

Contextual Effects on Explicature: Optional Pragmatics or Optional Syntax?

Abstract

The debate between advocates of free pragmatic enrichment and those who maintain that any pragmatic contribution to explicature is mediated by a covert linguistic indexical took a new turn with the claim that these covert elements may be *optional* (Martí 2006). This prompted the conclusion (Recanati 2010b) that there is no longer any issue of substance between the two positions, as both involve optional elements of utterance meaning, albeit registered at different representational levels (conceptual or linguistic). We maintain, on the contrary, that the issue remains substantive and we make the case that, for a theory of the *processes involved in utterance comprehension*, the free pragmatic enrichment account is indispensable. We further argue that the criticism of free enrichment that motivates at least some indexicalist accounts rests on a mistaken assumption that it is the semantic component of the grammar (linguistic competence) that is responsible for delivering truth-conditional content (explicature).

Keywords: pragmaticist; contextualist; semanticist; optionality; covert indexicals; free pragmatic enrichment; on-line pragmatic processing; linguistic competence

1. Introduction

The idea that a pragmatic process of ‘free’ enrichment can contribute linguistically unarticulated constituents of content to the explicature (the intuitive truth-conditional content) of an utterance has been criticised as hopelessly unconstrained and unsystematic

(Stanley 2002, 2007; Martí 2006; Elbourne 2008; Szabó 2011). These critics claim, instead, that, whenever and wherever a pragmatic process supplies content to the explicature, there is an indexical element (either overt or covert) in the logical form of the utterance. For example, if the explicature of a particular utterance of the sentence ‘It is raining’ includes a locative constituent, such as IN LONDON, there must be a covert location variable in the logical form of the sentence. The idea is that this ensures that the recovery of explicature can be explained in the desired systematic fashion because the linguistic system indicates where a pragmatic process (of saturation) is to take place. However, a problem for this indexicalist position is that there is a striking asymmetry between the behaviour of overt linguistic indexicals (e.g. ‘she’, ‘there’, ‘this’), which must be saturated (given contextual values), and their (alleged) covert counterparts, which need not always be saturated. It has been proposed that the problem can be solved by making covert indexicals optional (Martí 2006), a move that ensures both that any pragmatic effects on explicature are linguistically mandated and that covert variables behave the same way as overt ones. This development in the indexicalist account has prompted the conclusion that there is no longer any issue of substance between the two positions (pragmaticist and indexicalist), in that both now involve optional elements of utterance meaning (Recanati 2010b).

The main aims of this paper are to show that, in fact, the issue remains a substantive one and to make the case that, for a theory of the *processes involved in utterance comprehension*, the free pragmatic enrichment account is indispensable and covert indexicals are redundant. Our argument here turns on facts about on-line utterance processing, so even if it is a sound argument, a possible rejoinder from the indexicalist camp is that optional covert indexicals, nevertheless, have a role to play in a model of linguistic competence (knowledge). This position seems to be taken by Martí (2006),

whose criticism of ‘free enrichment’ and accompanying advocacy of optional covert indexicals rests on the assumption that the constituents of utterance meaning at issue are derived by the ‘semantic component’ of the modular (context-independent) language faculty. In our view, this is based on the mistaken assumption that, apart from the process of fixing referents of indexicals, the intuitive truth-conditional content of an utterance is to be entirely accounted for by processes internal to the grammar/parser. We argue that extra-linguistic (pragmatic) processes play an essential role in delivering explicature (intuitive truth-conditional content) and that there is, therefore, no need to posit optional covert indexicals at all, even in a model of linguistic competence.

The paper is organised as follows: in the next section, we set out the debate between pragmaticists (advocates of processes of free enrichment contributing to the explicature of the utterance) and semanticists (advocates of covert indexicals in logical form that indicate where a pragmatic process may supply a contextual value to explicature). Here we also point out three important background assumptions about explicature that are shared by the two opposing camps. Then, in section 3, we explain the key problem for advocates of covert indexicals, namely, the unstable behaviour of these elements as compared with overt indexicals, which has led to the idea that they should be treated as optional elements of logical form. The consequences of this move are explored in section 4, where we argue that, contrary to the suggestion of some commentators, the question whether the optional elements at issue are best treated as syntactic (components of logical form) or as wholly pragmatic is still a live issue and that there are compelling reasons for preferring the latter approach (that is, free pragmatic enrichment). In section 5, we address the wider issue dividing the pragmaticist and the indexicalist, that of how the truth-conditional content (the explicature) of an utterance is to be accounted for (via

linguistic and/or extralinguistic processes) and the bearing this has on the existence of covert indexicals. We end with a short concluding section.

2. Pragmaticist versus semanticist approaches

Accounts of linguistic communication draw a distinction between two kinds of communicated (or speaker-meant) propositions (or thoughts). Consider the following exchange:

1. Max: How did the party go?

Amy: There wasn't enough drink and everyone left early.

A likely interpretation by Max of Amy's utterance, given the question he has just asked her, is the following:

2. a. There wasn't enough *alcoholic* drink *to satisfy the people at [the party]_i*; and *as a result* everyone who came to *[the party]_i* left *[it]_i* early.
- b. *The party_i did not go well.*

It seems pretty clear that (2b) is a conversational implicature, a proposition which the speaker communicates indirectly and which the hearer pragmatically infers from the more directly communicated meaning together with accessible contextual assumptions about the characteristics of a successful party. The proposition in (2a) is communicated *explicitly*, in that it is constructed on the template provided by the encoded linguistic meaning; we use the term 'explicature' for communicated thoughts of this sort. It is generally agreed that

explicature content often goes well beyond the meaning that would result from the composition of decoded linguistic meaning and saturation of overt indexical elements. The explicitly communicated content is that propositional representation, pragmatically developed out of the semantic schema (or propositional template) provided by the linguistic meaning, which is the basis of ordinary speaker-hearer judgements of the utterance as true or false (that is, it is the intuitive truth-conditional content of the utterance). For Amy's utterance in (1), this intuitive truth-conditional content includes the italicized elements in (2a), whose recovery, virtually everyone agrees, requires pragmatic processes. However, the source and nature of these pragmatic processes has been the subject of much debate: on the one hand, there are those who believe that 'free' (that is, pragmatically rather than linguistically motivated) pragmatic processes can contribute constituents of explicature, and, on the other hand, there are those who hold that 'all truth-conditional effects of extra-linguistic context can be traced to logical form' (Stanley 2000: 391). The first camp includes relevance theorists, such as Sperber and Wilson (1986/1995), Carston (1988, 2002) and Hall (2008), and contextualist philosophers of language, such as Bezuidenhout (2002), Neale (2007), Recanati (1993, 2004, 2010a), Soames (2008), and Stainton (2006), whom we'll call collectively 'pragmaticists' in this paper. The second group, called here 'semanticists', includes Stanley (2000, 2002), Elbourne (2008), Martí (2006), Stanley and Szabó (2000), Szabó (2001, 2011), King and Stanley (2005), Ludlow (2005), Sennet (2011) and Weiskopf (2007).

