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ABSTRACT. An important debate in the current literature is whether "all truth-conditional effects of extra-linguistic context can be traced to [a variable at; LM] logical form" (Stanley, 'Context and Logical Form', *Linguistics and Philosophy*, **23** (2000) 391). That is, according to Stanley, the only truth-conditional effects that extra-linguistic context has are localizable in (potentially silent) variable-denoting pronouns or pronoun-like items, which are represented in the syntax/at logical form (pure indexicals like *I* or *today* are put aside in this discussion). According to Recanati ('Unarticulated Constituents', *Linguistics and Philosophy*, **25** (2002) 299), extra-linguistic context can have additional truth-conditional effects, in the form of optional pragmatic processes like 'free enrichment'. This paper shows that Recanati's position is not warranted, since there is an alternative line of analysis that obviates the need to assume free enrichment. In the alternative analysis, we need Stanley's variables, but we need to give them the freedom to be or not to be generated in the syntax/present at logical form, a kind of optionality that has nothing to do with the pragmatics-related optionality of free enrichment.

1. Introduction

A recent debate in this journal addresses the question of whether truth-conditional effects of extra-linguistic context should be traced to a contextual variable in the syntax/logical form (LF) (Stanley 2000), or at least some such effects should be captured with purely pragmatic, optional mechanisms (variously called "free enrichment", "modulation", etc.) (Recanati 2002; see also Recanati 2003). Stanley's position is strong in the sense that it implies that all truth-conditional effects of extra-linguistic context are traceable to variables at LF, a position that has been argued to be problematic (see references and discussion in Section 4). Recanati's position is strong in the sense that it appeals to pragmatic mechanisms that can influence truth-conditions, mechanisms that have to be added to the theory of grammar and that entail a non-modular, pragmatics-invasive view of the semantics component of the grammar.

The goal of this paper is to argue that there is a middle ground between these two positions which is more satisfying than either of them

in a number of crucial respects. The proposal I make below makes use of contextual variables in the syntax of natural languages, but it gives these variables an option: be generated or not – without postulating pragmatic mechanisms, like free enrichment, that can influence truth-conditions. It should be borne in mind throughout that although I offer an alternative to both Stanley's and Recanati's proposals, what I have to say is much closer to Stanley's position than it is to Recanati's; this is so because, crucially, the alternative does not appeal to free enrichment, and it is Recanati, not Stanley, who appeals to free enrichment. Yet, the problems Stanley encounters are obviated. Section 2 in the paper presents the non-free-enrichment alternative in detail. The logic of the argument presented there is as follows: Recanati has argued that, in order to account for an array of facts concerning predicates like *eat* and *rain*, appeal to free enrichment must be made. I answer this argument by presenting an analysis of his data that does not appeal to free enrichment, thus showing that his argument is flawed.

As it turns out, some of the facts used by Recanati in his argument are either wrong or the conclusions he draws from them are not necessary. That is, both the logic of his argument and the facts it is based on are flawed. These issues are discussed in Sections 2–3, where I offer also what I think are the right empirical generalizations about predicates like *eat* and *rain*. Despite the fact that the alternative offered in Section 2 is an analysis of non-attested facts/generalizations, what is required to explain the real facts/generalizations involves only a small modification of the analysis presented in Section 2: the variables are obligatory instead of optional. This is not a move without consequences, of course, but it is a move that can easily be made within the classical assumptions of contemporary syntactic and semantic theorizing, again suggesting that the move towards frameworks like truth conditional pragmatics (as Recanati identifies his position) is not justified.

2. The answer to Recanati's argument for free enrichment

2.1. *Recanati's Facts and Generalizations*

In this subsection I present the facts and generalizations that Recanati uses in his argument for the necessity of free enrichment. The reader should bear in mind that, since the purpose of this section is to show that Recanati's *logic* is flawed, I postpone a thorough scrutiny of these facts and generalizations until Section 3. In the presentation in this subsection, I try to state the facts in as neutral a way as possible.

Recanati's basic facts are concerned with the behavior of verbs like *rain* and *eat*; more specifically, with the meaning of sentences containing these predicates which, in the case of *rain*, have no overt (in the phonological sense) specification of location and which, in the case of *eat*, have no overt (again, in the phonological sense) object. There are three basic cases to consider. First, when the preceding context makes salient a particular place or a particular edible thing, *rain* and *eat* are sensitive to the salient place and the edible thing, respectively. Consider (1) (cf. Perry 1993, 1998, Stanley 2000, Taylor 2001 and others) and (2) (based on Recanati 2002, p. 315–316):

(1) {Luisa to Klaus, while checking the weather forecast for their weekend destination, Paris:}
It's raining!

(2) {Klaus, Luisa and Andrew are in the kitchen. They have been discussing the dangers of the poisonous mushrooms they have just gathered in the forest. Luisa to Klaus:}
Look! He's eating!

A favored interpretation of (1) is that it is raining in Paris, where the place of *rain* is provided in the context of the sentence and is silent in that sentence. Similarly, Luisa in (2) means that Andrew is eating poisonous mushrooms, which are contextually salient in the preceding discourse. [1]

Second, when no location or edible thing is salient in the context, sentences with *rain* and *eat* can give rise to meanings with existential import. Consider (3), from Recanati (2002, p. 317), which exemplifies with *rain*, and (4), also based on Recanati (2002) (cf. Dowty 1978, 1982a, b; Partee 1989 and others):

(3) {Rain has become extremely rare and important, and rain detectors have been disposed all over the territory. Each detector triggers an alarm bell in the Monitoring Room when it detects rain. There is a single bell; the location of the triggering detector is indicated by a light on a board in the Monitoring Room. After weeks of total drought, the bell eventually rings in the Monitoring Room. Hearing it, the weatherman on duty in the adjacent room shouts:}
It's raining!

[1] The reader should remember that I will challenge some of these generalizations in Section 3.

(4) {John is anorexic. His parents come into the kitchen. John is eating, but they do not know what. John's mother to John's father:}
Look! He's eating!

In (3), no place is made contextually salient and yet, the weatherman's sentence means something: it means that it is raining somewhere. Notice that, because he is in the adjacent room, he cannot see which bell has rung, so he doesn't know where it is raining. Similarly, in (4), John's mother means that John is eating something, despite the fact that nothing edible is contextually salient. Notice that, because she hasn't seen what John put into his mouth, she cannot know what he is eating.

Third, sentences with *rain* and *eat* (and no overt specification of location or object, respectively) can also give rise to bound-variable-like readings. Consider (5), from Stanley (2000, p. 415), and (6), from Recanati (2002, p. 326):

(5) Every time John lights a cigarette, it rains.

(6) John is anorexic, but whenever his father cooks mushrooms, he eats.

(5) can have a reading that can be paraphrased as 'all times i at which John lights a cigarette are times at which it rains in the location in which John lights a cigarette at i', a reading in which the quantificational expression *every time John lights a cigarette* binds the silent location of *rain*. In (6), what John eats can vary with the food that his father cooks ('all times i at which his father cooks mushrooms are times at which he eats the mushrooms cooked at i').

