *C*.”¹³ As an example of such a concept Rosen takes the case of constitutionality: “It is a priori that: A U.S. law is constitutional (at *t*) iff the majority of the US supreme court, after informed and unbiased deliberation, would judge it constitutional (at *t*).”¹⁴ Rosen points out that facts about how the majority of Supreme Court judges would vote after informed and unbiased deliberation seem no different from any other facts about how some certain subset of humans would behave under particular circumstances. Thus, we have no reason to call these facts subjective or consider them different in nature from any other facts.

This seems right. And if we consider this in terms of faultless disagreement it seems clear that it does not apply. Disagreement about how the majority of the Supreme Court would vote will not be faultless. If Jack and Jill disagree about whether a particular law is constitutional, i.e., about how the majority of the Supreme Court would vote under particular circumstances, then one of them must be wrong. It seems to me that this case falls under what I called monarchy above: There is a certain subject or group of subjects who by definition decides the matter. So this cannot be the best available candidate for faultless disagreement.

Rosen’s other example is Johnston’s response-dependence. In short, a concept is response-dependent if it is a concept of a disposition to produce a mental response in a subject of a particular kind under particular circumstances. Rosen’s example is the concept of being annoying to fox terriers. It is the concept of the disposition to produce annoyance in fox terriers. However, we can make a list of the things that qualify as annoying to fox terriers (pullings of tails, pokings of eyes, etc.) and speak of the list as we speak of any other fact.¹⁵ We can speak of how tail pulling is disposed to produce annoyance in a fox terrier just as we speak of any other disposition. The conclusion is that we have no reason to think of the facts in question as any less objective than any other facts. There is nothing more subjective about the fact that eye-poking is annoying to fox terriers than there is about the fact that arsenic is poisonous to humans.

The notion of being annoying that Rosen adopts here is index-relative. He does not speak of what it would mean for something to be annoying *simpliciter*; only of what it is for something to be annoying to a specific group such as fox terriers. Rosen does not address the possibility of disagreement among fox terriers about what is annoying or between, say, fox terriers and humans. Nobody would deny that a statement such as “Boy-

band music is annoying to 77% of humans” refers to an objective fact, assuming this was the result of some thoroughly conducted survey. But the real candidates in the running for subjective or relative facts are not facts about what is annoying to so-and-so, but those about whether boy-band music or tail-pulling are annoying *simpliciter*.

Rosen avoids the issue of disagreement altogether. As already mentioned, he does not bring up the issue of possible disagreement within a group or between groups about what is annoying or funny. Yet the notion of subjective facts he seems to have in mind (and which he rejects) is one according to which faultless disagreement would make sense. So we might say that he fails to address the core of the issue. Is his rejection of subjective facts a result of his thinking there are no such properties as funniness or annoyance *simpliciter*, or is it the other way around? He never explains that. But his conclusion implies that subjective properties cannot exist without subjective facts, which we can assume involve the possibility of faultless disagreement.

As I mentioned above, one of the premises needed for the success of Rosen’s argument is that his candidates for subjective properties are the most promising ones. As I have shown, he seems to rely on index-relative properties for that purpose. If the properties are taken to be relative, there is no place for subjective facts. However, if the notion of something like funniness *simpliciter* is brought in, the facts are not as straightforward as they are in the cases described by Rosen. That is, if different subjective property candidates are considered, the idea that facts about them might be subjective seems at least somewhat plausible. On the other hand, if we stick to index-relative properties, Rosen’s point that nothing appears subjective or relative about the facts rings true. But should we go along with his premise that subjective properties require subjective facts? Below, I will argue that we should not; that a property can be ontologically subjective even though facts about it are not subjective or relative.

Let us now suppose that those who have doubts about the possibility of relative facts or relative truth are right, that there are no subjective facts, no faultless disagreement and thus no such thing as annoyance *simpliciter* or funniness *simpliciter*. Suppose there is no such thing as Grover being funny, only Grover-being-funny-to-Emma. Is there still a way to account for subjective properties?

6. Saving subjectivity

Suppose contextualism holds for a property such as funniness. Can we still make the claim that funniness is a subjective property? Remember that the kind of subjective property under discussion here is a property whose instantiation is mind-dependent. Can the instantiation of an indexically relative property be mind-dependent in an ontologically meaningful sense?¹⁶

The intuition mentioned at the outset, concerning the possibility of faultless disagreement, is that what makes funniness “special” or different from height is that it is not set in stone, so to speak, whether it is instantiated, such as whether Grover is funny, and that Emma and Harriet can disagree about it yet both be right. If contextualism is true, there is no disagreement between Emma and Harriet. Where did the “specialness” of funniness go?

