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François Recanati, Anouch Bourmayan

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## 7

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## Transitive Meanings for Intransitive Verbs\*

ANOUGH BOURMAYAN AND FRANÇOIS RECANATI

This chapter is about certain properties of verbs like ‘eat’ which have both transitive uses (‘John eats pasta’) and intransitive uses (‘John eats’). There are two standard views regarding such verbs. According to the first one, the verb always denotes a relation between an agent  $x$  (in the case of ‘eat’, the EATER argument) and some object  $y$  (the FOOD argument), but on the ‘intransitive’ uses of the verb the object remains *covert*—it is not articulated in surface syntax, though it shows up at LF. The logical form of ‘John eats’ is therefore something like ‘John eats [something]’, where the materials within square brackets correspond to a covert syntactic element with indefinite value.<sup>1</sup> We will refer to this view as the *covert indefinite view* (CIV). The other view, which we call the *genuine-intransitive view* (GIV), assigns two distinct (though related) lexical entries to transitive and intransitive ‘eat’. Transitive ‘eat’ denotes a relation between the EATER argument and the FOOD argument:

$$[[\text{eat}_{\text{tr}}]] = \lambda x \lambda y \text{ EATS}(x, y)$$

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<sup>1</sup> In this paper we are concerned with intransitive verbs whose implicit object is indefinite. Verbs which take a definite implicit object will be briefly discussed in Section 7.5.

Intransitive ‘eat’ does not denote a relation, but a property, namely the property one can generate by applying Quine’s DER operator to the two-place predicate which transitive ‘eat’ contributes to logical form: the property  $x$  has whenever *there is a  $y$*  such that  $x$  eats  $y$  (Quine 1960: 229–31). The lexical entry for intransitive ‘eat’ is:

$$[[\text{eat}_{\text{intr}}]] = \lambda x \exists y \text{ EATS } (x, y)$$

On this view, intransitive ‘eat’ takes no syntactic object, not even covertly at LF. It contributes a monadic property, namely  $\lambda x \exists y \text{ EATS } (x, y)$ .

We take it that the GIV has a *prima facie* advantage over the CIV. The CIV has an extra burden: it must account for the fact that the indefinite object of intransitive ‘eat’ can only take narrow scope with respect to operators like negation. On the GIV, this follows from the fact that the object in question is part of the *lexical entry* of intransitive ‘eat’ rather than being syntactically articulated at LF. So, following Recanati (2002), we assume the genuine-intransitive view; but nothing, we take it, hinges on this choice, and what we have to say about the specific topic of this chapter, namely the ‘definite’ interpretations sometimes carried by the verb on its intransitive uses, could presumably be rephrased in the CIV framework.<sup>2</sup>

According to both the CIV and the GIV, there is an understood FOOD object whenever intransitive ‘eat’ is used. That object features either (through existential quantification) as part of the lexical entry of intransitive ‘eat’ (GIV), or it features as part of the logical form of the sentence in which the verb occurs (CIV). Both the GIV and the CIV acknowledge the fact that the understood object has to be *indefinite*. This is in contrast to other verbs, like ‘notice’, which can also be used intransitively, as in ‘John noticed’, but whose implicit object, on such uses, has to be definite (Fillmore 1986).

Still, there are readings on which intransitive ‘eat’ seems to take a *specific* FOOD argument in context. Those readings, which are the topic of this chapter, are mentioned in Recanati (2002):

- (7.1) We can imagine a context in which ‘Look! He’s eating!’ would be understood as stating not merely that the individual denoted by ‘he’ is eating something or other, but that he is eating a certain salient piece of food, e.g. a dangerous mushroom which has been the focus of attention for some time. (from Recanati 2002: 315–16)

The specific argument may be determined by anaphoric means, as in this example from Wilson (1998):

- (7.2) They gave Socrates the hemlock, and he drank.

<sup>2</sup> For recent criticism of the GIV, see Gillon 2012.

Finally, as Recanati (2002) pointed out, there are also examples in which the FOOD argument, albeit specific, varies with the values introduced by a quantifier, as in:

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

On the intended interpretation, it is understood that, whenever the occasion presents itself, John eats the mushrooms his father has cooked.

Where do these specific objects come from? To accommodate them, one might revise the semantics by letting the intransitive verb take *either* an indefinite or a definite implicit object (see Recanati 2010: 80 for the suggestion that some lexical items take an implicit argument that can be understood either way). Alternatively, one may try to account for the ‘definite’ interpretations in the pragmatics while maintaining that, semantically, intransitive ‘eat’ only means EAT SOMETHING. That is what Recanati (2002) did: he adopted a pragmatic explanation. Critics, Martí and Stanley, agree that this is the right thing to do. But they disagree about the nature and status of the appropriate pragmatic explanation.

According to Recanati (2002, 2004), the definite implicit objects in Examples (7.1)–(7.3) result from a pragmatic process of ‘free enrichment’ of the meaning of ‘eat’. Free enrichment can affect truth-conditions even though it is a purely pragmatic process. The existence of such processes (purely pragmatic processes that nevertheless affect truth-conditions) is controversial, and that is one of the key issues in the debate between Recanati (2002) and Stanley (2000) over the semantics/pragmatics interface. In Section 7.1 we will present Recanati’s analysis, and his use of examples like (7.3) in arguing against Stanley (2000).

In Section 7.2, we will present Martí’s and Stanley’s responses, based on a re-analysis of all the examples (Martí 2006; Stanley 2005, 2007). According to these authors, the specific FOOD argument does not reach into the level of truth-conditional content, so it can be ignored (it is only a matter of implicature or background assumption). Martí and Stanley base their claims on a new class of examples involving negation, and we agree that their examples cast doubt on Recanati’s analysis in terms of free enrichment.

In Section 7.3, we will offer a new analysis of the phenomenon, couched in a situation-theoretic framework. The new analysis attempts to steer a middle course between Recanati’s earlier analysis and the view put forward by Martí and Stanley. To a large extent, it preserves the two main claims of Recanati’s earlier analysis: (i) the specific FOOD argument at stake is contributed as a result of some kind of pragmatic inference—it is a ‘pragmatic object’, as we shall say from now on—yet (ii) the pragmatic object in question nonetheless affects truth-conditional content (at some level—though not the same as on Recanati’s earlier analysis). We will then argue that the Martí–Stanley examples involving negation can be accounted for within our framework (Section 7.4), and we will draw general conclusions regarding the semantics/pragmatics interface and the Recanati/Stanley debate (Sections 7.5 and 7.6).