Recanati's argument for free enrichment is as follows: any account of the facts in (1)–(6) must make use of a process of free enrichment; without free enrichment, it is not possible to explain what is going on in these examples. I counterargue by presenting, in Section 2.2, an account of (1)–(6) that does not make use of free enrichment.

What is free enrichment? According to Recanati, free enrichment is a pragmatic, optional process. It is pragmatic and optional in the sense that it is not linguistically controlled; nothing about the linguistic requirements of anything in a sentence calls for free enrichment to occur. "It takes place purely for pragmatic reasons", he says (Recanati 2002, p. 300). What I think is the most controversial point

here is that free enrichment is supposed to be a process that plays a role in the truth-conditions of sentences; it is supposed to be able to affect those truth-conditions directly. I take this to mean that Recanati, and, more generally, the truth-conditional pragmatics program, takes it to be the case that semantics is not a module separate from pragmatics. More specific and detailed definitions of the process (apart from descriptive statements about how free enrichment is supposed to work in concrete examples, which I discuss in some detail in Section 2.3; see footnote 14) are not so easy to come by, but it is not necessary to know what free enrichment really is in order for the argument I am about to present to go through. In that argument, I show that the facts in (1) – (6) can be explained within quite standard syntactic and semantic assumptions. Whatever free enrichment is, I never appeal to assumptions that are incompatible with standard syntactic and semantic theories.

2.2. *A Non-Free-Enrichment Analysis of Recanati's Facts*

The intuition that is behind this analysis is that the readings that examples (1)/(2) and (5)/(6) have are reminiscent of readings that sentences with pronouns like *he* also have, that is, free-variable-like and bound-variable-like readings, respectively. Consider (7) and (8):

(7) {Klaus to Andrew, while pointing at a stranger sitting in the living room:}
Who is he?

(8) Every student thinks that he is a genius.

In (7), there is a salient man in the context that Klaus is pointing to, and Klaus uses the pronoun *he* to refer to that man. In (8), the people who think that they are geniuses can vary with each student ('every student x is such that x thinks that x is a genius'). As is well known at least since Mitchell (1986) and Partee (1989), there are silent items, such as the comparison class of adjectives like *short*/*tall*, *small*/*big*, etc. and the perspective of adjectives like *local* that also display this behavior. Consider the examples in (9) through (12):

(9) John is short.

(10) John visited a local bar.

(11) Most species have members that are small.
(Stanley 2000, p. 418)

(12) Every sports fan in the country was at a local bar watching the playoffs.
(Partee 1989, p. 344)

When a standard of comparison is made salient in the context preceding (9), (9) means that John is short with respect to that standard of comparison. If this standard is set by the height of basketball players, then a speaker/hearer of (9) will mean/understand that John is short compared to basketball players. Compared to a different standard, he might actually be tall; for example, if the standard of comparison is set by children attending kindergarten (in which case (9) would be false). Likewise, when the context preceding (10) provides a particular perspective, (10) is understood to mean that John visited a bar that is local from that perspective (it could be, e.g., John's, who is of course salient, or somebody else's).[2] (11) has a meaning in which the comparison class needed for the interpretation of *small* varies with the species ('most species x have members that are small for x'), and *local* in (12) can be interpreted with respect to a different perspective for each sports fan, his own ('every sports fan in the country x was at a bar local from x's perspective watching the playoffs').

A significant and important difference between pronouns like *he*, the silent comparison class of adjectives like *short* and the silent perspective of adjectives like *local*, on the one hand, and the silent location of *rain* and the silent object of *eat*, on the other, is that failure to contextually provide for the former results, in Recanati's words (2002, p. 307), in "a proposition not being expressed", while failure to contextually provide the location of *rain* or the object of *eat* when that location or that object are silent in the sentence, as we know from examples like (3) (the weatherman example) and (4) (the anorexia example), does not prevent a proposition from being expressed. (13) exemplifies with a pronoun:

[2] Sometimes this perspective is the speaker's, so that (10) can be understood to mean that John visited a bar that is local from the perspective of the speaker. Speaker readings like this one may or may not be (easily) available in the examples discussed so far and are put aside here.

(13) {Klaus to Andrew; there is no salient man provided for contextually, no man they have been talking about:}
#Who is he?

Likewise, were the context of e.g. (9) not to provide a comparison class for the adjective, there would be no proposition expressed by it.[3]

The analysis provided below exploits the similarity between the readings of (1)/(2) and (5)/(6) and the free-variable and bound-variable readings of examples like (7)/(9)/(10) and (8)/(11)/(12), respectively: I postulate a phonologically null variable in the syntax of sentences with *rain* and *eat*, and that variable can be either free or bound. However, that is not the whole story, because the readings of (3) and (4) must also be explained. In order to do that, I claim that these silent variables are adjuncts, i.e., they are optional. They can, but don't have to, be generated in the syntax of these sentences. When they are not generated in the syntax, I appeal to the existence of so-called metaphysical unarticulated constituents (Perry 1993, 1998, Recanati 2002, and others). This, as we will see, will help to explain the meanings of the sentences in (3) and (4). As we will also see below, Gricean conversational implicatures are appealed to in some cases. None of these appeals are threats to the central theses of contemporary semantic theorizing the way free enrichment is.

In order to remind the reader that the analysis presented in this section is an analysis of the facts *as Recanati describes them*, and not of the facts as they actually are (cf. Section 3), I switch from now on to a notation in which *rain* and *eat* are the predicates as they are actually used in English, and *RAIN* and *EAT* are the predicates as Recanati thinks they are used in English.

A final note before beginning: in the analysis below, while I never appeal to free enrichment, I appeal to technology that Recanati (2002) himself uses (and that is compatible with standard semantic assumptions, of course). The detailed review of the similarities and differences between the two approaches is in Section 2.3.

Let us enumerate the analytical possibilities available for (14) and (15):

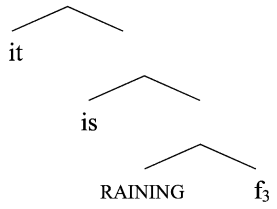
(14) It RAINS/It's RAINING

(15) He EATS/He's EATING

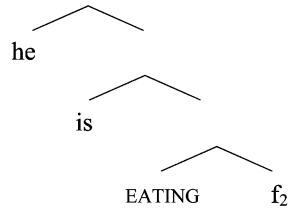
[3] Perhaps it is difficult to find such a context, since presumably, by default, the speaker or the hearer could take his/her own height as comparison.