My concern here is not whether relativism about truth or facts is a viable view. My aim is strictly to consider whether it is a necessary condition for subjective properties. I maintain that the mind-dependence of a property does not rest on the possibility of faultless disagreement. Let us take a closer look at what contextualism about funniness entails: If funniness is index-relative, there is no such property as funniness *simpliciter*. There are no facts about Grover’s being funny or Grover’s not being funny. Grover can be funny-to-Emma-, not-funny-to-Harriet and so forth, but he cannot simply be funny. Let us now focus on the property of being-funny-to-Emma: That which makes it true that Grover is funny-to-Emma is Emma’s state of mind. If Emma had a different sense of humor and thus thought differently of Grover, being-funny-to-Emma would not be instantiated in Grover. The mental response of amusement in Emma makes it so that she finds Grover funny, and this is exactly what makes it so that Grover has the property of being-funny-to-Emma. In contrast, Grover’s exact height is not something he has in virtue of anybody’s mental response.

Now I will return for a moment to the option presumed to be lost, i.e., to faultless disagreement and how that might constitute subjectivity. Let us suppose that funniness is subjective because facts about its instantiation are relative to the perspective of the judge. Emma and Harriet disagree about Grover’s degree of funniness but neither of them is wrong because it is somehow both a fact and not a fact that Grover is funny. Where does the mind-dependence of funniness enter? It cannot be just that the fact is relative to *something* that makes it (and then the property resting upon it) mind-dependent; there must be a mind involved. Facts about funniness are subjective because they vary in accordance with the mental state of the subject

making the assessment. What makes it a fact that Grover is funny is that certain subjects, such as Emma, find him funny.

The mind-dependence involved in the two versions can now be compared. On the contextualist account, Emma finds Grover funny and this causes her to utter "Grover is funny." The reference of this utterance is relative to the speaker, which means that she is in fact stating that Grover has the property of being funny-to-Emma. She thereby assigns this property to Grover, which makes it the case that Grover has the property. On the truly relativist account, Emma finds Grover funny and this causes her to utter "Grover is funny". She thereby assigns the property of funniness to Grover, which makes it a fact that Grover has the property. This fact is relative to Emma's perspective, which among other things involves her finding Grover funny.

Presumably, ontological subjectivity means that a mental state is what is responsible for something's existing, obtaining or being instantiated. And on both the relativist and contextualist accounts it is the very same mental state, Emma's amusement, that is responsible. Why should one account then fail to be an account of something mind-dependent while the other is? The inevitable conclusion is that if a relativist account of Grover's funniness is an account of a mind-dependent property, then a contextualist account of Grover's funniness is as well.¹⁷

7. Conclusion: Is there nothing "special" about mind-dependence?

The motivation behind connecting subjectivity with faultless disagreement and relativism may have something to do with the expectation that there should be something ontologically distinctive about subjective properties. If there is to be some significant distinction between objective and subjective properties, it had better be on some deep ontological level. If a subjective property is simply one that is instantiated because of a subject's ascription of it to something, without anything "strange" going on with truth or facts about it, the distinction may seem disappointing to some. This, they might complain, is not an ontologically meaningful distinction.

Perhaps they are expecting too much. In any case, conflating subjectivity with relativity is not justified. Take the type of moral relativism that has also been called moral subjectivism. This is the view that the truth of a moral claim is relative to the individual subject judging it. Even though this view happens to be both a type of relativism and a type of subjectivism, it

does not mean that relativism and subjectivism are one and the same. What makes this a relativist account is the relativity of truth to judge. What makes it a subjectivist account is that the subject's feelings on the matter make the claim true or false. These are two different things even though they happen to coincide in this case.

Another example: suppose I have a headache and someone asks me "Is it a bad headache?" There are two things on which I can base my answer. I can compare the headache to other headaches I've had and then give an answer based on whether this particular headache is bad relative to my "headache standard". I can also focus on the way this headache makes me feel and base my answer on whether I feel that the headache is bad. My point is that it is not the same for something to be relative to a standard, even though it happens to be a standard belonging to a subject, and for it to be ontologically dependent on a subject's evaluation. The former has to do with being measured against a parameter while the latter has to do with being what it is on the basis of a mental state.

Hence, relativity and subjectivity are by no means the same thing and there is no reason to think of relativity as a requirement for subjectivity or mind-dependence. Relativism about truth or facts, or the possibility of faultless disagreement, is not a precondition for subjective properties. Hence, contextualism ought to fare just as well as relativism when it comes to accounting for subjective properties.

This does not mean that a contextualist account of funniness comes without problems, nor does it mean that it is my intention to endorse contextualism specifically. But these problems will not be addressed by me at present. What matters is that however contextualism about properties such as funniness may fare, failure to account for ontological subjectivity should not be counted among its weaknesses.¹⁸

Notes

1. My distinction between subjective and objective properties is similar to the one found in (Campbell 1993).
2. (Rosen 1994).
3. See e.g. (Kölbel 2004a; 2004b); and (MacFarlane 2005).
4. See (Einheuser 2008).
5. See (Kaplan 1977; 1989).
6. Examples of this kind of contextualism can be found in (Cohen 2005); (DeRose 2004; 2005); and (Glanzberg 2007).

