Tipper is ready but he is not strong enough: minimal proposition, question under discussion, and what is said

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Abstract

A standard objection to Cappelen and Lepore's (2005) Semantic Minimalism is that minimal propositions are explanatorily idle. But Schoubye and Stokke (2016) recently proposed that minimal proposition and the question under discussion of a conversation jointly determine what is said in a systematic and explanatory way. This note argues that their account both overgenerates and undergenerates.

1 Introduction

A standard objection to Cappelen and Lepore's (2005) Semantic Minimalism is that minimal propositions are explanatorily idle. But Schoubye and Stokke (2016) recently proposed that minimal propositions and the question under discussion (QUD) of a conversation jointly determine what is said (i.e. intuitive truth-conditional content) in a systematic and explanatory way. This note argues that their account both overgenerates and undergenerates.

2 Schoubye and Stokke on What is Said

On S&S's view, minimal proposition is compositionally derived semantic content, but it need not be identical to what is said.² For example, consider:

- (1) a. Q: Is Tipper ready for the party?
 - b. A: Tipper is ready.
- (2) a. Q: Is the steel strong enough to support the roof?
 - b. A: The steel not is strong enough.

According to S&S, (1-b) expresses the minimal proposition that Tipper is ready for something,³ but says that Tipper is ready for the party. Similarly, (2-b) expresses the minimal proposition that the steel is not strong enough for anything, but says that the steel is not strong enough to support the roof.

S&S's central claim is that minimal proposition and the QUD jointly determine what is said in the way specified by the following principle (2016, p.783):

³To follow up on the charge that minimal propositions are by themselves explanatorily idle, consider:

- (i) a. Tipper's father cooked him a mushroom, but he ate without eating it.
 - b. #The exam is difficult, but Tipper is ready without being ready for it.
- (ii) a. #Every man whose father cooked him a mushroom didn't ate. But they all ate cheeseburgers.
 - b. Every student who has a difficult exam today isn't ready. But they are all ready to party.

Notice that these contrasts are quite robust, and they don't depend on the context-shifting arguments and the incompleteness arguments Cappelen and Lepore (2005) rightly warned against. So they demand an explanation. But it not clear how we can explain them if the semantic content of 'is ready' is, as S&S assume, the property of being ready for something. See Partee (1989), Condoravdi and Gawron (1996), Stanley (2000), and Marti (2006) for related data and their analyses.

¹For versions of that objection, see Carston (2008), King and Stanley (2007), Recanati (2004), Stanley (2007). For replies, see Cappelen and Lepore (2004, 2005, 2006).

²Minimal propositions are so called because they are intended to be minimally context-dependent: The only way the context affects the truth-conditions of a minimal proposition is by fixing the values of indexicals, demonstratives, and covert variables. But notice that this general characterization is compatible with multiple views on the truth-conditions of minimal propositions. So it is best to fix what S&S mean by 'minimal proposition' with their own examples.

(3) What is said by a sentence S relative to a context c and the QUD in c is the weakest relevant proposition ϕ such that ϕ either entails or is entailed by the minimal proposition of S in c.

Before we explain how this principle applies to (1) and (2), we need to explain the term 'QUD' and the adjective 'relevant', because they have technical meanings that are rooted in the theory of information structure developed by Roberts (2012). The QUD is the immediate common inquiry of a conversation. For example, in a trial, the QUD is whether the defendant is guilty; in a game of treasure-hunt, the QUD is where the treasures are. The QUD can be either explicitly articulated by a question (e.g. Where are the treasures?) or inferred based on contextual information. If the question articulating it is accepted, or if it is successfully inferred, the QUD partitions the common ground (as a set of worlds⁴) into sets of worlds, or cells, each of which is a possible complete answer to it.⁵ For example, suppose the question "Is Tipper ready for the party?" is accepted. The QUD becomes Is Tipper ready for the party?, which partitions the common ground into the set of worlds in which Tipper is ready for the party, and the set of worlds in which Tipper is not ready for the party. Another example: If the QUD is Who is ready for the party?, and if the domain of discourse contains Tipper and Dipper only, then the common ground is partitioned into four cells, each of which represents a possible assignment of party-readiness to Tipper and Dipper. The QUD determines what it is for a proposition to be *relevant*: For a proposition to be relevant to a QUD is for it to be an informative answer to that QUD, that is, for it to be the union of some but not all of the cells determined by that QUD.⁶