The semanticist and the pragmaticist start from several shared assumptions. First, they both agree that the explicature/truth-conditional content goes well beyond the overt (phonologically realized) material and includes elements of content such as the italicized elements in (2a) above. Although there is occasional disagreement about particular examples, due to divergent intuitions about exactly what elements the truth or falsity of the

utterance depends on, they agree that what is explicitly communicated should be taken to be the ‘intuitive’ truth-conditional content – that is, the basis on which ordinary speaker-hearers would take the utterance to be true or false, would agree or disagree with it, etc. Semanticists frequently emphasize that the basic data of semantic theorizing is native-speaker intuitions about truth-conditional content (see, for example, King and Stanley 2005: 141; Stanley and Szabó 2000: 240). So this shared conception of truth-conditional content is non-minimalist, and in this respect, both semanticist and pragmaticist line up against those such as Cappelen and Lepore (2005), who claim that there is a minimal proposition that results from just linguistic decoding, disambiguation, and saturation of the small number of overtly context-sensitive elements, or the even more minimalist Borg (2004).¹ Both sides in the present debate agree that the context-sensitivity of truth-conditional content is far more widespread than this; their disagreement, as will become clearer below, lies in what they believe is responsible for it. They take the fact that our assessments of an utterance’s truth are based on this non-minimal conception of truth-conditional content to be evidence for its psychological reality; in contrast, there is no reason to think that the minimal proposition (in Cappelen and Lepore’s sense) is a level of representation in the comprehension process at all.

A second point of agreement is that, in describing the processes that are responsible for the recovery of explicature, the ultimate aim is to account for the (typically) smooth and rapid process of linguistic communication, even when the utterance employs a sentence that speaker and/or hearer may never have encountered before (see, for instance,

¹ From a minimalist perspective, Stanley and the other semanticists could be considered ‘contextualists’ because they allow that there are contextual contributions to the proposition expressed that go beyond the resolution of obvious context-sensitivity (overt pronouns, demonstratives, etc.) Other authors, e.g. Recanati (2004), however, contrast Stanley’s position (‘indexicalism’) with contextualism, represented by Recanati, Bezuidenhout, Neale, Soames, and Stainton, while some who share many of the latter group’s commitments reject the label ‘contextualism’ (e.g. Carston 2009). We avoid the term here, using ‘semanticist’ and ‘pragmaticist’ to reflect the fact that the two camps offer, respectively, highly semantically-oriented versus highly pragmatically-oriented accounts of the data.

Stanley 2007: 10). Finally, both approaches are ‘original-utterance centric’ - that is, their focus is squarely on the proposition that is explicitly expressed/communicated in the specific original situation of utterance and so is entirely determined by facts about the original speaker, her audience and their common context. In this regard, again, both differ from Cappelen and Lepore (2005), who reject original-utterance centrism in favour of ‘speech-act pluralism’ – that is, the view that an utterance can have a wide range of propositional contents, some of which are determined by contexts other than that of the original utterance, including, in particular, contexts in which the utterance is being reported by a third party and so may include facts unavailable to the original speaker or her audience (ibid: 201).

Among the examples that have been discussed by both parties are the following, each of which can be used to communicate an explicature with one or more components of content that are not obviously the values of an element supplied by the linguistic form:

3. It’s raining.

Explicature: IT IS RAINING IN LONDON²

4. *Ann*: Would you like to stay and have dinner with us.

Bob: No thanks, I’ve already eaten.

Explicature of Bob’s reply: BOB HAS ALREADY EATEN DINNER THAT EVENING

5. The candidate arrived late.

Explicature: THE CANDIDATE FOR THE PRAGMATICS JOB ARRIVED LATE FOR THE

² From this point on, we represent explicatures in small caps, thereby distinguishing them (and other conceptual representations) from linguistic expressions. The characterizations of the explicatures above are intended to illustrate where unarticulated constituents arise, and thus sometimes ignore details such as the fact that natural-language pronouns (e.g. ‘he’ in (6)) will have been assigned referents.

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6. He insulted her and she hit him.

Explicature: HE INSULTED HER AND THEN AS A RESULT SHE HIT HIM

7. *Mother to child crying over a small cut on his knee:* You're not going to die.

Explicature: YOU ARE NOT GOING TO DIE FROM THAT LITTLE CUT

8. His glass is empty.

Explicature: HIS GLASS IS APPROXIMATELY EMPTY OF BEER

All of these examples are very familiar and have been extensively discussed in the literature of both camps, so we will assume there is no need to discuss them further here; the explicature in each case answers to naive intuitions about what the speaker expressed and is the basis on which further communicated assumptions (implicatures) are inferred.

The two sides in the debate have different approaches to accounting for the 'extra' elements of explicature in these examples. The pragmaticist claims that these elements are 'unarticulated constituents' (UCs), where 'unarticulated' means not just unpronounced but not present at any level of linguistic representation (not a feature of the language faculty). Their provision is wholly pragmatically motivated – by the requirement to meet a standard of sufficient contextual relevance – and they are composed into the content by a process which has been labelled 'free enrichment'³, where what is meant by

³ This is, of course, not 'semantic composition' as traditionally understood, but a composition process that acts on a mixture of semantic (decoded) and pragmatically inferred material. For a detailed attempt to work out a formal account of pragmatic composition, see Recanati (2010a).

‘free’ is that the pragmatic process is not linguistically triggered or mandated⁴. It is an optional process, as far as the linguistic meaning is concerned, hence it need not take place in all contexts but only when it is required for pragmatic reasons. The semanticist rejects this approach, for a reason which we discuss below, holding that there are no ‘free’ pragmatic effects on explicature. On this view, explicatures are fully linguistically articulated, and the only pragmatic processes affecting them are linguistically mandated, hence obligatorily take place in all contexts of utterance.

Given that semanticists agree with pragmaticists on what it is that they are aiming to explain – the non-minimal, intuitive, conception of truth-conditional content – how do they account for the elements of explicature that do not appear to be the values of anything in the overt linguistic form? Their explanation is that there are covert indexicals attached to certain lexical items, which are, therefore, present in logical form whenever the item is tokened. For instance, weather verbs might encode a location variable, and, on Stanley and Szabó’s (2000) proposal, every nominal encodes a domain variable, which accounts for quantifier domain restriction, the completion of definite descriptions, and so on.⁵ The kinds of structures envisaged are shown (in rough form) here:

9. It is <raining at Loc L>

⁴ As far as we are aware, the first use of the term ‘free enrichment’ was by Recanati (1993: 243, 258-9), where it included cases of unarticulated constituents: e.g. the ‘extra’, pragmatically inferred constituents in (1) and (3)-(8). Since that time, work in truth-conditional pragmatics has led to new distinctions and clarifications of the range of pragmatic processes, so that the term is sometimes used in a more restrictive way, which excludes cases of UCs (see Recanati 2010a: 22-24). We continue to use the term ‘free enrichment’ for cases of UCs, because they both involve a pragmatic process of developing (enriching) the linguistically decoded content into a further mental representation and are ‘free’ inasmuch as they are not linguistically mandated. See Recanati (2012: section 5) for discussion of this use of the term ‘free enrichment’.

⁵ In fact, Stanley and Szabó’s (2000) proposal is that every nominal encodes a pair of domain restriction indices: a function index and an argument index, as indicated in (11) and (12). Since it does not matter for the issues discussed in this paper, we follow the usual practice of speaking as if the proposal is that there is a single domain variable.