### 7.1. The free enrichment account

Through free enrichment, a lexical item (or, for that matter, a complex phrase) can be understood in a more specific sense than the sense it literally has. For example, intransitive ‘drink’ is often understood in the specific sense DRINK ALCOHOL—so often that this sense has been lexicalized, making intransitive ‘drink’ polysemous. In the same way, ‘smoke’ can mean SMOKE TOBACCO, SMOKE POT, or (less conventionally) SMOKE COCAINE or what-not; and ‘eat’ similarly can be used to mean EAT DINNER, as in the following dialogue inspired by Wilson and Sperber (2002: 607):

- Have you eaten?
- No. I’ve had a few peanuts, that’s all.

If ‘eat’ were not understood in the specific sense EAT DINNER, it would be self-contradictory to assert in the same breath that one has not eaten and that one has eaten a few peanuts.

Free enrichment can be represented as mapping the property denoted by ‘eat’ or ‘drink’, viz  $\lambda x. \exists y \text{ EATS } (x, y)$ , onto a more specific property, namely  $\lambda x. \exists y \text{ EATS } (x, y) \ \& \ Fy$ , where ‘F’ is a contextually salient property of the thing eaten or drunk, viz the property of being alcoholic, or of being dinner. Underlining means that the property in question is contributed on pragmatic grounds (following the convention set up in Recanati 2010).

Note that the same semantic effect—the transition from  $\lambda x. \exists y \text{ EATS } (x, y)$  to  $\lambda x. \exists y \text{ EATS } (x, y) \ \& \ Fy$ —can be achieved by morphosyntactic means. In languages such as West Greenlandic, some verbs can undergo a process of ‘incorporation’ of their direct objects which yields noun-verb combinations behaving like single, verbal, morphological items (van Geenhoven 1998; Martí *ms.*). The extent and the exact definition of noun incorporation is still a matter of debate, but the phenomenon overall corresponds to constructions where the verb and one of its argument build a very tight, cohesive unit. Indeed, as shown in (7.4), incorporated objects in West Greenlandic, unlike their non-incorporated counterparts, are not marked for case; the verb itself is marked by the intransitive morpheme, and there is no longer any object agreement inflection on the verb:

(7.4) *West Greenlandic*

Arnajaraq	<b>eqalut</b>	-tur	-p	-u	-q
A.ABS	salmon	-eat	-IND	-INTRAN	-3SG
‘Arnajaraq ate salmon’ (literally, ‘Arnajaraq salmon-ate’)					

According to van Geenhoven (1998), the incorporated object of the verb does not correspond to a genuine argument: it does not denote an individual of type  $e$ , but rather a property of type  $\langle e, t \rangle$ . What the incorporated object contributes, we submit,

is the property  $Fy$  which characterizes the output of the mapping from  $\lambda x. \exists y \text{ EATS } (x, y)$  to  $\lambda x. \exists y \text{ EATS } (x, y) \ \& \ Fy$ . The verb-cum-incorporated-object then does not denote a relation between two individuals, as transitive verbs do, but rather behaves like an intransitive verb, denoting a monadic property. (Indeed, as we already said, verbs with incorporated objects are marked with the morpheme of intransitivity in West Greenlandic.)

The semantic features that are common to incorporated objects and the ‘pragmatically enriched’ readings of verbs like intransitive ‘eat’ can be accounted for in several ways. On one account, the parallelism shows that the notion of ‘free enrichment’ misclassifies a phenomenon which is, at bottom, syntactic rather than pragmatic (Marti forthcoming). Alternatively, one can argue that the same semantic effect can be achieved by morphosyntactic means or by pragmatic means (Bourmayan, *ms*). This is the view we favour.

Now, as Neale (2004: 171–3) pointed out, a property  $F$  that is contextually provided through free enrichment can also be a singular property, viz the property of being *identical to a given object*  $a$ . In the case of ‘eat’, this type of singular enrichment yields interpretations along the following lines:

$$(7.5) \quad \lambda x. \exists y \text{ EATS } (x, y) \ \& \ \underline{y = a}$$

This is how one can analyse Recanati’s ‘mushroom’ example, or Wilson’s ‘hemlock’ example, within the free enrichment framework. The enrichment of DRINK into DRINK THE HEMLOCK is similar to the enrichment of DRINK into DRINK ALCOHOL, with the only difference that the contextually salient property of the thing drunk is a singular property (the property of being identical to the hemlock mentioned in the first conjunct) rather than a general property like the property of being alcoholic.

Let us now turn to examples like (7.3), where the implicit FOOD argument of the verb is bound. This example was first mentioned by Recanati (2002) in his debate with Stanley (2000) over the possible effects of context on semantic content. That debate is relevant since Stanley denies the existence of free pragmatic processes of enrichment and therefore needs to account for the examples in a different way (see Section 7.2).

According to Stanley (2000), context contributes to semantic content only by providing values for indexicals or free variables in logical form. This corresponds to what Recanati calls the contextual process of ‘saturation’. Saturation (the assignment of values to context-sensitive items) is a linguistically controlled pragmatic process. But, according to Recanati, there are *also* pragmatic processes of ‘modulation’ that are not mandated by the linguistic material but take place in order to make sense of the speech act. Modulation consists in contextually assigning to a linguistic expression some occasional meaning distinct from its standing meaning. According to Recanati, modulation affects the intuitive truth-conditions of an utterance. Thus in ‘There is a lion in the middle of the piazza’, ‘lion’ may be understood (through

modulation) as meaning a statue of a lion. Free enrichment is a special case of modulation, whereby the meaning of a linguistic expression is mapped to a more specific (richer) meaning. Now, as we said already, Stanley denies that such cases exist, and acknowledges only ‘weak’ pragmatic effects on semantic content, that is, pragmatic effects traceable to logical form (King and Stanley 2005: 118–19). To show that, in a particular case, a contextual effect on content is a weak pragmatic effect (resulting from saturation) rather than a strong pragmatic effect (resulting from modulation), Stanley appeals to the ‘Binding Criterion’. If what the context contributes in the case at issue (e.g. the location of rain in ‘It is raining’) can be made to vary with the values introduced by a quantifier (as in ‘Everywhere I go, it rains’), this shows that there is a variable in logical form, since only variables can be bound. The presence of an underlying variable means that the role of the context in ‘It is raining’ is merely that of assigning a particular value to the location variable in logical form (a variable that can either be contextually assigned a value, as in ‘It is raining’, or bound by an operator, as in ‘Everywhere I go it rains’). This is saturation, not modulation, contrary to what Recanati claims.

Recanati’s response is that the Binding Criterion ‘works too well’ (2002: 324): it over-generates. Thus, in the case of intransitive ‘eat’, there is no free variable for the FOOD argument in logical form. Even if one opts for the CIV (rather than the GIV) and posits a variable for the FOOD argument at LF, that variable will be bound by an existential quantifier, rather than free. Still, the FOOD argument can be made to vary as a result of quantification. This is what Example (7.3) was meant to show. Recanati concludes that there is something wrong with the Binding Criterion and the idea that there is no quantification without a (pre-existing) free variable available to be bound.