Let's apply S&S's principle to (1) and (2). Suppose the question (1-a) is accepted. The common ground is partitioned into two cells: the set of worlds in which Tipper is ready for the party, and the set of worlds in which Tipper is not ready for the party. So the relevant propositions are the proposition that Tipper is ready for the party, p, and the proposition that Tipper is not ready for the party, $\neg p$. Clearly, neither p nor $\neg p$ is entailed by the minimal proposition of (1-b), which we should recall is the proposition that Tipper is ready for something. But since p is the only, and hence the weakest, relevant proposition that entails the minimal proposition of (1-b), it is what (1-b) says, as expected. The case for (2) is similar, except that this time what the answer says is entailed by, rather than entails, its minimal proposition.

S&S's principle seems plausible, but I argue that it both overgenerates and undergenerates.

3 Overgeneration

S&S (2016, §5.2) have considered the following potential case of overgeneration:

- (4) a. Q: Is Mary awake?
 - b. A: Someone is awake.

S&S's principle seems to predict that what the answer says is that Mary is awake, contrary to intuition. To see this, if we assume that the question is accepted by the interlocutors, the relevant propositions are the proposition that Mary is awake and the proposition that Mary is not awake. The minimal proposition of "someone is awake", according to S&S, is the proposition that someone is awake. Since that minimal proposition is entailed only by the relevant proposition that Mary is awake, and it doesn't entail any relevant proposition, "someone is awake" says only that Mary is awake.

But S&S argue that (4) is not a case of overgeneration. Their argument depends on the plausible assumptions that, for "someone is awake" to be a felicitous answer to "is Mary awake?", "someone" must be intonationally stressed, and that if "someone is awake" is uttered with an intonational stress on "someone", it signals that the immediate QUD is the unarticulated QUD *Who is awake*? rather than the one articulated by "Is Mary awake?". We won't be detained by the details of their argument here, because there are cases of overgeneration that can't be explained away by considerations from intonational stress. Consider:

- (5) a. Anne: Is Tipper a robot?
 - b. Bob: Tipper has some robot parts in him.

⁴It can also be represented as the set of propositions that are mutually accepted by the interlocutors. For our purpose, we only need to consider the intersection of those propositions.

⁵For our purpose, we do not need to go into the semantics of questions. For instructive discussion and references, see Roberts (2012)

⁶See Roberts (2012; p.12, p.21) for other ways in which a proposition counts as relevant to the QUD.

Suppose Bob is rational, cooperative, and truthful.⁷ Suppose, as well, both Bob and Anne know that Bob has those attributes. I can think of two ways to make sense of Bob's reply: On the first, Bob believes that it is common ground that anything that has robot parts in it is a robot, and so he expects Anne to infer from both the content of his utterance and the background information in the common ground to the conclusion that Tipper is a robot.⁸ On the second, although Bob knows that Tipper has some robot parts in him, he doesn't know whether Tipper is a robot. So, in uttering (5-b), he only intends to provide Anne with a relevant piece of information about Tipper so that she can update her confidence in the proposition that Tipper is a robot.⁹

Either way, without intonational stress on any of its words, (5-b) is perfectly natural. A natural way to describe the conversation between Anne and Bob is that Bob *says* that Tipper has some robot parts in him, and that, on accepting what Bob says, Anne either infers from it (and the background information in the common ground) to the conclusion that Tipper is a robot, or use it to update her confidence in the proposition that Tipper is a robot.

However, S&S's principle predicts, contrary to intuition, that Bob says that Tipper is a robot. To see this, since (5-b), I assume, expresses the minimal proposition that Tipper has some robot parts in him, and since the proposition that Tipper is a robot is the only, and hence the weakest, relevant proposition that entails that minimal proposition (and no relevant proposition is entailed by that minimal proposition), (5-b) says (only) that Tipper is a robot. ¹⁰

S&S may respond that what Bob says is in fact an answer to an unarticulated QUD the answering of which is part of a strategy to answering the QUD articulated by Anne. ¹¹ This response is not without plausibility: After all, a very natural reason why Bob does not give a simple yes-or-no answer to Anne's question is that he is not sufficiently informed to answer the QUD articulated by that question. ¹² So it is not implausible that Anne first infers, based on Bob's verbosity, that he is not sufficiently informed to answer the QUD she articulates, and then interprets what he says as an informed answer to a different QUD, the answering of which helps address the QUD she articulates. A plausible candidate of that unarticulated QUD is *Which facts about Tipper are relevant to the issue whether he is a robot?*.