If variables are given the option to be generated in the syntax or not, then one derivation for (14) and (15) generates a variable with *RAIN* and *EAT*, respectively. We obtain the representations in (16) and (17):

(16)



(17)



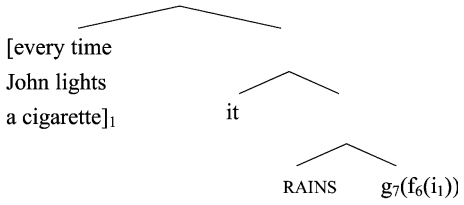
In (16), 'f_3' is a free variable that must receive a value from the context. In the appropriate context (e.g., (1)), it receives as its value a contextually salient function from zero-place predicates to zero-place predicates such that when this function takes the predicate RAINING as its argument, it gives back the predicate ''raining in Paris''. While the context in (1) makes a location salient, the value of the variable here is not that place but a function whose output ''contains'' it. Such functions are known as ''variadic functions'' and resemble closely the semantics for adverbs and adverbial expressions in McConnell-Ginet (1982); these functions are also used in Recanati (2002). In (17), 'f_2' is also a free variable that must be provided for contextually. In the context in (2), it is a function from one-place predicates to one-place predicates such that when this function takes the predicate EATING as its argument, it gives back the predicate ''eating dangerous mushrooms''. So, again, while the context in (2) makes a particular food salient, the value assigned to the variable is not the food itself but a function whose output ''contains'' the food. The analysis entails that EAT is an intransitive verb; that is, it denotes the set of individuals who eat (see Recanati 2002, pp. 313–315).

In a second possible derivation for (14) and (15), the representations in (16) and (17) are generated, but no referent for this variable is available in the context. These derivations crash in the same way that

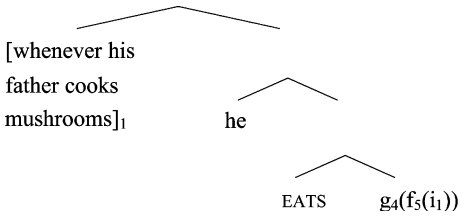
the derivation for a sentence with an overt pronoun crashes if there is no referent for the pronoun in the context (recall (13)).

In a third possible derivation, a more complex variable is generated in the syntax, so that we obtain (18) and (19) for examples (5) and (6), respectively:

(18)



(19)



In (18), 'i_1' is a time variable bound by the quantifier over times *every time John lights a cigarette*. 'f_6' is a function from times to locations, a "bridging function". 'g_7' is a function from locations l to functions from zero-place predicates to zero-place predicates such that when these functions take *RAINS* as their argument, they give back 'rains at l' as output. This gives rise to the desired reading, 'all times i at which John lights a cigarette are times at which it rains in the location in which John lights a cigarette at i'. In (19), 'i_1' is a time variable bound by the quantifier over times *whenever his father cooks mushrooms*.[4] 'f_5' is a function from times to food cooked at those times, again a bridging function. 'g_4' is a function from individuals x to functions from one-place predicates to one-place predicates such that when these functions take EATS as argument, they give back 'eats x' as output. This gives rise to the desired meaning, 'all times i at which his father cooks mushrooms are times at which he eats the mushrooms cooked at i'. The functional variables 'f' and 'g' have to be provided

[4] This treatment of *whenever*-clauses is surely too simple, in that it disregards the debate about the quantificational force of *ever* and the 'ignorance' flavor of *ever*-clauses (see Dayal 1997; von Fintel 2000; Jacobson 1995, among others). I take it that these issues are orthogonal to the matter at hand.

with referents, since they are free, and the assumption here is that the first parts of the sentences in these examples introduce a context rich enough to make the necessary values salient. There are, of course, licit questions to ask as to how exactly this process happens, but they arise in any analysis that makes use of functional variables (for similar though not identical functional variables, see Chierchia 1993, Engdahl 1986, Groenendijk and Stokhof 1983, among others) and are hence not specific to this proposal.

In a fourth derivation, no variable is generated next to RAIN or EAT. Since there is no variable, there is no requirement that the context provide for it. Nothing goes wrong when this happens, but, if this derivation is to serve as the successful derivation of examples (3) and (4), the existential import that we described earlier for these cases must come from somewhere. More generally, when no variable is generated next to RAIN or EAT, we need to know what the sentence ends up meaning. Here I appeal to metaphysical unarticulated constituents, of the kind assumed by Perry (1993, 1998), Recanati (2002) himself, and others. Non-linguistic reasons dictate that every dancing event and every raining event happen somewhere, and that every eating event involves an edible thing that is eaten. The place of dancing in (20), the place of raining in (21), and the edible thing being eaten in (22) are metaphysical unarticulated constituents of the propositions expressed by the utterances of these sentences:

(20) Mary danced.

(21) It's raining. (cf. Perry 1993, 1998)

(22) He's eating.

Recanati (2002, p. 306) (cf. Perry 1993) puts it this way:

> It's a metaphysical fact that every action takes place somewhere. The action of dancing is no exception. It follows that, if we say that Mary danced, we describe a state of affairs (Mary's dancing) which is bound to involve a place. The place is not articulated in the sentence – when we say 'Mary danced', we do not say that she danced in place l, not even that she danced somewhere. No place is articulated in the uttered sentence, yet in virtue of the fact that the sentence describes an action, a truth-maker for that sentence is bound to involve a place. The place, therefore, is a (metaphysical) unarticulated constituent of the statement that is made by an utterance of the sentence 'Mary danced'.

One may wish to think of these unarticulated constituents by making reference to our concept of 'dance', or our concept of 'eat'. For

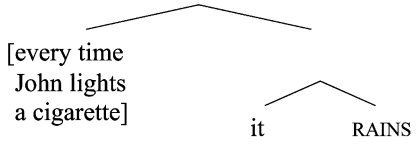
example, it is because of the way our concept of 'eat' works (I do not claim to know where this concept comes from, or how it is formed) that we know that, if somebody is eating, whoever is eating is eating something edible.[5] So, if it is true that, for metaphysical reasons, if it rains, it rains somewhere, and if somebody eats, that person eats something, then we have an understanding for why the sentences in (3) and (4) get interpreted the way they do. There is no variable generated next to the predicates, but there is always the fact that the silent place of RAIN and the silent object of EAT are metaphysical unarticulated constituents.

There are more derivations to consider. There is a derivation in which no variable is generated next to RAIN or EAT, and yet there is a referent contextually provided that, had there been an appropriate variable, could have been its antecedent. This is one possible derivation of examples (1) and (2), but, why is it unsuccessful? That is, why is it that (1) does not mean just 'it's raining somewhere'? Why is it that (2) does not just mean 'he's eating something'? Here I appeal to Gricean principles. *A priori*, these are possible derivations for these examples, but they have to compete with derivations in which Luisa's utterances are much more relevant to the situation at hand. I.e., Klaus could take her to mean that it's raining somewhere in (1), but that would not be relevant to anything they have said or done. Similarly, Klaus could take her to mean that Andrew is eating something, but that also would not be terribly relevant. There is nothing non-standard in this appeal to Gricean principles.

There are also derivations in which there is a quantifier in the sentence that, had there been an appropriately complex variable, would have bound this variable. However, in these derivations, there is no such variable, either because there is no variable at all or because the variable is not complex enough. These derivations lead to representations such as the following:

[5] Though, as an anonymous reviewer reminds me, this is incompatible with Perry's (1993) metaphysical unarticulated constituents: for him, if, e.g., the place of dancing is a metaphysical unarticulated constituent, then speakers are aware of it. While that seems to be unproblematic with *dance*, it is more controversial in *It's five o'clock* as uttered by a 5-year-old, with the time zone a metaphysical unarticulated constituent, since presumably 5-year-olds do not know about time zones. Still, I find it useful to think of these constituents as indicated in the text. I don't think this is problematic because it is not metaphysical unarticulated constituents that are at issue, and, even though they get put to use in the proposal I make, the issue of speaker awareness does not arise.