10. I've <eaten, object> <time>
11. The <candidate, f(i)> was late.
12. The <Russian, f(i)> voted for the <Russian, f(i)>⁶

If this approach can be extended to account for all genuine effects of context on explicature, then, apart from disambiguation, the only pragmatic process involved in getting from logical form to explicature would be saturation of (overt and covert) indexicals: there would be no 'intrusion' by pragmatic processes that have no linguistic mandate. As Stanley says, 'If my proposal is correct, there is no gap between the linguistically determined content of a sentence, relative to a context, and the proposition it intuitively seems to express' (2007: 5). The elimination of a gap between linguistically determined content (relative to context) and proposition expressed (explicature) is seen as desirable by many authors because of a concern they have with the 'free' enrichment that would be required to bridge any gap. The problem is that, since it is not linguistically mandated, it is unclear how (or that) the process of enrichment can be properly constrained, which gives rise to the worry that no systematic account of our grasp of explicature is possible if we admit the existence of this mysterious new process. In contrast, the semanticist approach claims to make use of only the familiar, independently required mechanism of indexical saturation and is, therefore, seen as making an explicit account of how hearers get from linguistic meaning to explicature much more methodologically tractable.

As presented by the semanticists, this objection creates the appearance of a wide gulf between the two approaches in terms of their prospects of giving a systematic theory of our grasp of explicature/truth conditions. However, they never elaborate on what it is to

⁶ To get the idea here, imagine an ice-skating competition where the individuals comprising the judging panel have a range of nationalities (including one Russian) and similarly for the competitors.

be ‘systematic’, so the objection is too vague to assess properly and we do not attempt a detailed response here. But, since the semanticists frequently appeal to this systematicity claim,⁷ we will respond briefly by pointing out that the implication that there is a vast difference between the two accounts in this respect is a gross exaggeration. As has been emphasized by Sperber and Wilson (e.g. 1986/1995: 12), the process of working out the values of many indexicals is just as mysterious as the process of free pragmatic enrichment: for any utterance of “he” or “that”, there will be multiple referents that meet the linguistically-provided constraints.⁸ This example from Blakemore (1987) illustrates how contextual prominence of a potential referent that meets the linguistically-encoded constraints is not sufficient for correct reference assignment to the occurrences of ‘it’ in B’s reply:

13. A: Have you heard Perahia’s recording of the Moonlight Sonata?
 B: Yes, *it* made me realize that I would never be able to play *it*.

The mere fact that some linguistic meaning is present in the form of an overt indexical, then, does not bring us any closer to an account of how the gap between the logical form and explicature is bridged, and the same would apply, a fortiori, to the hidden indexicals posited by the semanticist. The gain in systematicity that comes from moving to a hidden indexical account is far less than is implied by the semanticists’ criticisms of free enrichment: the one thing that covert indexicals do, at least in principle, and which free

⁷ See, for example, Marti (2006: 151), who says that the defenders of free enrichment have yet to provide ‘a coherent, specific and detailed algorithm that explicates the operation of the process of free enrichment’, as well as Stanley (2007: 10), and many other places.

⁸ In recent years, certain philosophers have also acknowledged this; see especially Neale (2007: 80-1). Clapp (2012a: 458-9) independently makes a similar point. He maintains that, if the proposed ‘unobvious indexicals’ exist at all, Gricean principles (thus non-demonstrative inference) must play a dominant role in determining their content since their linguistic character is ‘extremely lax and [does] *not* impose significant constraints on the values that can be assigned to them’.

enrichment does not do, is tell us where pragmatic/contextual contributions to explicature will occur (and, as a result, where they cannot occur). However, as we will see in the next section, even this apparent advantage of the semanticist position is called into question by a significant modification that the covert indexicals approach needs to undergo in order to accommodate the fact that these (alleged) indexicals behave rather differently from the overt indexicals of which they are supposed to be simply covert counterparts.

3. The move to *optional* covert variables

3.1 Covert and overt variables: an asymmetry

On the semanticist approach, covert indexical elements (which we'll also refer to as 'aphonics', following Neale 2007) are assumed to be present in the logical form of a sentence wherever intuition has it that some pragmatic process can contribute to explicature. The problem is that in many cases, they are idle or redundant. This can be seen clearly if we compare these covert elements with their (alleged) overt counterparts. Overt indexicals are obligatorily assigned a contextual value (unless they are bound to a quantifier). This is the case also for uncontroversial cases of covert indexicals, such as the third-person pronoun in pro-drop languages, for instance Spanish, which is generally not made overt unless it is needed for clarification or emphasis:

14. a. She put it there.
b. # LISA PUT SOMETHING SOMEWHERE
15. a. [Spanish] Baila. (dance -3rd-sing-pres.tense)
b. # SOMEONE DANCES

An utterance of (14a) will not have been fully understood (as indicated by the #) if the hearer does not recover specific values for all of the (overt) indexicals. Similarly, an utterance of (15a) has not been understood if all that the hearer recovers is that ‘someone dances’, or ‘there is dancing’. In contrast, it appears that, in many of their occurrences, the covert indexicals that the semanticist posits are not saturated, without there being any sense that the utterance has not been completely understood. Consider (16):

16. It is <raining at Loc L>

According to the semanticists, a variable is present in the logical form mandating saturation. Yet a location-indefinite interpretation is possible in certain contexts.

Here are some examples for which such an interpretation would arise:

17. Why does it rain? It rains because water vapour in the air condenses and ...

(see also discussion in Cappelen and Lepore 2007)

18. a. Once, in Antiquity, it rained blood. Since then, it has never happened again.

b. Once, in the middle ages, it rained for a hundred years.

(Recanati 2007)

c. On the day of judgment, it will rain dead people.

(Cappelen and Hawthorne 2007)

In these cases, the explicature (truth-conditional content) of the ‘rain’ clauses appears to be just: IT IS RAINING/RAINED SOMEWHERE (or IT IS RAINING [*punkt*]).⁹ Although the raining event takes place at a location, so that location can be considered what Recanati (2002) calls a ‘metaphysical unarticulated constituent’ of the utterance, it does not seem to be part of what is communicated (nor is it likely to be represented by the speaker or hearer at all). It has been suggested (by Martí 2006 among others) that such examples do in fact involve an inferred location, namely ‘the earth’. If correct, this would mean that the location variable with weather verbs is always saturated with a specific value, just as overt indexicals are. It is not clear to us that this is plausible for all the examples in (17) and (18), or that the suggestion that a location is inferred is supported by anything other than the need to maintain as close a parallel as possible between overt and covert indexicals¹⁰. Moreover, Recanati’s view is supported by the behaviour of other verbs. It is undeniable that utterances of sentences with the verb ‘rain’ (or other meteorological verbs) very often communicate a specific location and this gives an initial reason for thinking that these verbs might come with a linguistically provided location variable. In contrast, it is generally agreed that verbs like ‘dance’ and ‘sing’ do not come with such a variable, because utterances containing them are often fully understood without the recovery of any location of the dancing/singing:

19. a. Mary sings/is singing to keep her spirits up.
 b. Last night, we danced until dawn.

⁹ The pragmatic explanation here is that while it is most often relevant to us to know the location of an event of raining, this is not inevitably the case. In the examples in (17) and (18), relevance turns on something other than location (the nature of the rain, the object that is rained or the length of the raining event).

¹⁰ Recanati (2007) gives detailed arguments, which we endorse, against the idea that examples such as (17)-(18) involve the inferred location ‘the earth’.