My main concern with this response is that it is bound to complicate S&S's analysis of (1) (and similar cases such as (2)). To see this, notice that this response requires that, even in the absence of intonational stress on any of the words in the answerer's utterance, unarticulated QUDs can sometimes be triggered, overriding the QUD articulated by the questioner.¹³ If S&S were to endorse this response, more needs to be said about why the conversation (1), repeated below as (6), is both natural and rational.

- (6) a. Anne: Is Tipper is ready for the party?
 - b. Bob: Tipper is ready.

Here are two salient issues: If (6-b) expresses the unusually uninformative minimal proposition that Tipper is ready for something, and what it says might turn out to be an answer to an unarticulated QUD, why would Bob (or any rational speaker who knows the truth-conditions of the sentences she utters and how truth-conditions tend to depend on the

- (i) a. Anne: Does every student like Tipper?
 - b. Bob: A student likes Tipper.

Assume that Bob is well-informed about the issue Anne raises. A natural way to describe the dialogue above is that Bob says that a student likes Tipper but implies (via the Quantity maxim) that not every student likes Tipper. But, according to S&S's account, since the minimal proposition expressed by (i-b) is entailed by the relevant proposition that every student likes Tipper, what (i-b) says is that every student likes Tipper.

⁷If slightly modified, this case is a potential counterexample to Stokke's (2016) account of the lying-misleading distinction, which builds on S&S's account of what is said.

⁸Roberts (2012, p.12) would describe Bob as asserting a proposition that *contextually entails* an answer to Anne's question. (For a proposition p_1 to contextually entail proposition p_2 is for p_1 and the propositions mutually accepted by the interlocutors to jointly entail p_2 .)

⁹It seems clear that Bob's utterance should count as a relevant discourse move here. We often answer a question without intending to rule out entirely an alternative (cell) raised by that question. Some examples: Q: Is it raining? A: It is wet outside. Q: Is Tipper dead? A: He isn't breathing. Q: Do I have cancer? A: You have a tumor.

¹⁰Here is another symptom of this problem. In some cases, S&S's account fails to respect the distinction between saying and implying. For example, consider:

¹¹In §5.3 of their paper, S&S use a similar strategy to explain why what the answerer says is not an answer to the QUD articulated by the questioner. The case they consider does not involve intonational stress, but, unlike (5), the minimal proposition expressed by the answer neither entails, nor is entailed by, the relevant propositions determined by the QUD.

¹²So S&S may argue that Bob's answer is not felicitous on my first way of making sense of Bob's utterance.

¹³I don't object to this possibility; in fact, I find it plausible. My worry is only that it leads to undesirable results when combined with S&S's account of what is said.

context) use the utterance (6-b) to answer the QUD articulated by Anne, instead of using the simpler one-word utterance 'yes' or the more verbose 'Tipper is ready for the party', both of which unequivocally communicate an informative positive answer to the QUD articulated by Anne?¹⁴ If Bob's choice of utterance is not optimal for contributing to the common ground an answer to the QUD articulated by her, would Anne not immediately seek to make sense of Bob's apparent irrationality — for example, by asking "What do you mean?" — instead of interpreting what he says as an answer to the QUD articulated by her?

4 Undergeneration

We turn now to the undergeneration problem. Consider:

- (7) a. Q: Is Tipper ready and strong enough to kill a dragon?
 - b. A: Tipper is ready but he is not strong enough.

(7-b) expresses the minimal proposition that Tipper is ready for something and that he is not strong enough for anything. But what (7-b) says is that Tipper is ready but not strong enough to kill a dragon. Notice that what (7-b) says neither entails, nor is entailed by, its minimal proposition. So, if we assume that what (7-b) says is an answer to the QUD articulated by (7-a), S&S's principle fails to explain why (7-b) says what it does.