(23)



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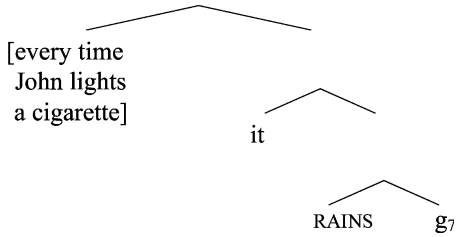


(23) gives rise to the reading, 'every time John lights a cigarette, it rains somewhere' (whether or not the context makes available an appropriate referent for a potential variable). Recanati (2002, p. 333) himself claims that this reading exists; it is felicitous in a situation in which John's lighting a cigarette has the (rather bizarre) consequence of causing rain in some place or other. (24) crashes for purely semantic reasons: even if there is an appropriate referent provided contextually for 'g', a semantic type mismatch results, since 'g' needs locations as its argument, and RAINS is not a location.

To sum up, I propose to treat RAIN and EAT by making use of variables that are only optionally generated in the syntax. This optionality allows us to account for the existential interpretations associated with these verbs (the variable is not generated) and for the bound-variable and free-variable interpretations (the variable is generated). Unwanted derivations are unsuccessful for various independent reasons. Appeal to metaphysical unarticulated constituents is made in order to account for existential interpretations. A standard treatment of variables is needed for the other interpretations. Notice that I have not made any appeal to free enrichment.

It is useful, as Polly Jacobson (p.c.) points out, to think of optionally generated variables as adjuncts; their realization as variables that do not change adicity but take predicate-denoting items and return items of the same semantic type makes them adjuncts. This is a useful way of understanding why they are optional: they are not always there because they are not arguments; they are not required type-wise. This is in contrast with the comparison class of adjectives like *short*, or the perspective with *local*: in these cases, the

variable is obligatory (and hence subcategorized for; i.e., it is required by the semantics of *short* or *local*).

To go back to the main argument in this section, I have proposed a viable analysis of Recanati's facts that does not appeal to free enrichment. I have therefore shown that these facts cannot be part of an argument for free enrichment.

2.3. *Similarities and Differences Between the Two Approaches*

Before comparing the two approaches, I summarize briefly Recanati's own approach to the facts in Section 2.1. On the descriptive side, Recanati assumes that there are three different kinds of unarticulated constituents, one of which is intimately tied to the process of free enrichment I referred to above.

Unarticulated constituents are silent objects that are part of the proposition expressed by the utterance. In addition, they may or may not be contextually provided. At least some contextually provided unarticulated constituents are represented syntactically. Such is the case of, e.g., the domain restriction of quantificational expressions, as argued for in Martí (2003), Stanley (2000) or Stanley and Szabó (2000), where these restrictions are represented as silent pronouns in the syntax; such is the case also for the 'standard of comparison' for context-sensitive adjectives like *tall* in Recanati. According to him, however, there are kinds of contextually provided unarticulated constituents that are not represented syntactically.

The first kind of unarticulated constituent assumed by Recanati is the metaphysical kind; these constituents have already been discussed in Section 2.2 in connection with my proposal, where they get put to good use. They receive the same use in Recanati's own approach.

For Recanati, in addition to being metaphysical, unarticulated constituents can be communicational. Here are Recanati's (2002, p. 306) words on the matter:

> For something to count as an unarticulated constituent in the *communicational* sense, it must be part and parcel of what the speaker means by his or her utterance. Thus, the speaker who says 'It's raining' means that it's raining where she is (or at some other contextually given place) [...] On the hearer's side, the unarticulated constituent must be identified on pains of not arriving at a proper understanding of the utterance.

Communicational unarticulated constituents are contextually provided and come in two varieties. Whereas both of them are

intrinsically part of what the speaker means by his or her utterance, the two differ in what happens with the proposition when they are not contextually provided.

Type B unarticulated constituents (B's) are characterized as follows: failure to contextually provide them prevents a proposition from being expressed. In other words, the contextual provision of B's is required for the sentence to denote. The comparison class of *short*, etc., and the perspective of *local* are B's (recall examples from Section 2.2). B's are associated with the lexical requirements of particular lexical items and are hence always arguments. B's can give rise to bound-variable-like readings. Recanati suggests treating B's as variables in the syntax/at LF, and that is also the treatment I espouse for these cases.

Type A unarticulated constituents (A's) differ significantly from B's in that failure to contextually provide them results in a "less specific proposition", i.e., in a proposition with existential import, instead of preventing the sentence from expressing a proposition. Recall the examples with RAIN and EAT in Section 2.1: the silent location of *RAIN* and the silent object of EAT are A's. A's can occur with any predicate: to use the words of an anonymous reviewer, "any predicate can be used, in the appropriate context, in such a way that its location [and potentially other properties; LM] are contextually understood on the basis of prior discourse". A's can also give rise to bound-variable-like readings. A's are intimately related to the process of free enrichment. For Recanati, free enrichment is at work in examples such as (1) and (2): the context supplies the place of RAIN and the object of EAT, which are not articulated in the sentences in question. The context thus directly affects the truth-conditions of these sentences.

Recanati is not very explicit as to how exactly this process is supposed to happen (i.e., as to what exactly is behind the words "the context supplies the place of RAIN and the object of EAT" above), though he offers different possibilities for implementing A's, one of which involves variables introduced at a post-syntactic level. I do not discuss these possibilities here, since, once the argument against the need for free enrichment is in place, how free enrichment is implemented is irrelevant.

The system that Recanati proposes is summarized in Table I. This table includes overt as well as covert items. For example, overt pronouns are overt versions of B, in that covert B-variables and overt pronouns share all properties except their phonological realization. There are no overt versions of A's or metaphysical constituents. Looking at the covert items, there are B's, which have been illustrated

TABLE I
Recanati's system.

Overt[a]	Covert	
pronouns	*short*, *local*	B[b]
	EAT, RAIN	A[c]
	EAT, RAIN, *short*, *local*	Metaphysical[d]

[a]I.e., phonologically present.
[b]Properties of B's: realized as variables in the syntax/LF; obligatory/argumental; B-variables can be bound or unbound.
[c]Properties of A's: optional/adjuncts; subject to free enrichment; A's can give rise to bound-variable-like interpretations.
[d]Properties of metaphysical constituents: existential interpretation.

here with adjectives like *short* or *local*, and there are A's, which have been illustrated with RAIN and EAT. All of these also fall into the metaphysical unarticulated constituent category.

The simplification proposed in Section 2.2 is in Table II. In the simplified system, there are no A's, only B's and metaphysical constituents. B-variables in this system, however, are slightly different from Recanati's B-variables: they may or may not be generated in the syntax. That is, once we distinguish two types of B-variables, those that are adjuncts and those that are arguments, there is no need to categorize the silent place of RAIN or the silent object of EAT differently from the comparison class of *short*, etc., or the perspective of *local*. Ultimately, the important thing is that there is no need to appeal to free enrichment.