7. (McLaughlin 2003: 122). For a similar view, see (Cohen 2004).
8. See (Rosen 1994).
9. See (Rosen 1994: 278–279).
10. See (Einheuser 2008).
11. See (Wright 1992).
12. See (Johnston 1993).
13. See (Rosen 1994: 297).
14. See (Rosen 1994: 300).
15. See (Rosen 1994: 293).
16. It is worth noting that the possibility of faultless disagreement may be threatened even though contextualism is not assumed. Some have argued, such as (Stojanovic 2007), that relativism does not save faultless disagreement.
17. This is consistent with the notion of subjectivity assumed by John MacFarlane (2007): “the degree to which their truth seems to depend not just on how things are with the objects they are explicitly about, but on how things are with certain subjects” (20). Indeed, MacFarlane claims that subjectivity is not a problem for contextualism; it is only the disagreement that it fails to save.
18. My thanks go to Neftalí Villanueva Fernández, Barry C. Smith, and the students in my seminar on relativism at the University of Iceland in the spring of 2009 for discussion of and comments on issues pursued in this paper.

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Perspectival truth and perspectival realism

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Abstract: The formal difference between genuine relativism and indexical relativism is that according to the former the “perspectival parameter” in the context of utterance is part of the point of evaluation, whereas according to the latter it contributes to determine the content expressed. How should this difference in the semantics be interpreted? Does it correspond to any substantial difference between the two approaches? I will argue that the relativist has to endorse a realist construal of relative truth and perspectives in order to render her position significantly different from the indexicalist’s. If relativism is not to be a trivial thesis, or just a notational variant of indexicalism, the relativist’s construal of contextual interpretation and evaluation of a sentence has to be carried out on the background of what I will call pluralistic perspectival realism. In the conclusion, I cast some doubts on whether pluralistic perspectival realism is indeed a tenable metaphysics (at least outside of the temporal domain).

1. Introduction

Call the (quite trivial) thesis that sentences containing certain “perspectival” expressions (P-sentences, for short), such as tensed verbs, and moral or aesthetic predicates (e.g., “good” or “beautiful”) are context sensitive “vanilla relativism”.

Relativism about truth is a stronger thesis than vanilla relativism; it is the thesis that we need to resort to an *irreducibly relativized notion of truth* to assess the truth value of utterances of P-sentences. According to relativism about truth, P-sentences are not true or false solely in virtue of what the world is like, but only with respect to a perspective on the world, such as a temporal, moral, or aesthetic perspective. Recently, relativists about truth have endeavored to answer the compelling question of what the role of relative truth is in a normative theory of assertion.¹ In this paper I will *not* address this issue. Rather, I will address the issue of what exactly the relativist means by claiming that P-sentences are “true relative to a perspective”. This issue, too, is compelling for the relativist. If by saying “p is true relative to a perspective” the relativist were to mean something like “p is true according to one’s opinion” (for example, one’s moral code or aesthet-

ic canon), relativism about truth would turn out to be but a triviality that everybody agrees on. Everybody grants that, as a matter of fact, people do have different beliefs concerning moral or aesthetic matters. Yet if *p*'s being true relative to a perspective is tantamount to *p*'s being *believed* to be true by someone endorsing such a perspective, why should relativism about truth be a philosophically interesting position? Relativism about truth, then, must imply some different conception of being true relative to a perspective. I will begin the analysis by introducing some terminology.

Relativism about truth parts company with the standard semantics for indexical languages by claiming that the context of use does not provide all the relevant parameters for the interpretation and evaluation of P-sentences. Thus, relativism about truth is characterized by the following tenet:

(T) The truth value of the proposition expressed by a P-sentence in a context *C* does not depend *only* on the *world* of the context of use (*w_C*); it also depends on a further parameter that is not uniquely associated with the context of use *C*.