However, in certain instances, such as (20a), a location *is* recovered as a constituent of the explicature, so these are clear cases for which the location constituent is optional:

20. a. We went to the Royal Festival Hall last night – Pavarotti was singing.
 b. PAVAROTTI WAS SINGING AT THE ROYAL FESTIVAL HALL AT TIME *t*
 c. Pavarotti was <singing at Loc *l*>

The explicature of the second clause of (20a) is given in (20b). To maintain the thesis that all truth-conditional effects of context are traceable to logical form, the semanticist would have to say that the logical form of (20a) is that given in (20c). It looks, then, as if, on the semanticist account, virtually every verb in the language would have to have an encoded location variable, even those which are almost never interpreted with a specific location. We are not aware of anyone having suggested that, in cases such as (19a), the explicitly communicated content includes an inferred location constituent, such as ‘on earth’, and we take it that the semanticists would not endorse this idea.¹¹ Here, then, we have a case where it looks very much as if the semanticist must say that a covert indexical is present, but that saturation is optional.

Consider now the case of ‘eat’. In example (4) above, ‘I have eaten’, or the case of the mother who says ‘Eat!’ while placing a plate of food in front of her child, the object is left unexpressed (unpronounced) and the hearer infers it. But an interpretation which is indefinite with regard to what is eaten (or when the eating took place) is possible:

21. John is anorexic but he’s eaten today.

¹¹ An alternative analysis that the semanticist might appeal to in this case would be to posit event variables. We explain at the end of the next section why this does not succeed.

22. Lucy has eaten in the best Parisian restaurants.

These have the interpretation that John/Lucy has eaten something (or ‘has eaten *punkt*’).

So, again, the alleged covert indexical for object eaten is not saturated with a context-specific value.

A different but related issue arises concerning domain variables. Consider the examples in (23a) and (24a), due to Breheny (2003). On the view of Stanley and Szabó (2000), according to which every nominal comes with a domain variable as a matter of its lexical structure, (23a) has the structure in (23b) and (24a) has the structure in (24b). This seems fine for (23a), where the adjective ‘former’ takes both the nominal and the domain in its scope, giving the interpretation in (23c):

23. a. Our boss sends every former secretary a Christmas card.
 b. Our boss sends every former <secretary, f(i)> a Christmas card.
 c. Our boss sends every [former [secretary of our company]] a Christmas card.

But it does not work for (24a), where the intuitive truth-conditional content is as in (24c), with the domain ‘at the party’ falling outside the scope of the adjective ‘former’:

24. a. Every former policeman was asked to leave.
 b. Every former <policeman, f(i)> was asked to leave.
 c. Every [[former policeman] at the party] was asked to leave.

So the representation in (24b) seems to be wrong: the domain variable cannot cohabit a node with the noun. It looks, then, as if domain variables can be adjoined in several different positions in logical form.

What these examples indicate is that the covert elements posited by the semanticist are not simply covert counterparts of overt indexicals; rather, they seem to be a new and unknown category of linguistic element (as noted by Carston 2000; Recanati 2002; Martí 2006; Hall 2009). Saturation of indexicals is obligatory, at least when one considers those indexicals whose existence is uncontroversial – that is, the overt ones, and the silent pronouns in pro-drop languages. So the semanticist faces the problem of reconciling the following two commitments: (a) All truth-conditional effects of context can be traced to logical form, so there have to be some covert variables to account for when and where such effects occur; (b) Whenever an indexical (overt or covert) is present, it must be saturated.¹²

3.2 The semanticist solution: optional covert variables

Within the semanticist camp, Martí (2006) has acknowledged this problem and proposed a solution to it by relocating the source of optionality. She suggests that what is optional is the generation of variables (covert indexicals) in the *syntax*. She presents this idea as a modification of the more standard covert indexical account of Stanley (2000) and Stanley and Szabó (2000): ‘We need to give them [Stanley’s variables] the freedom to be or not to

¹² A reader has suggested that we need to consider an alternative account, which is that the variables are existentially closed by default when they are not assigned specific values. Recanati (2002: 326-8) notes that, for this idea to have any initial plausibility, we would need to find examples of overt variables undergoing existential closure by default. But overt variables are not subject to existential closure (see our discussion of example (14) above). Martí (2006: 152-53) endorses Recanati’s criticism, and develops an alternative semanticist solution to the optionality problem, which we introduce next: optional variables. While we recognise that there has been much debate, still unresolved, about the existence of existential closure, our purpose in this paper is to assess the idea of optional variables. Therefore, as Martí does, we take as our starting-point the assumption that existential closure is ruled out as a general solution for the kinds of case under discussion here: ‘sing’ (see example 19) is highly unlikely to encode a location variable, which is existentially closed on the vast majority of tokenings.

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' (Martí 2006: 135). So, on this approach, the surface form 'It is raining' would have two logical forms: one with a covert location variable and another without any such variable.¹³ When the sentence uttered has the first kind of logical form, the variable (indexical) is always saturated with a specific value for the location, just as for overt indexicals. As noted above, there has been some debate over whether 'rain' and other weather verbs really have location-indefinite interpretations (Martí herself is sceptical). The semanticist does face the problem of the optionality of saturation, though, as we demonstrated with the verb 'sing' in examples (19)-(20). Martí's optional variable idea is a potential solution to the problem posed by these and possibly several other kinds of example¹⁴, and therefore merits consideration, regardless of exactly which expressions turn out to need to be analysed this way.

Stanley (2007) makes a somewhat similar move to Martí's in a revision of his view on domain variables – a revision motivated in part by Breheny's (2003) examples given in (23) and (24) above. Here he maintains that domain variables are adjoinable in different positions (Stanley 2007: 223, note 15). So the surface form 'every former secretary' has (at least) two logical forms, one in which the adjective takes the domain variable along with the noun in its scope, and one in which it doesn't:

¹³ In fact, there is a third logical form, containing two variables, which is necessary for bound readings, as in the most natural reading of 'Whenever John lights a cigarette, it rains' (see Martí 2006: 143). It is not clear whether the idea is that this is automatically generated whenever the verb 'rain' is tokened (in which case the added complexity would reinforce our arguments below) or it is triggered only when the phrase comes embedded in a potential binding context. We omit further consideration of this third option.

¹⁴ Here are some examples of where a pragmatic contribution to explicature is optional: causal readings of 'and'-conjunctions, illustrated in (6); metaphor and metonymy (see Stern 2006); scalar inferences (see Breheny et al 2006); Travis cases such as those involving colour predicates (see Clapp 2012b), and so on. Martí also suggests that intransitive 'eat' has an optional object variable (see examples (21) and (22) above).

25. a. ... every former <secretary, f(i)> ...
 b. ... every <former secretary, f(i)> ...