The crucial difference between the two proposals resides in what bears the responsibility for optionality. In Recanati's system, that is

Table II
Proposed reduction.

Overt[a]	Covert	
pronouns	EAT, RAIN, *short*, *local*	B[b]
	EAT, RAIN, *short, local*	Metaphysical[c]

[a]I.e., phonologically present.
[b]Properties of B's: realized as variables in the syntax/LF; arguments or adjuncts; B-variables can be bound or unbound.
[c]Properties of metaphysical constituents: existential interpretation.

the responsibility of the pragmatics, of the properties of the context of utterance. In the system proposed here, the pragmatics has the same responsibility it has in the interpretation of pronouns, and only that. That is, given a variable in the syntax/at LF, there has to be a variable assignment, which of course depends on the context of utterance, that provides values for this variable. But the pragmatics does not trigger anything in the sense of Recanati; there is no process of free enrichment. Whether one of the B-variables involved in the analyses above is generated in the syntax or not is left completely free, just because adjuncts generally are not necessary. The system tries out different derivations, and only those that comply with all the principles of grammar, including Gricean principles, are successful.

One may understand the reduction I have proposed here as less important than I claim it is. The change from a system that has A's, B's/B-variables and metaphysical constituents to a system that has only B's/B-variables and metaphysical constituents can be understood as a change into a system that has two kinds of B-variables (those that are obligatorily generated in the syntax and those that are not) and metaphysical constituents: still a system with three kinds of items.[6] But that would be the wrong way to understand it. The system I have developed here does more than merely "relocate" A's and give them another name: I have argued that the properties of the examples that purportedly justify Recanati's A's can be accounted for without making use of technology and processes we don't already have. This is a substantive difference, and it is what is at stake in distinguishing the two theories. It is also why, at the beginning of the paper, I said that my proposal is much closer to Stanley's than it is to Recanati's: Stanley denies the existence of free enrichment, like I do, whereas Recanati supports it.

One may object to this system by raising the complaint that each of the examples analyzed has quite a number of different possible derivations, and that hence the speaker and hearer are burdened with an intolerable computational load, something which does not happen

[6] Thanks to François Recanati (p.c.) and an anonymous reviewer for bringing this criticism to my attention.

in Recanati's system.[7] It is, of course, true that the system I have proposed lacks the ''determinism'' that Recanati's has: in my system, different derivations must be tried out, until a successful one is arrived at. In Recanati's system, the context determines the derivation. This is a criticism that applies more generally to standard theories of syntax and semantics; e.g., any theory that assumes a variable assignment treatment of pronouns will suffer from this problem, since a simple string such as *He left* has an infinite number of derivations in that system, one for each of the infinite number of indices that are assumed to be possible for the pronoun. Heavy computational loads, whether in the form of pronoun indices or in some other form, are problems for standard theories and, since my approach is couched within one, it indeed suffers from this problem. However, until the defendants of free enrichment have provided a coherent and detailed algorithm that explicates the operation of the process of free enrichment, this kind of comparison between the two systems is

[7] Thanks again to François Recanati and an anonymous reviewer for bringing this criticism to my attention. An issue related to this one is as follows. Perhaps the following quote from Carston (2002, p. 204) is a predecessor of the proposal made in this section:

> Another way out might be to propose that the sentence 'I have eaten' (and innumerable others) has a variety of logical forms, each with an array of variables, differing in number and type (including one with none), marking possible contextual completions. In the case of a sentence with four variables for different constituents, that means sixteen linguistically provided logical forms to cover the range of cases.

This quote comes in the context of a discussion in which worry is expressed at the fact that approaches like Stanley's (2000) have to posit quite a number of variables at LF, including variables for place, manner, or time.

I don't know if what I have done in Section 2.2 is to develop Carston's ideas into a full proposal. Be that as it may, let me note that the problem that Carston points out in the above quote slightly misrepresents approaches like Recanati's by implicating that Stanley's approach, not Recanati's, involves a multiplicity of representations. For an approach like Recanti's must say that an utterance of 'I have eaten', on a particular occasion, gives rise to one of the propositions that the Stanley/Martí account gives rise to by making use of a particular number of variables; and, on a different occasion, Recanati must say that an utterance of 'I have eaten' gives rise to another one of the propositions that the Stanley/Martí account gives rise to by making use of another particular number of variables. In other words, Recanati also needs sixteen representations for 'I have eaten', though they are not ''linguistically provided'' representations. The debate seems to relate, then, to the *origin* of the representations (linguistic or not), not to their number.

unfair: the level of detail that the two kinds of approaches provide is just not comparable.

As an anonymous reviewer points out, this system does not offer (at least, not yet) the means for deciding what sorts of complex variables one is allowed to postulate. It assumes that things such as the complex functions discussed above are available for them, but it does not tell us what sorts of functions are not available. Surely not everything is allowed. This is a fair criticism of the current system, but it is also a fair criticism of Recanati's system. While I would find it much more satisfying if I could restrict the system in the appropriate ways, this problem cannot be used in a comparison between it and Recanati's system, since both of them suffer from it. Whatever this more restricted version of it turns out to be, it is not something that can bear on the choice between the two systems.

I mentioned above that there are, nevertheless, similarities between the approach I have defended and Recanati's approach. These similarities have to do with some of the technology I have used. For example, in Section 2.2, I use the same kind of functions Recanati uses in his account, except that for me these functions are not related to A's but, always, to B's. Recanati appeals to metaphysical unarticulated constituents in order to account for the weatherman and anorexia examples, and so do I. Recanati and I do not disagree on what the treatment of cases like *short* and *local* is.[8]

What about Stanley? With Stanley there are only small differences (aside from remarks in Section 4): the variables that he is worried about can be adjuncts (that is, they are not always there) and one also has to assume the existence of metaphysical unarticulated constituents. It is part of what I have been saying all along that these modifications of Stanley's system do not force a departure from standard semantic treatments.

2.4. *A Further Reduction?*

We finally consider Recanati's (2002, p. 326–328) negative answer to the question of whether metaphysical unarticulated constituents can be eliminated. For us, the question is: why not further reduce the system in Section 2.2 and get rid of metaphysical unarticulated constituents as well? Recanati and I blame existential interpretations on them, but couldn't the same result be obtained via existential

[8] See Section 4 for more similarities between my position and Recanati's.

closure by default of B-variables when they are not bound by a quantifier and when no referent is contextually provided? I side with Recanati here: positing existential closure by default raises serious problems. For example, if overt versions of B-variables are not subject to it, why should covert ones be? That overt B-variables are not subject to existential closure by default can be seen in the fact that a sentence like (25) never means 'somebody is bald':

(25) He is bald.

Consideration of examples like (26) makes Recanati's point stronger. (26) never means 'John is in someone's home', so why would it be that some B-variables are subject to existential closure by default while others are not?

(26) John is home.

3. Back to the empirical generalizations[9]

As it turns out, there are certain aspects of Recanati's description of the facts in Section 2.1 that are wrong, or, at least, there are, in certain cases, alternative descriptions of the facts. In this section I first discuss what I think are the right empirical generalizations, and then I discuss what sort of account is required in order to deal with them. This account does not involve major changes to the account presented in Section 2.2.

