Local Pragmatics and Structured Contents[*]

Mandy Simons
Carnegie Mellon University
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1. Introduction

There is a long-standing view that the Gricean model of conversational reasoning – the kind of reasoning that supports the identification of conversational implicatures – cannot accommodate cases of pragmatically generated modification of the contents of embedded clauses. Such modifications are often referred to as "embedded implicatures." I will instead use the term *embedded pragmatic effects*, to be defined explicitly below. [1] The goal of this paper is to argue that some of the supposedly

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[1] A reviewer of this paper observes that the term *embedded implicatures* seems fundamentally incoherent. The reason is that implicatures, on a strict Gricean construal, are things (let's say, for concreteness, propositions) that the speaker means, and the speaker, surely, cannot mean something embedded. In the linguistic literature, the term *conversational implicature* tends to be used in an extended, interpreter-oriented way, to refer to any content which is inferred via Gricean reasoning. The definition given below of embedded pragmatic effects is, I think, a reasonable construal of what is usually intended by the term *embedded implicature*.

The analyses to be developed in this paper do, I think, suggest how we might formulate a notion of embedded implicature which accords with the strict Gricean conception. Suppose that a speaker, in uttering a complex sentence S with constituent c and thereby saying (or making as if to say) p, implicates q; and intends the addressee to recognize that she so implicates by recognizing (via general considerations of Cooperativity) that she intends c to be given the non-literal interpretation i'. Then

problematic pragmatic effects can be accommodated within a Gricean framework, and indeed that these effects can be seen as continuous with ordinary, utterance-level, conversational implicature. I will further suggest, though, that embedded pragmatic effects do force us on us a particular conception of *semantics*. Specifically, I will argue that an adequate model of the data requires a semantic framework that posits structured representations or contents. One of my primary goals in this paper is to suggest such a model.

Let's begin by characterizing somewhat more precisely the kinds of effects that are the target of this discussion. I define embedded pragmatic effects as in (1). (Illustrative examples will come shortly.)

(1) <u>Embedded Pragmatic Effects</u>: Cases where the propositional content which falls under the scope of a linguistic operator (at some stage of interpretation) includes content which is the output of pragmatic inference.

It will be important for the discussion that follows to note that this definition makes reference only to the *output* of pragmatic inference. In contrast, discussions of "embedded implicature" are often concerned with the *input* to such inference. I will distinguish between embedded pragmatic effects, as defined in (1), and a different possible phenomenon, of *embedded pragmatic computation*, defined in (2).

(2) <u>Embedded Pragmatic Computation</u>: Cases where a pragmatic computation uses as premises the content of an unasserted embedded clause, or the observation that the speaker has expressed this content, combined with general pragmatic principles.[2]

It should be noted that the definition of embedded pragmatic computation is not inclusive enough, as formulated, to accommodate pragmatic effects of choice of form, effects which in the Gricean

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the speaker might be said to have produced an utterance with an embedded implicature.

Although I think some such notion could be useful, I will not make use of it in this paper.

[2] References to pragmatic computations should be understood as references to computations posited in the model, understood as rational reconstructions of inferences that might involve psychological processes of some very different nature. Like other Griceans, I do not claim that the model I propose is a processing model.

framework are traced to the Maxim of Manner. As one reviewer of this paper notes, the fact that Grice posited such effects demonstrates that it is not the case that all Gricean implicatures are generated by virtue of reasoning about *what is said*: Manner implicatures are generated by virtue of reasoning about *form*. My focus in this discussion, though, is on embedded occurences of pragmatic effects which, when they occur unembedded, are accounted for in standard Gricean models by making reference to what is said. The question I address here is how to model these occurences when the content which triggers the pragmatic inference is not said. Discussion of embedded Manner implicatures leads in a different direction, which I will not pursue here.