I will call this further parameter the *perspectival parameter*, or *P-parameter* for short.² Relativism about truth is *genuine* in so far as it distinguishes itself from *indexical* forms of relativism. Indexical relativism and genuine relativism differ in the way they construe the context sensitivity of P-sentences. According to indexical relativism, it is the *content* of a P-sentence, namely the proposition expressed by a P-sentence in a context, that depends on the P-parameter. According to genuine relativism, it is the extension of a P-sentence (namely its *truth value*) that depends on the P-parameter. Genuine relativism, thus, can be understood as the conjunction of (T) and the thesis of *non-indexical contextualism*:

(NIC) Only the truth value of a P-sentence, and not its content, depends on the P-parameter (modulo other sources of indexicality in the P-sentence)

In this paper, I will first argue that the genuine relativist has to entertain a certain view on what *interpreting* an utterance of a P-sentence amounts to, if she is not to conflate her position with that of the indexical relativist. Roughly, she has to claim that the P-parameter is not relevant for the interpretation of what is said, but only for its evaluation with respect to truth. We do not need to consider a P-parameter in order to understand an utter-

ance. Rather, having understood it, we appeal to the P-parameter to determine the utterance's truth value. In this part of the paper I focus on genuine relativism as committed to a peculiar form of non-indexical context sensitivity.³ Then, I will argue that *if* relativism is not to be a trivial thesis, the genuine relativist's construal of contextual interpretation leads her to maintain a certain metaphysical picture of what the world is like: she has to endorse a form of *pluralistic perspectival realism*. As a conclusion, I will cast some doubts on whether pluralistic perspectival realism is a viable position (at least outside of the temporal domain).

2. Evaluation and content-determinative roles

Following a recent article by MacFarlane,⁴ I will flesh out the difference between non-indexical and indexical forms of context sensitivity of P-sentences by referring to two different roles that a semantic parameter may play; in standard semantics, as much as in relativistic semantics.

One is the *evaluation role* (what MacFarlane calls the circumstance-determinative role), in which the parameter determines an aspect of the reality against which the proposition is evaluated. This aspect or element does not enter into or is not "represented in" (depending on your favored view of propositions) the content expressed. The other is the *content-determinative role*, in which the parameter determines an element of the content expressed. This element or aspect is a constituent of (or is "represented in") the proposition expressed.

To illustrate this difference, consider the standard semantic framework for indexical languages. Among the contextual parameters of the standard framework, we find a *possible world* parameter and an *agent* parameter, which correspond, in normal cases, to the world where the utterance takes place and to the speaker:

$$C = \langle w_C, a_C \rangle$$

Consider, then, the truth-conditions of a simple sentence such as 'I am blond', whose interpretation and evaluation is sensitive both to the world and to the agent parameter:

(TC) "I am blond" is true in a context C iff a_C is blond in w_C

While the agent parameter's role is to "complete" the interpretation of an utterance of "I am blond", namely to determine the proposition that is contextually expressed by such a sentence, the world parameter's role is to "complete" the evaluation of such a proposition, namely to determine its truth value.

The indexicalist relativist considers the P-parameter as a content-determinative parameter to which the interpretation of P-sentences is sensitive. Therefore, a P-sentence such as

(1) *Botticelli's Primavera is beautiful*

expresses *different* propositions with respect to different P-parameters (aesthetic standards, say), and thus it has a truth value only with respect to a P-parameter. Presumably, the P-parameter contributes to the determination of the content of "beautiful", which is consequently treated as a "hidden" indexical. Thus, the *sentence* (1) is not true or false in virtue of the way the world is, but only with respect to a certain perspective, because in different perspectives it expresses different propositions (that may vary in truth value). However, given a world of evaluation, a sentence such as (1), and a P-parameter, the result of the evaluation of what is said is determined and absolute (i.e., non-relative). It is absolutely true that the Primavera is beautiful for the classicist, and it is absolutely false that the Primavera is beautiful for the avant-gardist.

The genuine relativist maintains that P-parameters play the evaluation role. A sentence such as (1), then, expresses the *same* proposition with respect to every P-parameter; viz., from every perspective. This proposition does not have a truth value absolutely,⁵ but *only* with respect to a perspective - i.e., a P-parameter. However, also in this case, given a world of evaluation, a sentence and a P-parameter, the result of the evaluation of what is said is determined and nothing else is required.

The distinction between indexical and genuine relativism may seem at first sight a quite shallow technicality. After all, given a world of evaluation, a sentence such as (1), and a P-parameter, both parties end up with a determined and absolute truth value. It would seem that the difference is only in the details of the semantic machinery. However, contrary to such an impression, Max Kölbel has claimed that the difference between indexicalism and genuine relativism is substantive.⁶ Kölbel argues that the indexicalist has to face at least two problems that do not bother the genuine relativist. First,

(1P) Indexicalism *distorts* the content of P-sentences.

Briefly, by claiming that the perspectival parameter enters into the content expressed by an utterance of (1), the indexicalist is claiming that (1) is *about* a certain aesthetic canon and about what counts as beautiful according to this canon. Yet this seems just wrong. Whoever utters (1) is talking about the *Primavera*, and *not* about her own aesthetic canon; indeed, she is ascribing to the *Primavera* a certain aesthetic property. This is not a knock-down argument against the indexicalist position, as Kölbel acknowledges, because the indexicalist may claim that although the propositions are different, they are expressed by sentences sharing a certain aspect of their meaning – for instance, their “Kaplanian” character.⁷ However, he points out that the genuine relativist never encounters a problem regarding the distortion of content. According to the genuine relativist, (1) expresses a proposition that can be characterized as an ascription of the property of *being beautiful* to Botticelli’s *Primavera*. This proposition *is* about the *Primavera*, and is *not* about the speaker’s aesthetic canon.