The move to ‘covert optionals’, as Recanati (2010b) calls them, seems to dissolve the problem of the apparent difference between overt and covert indexicals, while still allowing the semanticist to steer clear of the process of free pragmatic enrichment. However, the important question, which we consider in the next section, is whether this provides a workable alternative account of the processing of these utterances. More generally, does it advance us towards the goal of providing a systematic theory of our grasp of explicature and of accounting for the smoothness and rapidity of linguistic communication? First, note one consequence of the move: a sentence whose logical form could include up to three such aphonics would have eight distinct logical forms; a sentence whose logical form could include up to four aphonics would have 16 logical forms; and so on (see Carston 2000: 34-35). This massive proliferation of logical forms corresponding to a single surface form seems to be both wildly counterintuitive and to impose an extreme computational burden, so it is hard to see that it could be reconciled with the typical smoothness and rapidity of our communication. Martí herself acknowledges that her approach seems to entail that ‘the speaker and hearer are burdened with an intolerable computational load’ (2006: 150), but points out that this is a general problem for standard treatments of indexicals (as in, for example, Heim and Kratzer 1998), so should not be held against her account. In any case, she maintains, the superiority of her proposal to any account involving the mysterious, unsystematic, non-standard process of free enrichment outweighs any considerations of cost. Although we think issues of computational costs (cognitive effort) are of considerable significance, we set them aside in what follows because it is very unclear how to make a meaningful cost/effort comparison between the

kind of utterance comprehension account that we are developing (inherently a matter of a performance mechanism) and the linguistic competence-oriented approach of Martí (see discussion in section 5 below).

Second, as discussed in section 3.1, the only sense in which saturation of a covert variable is more constrained than free enrichment is that the presence of variables in the linguistic form determines *where* a pragmatic contribution will occur and where it will not. Make the variables optional, though, and the systematicity advantage of the semanticist account diminishes still further: the most that can now be said is that the standing linguistic meaning determines where a pragmatic contribution *might* occur (and where it definitely will not). So, one consequence of making the optionality move is that the semanticist account becomes less predictive. The real problem, however, arises from the fact that we now have a further process required for the recovery of explicature: since the imperceptible variables are optional, there is a preliminary somewhat mysterious (presumably pragmatic) process of figuring out for an utterance of ‘It’s raining’, ‘I’ve eaten’, etc., whether or not the logical form contains a variable. As we discuss in the next section, this additional process makes the account unworkable as an explanation of how the truth-conditional content is recovered in on-line comprehension.

4. Optional syntax versus optional pragmatics: six of one and half a dozen of the other?

In a recent paper discussing this move on the part of the semanticists (or ‘indexicalists’, as he calls them), François Recanati (2010b: 38) claims that an account in terms of ‘covert optionals’ is simply ‘another – admittedly deflationary – syntactic construal of free

pragmatic processes.¹⁵ The only difference, he says, ‘is that the level of syntactic representation to which the additional elements belong remains within the confines of the language system (rather than involving a shift to the conceptual system)’ (ibid: 38). And, he adds, whether or not this is a substantive difference and what its consequences are remain to be determined. The semanticists would maintain that the difference is highly consequential: they abhor the idea of free enrichment and aim at a rigorous (linguistically controlled) alternative. As pragmaticists, we also think the difference between the two accounts is significant but maintain that it is the free pragmatic enrichment approach that emerges as the better account once facts about the processing of utterances in on-line interpretation are brought into the picture.

Recall that the shared aim is to explain the hearer’s grasp of explicature, as part of the broader project of accounting for the ‘smoothness and rapidity of linguistic communication’. The suggestion from the semanticist/indexicalist is that covert indexicals are required to explain this process. However, no argument is given for the necessity of indexicals or the incompatibility of free enrichment with the facts to be accounted for. Our question, then, is: what role do the (alleged) optional aphonics play in communication/comprehension that is not achieved by optional (free) pragmatic enrichment? First, consider the pragmatic processes that are involved in an account of on-line comprehension that features syntactically optional covert elements. There must be two obligatory (linguistically mandated) pragmatic processes: (a) Selection of the correct logical form (a kind of structural disambiguation), and (b) In the case where the chosen

¹⁵ There are broadly two construals of free enrichment, a semantic one and a syntactic one (see Recanati 2002: 339-42). On the semantic construal, the output of free pragmatic processes is a proposition, a truth condition or a state of affairs, that is, a semantic object, rather than a representation. On the syntactic construal, the output is a mental representation, a structured string of symbols. For relevance theorists and most pragmaticists, it is a conceptual representation, a sentence of Mentalese, the representational medium in which we think and store our beliefs, as distinct from those syntactic representations which are specific to our linguistic systems (our I-languages, in Chomsky’s terms). Recanati’s (2010b) use of ‘syntactic’ is in the broad sense of ‘mental representational’ which encompasses both conceptual and linguistic representations.

logical form includes a covert indexical, provision of a context-specific value (saturation). Now let's see how these would play out in the interpretation of a concrete example:

26. Ann and Ben are in their London flat and Ann has just got off the phone after talking to her parents who live in Christchurch, New Zealand.

Ben: How's your mother?

Ann: She's a bit fed up. It's raining so she can't get out into the garden.

Focussing here on the underlined conjunct in Ann's reply, we assume that everyone would agree that the explicature (truth-conditional content) is, roughly, IT IS RAINING IN CHRISTCHURCH NEW ZEALAND AT TIME T. On the covert optionals account, the value for the location must result from the saturation of a variable, so the logical form that contains the variable must have been selected. The question here concerns the process by which this selection comes about, that is, what the grounds are for the hearer's choice of the logical form containing the location variable.

The answer in brief (explained in more detail below) is that the basis for the selection of this logical form is the contextual salience of the location constituent CHRISTCHURCH NEW ZEALAND. This constituent is highly accessible to the hearer since he knows that Ann is reporting on the situation where her mother lives. So assuming that it is plausible and sufficiently relevant to him that the proposition expressed by the speaker is IT IS RAINING IN CHRISTCHURCH NEW ZEALAND, this would provide the basis for selection of the variable-containing logical form. But what this indicates is that the context-specific content of the (alleged) location variable is recovered before the variable itself. So it looks

very much as if the covert optionals approach is getting the order of processing back-to-front.

On Martí's (2006) account, for any given instance of an utterance of 'It is raining', the various possible interpretations based on the distinct logical forms (LFs) are tried out or tested to see which of them complies best with both linguistic and contextual/pragmatic constraints (ibid: 141-146). This could play out in various ways: it may be that the order of testing is serial and random, or that it is serial but with the most economical one tried first, or that all possible derivations¹⁶ are tried out in parallel. Focusing again on the example in (26), let's start with the serial testing approach, which is widely assumed to be the correct parsing model where syntactic ambiguity is concerned (Frazier 1987). If this is random, then on some occasions of utterance, the LF containing a location variable might be the first one tested; it will be saturated with the highly accessible constituent IN CHRISTCHURCH NEW ZEALAND and will satisfy pragmatic principles (e.g. the hearer's expectation of relevance),¹⁷ so that works fine. But consider what happens on the scenario where the first version tested is the LF without a variable, that is, the LF which, according to this account, would preclude the occurrence of any context-specific location constituent in the explicature and so determine the interpretation IT IS RAINING *punkt* (or, perhaps, IT IS RAINING SOMEWHERE). That interpretation would patently not meet the hearer's expectation of rational communicative behaviour in the situation described in (26) since being told of the existence of some unlocated raining event is completely irrelevant, so this LF would be

¹⁶ Recall that Martí (2006) considers several more derivational possibilities for 'It is raining' than the two we focus on here, including those with a quantifier that may or may not bind the raining location, e.g. 'Whenever I light a cigarette it rains'.