It is *not* my goal to argue that embedded pragmatic effects are conversational implicatures in the strict Gricean sense. If one is strict about terminology, then clearly they are not. Most, if not all, of the pragmatic enrichments I will discuss are cases of conversational impliciture (Bach 1994). Indeed, if we take Bach's distinction between implicature and impliciture seriously, then (as he has also pointed out, although arguing on different grounds (Bach 2011)) there can be no true cases of embedded conversational implicature. For in the case of conversational implicature (on Bach's view), the speaker *says* one thing but implicates something different: conversational implicatures are inherently separable from what the speaker says. But the whole point of embedded pragmatic effects is precisely that they are not separable from what is said: they are embedded.[3]

2   Think globally, act locally

In this section, I will focus on a phenomenon I call *local pragmatic enrichment*.[4] The same phenomenon at the global level has been argued to be a type of implicature by Horn 1984, by Atlas &

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[3] In this paper, I will largely avoid the particular question of embedded scalar effects, focusing instead on a set of cases which I think clearly cannot be reduced to a grammatical operation. The discussion in this paper contributes to the literature on embedded scalars only tangentially, that is, as a reminder that even if scalar effects turn out to be reducible, say, to the presence of an implicit operator, there are still important questions concerning the semantics/pragmatics interface that remain to be resolved.

[4] Following standard terminology in linguistics, I will use the term *local* to refer to phenomena at the level of embedded clauses, and *global* to refer to utterance-level phenomena. The term *enrichment* is used by various authors, including Recanati 2004 and elsewhere, and by the Relevance Theorists.

Levinson 1981 and by Levinson 2000. (For Horn, this is an instance of his R-implicature; for Atlas and for Levinson, this is an instance of I-implicature.) I will argue that in a large number of cases, local pragmatic enrichment can be modeled as a process aimed at making sense of the utterance as a whole, that is, as aimed at reconciling the utterance act with the requirements of Cooperativity. In these cases, the process of pragmatic enrichment is triggered by an apparent violation of Cooperativity at the *global* level. In the relevant examples, however, the global problem has a local solution.[5]

I should emphasize before starting that the point of the discussion is *not* to argue that the strategies to be suggested are the only possible theoretical treatments of the data. The discussion is intended as a plausibility argument that Gricean accounts of the phenomena in question are possible.

2.1 Disjunction

The first set of cases we'll explore involve apparent enrichments of disjuncts in clausal disjunctions. Here are some illustrations:

(3)　A:　What's making noise up in the attic?

　　　B:　Either there's a nest up there, or some squirrels have moved in.

　　　　　>> *nest* understood to mean "occupied nest"

(4)　A:　How will you get to Boston?

　　　B:　Either I'll rent a car or I'll fly.

　　　　　>> *rent a car* understood to mean "rent a car for the purpose of driving it to Boston"

(5) A:　What will you do for your mother's birthday?

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[5] I want to emphasize that the view to be developed here is quite different from that advocated by Sauerland 2004 and Russell 2006 with respect to certain cases of purported embedded scalar effects. In the works cited, the goal of the authors is to argue that the effects in question are in fact not embedded: they are global effects which merely give the appearance of being embedded. In contrast, I take the effects under consideration here to be embedded. I argue only that the local effects are in part a result of global Gricean reasoning.

B: Either I'll buy flowers or I'll cook a nice dinner.

>> *buy flowers* understood to mean "buy flowers and give them to my mother"; *cook a nice dinner* understood to mean "cook a nice dinner to share with my mother."

The relevant feature of these examples is this: Speaker A asks a question, and B replies with a disjunctive *or* sentence.[6] In each case, at least one of the disjuncts is such that, on its fully literal interpretation, it does not directly answer the question asked. We very naturally give that disjunct an enriched interpretation, as indicated for each example. If the sentences are so understood, then we have a case of a local pragmatic effect. I take all the examples to require more or less the same account. Here, I'll focus on the first disjunct of example (5).

First, some preliminaries: Notice that the enrichment of the first disjunct is just the same enrichment that would arise if this content were unembedded, as in (6):

(6)   A: What will you do for your mother's birthday?
       B: I'll buy flowers.
            >> *I'll buy flowers and give them to my mother for her birthday*.