Second,

(2P) Indexicalism cannot account for *genuine disagreement* between two parties of a dispute over moral or aesthetic matters.

Take a classicist A, who thinks that (1) is true, and an avant-gardist B, who thinks that (1) is false. According to the indexicalist, when the classicist A and the avant-gardist B (for instance) disagree on the truth value of (1), they are resorting to two different conceptions of beauty and so are *not* contradicting each other. What the one party claims is fully compatible with what the other claims: the *Primavera* is beautiful with respect to a classical canon of beauty, but it is not beautiful according to an avant-garde canon of beauty. To put it differently, A can acknowledge the correctness of what B claims *without* changing her mind over the *Primavera* (and *vice versa*). Yet, in that case, what are they actually quarreling about? How could the dispute even get off the ground? For all we know, the classicist and the avant-gardist *do* quarrel over whether the *Primavera* is beautiful or not, and if A were ready to accept that B is right, she would change her mind on the aesthetic value of the *Primavera* – contrary to what the indexicalist predicts. Again, this predicament is not fatal to the indexicalist. For instance, the indexicalists may claim that the disagreement is actually on whose standard of beauty is the *right* one. However, the genuine relativist

seems to be in a safer harbor; according to her, the content expressed by (1) and the content expressed by its negation, i.e.,

(1') *Botticelli's Primavera is not beautiful*

are *contradictory* propositions: it is the very same aesthetic property (beauty) what one party ascribes to, and the other refuses to ascribe to, the painting. Therefore, A and B *do* disagree on whether the *Primavera* is beautiful or not; hence, the genuine relativist is not bothered by the second problem. In what follows I will argue that on a “deflationary” reading of relative truth, the two positions turn out to be very similar, up to the point of looking like notational variants.⁸ Consequently, whether the fact that the two problems that concern the indexicalist have no effect on the genuine relativist is actually an advantage of relativism about truth over indexicalism depends crucially on what the relativist means by “true relative to a P-parameter”.

2.1. Topic and Target

Inspired by certain considerations that Kit Fine has set forth in his recent “Tense and Reality”,⁹ I will now try to present a framework in which the genuine relativist can give a more detailed account of what ‘being true in a perspective’ for a proposition amounts to.

Fine points out that there are two factors that occur in every assertion of a P-sentence. By asserting a P-sentence, the speaker

(topic) expresses a *content*, namely a proposition

and

(target) points to some *aspect of reality* that is relevant for assessing the correctness of the utterance.

Note that what Fine proposes here is a departure from “the way language is usually taken to connect with reality” (Fine 2006: 295). The old *adage* of the standard semantic framework for indexical languages is that “the truth of any statement depends on two things: what it says, and whether the world is as it says” (Stalnaker 2002: 66).

According to the standard picture, there does not seem to be room for the speaker to “point to” one aspect of reality (or at a “reality” in Fine’s words) rather than another, without thereby expressing a different content. Relativism about truth distinguishes itself from standard indexicalism in so far as it allows for “targeting” aspects of the point of evaluation without influencing the content expressed.

Now, my claim is that if the genuine relativist wishes to distinguish her position from that of the indexicalist relativist, she needs to do two things. Firstly, she needs to regard the *interpretation* of an utterance as concerning only the (topic) part of the speech act: interpreting an utterance amounts to nothing over and above fully determining the *content* it expresses; it is *not* a matter of determining those aspects of reality that are relevant for the assessment of its correctness.¹⁰ Secondly, and more importantly, she must consider the P-parameter as what is targeted in the (target) part of the speech act. Consequently, the P-parameter is relevant only for the assessment of an utterance of a P-sentence for correctness, and not for its interpretation. In other words, the genuine relativist must regard the evaluation role that the P-parameter plays as *not* part of the interpretation of the utterance, but only as part of its assessment. Otherwise, what the genuine relativist calls the “content” of an utterance would not be its *full* content, but rather a *partial content* (or a layer in a multi-layer conception of content, as in Recanati 2007).