¹⁷ Martí herself prefers to employ Gricean maxims rather than relevance-theoretic pragmatics but obviously this makes no difference to the point we are making here. When considering which of the various possible derivations wins on a particular occasion of use of 'It is raining', she says: 'Why is it that (1) [It's raining] does not mean just 'it's raining somewhere'? ... Here I appeal to Gricean principles. *A priori*, this is a possible derivation but it has to compete with a derivation in which Luisa's utterance is much more relevant to the situation at hand. I.e., Klaus [the hearer] could take her to mean it's raining somewhere, but that would not be relevant to anything they have said or done.' (Martí 2006: 145).

rejected and the variable-containing version tried. Clearly, exactly the same thing would occur on a non-random serial account, which is the more plausible version of the serial model. On this account, the possibilities are tested in order of their complexity, starting with the simplest – here, the LF without the variable.¹⁸

Now, crucially, what we need to be clear about is what it is that prevents an interpretation based on the variable-free LF representation from being successful. Given that this is a serial processing account, it is not because there is another version of the logical form available so the hearer should try that and see if he can find a value to saturate it. Rather, the relevance-seeking hearer cannot help but recognize that the communicatively intended propositional content is *IT IS RAINING IN CHRISTCHURCH NEW ZEALAND*, and it is this that serves as the grounds for the rejection of the minimal LF (which would block the derivation of a location constituent) and the consequent accessing and testing of the LF that contains a location variable. But if the hearer has already accessed the representation that includes the context-specific location of the raining event, there is no need for him to make the further move of selecting the variable-containing LF and saturating the variable with the relevant content. So, within the serial testing versions of the comprehension process involving optional covert indexicals, the context-specific location constituent *can* be (on the random order of testing) - and *must* be (on the ‘simplest LF first’ version) - derived before the LF with the location variable is selected, in which case the variable is playing no role in processing and is redundant.

Consider now an account on which both (all) possible derivations with their distinct LFs are tried out in parallel (which, however, is rather unlikely, given the processing costs involved). On the face of it, this way of construing the selection process might not seem to

¹⁸ This scenario respects the highly plausible assumption that, *ceteris paribus*, the simplest analysis will be tried first. Economy in sentence processing is generally supported by work on parsing heuristics (see Frazier 1987, Altmann 1998) and by more general Zipfian considerations (see Horn 2004).

run into the redundancy problem that arises for the serial testing approaches. Focusing again on the utterance of ‘It’s raining’ in (26), suppose we have the two LFs, [It is raining] and [It is <raining at Loc L>] proffered in parallel to the pragmatic processor, which has at its disposal the salient contextual information about the phone-call to Ann’s mother. The interpretation that satisfies relevance requirements is clearly that it is raining in Christchurch, New Zealand (at such and such a time) and so it might seem obvious that it is the second (variable containing) LF that is successful here. But, again, the question is: what role is being played by the variable and why does the simple (variable-free) LF fail? The semanticist’s answer is that the variable indicates the position in the propositional structure where a pragmatic process is to take place and the LF without a variable indicates that no pragmatic process (that could affect truth conditions) is to take place.

Note that the claim that the variable-free LF precludes the pragmatic provision of any content is a matter of pure stipulation (free enrichment is ruled out by fiat). For the sake of our argument, however, let’s accept it for a moment and think about how the interpretation of ‘It’s raining’ in (26) would work if there was only the one (variable-free) LF. Given the high relevance of the place at which the raining is occurring, it must be that it would arise as an implicature, so the interpretation would be as follows (omitting inessential details):

27. Proposition expressed: IT’S RAINING (SOMEWHERE) SO X CAN’T GET OUT INTO X’S

GARDEN

Implicature: IT’S RAINING IN CHRISTCHURCH, NZ, SO X CAN’T GET OUT INTO X’S

GARDEN

This is the kind of analysis that would be advocated by some Gricean philosophers who favour a minimal ‘what is said’ (for discussion, see Carston 2002, 2004; Recanati 2004). The reason the semanticists we are debating with here would not advocate this is that, as discussed in section 3, they share with us the view that the target of inquiry is intuitive truth-conditional content (explicitly communicated speaker meaning) and, in this instance, that content is identical to the proposition (allegedly) implicated in (27). Suppose, now, that we lift the arbitrary stipulation that no pragmatic process can take place without a variable indicating that it must:¹⁹ the immediate result is that the variable-free LF is pragmatically enriched with the location constituent and what is labelled ‘implicature’ in (27) is, in fact, the explicature of the utterance (and there is no irrelevant ‘proposition expressed’ or ‘what is said’ as in (27)). Thus, it seems that when the location constituent is highly accessible and relevant, as it so clearly is in example (26), it is composed directly into the explicature, whichever of the logical forms is taken as its basis. So, even on the parallel testing approach, the LF containing a covert location variable is redundant. In short, the linguistic starting point for the comprehension of utterances of ‘It’s raining’ is just that logical form for which the hearer has perceptible linguistic evidence – that is, the simple variable-free version²⁰.

This argument is reinforced by the case of expressions for which provision of a specific value is much rarer, as on the few occasions where a location is inferred with the verb ‘sing’, illustrated in (20) (‘We went to the Royal Festival Hall last night. Pavarotti

¹⁹ In fact, we think the stipulation is not only arbitrary but false: for arguments to this effect, see the discussion in Hall (2008) and (Clapp 2012a).

²⁰ An attempt at providing linguistic evidence for these covert indexicals is Stanley’s (2000) binding argument, which assumes that, if a bound interpretation is available, there must be a bindable variable in the logical form. However, no evidence is given for this assumption. Compare a well-attested case of covert structure, such as *wh*-traces, where grammaticality judgments provide evidence of their presence in logical form; in contrast, the only judgments adduced in support of the covert indexicals under discussion here are judgments about interpretations: there is no syntactic evidence for this allegedly covert syntax. See Collins (2007) for further development of this point.

was singing.’) Let’s imagine that the grammar provides, for an utterance of ‘was singing’, the option of a logical form with a covert location variable. The infrequency of use of this logical form as compared to the version with no location variable would make the latter far more accessible to the pragmatic interpretation mechanisms and thus more likely to be tested first on the parallel processing model on which the parser presents all possibilities simultaneously to pragmatic interpretation.²¹ Given the decoded linguistic meaning PAVAROTTI WAS SINGING in its immediately preceding discourse context, the hearer constructs the assumption PAVAROTTI WAS SINGING AT THE ROYAL FESTIVAL HALL and accepts this as the explicitly expressed meaning. The covert optionals account requires that the hearer, on that basis, rejects the variable-free logical form and recovers a different logical form with an imperceptible location variable, solely in order to achieve the desired structural match between logical form and explicature. We suggest that an account on which the hearer stops at the previous stage is more plausible: he has successfully worked out, **on the basis of the variable-free logical form**, what the explicature is. The putative location variable is entirely redundant in this case – it need never play a role in the interpretation of the types of predicates that rarely require a location to be inferred. The frequency facts are the opposite for the weather predicate cases: the location-specific interpretation is much more frequent than the interpretation without a location constituent, which would seem to favour the variable-containing LF being tested first. However, the case of ‘sing’ shows that the location-specific interpretation is derivable without any location variable, from which it follows that the variable is equally redundant in the case of weather predicates. This confirms the arbitrariness, mentioned above, of the semanticists’ stipulation that no pragmatic process (that contributes to explicature) can take place in the absence of a variable mandating such a contribution.