In his 2002 paper, Recanati did not provide an analysis of the utterance on the bound reading. He merely used it to cast doubt on Stanley’s Binding Criterion. However, if one tries to implement the free enrichment analysis for that sort of case, one will presumably have to substitute a variable ‘*z*’ for the constant ‘*a*’ in formula (7.5) and let the variable ‘*z*’ be bound by a higher quantifier. Intuitively, one says that whenever there is a *z* such that MUSHROOMS (*z*) and COOKED-BY-JOHN’S-FATHER (*z*), then there is a *y* such that John eats *y*, and  $y = z$ . The clause ‘and  $y = z$ ’, provided through free enrichment, does the same work here as the singular clause ‘ $y = a$ ’ in the deictic case.

## 7.2. Do pragmatic objects affect truth-conditional content?

Martí and Stanley think the examples in which the verb allegedly takes a pragmatic object should all be re-analysed. Martí discusses the following version of Recanati’s mushroom example:

(7.6) 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! (Martí, 2006: 137)

According to Martí, Luisa's utterance in (7.6) expresses the proposition that Andrew is eating something, NOT the more specific proposition that he is eating the mushrooms. Yet it is easy to be misled into thinking that the utterance is true iff John eats the mushrooms: that is so because (i) the proposition that John is eating something is true in a situation in which John eats the dangerous mushrooms, and (ii) in the context of (7.6) this is the sort of situation the conversational protagonists have in mind. Martí concludes:

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 reading, I claim). (2006: 157)

Likewise, Martí argues against the analysis of examples like (7.7), inspired by Wilson's example (7.2), as involving a pragmatic object anaphorically inherited from the first conjunct.

(7.7) John bought pizza and then he ate.

One is of course tempted to interpret the second conjunct of (7.7) as meaning that John ate pizza, but this, according to Martí, is an illusion: the utterance is actually true if and only if John bought pizza and then ate *something*.

According to (7.7), did John eat the pizza? Yes, that is compatible with what (7.7) says, as is any situation in which John eats anything at all. . . . *John bought pizza and then he ate something* has the same range of interpretations as (7.7). In other words, since pizza counts as something, and since pizza is highly salient and relevant in (7.7), there might be cases in which it looks as though the silent object of 'eat' is establishing an anaphoric relation with a previously introduced entity, but one need to look at the whole set of facts. (Martí, ms.)

The same considerations apply to the example in which the pragmatic object of intransitive 'eat' appears to be bound, viz (7.3) above. According to Martí, the second conjunct of (7.3) is true if and only if, whenever his father cooks mushrooms, John eats *something or other, no matter what*. So she denies the existence of the reading invoked by Recanati in his critical discussion of Stanley's Binding Criterion. To be more precise, what she denies is that the interpretation described by Recanati achieves the status of a reading and corresponds to the utterance's truth-conditions: if pragmatic object there is, she claims, it does not reach into the truth-conditional content of the utterance but comes into play through some form of Gricean reasoning. Stanley similarly contends that the pragmatic object in (7.3) does not affect truth-conditional content:

Of course, when we hear an utterance of Recanati's (7.3), we are liable to assume that John ate the mushrooms his father cooked. . . . We would also assume he was not from Mars, and that he was not the product of in-vitro fertilization. . . . Such information has nothing to do with intuitive truth-conditions of an utterance. (Stanley 2005: 250–1)

To drive their point home, Martí, and following her, Stanley, resort to what Martí calls the 'negation test' (Martí 2006: 156). For each of Recanati's examples, Martí constructs a negative variant, on the plausible assumption that what is negated in the variant is the same proposition as what is asserted in the original example. In Martí's scenario below, Sally utters the positive variant and Tobias, in response, the negative one:

(7.8) 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 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.

According to Martí (2006: 155), Tobias' answer in (7.8) does not mean that David is not eating dangerous mushrooms. Tobias's answer would be considered as true only in a situation where 'David is not eating anything but is moving his jaws for some other reason (e.g., he could be chewing gum)'. Since Tobias' retort in (7.8) is supposed to be the mere negation of Sally's assertion—equivalent to Luisa's assertion in (7.6)—this invalidates Recanati's analysis of (7.6) as involving a pragmatic object, namely the poisonous mushrooms.

Martí applies the negation test to the example in which the pragmatic object of intransitive 'eat' appears to be bound. The negative variant she provides is the first sentence of (7.9):

(7.9) When John cooks mushrooms, Sally never eats. # Instead, she eats pasta with tomato sauce. (from Martí 2006: 154)

As emphasized by Martí, the second sentence in (7.9) cannot be added felicitously, which argues against the presence of a pragmatic object in the content expressed by the first sentence. Indeed, if 'eat' in the first sentence of (7.9) could be understood as meaning *EAT THE MUSHROOMS COOKED BY JOHN*, there would be no issue in stating that Sally ate something else, for example pasta with tomato sauce. But this does not seem to be possible: the second part of the utterance is clearly at odds with the first part. Hence Martí's conclusion that intransitive 'eat' in (7.3) is not assigned a pragmatic object at the semantic, truth-conditional level. She concludes by dismissing the whole set of examples as semantically irrelevant:

The right empirical generalization about intransitive ‘eat’ seems to be, as has been noted in the literature before (see, e.g., 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. (Martí 2006: 136)

To sum up, Martí and Stanley argue that intransitive verbs like ‘eat’ cannot take pragmatic objects, or at least, that such objects cannot affect truth-conditions. To make their point, they rely on the negation test. As we shall see in Section 7.4, the intuitions about the negative examples are not as clear-cut as they claim. Thus we agree with what Martí says about the interpretation of the last sentence in Example (7.8) but find it possible to devise other examples in which the allegedly inexistent reading is exemplified. Still, we agree with Martí and Stanley that examples like (7.9) are no good, a fact that needs to be explained. But we’re not satisfied with their own account, for they deny what we take to be obvious: that there is an interpretation of examples like (7.2) or (7.3) in which ‘eat’ intuitively takes a pragmatic object, in such a way that the utterance counts as true only if, in the relevant circumstances, John eats the mushrooms.<sup>3</sup> That interpretation stands in sharp contrast to another interpretation, which we call the ‘literal’ interpretation, in which ‘eat’ means EAT SOME—UNSPECIFIED—FOOD. This interpretation, less obvious and natural, can be made salient by manipulating the context.<sup>4</sup> Far from casting doubt on the readings involving pragmatic objects, the existence of ‘literal’ interpretations shows that there is a genuine contrast which should be taken on board. To account for these various interpretations, as well as for the negation facts uncovered by Martí and Stanley, is the task we set for ourselves in this chapter.