If, for the relativist, *interpreting* an utterance required us to target the P-parameter relevant for its evaluation, relativism and indexicalism would be very close one to another. Remember that the genuine relativist claims that ‘beautiful’ expresses the same property in every perspective. Thus, if she were to add that *evaluating an ascription of this property is part of interpreting* someone’s utterance of a P-sentence such as (1), we should rightly suspect that, at the end of the day, the difference between the genuine relativist and the indexicalist is merely verbal. The only difference between them would be whether “evaluating a proposition with respect to a perspective” is a better label than “determining the content expressed with respect to a perspective” for the very same semantic phenomenon.¹¹ Therefore, the genuine relativist is compelled to take the P-parameter not to have any role in the interpretation of a P-sentence, but only in individuating certain characteristic of the reality against which an utterance is evaluated. By contrast, the indexicalist takes the P-parameter to have a role in the interpretation of the utterance: indeed, according to her, we need to resort to a P-parameter in order to complete the interpretation of an utterance of a P-

sentence. It is here important to see that the distinction between interpreting an utterance and targeting a P-parameter is *not* tantamount to the distinction between consider the P-parameter as playing the evaluation role vs. the content-determinative role. Indeed, it is compatible with nonindexical contextualism to maintain that “enriching” the point of evaluation with a P-parameter has to be seen as part of the interpretation of the utterance.¹² My claim is that this is not compatible with *genuine* relativism. This is not just a matter of label choice but the first step to interpreting the formal differences between the two theories in a way that does not makes them just notational variants.

Keeping the above considerations in mind, I will now address explicitly two questions: (i) what is a perspective? and (ii) what does being true relative to a perspective amount to?

2.2. Perspectives

To begin, note that we must be careful to give a metaphysical characterization of a perspective that is sufficiently substantial that it does not turn genuine relativism into a triviality. If a perspective were just the “corpus” of moral or aesthetic principles of a community, or something like the set of standard beliefs of a certain community, then the relativist would not mean any more by “true with respect to a perspective” than “true according to one’s opinion”. This option is tantamount to construing genuine relativism as a triviality that everybody agrees on: there are different opinions, different moral codes, different aesthetic canons, which different people may accept or adhere to. Of course, since not everybody agrees on whether a perspective (even construed in a “deflationary” way) should be considered as part of the content or of the point of evaluation, there is still space for theoretical disagreement (e.g., a nonindexical contextualist will treat P-parameters differently from an indexicalist). However, on the deflationary reading of perspective the distinction between interpreting an utterance and targeting a P-parameter for its evaluation becomes blurry. A set of beliefs about what actions should be considered good, for instance, looks very close to a set of instruction for interpreting the word “good”. If my considerations in the previous section are right, then, the difference between considering the relevant parameter as being in the point of evaluation or in the index completing the proposition would indeed be merely different ways of expressing the theory. In order to provide a substantial distinction between

interpreting an utterance of a P-sentence in a context and evaluate it, thus, we must look for a more substantial construal of perspectives.

One possibility would be to think of a difference of perspective as, roughly, analogous to differences in *spatial position*. In spatial perspectives, centered on the spatial position of a subject, objects and events have perspectival properties such as *being here* and *being over there*. Here we are moving away from a trivial characterization of relativism, but nonetheless, we risk conflating genuine relativism and indexicalism. In particular, if we take the analogy of spatial location too seriously, the genuine relativist will face a problem concerning disagreement completely analogous to that of the indexicalist.

Remember that the relativist seemed not to have the problem of accounting for the disagreement at the outset: between two parties A and B who claim (1) and (1') respectively, there is disagreement because A and B *do* express contradictory contents, and contradictory contents cannot be both true *within* the same perspective.¹³ However, if perspectives are aspects of reality just in the same way that different places are, it becomes difficult to see how the disagreement could get the ground. A claims that the *Primavera* is beautiful and targets the perspective π as relevant, B claims that the *Primavera* is not beautiful and targets a different perspective π' as relevant. Yet if perspectives are really like places to which someone may go and see what is going on there (or be told by a reliable witness about them), it is hard to see how the dispute between A and B could really be like a dispute over a matter of aesthetics or ethics. Obviously, A and B may disagree if A has false beliefs about what goes on in π' , or B has false beliefs about π (for instance, the classicist may think that the avant-gardist's aesthetic canon is very similar to hers).

Yet this is not the point. The point is whether it is possible for the two parties to disagree even when they each possess the relevant information. This is exactly what distinguishes the kind of disagreement in which we are interested here from the indexicalist interpretation of the disagreement.¹⁴ Yet if different perspectives are like different places, it does not seem possible to have a disagreement of this kind. Therefore, we should look at something possessing a somewhat more "independent" reality from the actual world than the places of the actual world. I suggest considering a "realistic" construal of perspectives, and looking at times, rather than places, as models. I will call this position *Perspectival Realism*.¹⁵

3. Perspectival realism

According to perspectival realism, perspectives (such as the perspective from the present time, or the perspective from a particular ethical or aesthetic canon) are akin to possible worlds, with the only possible difference being that the entities in a perspective determinately possess *perspectival* properties (among other, nonperspectival properties).