²¹ See Sperber & Wilson (1986/1995) and empirical evidence in Wilson & Matsui (2000) on factors affecting accessibility.

The fundamental problem with the ‘covert optionals’ account, then, is that it looks as if the selection of the logical form with a variable in it depends on the prior recovery of the utterance’s propositional content (explicature). The role of the logical form of an utterance is to provide the linguistic input to the pragmatic processes that are responsible for working out the intended meaning. For covert variables to play any useful role, they should be recovered first so as to indicate to the hearer what kind of values are to be pragmatically supplied (as is obviously the case with overt indexicals). But it seems that the identification of the logical form depends on the prior (pragmatic) identification of the propositional content. The upshot of this processing argument is that certain components of the explicature are recovered by a purely pragmatic process and that optional covert variables do not provide an alternative mechanism for their recovery. In short, it seems that either we take the semanticist route which makes for massive redundancy (and accompanying high computational costs) or we allow for occasion-specific instances of free pragmatic enrichment and a simple variable-free logical form for ‘sing’, ‘dance’, ‘rain’, and many other verbs.

Before concluding this section, we want to briefly consider a different indexicalist solution, according to which predicates introduce a covert event or situation variable. This was suggested by Stanley (2000) as an alternative to the idea that weather verbs encode location variables, and is apparently the version he now prefers (Stanley 2007: 257-8). The idea is that when a speaker utters ‘It’s raining’ she refers to a particular event, and says of it that it is a raining event. The referred-to event is the value of an event variable in the syntax of the sentence. Although Stanley doesn’t go into detail, the idea seems to be that certain aspects of the event such as its location and time are therefore part of what is considered the value of the event variable. So, on this sort of account, the location is not a linguistically unarticulated constituent (UC) of the utterance. The proposition expressed

contains an event, and the speaker and hearer know where the event is taking place on the basis of their extra-linguistic world knowledge.

However, we fail to see how this event variable account avoids analysing the location as a UC. As many verbs, not just weather verbs, would introduce these event variables, they would also be present in both the case of ‘Pavarotti was singing’ in (20) above, which does express a location, and ‘Last night, we danced until dawn’ in (19b) above, which does not. So event variables do not seem to provide a solution for the indexicalist, because this account cannot, as far as we can tell, distinguish between cases where a location constituent is irrelevant (though perhaps known), in which case the location would be merely a ‘metaphysically unarticulated constituent’,²² and cases where the location is relevant and needs to be inferred, as in (26) and (20). Recanati (2007: 130-131) seems to have this point in mind when he writes ‘The place and time of the described event do not automatically count as arguments of the predicate, hence they are not automatically part of the argument structure, because they are general characteristics of events.’ So even on the event variable account, when the location is inferred, it is not linguistically mandated but pragmatically required, and forms an extra constituent of content additional to any constituent denoting the raining/singing event: it is, therefore, a UC.

The other class of expressions that Martí considers as candidates for optional variables includes ‘eat’ and similar verbs (e.g. ‘drink’, ‘smoke’). As we showed earlier, while intransitive uses of ‘eat’ may receive a reading that is indefinite with respect to what is eaten (see examples (21) and (22)), in some cases, a specific object may be pragmatically supplied (see example (4)). The argument that we have given in this section

²² It would thus not be represented by the speaker and hearer, and not be part of the truth-conditional content of the utterance.

about weather verbs applies straightforwardly to cases like ‘eat’: the logical form containing a covert optional will only be recovered if the hearer has already worked out that the explicature contains a specific object, in which case the variable is redundant.²³

Let us end this section by reiterating the central point of our response to Recanati’s claim that there may be ‘no substantive difference’ between the optional covert indexicals account and the pragmatic free enrichment account. We maintain that, from the point of view of the on-line cognitive processes of utterance comprehension, there is an important difference. There can be no saturation without a variable to saturate, but selection of the logical form with the covert variable in it is dependent on a prior (pragmatic) process of identifying the explicature, so recovery of the variable-containing logical form, followed by saturation, is redundant. The moral is that making covert variables/indexicals optional divests them of any role in the *process* of utterance understanding, which seems to be a good reason for abandoning them altogether.

In the next section, we will consider two related possible semanticist responses to this line of argument. The first involves the idea that covert optionals are far more linguistically respectable items to add to grammatical/semantic theories than is free pragmatic enrichment; the second takes issue with our focus on utterance comprehension, which is a cognitive ‘performance’ matter, and maintains that such considerations are irrelevant to the kind of linguistic competence model under discussion.²⁴

5. Linguistic competence and truth-conditional content

²³ See Bourmayan & Recanati (2013) for detailed arguments against a covert-variable approach to these intransitive uses, and for an alternative (situation-theoretic) account.

²⁴ This response comes from Luisa Martí (p.c.). Whether Jason Stanley would endorse it is not entirely clear, given his avowed concern to account for the ‘smoothness and rapidity’ of communication (Stanley 2007).

The idea of making covert indexicals *syntactically* optional seemed initially to get round the problem of the apparent optionality of their pragmatic saturation, thus maintaining a parallel with overt indexicals. However, it introduces a new dissimilarity since overt indexicals are not optional in any way similar to these covert ones. Furthermore, far from relying on familiar processes, the move to covert optionals introduces a rather mysterious step of deciding whether the indexical/variable is actually there or not, and this appears to be a new, and so far unattested, process.

Martí is aware that there is not a perfect parallel between her covert optionals and attested species of indexical, and, towards the end of the paper, she makes a different, or at least a more specific, parallel, suggesting that her optional variables are the covert counterparts of overt adjuncts (which are optional): just as ‘in Paris’ and the indexical ‘there’ are optional modifiers of ‘It’s raining’, so are covert variables. Thus, she can claim that these variables are at least similar to familiar elements of the grammar, whereas to admit ‘free enrichment into the semantics’, which is how she characterises the pragmaticist account (Martí 2006: 135), would be to introduce a wholly new process that is nothing like existing ‘semantic’ phenomena. Covert optionals, then, seem to be the conservative, more theoretically parsimonious, hence attractive, solution, and if we allow obligatory and optional variables, then we do not need free enrichment in the semantics.

We agree that introducing a process like free enrichment into the semantics would be an unappealing move. However, Martí’s line of argument here rests on a misconstrual of the pragmaticist approach, which stems from a basic assumption that underlies her whole approach and which, in our view, is mistaken. Her assumption is that the grammar (specifically the semantics component) delivers the truth-conditional content of the utterance, where this truth-conditional content is equated with explicature. Martí seems to assume that free enrichment is intended by pragmaticists to be a *semantic* process, hence

part of a semantic module that is part of the grammar. Free enrichment, she writes, ‘entail[s] a non-modular, pragmatics-invasive view of the semantics component of the grammar’ (2006: 135). But this reasoning conflates two different notions of semantics. On the one hand, ‘semantics’ or ‘semantic content’ is often used as a name for what we are calling the explicature – the intuitive truth-conditional content of the utterance (or speech act). The pragmaticist claim is that free enrichment contributes to explicature. But it is quite clear in the pragmaticist literature that it does *not* contribute to semantics as used in a different sense, that is, as the component of the grammar that maps linguistic forms to encoded meanings.²⁵ We agree with Martí that free enrichment is not part of the kind of semantics that could be a component of the grammar – that is, part of a modular linguistic competence. It contributes to explicature, but the pragmaticist approach is based on the assumption that explicature incorporates much more material than could be considered a matter of linguistic semantics. This is precisely why certain pragmaticists have argued against equating semantics or semantic content with explicature (see especially Carston 2008). Martí seems to think that the shared starting point for semanticists and pragmaticists includes the assumption that the semantics component of our grammar delivers explicature, at least modulo saturation and disambiguation. In fact, however, this is not a shared assumption: instead, the truth or falsity of this assumption lies at the very heart of the semanticist versus pragmaticist debate.