### 7.3. A situation-theoretic approach to pragmatic objects

In what follows, we use the framework of situation semantics (Barwise and Perry 1983; Barwise 1989; Kratzer 1989) to capture the truth-conditions of ‘eat’-sentences

<sup>3</sup> García-Carpintero (personal communication) objects that this is too strong. Martí and Stanley, he claims, do not deny that there is such an interpretation, but take it to be something like a conversational implicature, that is, a purely pragmatic component of meaning.—The debate, however, bears on the issue of truth-conditional content. A pragmatic component of meaning may or may not affect the intuitive truth-conditions of the utterance. Standard particularized conversational implicatures do not. (If, in answer to the question ‘can you cook?’, François answers ‘I am French’, he thereby implies that he can cook, but the answer does not strike anybody as *false* if it turns out that François can’t cook). In all cases in which a pragmatic process does impact truth-conditions at some intuitive level, it cannot be ignored, we take it, but must be taken on board. So what we are after is a satisfactory (semantic-*cum*-pragmatic) analysis that accounts for our intuitions regarding truth-conditional content. Such an analysis can’t start by *ignoring* the data it is supposed to account for.

<sup>4</sup> For example, we can imagine a context where the very fact of his father’s cooking mushrooms makes John feel much better—because he enjoys the smell of the mushrooms cooked by his father, or because a nice memory is attached to this image—and this leads him to eat not only the mushrooms cooked by his father but virtually anything he is offered. In such a context (7.3) might be given the literal interpretation: Whenever his father cooks mushrooms, John eats something.

when they do and when they do not involve pragmatic objects. In situation semantics, a proposition is modelled as a set of situations (rather than a set of possible worlds). An utterance which expresses the proposition that  $p$  counts as true iff the topic situation (the situation the speaker talks about) is a member of the set of  $p$ -situations.

Situations consist of particulars having properties and standing in relations. Situations are ordered via a sui-generis part-of relation. A situation is part of another one, which *extends* it, just in case whatever holds in the former holds in the latter. For a situation  $s'$  to count as an extension of  $s$ , all the particulars featuring in  $s$  must also occur in  $s'$ , and they must instantiate all the properties and relations that they do in  $s$ . For example,  $s$  might be a situation in which Anouch is talking to François, and  $s'$  a situation in which Anouch is talking to François and François is listening. The bigger situation  $s'$  contains  $s$  as a proper part: it extends  $s$ . Both  $s$  and  $s'$  in this example are situations in which Anouch is talking to François, but only  $s$  is a *minimal* situation in which Anouch is talking to François. A *minimal situation such that*  $p$  (for short, a minimal  $p$ -situation) is a situation which contains just enough individuals, relations and properties to make it the case that  $p$ , that is, a situation which does not itself contain as a proper part any smaller situation which (already) makes it the case that  $p$ . The situation  $s'$  in which Anouch is talking to François and François is listening is not a minimal situation in which Anouch is talking to François because it contains as a proper part the smaller situation  $s$ , in which Anouch is (already) talking to François.

In this framework, a possible world is a maximal situation, that is, a situation which cannot be further extended. In contrast to Kratzer, who adopts Lewis's counterpart theory (Lewis 1968, 1973, 1986), we do not take individuals and situations to be 'world-bound', that is, to belong to only one possible world. For us, a given situation—say, the actual situation in which we presently find ourselves—exists in all the possible worlds which maximally extend it.

In the situation-theoretic framework, the semantics of a verb like intransitive 'eat' is given by the following formula:

$$[[\text{eat}_{\text{intr}}]] = \lambda x \lambda s. \exists y \text{ EATS } (s, x, y)$$

Intransitive 'eat' thus denotes the relation that holds between an individual and a situation iff there is something that the individual eats in that situation. Now there are two possible cases. Depending on the discourse and the context, the situation  $s$  in which the eater is said to eat something may be left unconstrained with respect to the FOOD argument, or it may be restricted: the relevant situation  $s$  may be one in which only a certain type of food is available. Restricting the situation in this way will have the same effect as restricting the existential quantifier ' $\exists y$ ' in the lexical entry of

intransitive ‘eat’: to say that John eats, in a situation in which the only edible things are the mushrooms cooked by John’s father, amounts to saying that John eats the mushrooms cooked by his father. (This is very much like contextual domain restriction. If I say ‘Everybody came’, and the situation I am talking about is a situation with only three individuals *a*, *b*, and *c*, my assertion amounts to the claim that *a*, *b*, and *c* all came.)

In this way, we can account for the ‘intrusion’ of pragmatic objects into truth-conditional content. Once the variable ‘*x*’ in the lexical entry of intransitive ‘eat’ is saturated through composition with the subject term, the sentence (‘he eats’) expresses a proposition, that is, a set of situations, and is true if and only if the topic situation belongs to the set. We account for the (deictic and anaphoric) readings by suitably restricting the topic situation. On both the deictic and the anaphoric readings, attention is focused on a particular food object, and the predicate EAT is evaluated with respect to a restricted situation in which that object is the only food available. On the anaphoric reading, the focusing of attention is done through linguistic means; on the deictic reading attention is focused through extra-linguistic means.

Let us now turn to the cases in which a pragmatic object is bound, as in Recanati’s example, which we repeat here:

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

The most salient reading of (7.3) involves a specific object whose value co-varies with the values introduced by the temporal clause. Yet, as we emphasized, this reading is not the only possible one, and needs to be distinguished from that where ‘eat’ keeps its literal value of EAT SOMETHING. How can we account for these two readings?

We may suppose that a sentence like (7.3), composed of a main clause and a subordinate clause starting with ‘whenever’, has the underlying semantic and syntactic structure of a conditional prefixed with a universal adverb of quantification:

(C) [[always [if *p*]] *q*]

In the situation-theoretic literature that kind of structure is usually assigned the following truth-conditions:

$\lambda p.\lambda q.\lambda s.$  in *s*, for every minimal *p*-situation *s*’, there is a *q*-situation *s*” which extends it

Here *s* is the topic situation—the situation we are talking about—and it is characterized by saying that for every sub-situation in it with certain features, there is an extension of that situation with some further features.

If we apply this to (7.3), we get the following truth-conditions:

(7.10)  $\lambda s.$  in *s*, for every minimal situation *s*<sub>1</sub> such that John’s father cooks mushrooms, there is an extension *s*<sub>2</sub> of *s*<sub>1</sub> such that John eats

This is the ‘literal’ interpretation of (7.3), involving no pragmatic object. The extended situation  $s_2$  contains John eating in addition to John’s father cooking mushrooms, but it may involve any additional ingredient, and in particular any other kind of food than the mushrooms cooked by the father. This in turn implies that there is no particular constraint on what John eats in the extended situation. He may eat the mushrooms cooked by his father or a pastrami sandwich or whatever.