Consider temporal perspectives as an example. If we consider a possible world w in which the present time is not specified, then there is no event or object in w that determinately possesses a property such as *being past* or *being present*. If we just consider the actual world $w_{@}$, for instance, it cannot be determined whether an event such as World War II is present or past in it. In order to give a determinate answer we need to specify a certain time t as the present time in $w_{@}$ and its temporal relations with World War II: is t simultaneous with, or does t comes after or earlier than World War II? On the other hand, in a temporal perspective on $w_{@}$, for instance in the perspective π_t from (or centered on) the present time t , World War II *has* the property of *being past*. To generalize, according to perspectival realism, a perspective on a certain world w is a world π such that:

- (a) π has the same domain D as w
- (b) The entities in D determinately possess perspectival properties.

Perspectival realism is not an exotic position, at least not in the case of temporal perspectives. As Fine has argued, the position known in metaphysics as *tense realism* is a form of perspectival realism.¹⁶ According to the tense realist, when we utter

- (2) *World War II is (now) past*

we are ascribing a genuine monadic property to an event, and whether (2) expresses a truth or not depends on how things stand in a certain relevant temporal perspective; the perspective centered on the time of utterance t . The temporal perspective is what is pointed at (or targeted) by an utterance of (2).

Tense anti-realism, on the other hand, takes tensed properties to be just a manner of speaking. Tensed predicates are hidden indexicals that express relations between events or objects and the time of utterance, rather than genuine properties. Objects and events in no world possess properties such

as being present, past, or future. According to the anti-realist, there are no temporal perspectives in the sense of the realist. Rather, perspectives are more like contexts; the sort of things that we need to look at to determine the contents of tensed predicates.

It should be straightforward to adapt the temporal model to other kinds of perspective. For instance, consider moral perspectives. According to moral perspectival realism, moral perspectival expressions (such as “being good”) express *genuine properties*, which objects and events possess or fail to possess in perspectives. Thus, we can think of moral perspectives on the actual world as words in which entities possess moral properties. When we utter a moral judgment such as

(3) *Premarital sex is morally acceptable*

we are both expressing an ascription of a moral property, *being morally acceptable*, to a certain kind of behavior, and pointing at a moral perspective as the relevant one for the evaluation of this ascription. According to the anti-realist, on the other hand, moral perspectives are not something that can be pointed at for the evaluation of ascriptions of properties. Rather, we need to resort to a perspective to *interpret* moral terms.

3.1. Pluralistic realism

Now, the distinction between perspectival realism and perspectival anti-realism allows us to single out a form of nonindexical context sensitivity in which the notion of interpretation of a P-sentence and that of its evaluation are clearly distinguished. P-parameters do not stand for bits of information useful to understand what is expressed by an utterance of a P-sentence, they rather stand for different “realities” -the sort of things against which the assessment of a claim is brought about. Yet, how useful is this distinction for distinguishing genuine relativism from indexical relativism?

Let us turn again to our model: tense realism. It might be noted that according to standard tense realism, there is only one “real” perspective, namely the perspective from the present time.¹⁷ Things are never all of present, past, and future; rather, they are first future, then present, and, right after, past. As time passes by, the present perspective changes, but there is always only *one* real perspective. Past and future perspectives are *hypothetical* perspectives: they were real, and they will be real (respectively), when

they were and will be present. For instance, there is no sense in which World War II is *now* future. But if the perspective from January 1st 1900 were real (or when it was real), World War II would be (or was) future. However, Kit Fine has argued that it is possible to make sense of nonstandard forms of tense realism, according to which past and future perspectives are not merely hypothetical.¹⁸ Rather, reality is composed of a plurality of temporal perspectives that enjoy the same status. Obviously, these perspectives are pair-wise incompatible. For instance, the perspective from the present time and the perspective from January 1, 1900 are incompatible. This is because from the former, World War II is past, while from the latter it is future.

Setting aside here the question of whether pluralistic perspectival realism is intelligible, it is clear that the genuine moral or aesthetic relativist has to adapt her case to the model of nonstandard (namely pluralistic) tense realism, rather than to standard tense realism. According to aesthetic relativism, for instance, every aesthetic perspective enjoys the same *status*, there is no privileged, or “right” aesthetic perspective over the others. If only *one* aesthetic perspective counted as the right one, while the others are merely hypothetical, nonindexical context sensitivity for P-sentences would not be a form of relativism. The genuine aesthetic relativist, thus, must consider the actual world as composed of pair-wise incompatible perspectives, which speakers point to when they talk about aesthetic matter. More generally, every form of genuine relativism must endorse a form of *pluralistic perspectival realism*. The realist stance towards the perspectives allows the relativist to interpret her formal semantic theory as a genuine alternative to the indexicalist’s, and the pluralistic stance distinguishes her position from other forms of nonindexical context sensitivity.