The enrichment, in this case, has a straightforward Gricean explanation. Speaker A asks a question. Speaker B is presumed to be a cooperative interlocutor, so we expect that her response will be an answer to the question. Nothing indicates that her response is intended to opt out or be otherwise uncooperative. However, A presumably knows that simply buying flowers is not in itself something conventionally done to celebrate another's birthday; giving flowers, however, is. A further recognizes that it is reasonable for B to expect her to infer that if B buys flowers in connection with her mother's birthday, she does so with the intention of giving the flowers she buys to her mother; and so B intends to convey that she will buy flowers to give to her mother.[7] This is an instance of a Levinsonian I-

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[6] It is crucial that these are not merely *or* sentences (i.e. sentences in which *or* conjoins two clauses), but truly disjunctive *or* sentences. Not all *or* sentences are such: consider, for example, *Get down off the sofa or you'll fall* or *We'd better leave right away or we'll miss the bus*. The constraint on felicity to be invoked below applies straightforwardly only to disjunctive *or* sentences.

[7] The exact formulation of what is implicated matters. For example, on one formulation (*B will buy flowers and give them to her mother*), what might be considered the content of the enrichment contains

implicature, as it involves the interpreter amplifying the information content of the speaker's utterance up to what the interpreter judges to be the speaker's m-intended point. (See Levinson 2000: 114).

The second preliminary concerns disjunctive answers to questions: Where a disjunctive *or* sentence is given in answer to a question, it is felicitous only if each disjunct is interpretable as an answer to the question (Grice 1989: 68; Simons 1998, 2001). This can be explained in terms of the relevance of the disjunction as a whole to the question, adopting a standard analysis of questions and answers. We here take a question Q to be a partition over a subset *c* of the set of possible worlds (roughly, the current common ground of the conversation), where, intuitively, each cell of the partition corresponds to a possible exhaustive answer to the question. Then some proposition *p* constitutes an answer to Q only if the truth of *p* eliminates at least one possible answer to Q. In other words, where Q^c is the partition induced by Q on *c*, then *p* is an answer to Q relative to *c* iff $Q^{c \cap p} \subset Q^c$. If we further assume a standard (inclusive) Boolean semantics for disjunctive *or*, we derive the consequence in (7):

(7) For any question Q and context set (set of possible worlds) *c*:
$$Q^{c \cap A \, or \, B} \subset Q^c \text{ iff } Q^{c \cap A} \subset Q^c \, \& \, Q^{c \cap B} \subset Q^c$$

i.e. a sentence of the form *A or B* can provide an answer to a question Q (in the sense just articulated) only if each of A and B provides an answer in this sense.

Now let's return to our example (5) above, and attempt a Gricean reconstruction of the reasoning that leads to the observed enrichment.[8] At the first stage, we determine the content of the disjunction as a whole in a fully compositional manner. Now the interpreter must consider whether the utterance is pragmatically adequate. For the reasons just given, it isn't. Merely buying flowers is not a way to recognize someone's birthday (at least not in contemporary Anglo-American culture); hence, the first disjunct fails to provide an answer to the question asked. Consequently, the disjunction as a whole fails

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a variable which must be bound. I set aside these complexities here.

[8] Following many others (Saul 2002, Bach 2006, Soames 2008) I take the standard kind of presentation of Gricean reasoning to be a rational reconstruction of some inference process, not an explicit claim about processing. In particular, I do not wish to make any commitment to the claim that interpreters *actually* calculate full propositional content before engaging in any pragmatic inference. The question we are addressing here is whether Gricean resources allow us to provide a rational reconstruction in the case in question.

to do so. Let's further assume (as in fact seems to be the case), that no other way of making sense of the utterance suggests itself (e.g. it can't be understood as a "monkey's uncle" disjunction, it's not a way of opting out of answering the question, etc.).

Now we run standard Gricean reasoning: the speaker's utterance fails to provide an answer to the question asked. But it is presumed that the speaker intends to be cooperative; in particular, she intends to answer the question. So she must intend to convey something other than what she has literally said.