To capture the other reading of (7.3), we need to define a new notion of extension, namely that of a *minimal* extension:

For any situation  $s$  and  $s'$ ,  $s'$  is a *minimal extension of  $s$  such that  $p$*  (or, for short, a *minimal  $p$ -extension of  $s$* ) iff  $s'$  contains  $s$  plus anything that has to be added to  $s$  to make it the case that  $p$ , but nothing more.

If we take  $s_2$  to be a *minimal extension of  $s_1$  such that John eats* we get the following truth-conditions for (7.3):

(7.11)  $\lambda s$ . in  $s$ , for every minimal situation  $s_1$  such that John’s father cooks mushrooms, there is a *minimal* extension  $s_2$  of  $s_1$  such that John eats

Here, the only difference from the truth-conditions given in (7.10) for the literal reading of the sentence consists in characterizing  $s_2$  not as an extension of  $s_1$  such that John eats, but as a *minimal* extension of  $s_1$  such that John eats. The situation  $s_2$  now contains everything  $s_1$  contains, namely John’s father cooking mushrooms, plus what is necessary to make the consequent true, namely John eating, but nothing more. In particular, no new food is introduced into  $s_2$ , besides the food already present in  $s_1$ , viz the mushrooms cooked by John’s father. This straightforwardly gives us the reading we are after. To say that John eats in such a situation is to say that he eats the mushrooms (since that is the only edible thing in that situation).

Elbourne (2005) resorts to the notion of minimal extension—without naming it that way—to account for the truth-conditions of quantificational structures such as (C) in general. If Elbourne is right and the notion of minimal extension belongs to the semantic interpretation of that structure from the start, we cannot use it as a discriminating tool for capturing the contrast between the two interpretations which we analysed in terms of minimal extension versus standard extension. However, the main reason why Elbourne wants to generalize the idea of minimal extension and make it part of the literal semantic content of structures like (C) is to account for donkey anaphora, by letting the donkey pronoun be evaluated with respect to a situation which, being a minimal extension of a minimal situation with a donkey, can contain no more than one donkey and is therefore bound to satisfy the uniqueness presupposition of the definite. But instead of appealing to minimal

extensions we can solve the uniqueness problem by appealing to *resource situations*, as Heim (1990b) did. So we see no reason to follow Elbourne here.<sup>5</sup>

As should be clear, we are not claiming that the sentence ‘whenever his father cooks mushrooms, he eats’ is *ambiguous* between the two readings (7.10) and (7.11). We take (7.11), corresponding to the ‘bound’ reading of (7.3), to result from pragmatic modulation of the basic meaning of (7.3). The basic meaning of (7.3), given in (7.10), involves the notion that one situation (the situation in which John eats) is an extension of another (the situation in which his father cooks mushrooms), and ‘extension’ here can be understood more specifically as ‘minimal extension’, just as ‘drink’ can be understood as ‘alcoholic drink’ through pragmatic modulation.

#### 7.4. Accounting for the negation data

Stanley (2005: 249) provides a ‘deictic’ version of Marti’s example (7.9):

Suppose Bill has cooked a mushroom dinner. Pointing at a dirty plate on the table, and intending to communicate that John has eaten the mushrooms Bill cooked, I utter:

– John ate.

Suppose one knew that John had just eaten, but he did not eat the mushrooms Bill cooked. It is still clearly not permissible to follow my assertion with:

– No he didn’t; he ate broccoli instead.

We share Stanley’s intuition that ‘no, he didn’t; he ate broccoli instead’ is infelicitous in that context and want to account for that fact. (Marti’s quantified example will be dealt with below.)

Stanley argues that ‘no he didn’t’ cannot mean that John did not eat the mushrooms, for if it did, adding ‘he ate broccoli instead’ would raise no difficulty. On the assumption that what is negated by ‘no he didn’t’ is the same thing as what is asserted by ‘John ate’, Stanley concludes that ‘John ate’ does not mean that John ate the mushrooms, but only that he ate something or other. Likewise, what ‘he

<sup>5</sup> Not only is the appeal to minimal extension not necessary to deal with donkey anaphora: it is not sufficient either. Heim (personal communication cited in Elbourne 2005: 58–9) emphasizes that we cannot, in this way, account for some donkey sentences, like:

If a donkey is lonely, it talks to another donkey.

Heim’s alternative analysis consists in evaluating the donkey pronoun *it* with respect to the situation  $s_1$  in which the antecedent holds—a minimal situation in which a donkey is lonely. (That situation counts as an auxiliary, or ‘resource’, situation as far as the interpretation of the consequent clause is concerned since the consequent clause as a whole is to be evaluated with respect to an extension  $s_2$  distinct from  $s_1$ .) That analysis makes the right predictions here, since  $s_1$ , qua minimal situation, does contain a single donkey. In contrast, Elbourne evaluates the pronoun with respect to the situation  $s_2$  which is a minimal extension of  $s_1$  such that the consequent holds. But in  $s_2$ , precisely because the consequent holds, there are *two* donkeys, so ‘minimizing’ the extension does not suffice to solve the uniqueness problem along the lines of Elbourne’s analysis.

didn't' means is that John did not eat anything; so when one adds 'he ate broccoli instead', a contradiction ensues, and this accounts for the intuitive infelicity of the example.

Stanley's reasoning is valid, but it relies on a premise which we deny: we deny that, if 'no he didn't' means that John did not eat the mushrooms, then it is unproblematic to add 'he ate broccoli instead'. Adding 'he ate broccoli instead' may well be problematic if, as we claim, the reason why 'no he didn't' intuitively means that John did not eat the mushrooms is that it is evaluated with respect to a situation containing only the mushrooms as food. That is what we said in section 7.3 about the positive example: we claimed that the reason why 'John ate' can mean that John ate the mushrooms cooked by Bill is that the words are evaluated with respect to a topic situation which involves only the mushrooms as potential FOOD argument. If so, then exactly the same thing should happen with 'no he didn't': to claim that, in the very same topic situation, John did not eat, amounts to saying that he did not eat the mushrooms cooked by Bill. Still, a difficulty arises if we add 'he ate broccoli instead'. It is due to the fact that the new clause is, by default, evaluated with respect to the same topic situation as before. This default tendency can be overridden, as we shall see below, but in the present example it is reinforced by the presence of 'instead'. In 'not P, instead Q', the use of 'instead' forces the clause Q it introduces to be evaluated with respect to the same situation as the alternative clause P (and its negation). Thus, the speaker is claiming that in the very same situation (a situation that contains only the mushrooms as food), John did not eat and ate broccoli. That is doubly contradictory. In the first place, the topic situation has been characterized as containing only the mushrooms as food, so no broccoli can be eaten in that situation.<sup>6</sup> Next, there is inconsistency in both claiming that John did not eat and that he ate broccoli. *That inconsistency persists even if, to avoid the first contradiction, we lift the restriction on the topic situation.* So the infelicity of 'No he didn't, he ate broccoli instead' is straightforwardly explained within our situation-theoretic framework, in a way