3.2. Problems with realism

In order to distinguish genuine relativism from (a) the triviality that there are differences in opinions, and (b) indexical relativism, thus, we have to interpret it on the background of a realistic and pluralistic construal of perspectives. However, pluralistic perspectival realism is not a position that is void of problem. I will conclude by sketching two difficulties for it. The first difficulty is very general. According to pluralistic perspectival realism, perspectives are like possible worlds in that there are propositions that true in a perspective but false in others, but unlike possible worlds in that pers-

pectives are part of the same reality in a strict sense - they are perspectives *on the same* possible world (usually, the actual). It seems that in the non-temporal cases at least, the very idea of a multiplicity of “aesthetic” or “ethic realities” that together compose the actual world while being incompatible with each other is exactly what opponents of relativism find difficult to grasp when thinking about relative truth. Thus, genuine relativism seems destined to stretch the bounds of intelligibility on the part of its opponents.

The second problem stands even if we grant that pluralistic perspectival realism is intelligible. Consider again a debate between a classicist A, who maintains (1), and an avant-gardist B, who maintains (1'). A expresses the proposition that the *Primavera* has a certain aesthetic property and points to the “classic perspective” as the relevant reality that must be taken into account when evaluating what she claims. B expresses the proposition that the *Primavera* does not have this very same aesthetic property and points to the “avant-garde perspective” as the relevant reality that must be taken into account when evaluating what she claims. Now, A and B express contradictory contents, but they *also* disagree on which perspective we should regard as the relevant one for evaluating what they claim. They disagree not just in topic, but also in target. Now, if A acknowledges that B is focusing on a different perspective, there does not seem to be anything preventing A from accepting that B is right without thereby changing her mind. After all, A may claim something true with respect to the classic perspective, and B may claim something true with respect to the avant-garde perspective. Indeed, it seems that they may be both right, and acknowledge this reciprocally, without changing their mind. I think that the moral to be drawn here is one very close to the indexicalist's. The focus of the debate is shifted from whether the *Primavera* possesses the property of *being beautiful* or not, to which perspective is the relevant, or *right* one, for the assessment of (1) and (2). Yet then, one of the advantages for choosing genuine relativism over indexicalism fades away, and the two positions become suspiciously close to each other: aren't both the indexicalist and the genuine relativist claiming that the kernel of the debate is not whether the *Primavera* is beautiful or not, but rather who has the “right” aesthetic canon?

Maybe these two problems are not overwhelming. I am not here interested in assessing their seriousness for the perspectival realist. My point is rather that the *genuine relativist* cannot help facing them. This follows from the conclusion of the previous sections: if genuine relativism neither amounts to the triviality that there are different opinions, nor is indexical relativism in disguise, the genuine relativist has to embrace a form of pers-

pectival realism. But since perspectival realism has problems such as the two sketched above, the genuine relativist has to face them too.

Notes

1. See (MacFarlane 2005), and (Kölbel 2004; 2008).
2. In the recent literature, the P-parameter has been called “a perspective” by (Kölbel 2007a), and a “context of assessment” by (MacFarlane 2003).
3. Other forms of non indexical context sensitivity are those set forth in (MacFarlane 2007b) and (Predelli 2005). While MacFarlane adds a “count-as” parameter to the context, Predelli resorts to a more complex and richer notion of the world of the context. See also (Richard 2004).
4. See (MacFarlane 2009: 237; 2007a).
5. Nor we are in a position to define an absolute truth value by quantifying over possible evaluations of the proposition, e.g. by defining absolute truth as truth in some or every perspective, or as truth at *the* perspective of the context of use. Still, not all P-sentences necessarily have variable truth value with respect to perspectives. There may be “analytical” P-sentences that have the same truth value in every perspective. E.g. “Either the *Primavera* is beautiful or it is not”.
6. See (Kölbel 2004; 2007b). (MacFarlane 2007b) claims that once we sort out indexicalism and nonindexical context sensitivity we are in a position to deny the validity of the “context shift arguments” (which favor indexicalism).
7. The Kaplanian character of a sentence is a function from contexts of use to propositions (which in turn are function from circumstances of evaluation to truth-value). See (Kaplan 1989).
8. See also (Stojanovic 2007), who takes the difference between the two to be by large a “matter of taste”.
9. See (Fine 2006).
10. I here part company with Fine’s view.
11. Incidentally, that seems to be the idea behind (Lewis 1980).
12. This seems to be the idea in (Predelli 2005).
13. See (Kölbel 2007b).
14. See (Wright 2001) and (MacFarlane 2007a).
15. See (Fine 2006). On the notion of perspective, see also (Moore 1987).
16. See (Fine 2006).
17. For instance, see (Zimmerman 2005).
18. See (Fine 2006).

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