Now let's introduce some slight departures from standard Gricean accounts. First, let's assume that speakers recognize, at least implicitly, that the failure of relevance of the disjunction as a whole is due to the failure of relevance of the first disjunct. The interpreter might then reason as follows: the speaker has said *p or q*; but *p* is not in itself an answer to the question, and so renders the utterance as a whole irrelevant. So, *p* is not the intended content of the first disjunct. What might the intended content be? At this point, exactly the same reasoning that we invoked in the unembedded case comes into play. The difference is that the reasoning is used to determine only the content *of the disjunct*; and the result is an embedded pragmatic effect.

The account just given invokes only familiar types of Gricean reasoning. Crucially, although the result of this reasoning is enrichment of a disjunct, it was not necessary to take that disjunct to be subject to any Gricean maxim. The Gricean inference was triggered by the observation that the disjunction *as a whole* failed to satisfy the requirement of Relevance (in this case, relevance to the question asked). It was indeed necessary, in the analysis, for the interpreter to recognize that *the content of a particular disjunct* failed to satisfy the answerhood condition for disjuncts. But it was not necessary to take that content as being subject to the requirements of the Maxim of Relation. No Gricean reasoning taking that content as input was invoked.

2.2 Conditionals

It is easy to construct conditionals whose antecedents are naturally interpreted in a way which goes beyond their literal content. Here are some examples:

(8) A: What's making noise up in the attic?
   B: I'm not sure. But if there's a nest up there, we're going to have a heck of a mess to clean up.
   >> *If there's an occupied nest up there...*

(9) [Making plans to get together for an evening]

  If you cook dinner, I'll bring dessert.

  >> If you cook dinner for both of us and invite me to eat it with you...

(10) [Interlocutors are trying to figure out how to get to a conference in a different city; both know that their friend Harry is intending to go]

  If Harry rents a car, we could ride with him.

  >> If Harry rents a car to go to the conference...

First observation: in all of these cases, if the antecedent is given its literal interpretation, the resulting conditional makes a claim which the speaker is unlikely to intend to commit to. The presence of a possibly disused nest would not result in a mess; it's the birds occupying the nest that would be the problem. I'm unlikely to offer to bring dessert simply as a reward for you cooking dinner for yourself. And if Harry rents a car to drive to the airport to catch a plane to the conference, riding with him won't get us where we want to go.

  In the previous section, I was able to identify one simple condition – the answerhood condition – that triggered local enrichment in all of the disjunction examples. The factors that make these conditional assertions implausible if taken literally are more complicated. Certainly, it has something to do with the connection (or lack thereof) between antecedent and consequent. But for current purposes, all we need is the observation that the global content expressed is not content which an interpreter is likely to take the speaker to intend to convey.

  Consider what we might say about the discourse in (8). A, in interpreting B's utterance, first identifies the proposition literally expressed. But this, she figures, cannot be what the speaker meant. The speaker should mean something that she believes to be true (Maxim of Quality); but she can't plausibly believe that the presence of any nest (including abandoned nests) would generate a mess. So now the interpreter has the task of identifying the proposition that the speaker intended to convey. Again departing from standard Gricean reasoning, let's suppose that the interpreter recognizes that what makes the conditional implausible is that the antecedent is not restrictive enough; it's not the presence of any old nest that would result in a mess, but the presence of a nest with birds in it. Moreover, occupied nests would be more relevant to the current conversation than unoccupied ones,

as only the former could be responsible for the noise in the attic which is the current topic of conversation. Hence, this is the intended content of the antecedent.[9]

A similar story can be told for the other examples here. The general moral is the same as in the disjunction case above. The real Gricean reasoning takes place at the global level. The content of the utterance as a whole is recognized as somehow pragmatically inadequate, and, as per standard Gricean implicature, this triggers the search for a more plausible communicative intention. Taking our intuitions about the meanings of the sentences at face value, the best story would be one that allows that in order to make sense of the conditional as a whole, we find a way to refine the content of the antecedent. So, while the content of the antecedent is not the target of any Gricean maxim and does not serve as input to any Gricean calculation, this type of account does require that for purposes of pragmatic inference, we have access to the content of antecedent (and consequent).