Let us start with *rain*. I do not dispute that the unarticulated place of *rain* can give rise to bound-variable-like interpretations or to free-variable-like ones. However, I do dispute that, in the weatherman example (3), there is no place that is contextually salient; there *does* seem to be a place that is contextually provided in that example, namely, *the territory*. That is, this example does not differ from (1) in any relevant respects: in both cases, the unarticulated place of *rain* is

[9] The data discussed in this section was obtained with the help of four native speakers of English who were presented with sentences in context and asked to judge the appropriateness of the sentences in those contexts. They were also asked to explain in some cases where it was supposed to be raining, or what someone was eating. The speakers were not informed of the theoretical claims or generalizations that these data are used to support/refute.

provided contextually, and the weatherman's sentence just means 'it's raining in the territory'. This means that there is no example that suggests that *rain* gives rise to the existential interpretation, and hence I conclude that it doesn't.[10]

The right empirical generalization about intransitive *eat* seems to be, as has been noted in the literature before (see, e.g., Dowty 1978, 1982a, b;[11] Partee 1989), that there is no free-variable-kind or bound-variable-kind interpretation for its 'object'; rather, it only gives rise to the existential interpretation. That intransitive *eat* does not give rise to a bound-variable-like interpretation can be seen with the help of (27), an elaboration on (6). (6) is repeated here for convenience:

(6) John is anorexic, but whenever his father cooks mushrooms, he eats.

(27) #Whenever Sally cooks mushrooms, John never eats. Instead, he eats pasta with tomato sauce.

[10] As Orin Percus (p.c.) correctly points out, this analysis presupposes that it is plausible that the meaning of a sentence like (i) is 'it is raining somewhere in the territory':

(i) It's raining in the territory.

I think that this is indeed the case. For example, (i) can be followed by material that is only compatible with such an interpretation:

(ii) It's raining in the territory, though it is not raining everywhere in the territory.

It is harder to agree to this in examples like (iii), though I take it that this is because of purely non-linguistic reasons (Paris is perhaps too small a place for it to rain in some parts of it but not in others):

(iii) It's raining in Paris.

Recanati (2005) ('It's raining (somewhere)'; available at http://jeanNicod.ccsd.cnrs.fr/documents/disk0/00/00/05/98/index.html) develops this possible approach to the weatherman example further (see his 'second theory' in his Section 3.1). Recanati in this paper points out a problem with this approach (see his Section 4.2). I go back to the argument I presented in Section 2: if it turns out that *rain* = RAIN, there is still no need to appeal to free enrichment.

[11] Dowty refers to intransitive-*eat*-related kind of phenomena as Unspecified Object Deletion. In the 1978 article he offers serve as another case similar to *eat*, as in *John served Mary the cake*, where *Mary*, *the cake* or both can be absent and have existential import.

The second sentence in (27) cannot be a continuation for the first sentence. However, the opposite is predicted if it was possible to bind the 'object' of intransitive *eat*. This is so because, in that case, the first sentence would mean, 'whenever Sally cooks mushrooms, John never eats the mushrooms that she cooks', which is compatible with John eating pasta with tomato sauce in those situations.[12] The infelicity of (27) can be accounted for if the 'object' of intransitive *eat* is only interpreted existentially.

That it does not give rise to free-variable-like interpretations can be seen with the help of (28), an elaboration of (2). (2) is repeated here for convenience:

(2) {Klaus, Luisa and Andrew are in the kitchen. They have been discussing the dangers of the poisonous mushrooms they have just gathered in the forest. Luisa to Klaus:}
Look! He's eating!

(28) {Tobias and Sally have spent the afternoon in the forest gathering poisonous mushrooms, which are now lying around on their kitchen table. Tobias and Sally are in the living room discussing information from their field guide about the dangers of poisonous mushrooms. Their three-year-old son David comes into the living room from the kitchen chewing something:}
Sally: Look! He's eating!
Tobias: Don't worry. I can see from here what he was doing in the kitchen and he isn't eating.

If the 'object' of intransitive *eat* were context-sensitive, then Tobias should be able to mean that David isn't eating dangerous mushrooms. However, the exchange in (28) is felicitous only in one interesting situation, as suggested by some of the speakers consulted: that in which David is not eating anything but is moving his jaws for some other reason (e.g., he could be chewing gum). This suggests that

[12] This reading is available when transitive *eat* takes a pronoun as its object:

(i) Whenever Sally cooks mushrooms, John never eats them. Instead, he eats pasta with tomato sauce

the silent 'object' of intransitive *eat* is not context sensitive but, instead, is always interpreted existentially.[13]

So a better scrutiny of the facts suggests that it is plausible that the silent location of *rain* never gives rise to the existential interpretation, and that the silent object of *eat* is always interpreted existentially. The next issue to address, then, is: what is the analysis of *rain* and *eat* as they are actually used in English? This analysis must answer at least the following questions. First, in the case of *eat*, if its silent object is always interpreted existentially, as Tobias' statement in (28) seems to suggest, then why is it that in (2) (and in Sally's statement in (28)), it seems as though a different interpretation is intended (that the relevant person is eating poisonous mushrooms)? And why does it look like a bound-variable paraphrase is appropriate for examples like (6)? Second, how can we prevent the existential interpretation for *rain*?

Let us first address the issue of *eat*. We can follow Dowty (1978, 1982a, b) or any other similar proposal: a rule that changes the relevant transitive verbs into intransitive versions with existential quantification is added to the grammar (in fact, this seems to be what Recanati, 2002, p. 313–316 has in mind). This accounts for the anorexia example.

I do not think that 'Andrew is eating poisonous mushrooms' and 'all times i at which his father cooks mushrooms are times at which he eats the mushrooms cooked at i' are *readings* of (2) and (6), respectively. There are several *situations* that make (6) true, among them: (a) every time John's father cooks mushrooms, John eats the mushrooms that his father cooks at those times; (b) one of the times John's father cooks mushrooms John eats the mushrooms, and another one of the times he eats pasta with tomato sauce, and another time he eats lasagna, etc. (John could eat mushrooms cooked by his father again

[13] Running the 'negation' test for *rain* results in examples like (i):

(i) {John is an Englishman who travels a lot, though he has never been outside Europe. Weathermen across the world are really interested in him because of the following puzzling discovery:}
(?) Whenever John lights a cigarette, it doesn't rain, but it rains in Calcutta

If the unarticulated place of *rain* can be bound, then (i) should give rise to a perfectly coherent reading, 'whenever John lights a cigarette, it doesn't rain in the place where he lights a cigarette at that time, but it rains in Calcutta'. However, for reasons that I do not understand yet, some speakers found that (i) was somewhat odd. Given that their judgement was that (27) was much worse, I will take it to be the case that the place of *rain* can be bound.

at another time); (c) one of the times John's father cooks mushrooms John eats a sandwich, and another one of the times he eats pasta with tomato sauce, and another time he eats lasagna, etc. (i.e., never the mushrooms). (6) is predicted to be true in all of these situations if its only reading is the existential one, because in all of these situations John eats something. What is offered by Recanati as a *paraphrase of a reading* is merely a description of one of the situations that make the sentence true under the existential interpretation (its only real reading, I claim). Notice that this is different in cases of true variable binding. (8), where the pronoun *he* is bound, cannot be true in situations similar to (b) and (c) above: this sentence is *not* true if, of seven students, student 1 thinks that student 1 is a genius, and student 2 thinks that student 6 is a genius, and student 3 thinks that student 3 is a genius, and student 4 thinks that some other guy is a genius...etc. (5) is also a case of true variable binding: the sentence is *not* true in a situation in which, at time a, John lights a cigarette in place x and it rains in place x, and at time b, John lights a cigarette in place y and it rains in place z, and at time c, John lights a cigarette in place w and in rains in place v. . .etc.