<sup>6</sup> García-Carpintero (personal communication) objects that, 'if this were correct, it would be wrong to utter, in reply to "John ate", this: "yes, indeed, he ate a big dish of broccoli".' But, he adds, 'I do not see why this should be wrong. If it feels pragmatically odd, it can be followed with "He did not eat any mushrooms, if that is what you were implying".' But on our view, the reply 'yes, indeed, he ate a big dish of broccoli' is acceptable, *provided* one lifts the implicit restriction on the topic situation (to avoid contradiction). That restriction is effective in the interpretation of the first sentence ('he ate'), but cannot operate in the interpretation of the interlocutor's response ('yes indeed he ate a big dish of broccoli') on pains of contradiction. That means that the sentence 'he ate' (in the speaker's mouth) and the response 'yes indeed he ate a big dish of broccoli' (in his interlocutor's mouth) *do not talk about the same situation*: one talks about, and is evaluated in, a restricted situation in which the mushrooms are the only food available, and the other not. (That shift in the situation of evaluation entails that the interlocutors are not really in agreement, for agreement and disagreement presuppose that the parties are talking about the same situation (Recanati 2007a: ch 11). The lack of genuine agreement accounts for the ironical flavor of the 'yes, indeed' in García-Carpintero's example.)

which is consistent with the intrusion of a pragmatic object into the truth-conditions of the utterance.

Let us now focus on the negation test applied to pragmatic objects that are intuitively bound by a quantifier, as in Martí's example (7.9):

(7.9) Whenever John cooks mushrooms, Sally doesn't eat. # Instead, she eats pasta with tomato sauce.

The point is to explain why the second part of (7.9) is not acceptable.

The first thing to do is to analyse the sentence schema 'whenever  $p$ , not- $q$ ' in the situation-theoretic framework. There are two options, depending on the scope we give to negation:

- for every minimal situation  $s$  such that  $p$ , **it is not the case that** there is an extension  $s'$  of  $s$  such that  $q$
- for every minimal situation  $s$  such that  $p$ , there is an extension  $s'$  of  $s$  such that **it is not the case that**  $q$

We choose the second option and give narrow scope to the negation. Following Cooper, we define a situation such that not  $q$  (a not- $q$  situation for short) as a situation  $s$  in which it is expected that  $q$  but which is prevented from being a  $q$ -situation because it is an  $r$ -situation and no situation can be both an  $r$ -situation and a  $q$ -situation.<sup>7</sup> An example of a situation in which John does not eat might be, for instance, a situation in which he refrains from eating, or a situation in which he is prevented from eating.

On our analysis, the first sentence of (7.9) says that for every minimal situation  $s_1$  in which John cooks mushrooms, there is a minimal extension  $s_2$  in which Sally doesn't eat (ie, she refrains from eating, or something like that). When the second sentence, 'she eats pasta with tomato sauce', is interpreted with respect to the same situation, we get a contradiction. The key idea, then, is that in (7.9) 'Sally does not eat' and 'she eats pasta with tomato sauce' are interpreted with respect to the *same* situation  $s_2$ . We have so far analysed  $s_2$  as a minimal extension of  $s_1$  such that Sally doesn't eat; if the same situation  $s_2$  serves to evaluate the next chunk 'she eats pasta with tomato sauce', we get a contradiction. An alternative analysis takes the *instead*-clause to be part of the overall quantificational structure, in such a way that  $s_2$  should be re-analysed as a minimal extension of  $s_1$  such that *Sally doesn't eat and she eats pasta with tomato sauce*. But this is, of course, no less contradictory. The same kind of contradiction arises if  $s_2$  is analysed as a *standard* extension of  $s_1$  (rather than a minimal extension). The problem arises whenever the two chunks 'Sally does not eat' and 'she eats pasta with tomato sauce' are evaluated with respect to the same situation.

<sup>7</sup> See Cooper (1997) and Recanati (2010: 105–6).

Now one may wonder why the chunk involving negated intransitive ‘eat’ and the immediately following chunk involving transitive ‘eat’ should necessarily be analysed with respect to the same situation. The situational framework should be flexible enough to allow the second chunk to be evaluated with respect to a different situation, to avoid the contradiction. This would enable pragmatic objects to pass the negation test, for there would no longer be any contradiction in claiming that a given individual doesn’t eat in a certain situation which only contains mushrooms as food, but eats pasta in a broader situation.

This turns out to be right. In the Martí–Stanley pattern of examples, the situation with respect to which we evaluate the chunk involving transitive ‘eat’ (e.g., ‘she eats pasta with tomato sauce’) tends to be assimilated to the situation with respect to which the preceding chunk involving negated intransitive ‘eat’ is evaluated. That default tendency, as we said, is reinforced by the presence of ‘instead’. Still, this default pattern may be overcome, as in the following example from Collins (*ms*):

Imagine that we are looking at where the mushrooms are kept and find the spot bare. We both know that Sam loves mushrooms and has no qualms about leaving the rest of the household with none. So, you say, ‘Sam ate’; I, who am in the know, respond with ‘No he didn’t; Sam ate broccoli’.<sup>8</sup>

Here the situation with respect to which ‘Sam ate’ and ‘he didn’t’ are both evaluated is a past situation  $s_2$  that is causally responsible for the observed lack of mushroom in the current situation  $s_1$ . The key feature of situation  $s_2$  is that it involves a transition from a mushroom-involving state to a mushroomless state. That situation  $s_2$  is described by the first speaker as a situation in which John ate (the mushrooms), while the second speaker rejects that description of the situation and claims that there is no eating (of the mushrooms) by John in that situation. Let us assume that something like that is on the right track and that the situation the interlocutors are talking and disagreeing about is indeed the situation which witnessed the disappearance of the mushrooms. On that assumption, it is pretty clear that the second speaker’s next utterance, ‘he ate broccoli’, is *not* evaluated with respect to the same situation  $s_2$ . John’s eating broccoli is evidently not an aspect of the situation which is causally responsible for the observed lack of mushroom. What the second speaker is arguing is roughly that there is no eating (of the mushrooms) by John in the situation  $s_2$  which the interlocutors are talking about, so something else in  $s_2$  must be responsible for the disappearance of the mushrooms.<sup>9</sup> The evidence the second speaker provides in favour of John’s not having eaten the mushrooms in  $s_2$  is that there is

<sup>8</sup> Laurence Goldstein finds this example infelicitous: ‘On seeing that there are no mushrooms in their usual place, I can easily imagine B saying “Sam!” or “Sam ate them”, but nobody would say “Sam ate”’. But it seems to us that B could say ‘Sam had (his) dinner’, which is more or less equivalent to ‘Sam ate’.