2.3 Under embedding verbs

The next three cases involve enrichment of clauses under the scope of an attitude verb:

(11)   A: What's making noise in the attic?
        B: I'm not sure. Frank is worried that there's a nest up there, but I don't think there could be. There used to be holes under the eaves, but we've had everything fixed.
             >> ...worried that there's an occupied nest

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[9] Another way to think about this process is that the interpreter is seeking to establish an appropriate coherence relation between the antecedent and consequent. Various authors, including Asher & Lascarides 2003 and Kehler 2002, provide formal characterizations of such relations and models of processes whereby coherence relations are established between discourse units. These authors implicitly rely on the assumption that interpreters seek to render the conversational contributions of others coherent. For example, Kehler discusses cases where anaphora resolution is constrained by the goal of establishing a particular coherence relation. I would argue that in making this assumption, these authors implicitly adopt a Gricean stance with respect to the interpretation process: the expectation of coherence would be one component of the overall expectation for cooperativity in the interlocutor.

(12)   A: How is Bill getting to Boston next week?

         B: I'm not sure. I asked Freda, but she didn't know either. She doubts that he's going to rent a car, though. Apparently he hates long distance driving.

             >> ...doubts that he's going to rent a car for the purpose of driving to Boston

(13)   We suspect that the boy found a brick and then tried to smash a window, but wound up hitting a passerby.[10]

        >> ...suspect that the boy found a brick and tried to smash a window with the brick he found

Consider example (11), which is somewhat complex. B's utterance is an extended answer to A's question. The initial *I'm not sure* tells us that B considers herself not in a position to give a definite answer to the question. The function of the second sentence in the sequence is to give A a third-party perspective on the question A has asked. The main point of this sentence is to raise the possibility that a nest in the attic could be responsible for the noise, a possibility which the speaker goes on to argue against. Now, as we have already noted, an unoccupied nest could not be responsible for the noise in the attic. Moreover, there's no particular reason for Frank to be worried about an unoccupied nest in the attic, or at least there's much more reason to worry about an occupied nest. These two sets of considerations converge to have the effect that, on its literal interpretation, the sentence *Frank is worried that there's a nest up there* is a pragmatically unreasonable conversational contribution. This observation should trigger a Gricean inference to the conclusion that the speaker means something more than, or different from, what she has literally said.

At this point, I of course propose the same move as before. I would argue that the interpreter can identify the locus of infelicity, reasoning along the following lines: What proposition might the speaker intend me to identify as the content of Frank's (relevant) worry, on the basis of representing the content of that worry with the sentence *that there's a nest up there*?

The main point is as before: what triggers the Gricean inference is an apparent violation of cooperativity at the global level. By allowing that the interpreter can reason in plausible ways about the intended contents of subordinate clauses – but without any need to allow that interpreters apply Gricean reasoning to these contents – we can account for the local effects within the Gricean framework.

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[10] Based on an example in Recanati 2004: 23.

3 Accessing subsentential contents

Let's suppose for the moment that the analyses sketched above for the various cases are approximately correct. We then have the following picture: An interpreter recognizes that the literal content of a particular assertoric utterance cannot be what the speaker intends to communicate, for that would incur some violation of Cooperativity. What is special about these cases is that the interpreter is able to identify some particular subordinate clause as the locus of the violation, recognizing (via familiar kinds of reasoning) that if that clause were taken to convey content distinct from what is compositionally derivable, the apparent global violation would be resolved.

There is plenty of intuitive evidence that interpreters can, and do, access the contents of subsentential constituents and reason about them in discourse. Consider, for example, some possible responses to an utterance of the disjunction in (14):

(14)   Either they're gonna get divorced or they're gonna have another baby.
    a.   ... No, they're never going to have another baby.
    b.   ...Yes, they really might just wind up getting divorced.
    c.   ...You really think they might have another baby?