There doesn't even seem to be a preference for any of the situations described above in the case of (6). That is slightly different in (2), where the possibility of Andrew's eating of poisonous mushrooms seems to be salient. I suggest that Gricean reasoning, and nothing else, is involved here. There are two properties of (2) that are important: (i) nothing in the context suggests that Andrew's eating of just anything is something that could surprise Luisa, and (ii) something in the context suggests that Andrew's eating of poisonous mushrooms is something that could surprise Luisa. A situation in which Andrew eats poisonous mushrooms not only makes (2) true under the reading 'Andrew is eating something', it is also very relevant in the conversation. So (2) gives rise only to the existential interpretation, but, that not being terribly relevant, Klaus concludes that, of the numerous situations that could make Luisa's statement true, she is suggesting that they are confronting one in which Andrew is eating poisonous mushrooms. That relevance is at stake here can be seen from (29):

(29) {A phone conversation between Tobias, who is at home with his three-year-old son David, and Sally, who is at work:}
Tobias: Did you remember to make the lasagna? I just checked the fridge and I could find the spaghetti with tomato sauce, but no lasagna.

> Sally: No, sorry, I forgot. You'll have to make the lasagna.
> Tobias: Well, right now David is eating, so the cooking will have to wait.

In (29), the context *does* suggest that David's eating of something (it doesn't matter what) is relevant, and it is David's eating of something that prevents Tobias from starting with the lasagna right away. Notice that this is so despite the fact that something edible (and that kids love!) is made salient in the context, namely, the spaghetti with tomato sauce. So now there is a reason why David's eating of whatever is relevant, and that is what we get.

These remarks apply to Sally's statement in (28), but they do not apply to Tobias' remark in that example: its existential interpretation is 'it is not the case that David is eating something' (i.e., he isn't eating anything), and that is already relevant in the situation at hand.

So, as in the case of (6), a description of one of the situations that make the sentence in (2) and Sally's statement in (28) true is taken by Recanati to be a paraphrase of a reading. As opposed to (6), in (2) and in Sally's statement in (28), there are relevance considerations that suggest that one particular kind of situation is envisioned. I thus see no need to appeal to free enrichment, or to any other pragmatic process that affects truth-conditions, in the explanation of these examples.[14–16]

As to the analysis of *rain*, one has to make sure that a variable is *always* generated in sentences where the location is silent. If we accept

[14] For (2) (and for Sally's statement in (28)), Recanati would appeal to free enrichment: the 'basic' interpretation of intransitive *eat* is still the existential one, but free enrichment makes these statements more specific, so that the relevant people not only eat something, they eat poisonous mushrooms. Free enrichment is also appealed to for (6), except that in this case the unarticulated constituent is much more complex.

[15] Breheny (2003a) suggests that intransitive *eat* is context-sensitive and that a bound-variable reading of its 'object' is available in (i):

(i) Every boy ate before joining the others.

We are to imagine a scenario in which the boys "have to eat some particularly horrible concoction tailor-made to their individual phobias in order to join a secret society". (i) is claimed to mean that each of the boys "ate their individual horror meal". I am not sure what to make of this fact, since Breheny (2003b) suggests that intransitive *eat* is not context-sensitive and that it might not be so easy to obtain the bound-variable reading in (i).

[16] Similar remarks apply to examples in Wilson and Sperber (2000) and Carston (2003, p. 203–204) as well. Thanks to Jason Stanley for pointing out these references to me.

the view that metaphysical unarticulated constituents are real and play a role in giving rise to existential interpretations, as I have done here (following Recanati), what we need is a way of ensuring that the silent place of *rain* is never just a metaphysical constituent. Otherwise, the existential interpretation would be predicted. Perhaps the most promising possibility is to treat *rain* not as a zero-place predicate but as a predicate that takes an argument for place, perhaps along the general lines of Taylor (2001), where *rain* has a "lexically specified argument place" (p. 53) (cf. Stanley 2000, and others). This way, an overt or a covert place must always be generated for it. This is not a move without consequences: how many other arguments would we have to postulate for *rain*? Would we postulate a manner argument? Others? More work is required to answer these questions appropriately, and I do not undertake that work here. But I think it is enough to say that similar questions are familiar in the current syntactic and semantic literature (see, e.g., how similar questions are dealt with in event semantics, as in Parsons 1990 and many others), and that they don't seem to raise the kinds of issues that would force a movement towards a theory that incorporates free enrichment.

So, the treatment of *rain* seems to require that we say that at least certain variables, like the silent place of *rain*, are argumental. We of course already had to say that before, given *short*, *local*, etc. A slightly more important change is required if it turns out that *RAIN*/EAT actually do not exist (up to now, even though we know that *rain* $\neq$ *RAIN* and *eat* $\neq$ *EAT*, we have not considered the possibility that no lexical item in any natural language behaves like *RAIN* and *EAT*): we would then have to say that there are no silent adjunct variables of the kind used in Section 2.2. All silent variables would be arguments. Interesting and important questions would arise then: why are there no covert adjunct variables? Surely this could not be treated as a coincidence, particularly since many, if not all, languages have (overt) adjuncts. I leave these questions, and the issue of finding out if lexical items that behave in ways similar to *rain* and *eat* actually exist, for future research.[17]

[17]Thanks to Polly Jacobson (p.c.) for pressing me to clarify this issue. I haven't (yet) found actual realizations of *RAIN* or *EAT*. However, I suspect that, given the number of verbs per language and the many languages there are to look at, the probability of finding them is not low. Note that it would be enough to find verbs with the properties described in Section 2.1 even if these verbs do not have exactly the same lexical content as *RAIN* or *EAT*; for example, they don't have to necessarily be meteorological predicates, or verbs of ingestion.

4. Criteria for (Un)articulatedness

Recanati (2002, 2003) is, in part, an answer to the earlier paper by Stanley (2000), a paper that has been criticized, both by Recanati and by others, in part because of the proposal of the Binding Criterion, as in (30):

(30) Binding Criterion: A contextually provided constituent in the interpretation of a sentence S is articulated [i.e., present in the syntax/at LF; LM] whenever the role it fills can be intuitively 'bound', that is, whenever what fills the role can be made to vary with the values introduced by some operator prefixed to S.
(Recanati 2002, p. 323; Stanley 2000, pp. 409–413)

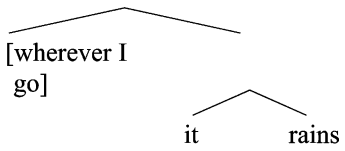
Stanley denies that there are any truth-conditional effects of context that cannot be traced to syntax/LF. Therefore, he assumes no A's and no metaphysical constituents, and runs into problems in several places. He has trouble predicting existential interpretations, and as pointed out by Recanati (2002, 2003) and Cappelen and Lepore (2002), he seems to need too many variables at LF, or strange variables in some cases. Let us consider some of their examples, starting with (31) and (32):

(31) Wherever I go it rains.