The pragmaticist position, then, is that free enrichment is a pragmatic process, a function of a pragmatic *performance mechanism*, and not a component of a model of *grammar/linguistic competence*. Introducing covert optionals into the grammar might seem appealing if the alternative suggestion were to introduce an even more alien process – free enrichment – *into the grammar*. But since we are denying that the pragmatic effects in

²⁵ See King & Stanley (2005: 111-137) for discussion of these and other construals of the term ‘semantics’.

question here are any part of what is derived by the grammar, the advantage that covert optionals seem to have in this respect disappears. In the previous section, we argued that that they have no role in the process of comprehension. The further point here is that they are different from any familiar linguistic phenomena that they may be modelled on. First, in the case of overt indexicals, there is no need for any pragmatic process of deciding whether or not the indexical is there to saturate: if it is not pronounced, hence audible, it is not there. Second, there is the suggestion noted above that the variables are covert counterparts of overt adjuncts (Martí (2006: 141, 159)). Adjuncts are, by definition, optional and since we unarguably have overt adjuncts in the grammar, why not assume covert ones as well? The answer is that this would still not give us anything parallel to the optionality of these alleged optional covert indexicals, because when a construction to which an overt adjunct could be added is tokened, it does not come with a variety of logical forms corresponding to all the possible combinations of adjuncts that might be attached on different occasions: again, if some possible adjunct is not pronounced, it is not there in the sentence uttered. In contrast, it appears that all the various possible combinations of covert optionals would have to be tokened so as to be available for testing to see if one will prove to be a logical form corresponding to the hypothesized explicature.

A third possible way of interpreting Martí's suggestion is that the choice between the two logical forms is a kind of structural disambiguation, which is clearly an independently attested phenomenon. But this apparent analogy also fails. In known cases of disambiguation, the linguistic system provides two distinct *contents* and the hearer selects one of them (e.g. the well-known case of 'He saw the spy with the binoculars'). He would not arrive at a particular contentful structure without it having been presented as such by the grammar as a possibility. In the optional variables case, on the other hand, the hearer has first to access or infer a certain content via the context (i.e. pragmatically) and

then choose between two logical forms which differ only with regard to whether or not they contain a variable corresponding to one of the constituents of that inferred content.

Our general point here is that, once it is recognized that the conception of free enrichment used by the pragmaticist is not a grammatical one, the apparent advantage of covert optionals (that they are far more like attested components of the grammar than is free enrichment) is undermined. Moreover, as we argued in the previous section, positing optional covert elements of linguistic structure does not relieve us of the need to appeal to free enrichment or something very akin to it. In working out what the correct logical form is, the hearer has to recover the propositional content, by a process whose nature remains something of a mystery on the covert optional view, but, upon close examination, appears to be indistinguishable from free enrichment. This reveals a fatal tension in the semanticist approach between wanting to account for the smoothness and rapidity of communication, and wanting to maintain as formal a system as possible: the latter does not reflect the psychological reality of the comprehension process.

Martí insists that she is working on a model of linguistic competence (knowledge), so perhaps she would not be troubled by these on-line processing considerations. However, she does recognise that the competence representations she proposes (logical forms) must be available to the performance systems responsible for utterance comprehension (the syntactic parser and the pragmatics system). So, as we discussed in section 4, when she comes to give specific ‘derivations’ involving the (alleged) different logical forms for ‘It is raining’, she works with specific utterances (tokenings of the sentence type in particular contexts) and tries to show that, in certain instances, the indexical-containing logical form plays a key role in comprehension thereby obviating the need for free pragmatic enrichment. However, if our analysis in section 4 of the comprehension process is correct, there is, in fact, no role for a linguistic representation containing a covert location indexical

and all the specifically linguistic work of guiding interpretation is done by the simple variable-free logical form. This being so, it is difficult to see what is gained by including such representations in an account of linguistic competence. While it is a part of our linguistic competence that we know that the sentence ‘It is raining’ can be modified by a location constituent, this knowledge is simply a consequence of very general grammatical principles (of phrase structure) as is our knowledge that ‘It rained/is raining’ (and many other sentences) can be modified by a temporal constituent or a manner constituent (e.g. ‘It rained constantly and heavily last week’). Such modified structures comprise distinct sentence types and no purpose is served by building this sort of knowledge into the linguistic representations underlying the simple sentence type ‘It is raining’. In short, even if the aim is just to model ‘semantic competence’, leaving aside performance issues, there is no role for these covert optional elements.

6. Conclusion

The primary motivation for positing hidden indexicals (obligatory or optional) is the worry about the apparently unsystematic nature of pragmatic enrichment (see especially Stanley 2007). However, a major challenge for the semanticist is how to account for the optionality of many pragmatic contributions to explicature. The proposed solution we have been considering here is that these contributions are the values of optional aphonic elements that are part of the logical form of the sentence uttered. We have argued that this proposal does not work: such elements are redundant as far as the interpretation process is concerned, and moreover, have no role in a model of linguistic competence. Recall that the overarching goal of both camps in this debate is to explain the generally rapid and effortlessly smooth process of grasping an utterance’s truth-conditional content. If our arguments are correct,

covert variables have no role in explaining this, and moreover, the optional variety appears to introduce additional complexity by requiring an extra process of structural disambiguation.

A wider point against the overall semanticist strategy is that it is highly improbable that free pragmatic enrichment can be entirely dispensed with. For instance, causal meanings are frequently inferred, as in the much discussed case of ‘and’-conjunctions such as (28), but also in a range of other cases, exemplified by (29)-(31):

- 28. Amy hit Max and he burst into tears.
- 29. The boss fired the employee who was embezzling money.
- 30. The drug-addled undergrad fell off the Torrey Pines cliffs.

((29) and (30) taken from Kehler & Rohde 2015)

- 31. LGBT couples can be refused service under new Mississippi law.

(Headline in *The Guardian*, 5th April 2016)

In understanding (29), we take it that there is a causal connection between the embezzling and the firing, and similar causal connections are inferred in the other examples. These causal meanings contribute to explicature (intuitive truth-conditional content), but it would be very difficult to make a case that any particular words in these examples contain a covert variable that would give rise to this meaning (see also the further range of cases discussed in Hall 2008 and Clapp 2012a). The key point here is that, unless all pragmatic contributions to explicature/truth-conditional content, other than disambiguation, can be plausibly analysed as saturation of (overt or covert) indexicals, the semanticists face exactly the same challenge that they issue to the pragmaticist: they need an account of the pragmatic constraints that allow some enrichments but exclude others. To conclude, then,

covert indexicals play – at most – a minor role in explaining hearers’ grasp of explicature, and contributions from free pragmatic enrichment are unavoidable.

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