<sup>9</sup> The ‘something else’ can be made explicit: ‘No he didn’t—Sarah did’. Here  $s_2$  is described as a situation in which Sarah ate (the mushrooms) rather than a situation in which John ate (the mushrooms).

another, contemporaneous situation  $s_3$  in which John eats something else (the broccoli).

Examples (7.12) and (7.13), in French, also reveal the ability of pragmatic objects to pass the negation test when distinct situations  $s_2$  and  $s_3$  come into play:

(7.12) *Quand son père cuisine des champignons, Jean ne mange pas; mais il se rattrape sur le dessert.*

‘When his father cooks mushrooms, John doesn’t eat. But he makes up for it with dessert.’

(7.13) *Quand son père cuisine des champignons en entrée, Jean ne mange pas; mais il se rattrape sur le plat et le dessert.*

‘When his father cooks mushrooms for starters, John doesn’t eat. But he makes up for it with main course and dessert.’

In contrast to Martí’s and Stanley’s examples, (7.12) and (7.13), though a little strained, do not sound contradictory. That means that, in interpreting these two conjunctive sentences, one brings into play two distinct situations, one for each of the conjuncts. Why is that so? Several factors seem to be relevant. First, ‘instead’ has been replaced by ‘but’. Second, the use of ‘make up for’ suggests that one situation compensates for the other (so they must be distinct). Finally, the scenario of the meal and its different courses (starters/main dish/dessert) helps represent one situation as a—temporal—extension of the other.<sup>10</sup>

## 7.5. Two levels of truth-conditions

In situation semantics, there are two levels of truth-conditions for a given utterance. Sentences express contents (pieces of information or ‘infons’) that are evaluated at situations. The infon expressed by a sentence in context we call the *lekton*, after Recanati (2007a). The *lekton* determines a set of situations, and is true at an arbitrary situation just in case the situation in question is a member of that set. So the *lekton* has truth-conditions. But there is another level of truth-conditions for the utterance: the ‘Austinian proposition’. The Austinian proposition, which consists of the *lekton* together with a designated situation of evaluation, is true just in case the *lekton* is true

<sup>10</sup> In (7.12) and (7.13), the situation of evaluation progressively widens: the first conjunct talks about the ‘starters’ situation while the second conjunct shifts to the ‘whole meal’ situation. This widening of the situation of evaluation as discourse proceeds contrasts with Kuroda’s (1982) example, ‘Since it was so stuffy in the house, Mary went up to the attic and opened the window’, which displays the opposite pattern. In Kuroda’s example, the situations at issue become narrower and narrower: ‘the house’ is interpreted with respect to a given situation  $s_1$  involving the house plus extra things; ‘the attic’ is then interpreted with respect to a narrower situation  $s_2$  corresponding to the house (it is the attic of the house); and ‘the window’ is ultimately assessed with respect to a situation  $s_3$  corresponding only to the attic (it is the window of the attic).

at the situation in question. Features of the situation can therefore impact the truth-conditions, at the Austinian proposition level.

We agree with Martí and Stanley that when a verb like intransitive ‘eat’ takes a pragmatic object, that object does not affect the truth-conditions of the *lekton*. Just as ‘It is raining’ only says that there is a raining event (Recanati 2007b, 2010), ‘John is eating’ only says that there is an eating event whose agent is John. The location of rain, or the FOOD argument, is not specified at the *lekton* level. Yet, if we take the situation of evaluation into account, it may be restricted in such a way that a specific LOCATION argument, or a specific FOOD argument, becomes salient and affects the truth-conditions at the Austinian proposition level.

The contextual process which maps a given *lekton* to a full Austinian proposition (circumstance-determination, as we may call it) is neither saturation nor modulation. Both saturation and modulation are contextual processes which affect the *lekton*, but circumstance-determination directly affects the Austinian proposition (hence, ultimately, the truth-value), without touching the *lekton*.

The difference between pragmatic processes which (like saturation and modulation) directly affect the *lekton*, and pragmatic processes like circumstance-determination which only affect the Austinian proposition, enables us to dispose of a potential counter-example to our analysis from Lyn Frazier. Frazier provides variants of our examples, where ‘eat’ has been replaced with a verb whose intransitive status is less controversial (‘indulge’):<sup>11</sup>

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

(7.3\*) John is anorexic, but whenever his father cooks mushrooms, he indulges.

On the face of it, (7.3) and (7.3\*) seem to behave alike: both give rise to a ‘bound’ reading. This is expected, given our analysis. As Frazier puts it:

Pragmatic inferences should relate the indulgence to the mushrooms, just like they relate the theme of ‘eat’ to mushrooms, i.e., in both cases the lexical entry of the verb entails the existence of the indulgence or the object eaten, and the pragmatics relates the indulgence/food to context. (personal communication)

The potential problem for our analysis comes from the fact that (7.9\*) is fine, while (7.9) is no good:

(7.9) When John cooks mushrooms, Sally never eats. # Instead, she eats pasta with tomato sauce (from Martí 2006: 154)

(7.9\*) Whenever John cooks mushrooms, Sally never indulges. Instead, she eats pasta with tomato sauce.

<sup>11</sup> ‘Indulge’ admittedly has transitive uses, but it ‘does not typically take a direct object (and when it does, it is some form of appetite, not the thing indulged in)’ (Frazier, personal communication).

The reason why (7.9) is no good, we said, is that the ‘instead’-clause is evaluated with respect to the same situation as the previous sentence’s main clause. But if that were the case, then the same thing would presumably happen in (7.9\*), which ought to be no good.<sup>12</sup> But it isn’t. This suggests there is something wrong with our analysis.

However, we think there are significant differences between ‘indulge’ and ‘eat’, which account for the noted difference between (7.9) and (7.9\*). One obvious (but, *pace* Frazier,<sup>13</sup> irrelevant) difference is that ‘eat’ can take a direct object (‘John eats salmon’) while ‘indulge’ can only take an oblique object: ‘John indulges *in* such and such’. The other difference—the relevant one—is this: typically, when the object of ‘indulge’ remains implicit, it must be definite, like the implicit object of ‘notice’ or ‘enjoy’. ‘Notice’ and ‘enjoy’ are DNI verbs, in Fillmore’s classification (Fillmore 1986; Fillmore and Kay, *ms.*). They take definite implicit objects, in contrast to INI verbs like ‘eat’ or ‘read’ which take indefinite implicit objects.<sup>14</sup> ‘Indulge’ shares with DNI verbs the property that its object, when implicit, must be definite, at least in a central class of cases (illustrated by (7.9\*)). Semantically, it is like ‘notice’ in that it denotes a two-place relation. The difference between ‘indulge’, on the one hand, and ‘notice’ and ‘enjoy’ on the other, is syntactic and corresponds to the way the second relatum is articulated when made explicit (as a direct versus oblique object).