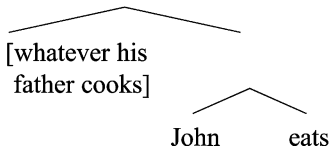
(32) Whatever his father cooks John eats.

(31) has a reading in which the place of *rain* is intuitively bound, 'all places l such that I go to l are such that it rains in l', and (32) has a reading in which the 'object' of *eat* is bound, 'all foods x cooked by his father are such that John eats x'. Stanley is therefore forced to postulate variables for the place of *rain* and the 'object' of *eat* in these cases, but, as Recanati points out, there is a simpler analysis for these cases in which there is no variable in the syntax/at LF:

(33)



(34)



In (33), the quantifier takes *it rains* as its argument and gives back '∀l. . .it rains in l' (i.e., the quantifier introduces the place of rain, fills this role with a variable, and binds it); likewise, in (34), the quantifier takes *John eats* as its argument and gives back '∀x. . .John eats x' (i.e., the quantifier introduces the argument of *eat*, fills this role with a variable, and binds it).[18] These examples share the property that the thing being quantified over is the same kind of thing the quantifier in the sentence quantifies over: e.g., the thing being quantified over in (31) is the place of rain, and the quantifier is a quantifier over places. For these cases, then, there is no need to postulate a variable in the syntax/at LF, but Stanley's principle would seem to suggest that one has to.

There are two additional sorts of problems that can be solved by following Recanati's suggestions for (31) and (32), which I now discuss.

There are cases where the kinds of variable that one must postulate if one follows (30) seem rather strange. Consider (35):

(35) {Sally is a confused mathematical anthropologist trying to find out if mathematical truths are universal. She summarizes her findings as follows:}
Everywhere I go, $2+2=4$. (Cappelen and Lepore 2002, p. 273)

(35) has a reading in which the place of $2+2=4$ (?) is quantified over ('for all places l such that Sally goes to l, $2+2=4$ at l'). Given what we learned from the analysis of (31) and (32), all we have to say here is that *everywhere I go* is a function that adds a place role, introduces a variable for it, and binds it. The point here is not only that there is

[18] It is of course also possible to analyze (31) and (32) with movement and traces.

no need to postulate any variables in the syntax/at LF in order to deal with these cases, but also that doing so is unwanted for other reasons (a variable for the place of $2+2=4$ in (35)?). However, Stanley's principle would force us to assume such variables.

Finally, Cappelen and Lepore (2002, p. 274) argue that an indefinite-number-of-variables problem arises for Stanley, given examples like the following (cf. (35)):

(36) No matter where Sally goes, no matter when she goes there, $2+2=4$.

(36) has a reading in which both the place and the time of $2+2=4$ (?) are intuitively bound ('for all places l and all times i such that Sally goes to l at i, $2+2=4$ in l at i'). It seems that we can start adding 'bound variables' and never finish: the place can be bound, then the time, etc. This means that, if one follows Stanley, one probably has to postulate an infinite number of variables to be bound. Again, given what we learn from Recanati's treatment of (31) and (32), there is an easy solution to this problem: *no matter where Sally goes* and *no matter when she goes* are functions that add a place and a time role, respectively, introduce a variable for them, and bind them. There is no need to postulate variables in the syntax/at LF here.

Here I side with Recanati and defend the simpler analyses for cases like (35) or (36). That is, I do not assume Stanley's Binding Criterion, at least not in its strongest form. It seems better to assume a weaker version of it: a contextually provided constituent in the interpretation of a sentence S is articulated whenever the role it fills can be intuitively 'bound' and an analysis without the articulated constituent is impossible (where an analysis without the articulated constituent is of course not an analysis with an unarticulated constituent). This gives the right results for all the examples discussed in this paper. Note that this weak version of the Binding Criterion is different from Recanati's (2002, p. 332) Weak Binding Criterion in that his is intended to draw a difference between bound and non-bound cases and in that he leaves the door open to analyses with A's.

Let me emphasize again that my position is much closer to Stanley's than it is to Recanati's: whereas Recanati assumes that the pragmatics can directly affect truth-conditions, both Stanley and I assume that this is not the case, or at least we are not convinced that there is any evidence for taking this strong position. My proposal is

an intermediate position between Recanati and Stanley that still falls within the same ballpark as Stanley's.

Recanati, in trying to, like Stanley (2000), find a criterion that will tell us how and when to postulate unarticulated constituents, proposes the Optionality Criterion in (37):

(37) Optionality Criterion: whenever a contextually provided constituent is (truly) unarticulated [i.e., not represented at LF; LM], we can imagine another possible context of utterance in which the contextual provision of such a constituent would not be necessary for the utterance to express a complete proposition. (Recanati 2002, p. 323)

The Optionality Criterion is often at odds with Stanley's Binding Criterion; for example, it suggests that no variable is present in the syntax/at LF in the case of (5), repeated here, since there are contexts in which the sentence can be interpreted as 'every time John lights a cigarette, it rains in some place or other' (see Recanati 2002, p. 333):

(5) Every time John lights a cigarette, it rains

I do not assume the Optionality Criterion, simply because there are no truly unarticulated (i.e., Type A) constituents in my system, so there cannot be a criterion that says when to assume them or not.

5. Conclusion

What I have done in this paper is defend what Recanati calls "the standard view" against views that depart from it in that

> various contextual processes come into play in the determination of an utterance's intuitive truth-conditions; not merely saturation – the contextual assignment of values to indexicals and free variables in the logical form of the sentence—but also free enrichment and other processes which are not linguistically triggered but are pragmatic through and through.
>
> (Recanati 2002, p. 302)

This is the truth conditional pragmatics view. An important consequence of the discussion in this paper is that, unless other, powerful evidence is given to support the truth conditional pragmatics thesis, there is no reason for pursuing it. This is so

because this paper has removed an important realm of empirical motivation from the side of the truth conditional pragmaticist, the data pertaining to *rain* and *eat* (Section 3). Not only that, the paper has argued that even if this empirical motivation had not been removed, there are serious doubts with respect to the theoretical motivation for pursuing this thesis, since an alternative thesis is possible and accounts for the data (Section 2). Only a weaker version of the thesis seems tenable, namely, that in which metaphysical constituents are the only aspects of the intuitive truth-conditions of a sentence that do not get articulated in the syntax/at LF. As far as the data dealt with here is concerned, there is no reason to assume that there are processes like free enrichment, or any other pragmatic process that can affect the truth conditions of a sentence/utterance. This is a significant blow to the truth conditional pragmaticist.

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