The speaker who says *No, they're never going to have another baby* need not be denying the truth of the disjunctive assertion: she might well believe that the couple are headed for divorce. This speaker's *no* is a rejection of the appropriateness of including the second disjunct. (Cf. Grice 1989: 64 on "substitutive disagreement".) Similarly, the speaker who says *Yes, they really might just wind up getting divorced* is not necessarily agreeing with the content of the disjunction as a whole: she might continue *...but if they find a really good therapist, they might be ok. In any case, they're smart enough not to try to solve their problems with another baby*. And the third response, similarly, is a query aimed at what is conveyed by the second disjunct.

We can make the same observations about responses to utterances of conditionals. First, it is obvious that, upon hearing an utterance of a conditional, we know which part of the utterance is the antecedent, which part is the consequent, and can identify the contents of those parts. Consider, for example, the following exchange:

(15)   A: If Jane comes later, we can fill her in.

        B: She won't be coming.

B's utterance neither affirms nor denies the conditional, but rather responds directly to the supposition made in the antecedent. (Cf. the proposal made by Groenendijk & Stokhof 1984 *i.a.*, that antecedents of conditionals serve to raise a new question for discussion.) Gazdar's very influential proposal (Gazdar 1979) that the utterance of a conditional gives rise to clausal implicatures that the speaker does not know the truth value of either antecedent or consequent similarly requires the assumption that the contents of these sentence sub-parts are independently retrievable. (Gazdar makes the same proposal with respect to disjuncts in a disjunction.)

Turning finally to the case of clausal complements of embedding verbs, it has been demonstrated (Simons 2007) that clauses under embedding verbs can be the target of pragmatic reasoning, and sometimes constitute the main point content of the utterance. As a small illustration, consider any of the sentences in (17) uttered in response to the question in (16). The utterances in (18) or (19) would be natural in response to any of these; and these responses require the recognition that the content of the subordinate clause is being offered as a possibly true answer to the question.

(16)   Where did Jane go last week?
(17)   a.   Henry believes she spent the week with Frances.

        b.   Henry thinks she spent the week with Frances.

        c.   Henry said she spent the week with Frances.

        d.   Henry hinted she spent the week with Frances.
(18)   But she can't have, I had lunch with Frances on Wednesday.
(19)   Why would she want to spend the week with Frances?

All these examples indicate that speakers can respond to, argue about, and question the content of embedded clauses independently of the overall (asserted) content of the sentence in which they occur. If we are to model such discourse moves, then it seems we must avail ourselves of some approach in which the output of the semantic system provides access to the contents of subsentential constituents. Given such a system, we also have the wherewithal to model the kind of pragmatic reasoning proposed earlier.

For many philosophers, the natural solution would be to adopt a structured propositions view, a view to which many are inclined for independent reasons. As King 2011 points out, "because

structured propositions have as parts the semantic values of expressions in the sentences expressing them, the semantic values of those expressions are recoverable from the semantic values of the sentences (i.e. the propositions)." In linguistic semantics, structured propositions have had much less appeal (although there are notable exceptions).[11] However, a similar effect could be captured within the possible world approach, by assuming that pragmatic reasoning has access not only to the final output of compositional semantics, but to the output of any step in the compositional procedure. The interpreted logical form approach proposed by Larson & Ludlow 1993 seems compatible with this view.[12]

Although there are many arguments for propositions as structured entities, what distinguishes the argument given here is that it is driven by observations about the semantics/pragmatics interface. But I also cannot claim to be the first to argue that a proper model of this interface requires that pragmatic processes operate on a relatively fine-grained input. Much work in Discourse Representation Theory (DRT; Kamp 1981, Kamp and Reyle 1993) constitutes an implicit argument for this position, an argument made explicit in Asher 2012.
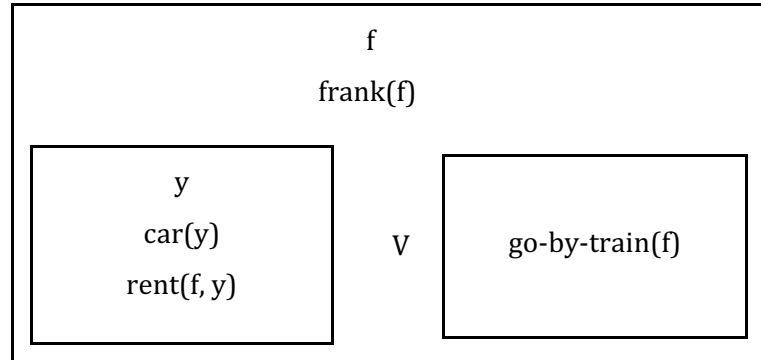
DRT provides an alternative to a structured propositions approach, introducing structure at the level of representations which are intemediate between the linguistic input and the semantic value. In this theory, the output of the semantic composition system is a structured representation, a Discourse Representation Structure, which itself receives a model theoretic interpretation. Subordinate clauses generate their own substructures, as illustrated by the basic DRS for a disjunctive sentence given in (20) below:

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[11] One reviewer, while agreeing that most linguistic semanticists adopt possible world semantics, remarks that this framework "is highly implausible as part of a theory of mental representation or communication," and notes the large number of highly influential pragmaticists who eschew it. I suspect that most semanticists would be unmoved by this observation, arguing that the job of formal semantics is to provide a formal model of linguistic content, not a psychological one. One way that semanticists might take my arguments here is as suggesting that semantics cannot proceed in a vacuum: for a plausible semantic theory must be able to interface appropriately with pragmatics, and my arguments here demonstrate that pragmatics needs access to subsentential contents.

[12] What it would mean to allow for local pragmatic effects in these and various other frameworks requires careful consideration. Unfortunately, I don't have space to explore that question here.

(20)   Either Frank will rent a car, or he'll go by train.

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\boxed{
\begin{array}{c}
f \\
\text{frank}(f) \\[4pt]
\boxed{\begin{array}{c} y \\ \text{car}(y) \\ \text{rent}(f, y) \end{array}} \quad \lor \quad \boxed{\text{go-by-train}(f)}
\end{array}
}
$$

As is clear from this simple example (where most of the details of the DRS have been omitted), each disjunct gives rise to a substructure in the representation. It is now clearer what it means for an interpreter to modify the content of a subordinate clause as a result of pragmatic inference. If the interpreter identifies the first disjunct as the locus of infelicity of the disjunction as a whole, then she can consider what modifications of the content of that disjunct, as represented by the subDRS on the left, would resolve that infelicity.[13] These modifications can be directly entered into the representation.[14]

   While modification of the contents of subordinate clauses goes beyond the most standard kind of Gricean analysis, the general approach seems fully in line with the Gricean picture. According to the standard Gricean picture, when a speaker makes an assertion, she intends to communicate some particular content to her addressee. The conventional content of her utterance is a guide to, but not fully determinative of, the content she intends to communicate. Interpreters reason on the basis of general principles as to what that content is.

   On the expanded Gricean view proposed here, we take into account more specific intentions that a speaker might have. When a speaker makes an assertion with a complex sentence, she intends the

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[13] The idea that sub-DRSs can be modified to maintain felicity of the discourse is integral to DRT. This idea is crucial to the treatment of presupposition in this framework (van der Sandt 1991), and is at the core of Segmented DRT (Asher & Lascarides 2003).

[14] A DRS could contain a record of these modifications, so that the literal meaning of the utterance could still be retrieved. For a strategy for maintaining distinctions between different types of content entered into a DRS, see Geurts & Maier 2003.

interpreter to construct a particular structured semantic representation or structured proposition. The conventional content of a subordinate clause is a guide to, but not fully determinative of, the intended content of the corresponding substructure[15]. It is, as before, up to the interpreter to reason on the basis of general principles as to what the intended content of that substructure is. But at least for the cases discussed here, reasoning about the intended contents of sentence subparts is always in the service of rendering the content of the utterance as a whole pragmatically appropriate.

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[15] The same point can be made without refering explicitly to representations: When a speaker makes an assertion with a complex sentence, she intends to convey a particular content. In particular, she has specific intentions with respect to how each subordinate clause will contribute to the total content conveyed. The conventional content of a subordinate clause is a guide to, but not fully determinative of, the content which the speaker intends that clause to convey.

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