Now, with DNI verbs and their cognates, the contextual provision of a specific object is a matter of saturation. The utterance is *infelicitous* if the context does not provide an appropriate object, namely some particular thing which the subject is said to have noticed or indulged in. This is important because saturation affects the *lekton*. So, in (7.9\*), the proposition expressed by the first sentence is the proposition that when John cooks mushrooms, Sally never indulges *in mushroom-eating*. This is perfectly consistent with what the second sentence says, namely that (in those situations) Sally eats pasta with tomato sauce. In contrast, the definite object of intransitive ‘eat’ in our examples is not directly provided as a constituent of the *lekton*, but indirectly, through manipulation of the situation in which the *lekton* is evaluated. In (7.9), the main clause of the first sentence and the ‘instead’-clause are evaluated with respect to the *same* situation, so a contradiction arises: the situation is said to be such that Sally does not eat and (at the same time) eats pasta with tomato sauce. No such contradiction can arise when the implicit object is directly provided—before the encounter with the circumstance of evaluation, as Kaplan might put it—

<sup>12</sup> It ought to be no good *if* there is a contradiction between not-indulging and eating pasta with tomato sauce (just as there is a contradiction between not-eating and eating pasta with tomato sauce). If there is no contradiction, our theory predicts that the sentence ought to be acceptable (as it actually is). We do not press this point, because we believe Frazier’s example could be reformulated so as to make (7.9\*) more similar to (7.9) in this respect.

<sup>13</sup> Frazier thinks the contrast between (7.9) and (7.9\*) objects to the analysis we dubbed ‘GIV’.

<sup>14</sup> ‘DNI’ means ‘definite null instantiation’, and ‘INI’ ‘indefinite null instantiation’.

through saturation of the argument place in the lexical semantics of the verb, as in (7.9\*). (Examples similar to (7.9\*) could easily be constructed using DNI verbs like ‘notice’ or ‘enjoy’.)

## 7.6. Conclusion

In this chapter, we have attempted to steer a middle course between, on the one hand, Recanati’s earlier analysis of pragmatic objects in terms of free enrichment (a variety of modulation), and, on the other hand, the view put forward by Martí and Stanley, according to which pragmatic objects are irrelevant to truth-conditional content and should be ignored. An intermediate position turns out to be available because, thanks to the situation-theoretic framework, we end up with a finer-grained classification of pragmatic processes in their relation to truth-conditional content.

First, there are the pragmatic processes that affect conveyed meaning but can be ignored by the semanticist because they do not affect the truth-conditions of the utterance. Particularized conversational implicatures are a case in point. Martí and Stanley take the pragmatic objects of intransitive verbs like ‘eat’ to fall into that category, and that, we believe, is a mistake. Next, there is the process of circumstance-determination which affects the Austinian proposition, but not the *lekton*. In contrast to Recanati’s earlier analysis in terms of modulation, which we take to be refuted by Martí’s ‘negation test’, we argue that the pragmatic object of ‘eat’ should be handled at that level. Modulation belongs to the *next* level: that of ‘primary’ pragmatic processes, that is, pragmatic processes which directly affect the *lekton*.

It is almost universally accepted that saturation affects what is said in the narrow sense (the proposition expressed).<sup>15</sup> Contextualists like ourselves hold that free processes of modulation—processes which are not linguistically mandated, contrary to saturation, and therefore do not contribute to ‘literal meaning’—can also affect the *lekton*. Such processes are ‘primary’ and contribute to propositional content, even though they are not regulated by linguistic conventions, but are pragmatic through and through (Recanati 2004, 2010). So modulation is a ‘strong pragmatic process’ by Stanley’s lights: that is, a pragmatic process which affects truth-conditions but does not involve saturating a variable or pronominal element in logical form. Stanley denies that there are such processes: among pragmatic processes, he claims, only saturation (of an indexical or a free variable in logical form) has the power to affect truth-conditions. Saturation is a ‘weak’ pragmatic process, because it is linguistically regulated.

What about circumstance-determination, the process we take to be responsible for the generation of pragmatic objects? Is it a *strong* pragmatic process? Arguably, yes.

<sup>15</sup> We say ‘almost’ because some philosophers deny this (see Stojanovic 2006, 2009).

Even though it does not affect the *lekton*, it does affect truth-conditions at the Austinian proposition level. So it is a pragmatic process that affects truth-conditions (at some level), and, arguably, it does not involve saturating a variable or pronominal element in logical form. This makes it a strong pragmatic process (though admittedly not as strong as modulation, which affects truth-conditions at the *lekton* level).

Stanley can respond that circumstance-determination is regulated by linguistic rules and therefore should not count as a ‘free’ pragmatic process unconstrained by semantic conventions. For example, in complex sentences such as (7.3), the situation of evaluation for the main clause is directly provided by the semantics, through, for example, the lexical entry for ‘always’ (or other adverbs of quantification).

We agree with that observation. Circumstance-shifters, or their extensional surrogates, determine the situation(s) of evaluation for the content of the sentences in their scope, and do so in virtue of the semantic conventions of the language.<sup>16</sup> But the point we make concerns *autonomous sentences* rather than sentences embedded under a circumstance-shifting operator. We claim that the situation of evaluation in their case is the *topic situation*,<sup>17</sup> a situation that is determined on purely contextual grounds and is not articulated linguistically. Features of the topic situation, thus understood, are what accounts for the simple examples of pragmatic objects we started from, as well as, arguably, for the understood location of the raining event in the much discussed case of ‘it’s raining’.

Admittedly, this is not the end of the debate. Many linguists treat the ‘free’ situations (resource situations and topic situations) as syntactically articulated by means of free situational variables at LF. We deny that such a treatment is inevitable, and think there are philosophical arguments against it. On the view put forward in Recanati (2007a), only constituents of the *lekton* are articulated. This, however, is a highly controversial issue, both in linguistics and philosophy. Some authors defend a thesis of full articulation which is diametrically opposed to Recanati’s view (Schaffer, *ms.*, 2012). So it would be consistent and reasonable for Stanley to *accept* the situation-theoretic analysis of pragmatic objects presented here, while treating circumstance-determination as a special kind of saturation, namely the assignment of contextual values to free situational variables. This is not the view we favour, but nothing we said in this chapter directly argues against it.

<sup>16</sup> Even in that case, however, free contextual processes may come into play. Thus when the quantificational structure ‘Always (If  $(p, q)$ )’ is given the enriched interpretation in terms of minimal extension (rather than standard extension) this is an instance of modulation, we take it, rather than a form of semantic ambiguity. See Gardent (2005) for a pragmatic approach to minimization phenomena in the spirit of this paper.

<sup>17</sup> In addition to the topic situation a given utterance is globally about, there are ‘resource situations’ involved in the evaluation of specific constituents in the sentence, as in some of the cases we have just discussed.