Before considering a possible response, let me explain the background behind the undergeneration worry. We can observe from S&S's principle (3) that what a sentence says is not compositionally derived from the contents of its parts, but is non-compositionally derived from its minimal proposition and the QUD. S&S (2016, §4.2) admirably acknowledge that feature of their account, but they believe that it is only a feature, not a bug, of their account. What (7) seems to show is that things do go wrong if compositionality does not hold at the level of what is said.

One may respond that the question should be understood as raising two unarticulated QUDs, namely, the QUD whether Tipper is ready to kill a dragon, and the QUD whether Tipper is strong enough to kill a dragon; and the answer should in turn be understood as expressing two minimal propositions, namely, the proposition that Tipper is ready for something and the proposition that Tipper is not strong enough for anything. The thought is that the first QUD enriches the proposition that Tipper is ready for something into the proposition that Tipper is ready to kill a dragon, and the second QUD enriches the proposition that Tipper is not strong enough for anything into the proposition that Tipper is not strong enough to kill a dragon. Since adding both enriched propositions to the common ground results in the same set of worlds as adding what (7-b) says to the common ground, we seem to have a workable way of explaining why (7-b) says what it does.

But this response lacks generality. Consider:

- (8) a. Q: Is everyone who is ready to kill a dragon strong enough to do so?
 - b. A: Whoever is ready is strong enough.

Here we have the same undergeneration problem as before: What the answer says — the proposition that everyone who is ready to kill a dragon is strong enough to do so — neither entails, nor is entailed by, its minimal proposition that everyone who is ready for something is strong enough for something. But, this time, there is no natural way to divide the question into questions, and the answer into answers. So it is difficult to see which unarticulated QUDs and which minimal propositions can be invoked to deliver enriched propositions that have the same effect on the common ground as what the answer says.

5 The way forward?

We owe S&S the important insight that the QUD must play a role in constraining what is said. But the problems we just saw suggest that the QUD does not constrain what is said in the way S&S proposed. What should be the way forward?

I wish to make two brief suggestions. First, while S&S take the QUD to play a constitutive role in determining what is said, the QUD may only play an epistemic role in enabling speakers to determine what is said. The epistemic interpretation of the QUD makes available this analysis of (5): The QUD articulated by Anne tells Anne and Bob

¹⁴Grice's (1989) Manner maxim may explain Bob's apparent irrationality.

 $^{^{15}}$ Roberts's (2012, 2017) presentation of the QUD seems closer to the epistemic interpretation than to the constitutive interpretation.

that their conversation is about whether Tipper is a robot, so it contributes to their mutual expectation that what Bob says is on that topic. But the QUD does not determine what Bob says; what does are the contents of the immediate parts of Bob's utterance and how those parts are put together syntactically. A similar analysis applies to (4).

Second, to account for the examples we considered, we need not give up compositionality at the level of what is said. Consider (7-b). Suppose we follow S&S in assuming that (7-b) has no implicit arguments or hidden variables in its logical form. Why does (7-b) say that Tipper is ready to kill a dragon but that he is not strong enough to do so? The most straightforward answer seems to be this: The relevant contents of the predicates 'is ready' and 'is strong enough' are the property of being ready to kill a dragon and the property of being strong enough to kill a dragon; those contents contribute compositionally to what (7-b) says. The QUD is part of the answer as well. But instead of determining what (7-b) says, it only helps establish expectation on what (7-b) says by fixing what it is for a proposition to be relevant.

References

- Armstrong, J. (2016). The problem of lexical innovation. *Linguistics and philosophy*, 39(2):87–118.
- Cappelen, H. and Lepore, E. (2004). A Tall Tale: In Defense of Semantic Minimalism and Speech Act Pluralism. *Canadian Journal of Philosophy*, 34(sup1):2–28.
- Cappelen, H. and Lepore, E. (2005). *Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism.* Blackwell.
- Cappelen, H. and Lepore, E. (2006). Response. Mind & language, 21(1):50-73.
- Carston, R. (2008). Linguistic Communication and the Semantics/Pragmatics Distinction. *Synthese*, 165(3):321–345.
- Clark, H. H. and Clark, E. V. (1979). When nouns surface as verbs. Language, 55(4):767–811.
- Condoravdi, C. and Gawron, J. M. (1996). The context dependency of implicit arguments. In Kanazawa, M., Pinon, C., and de Swart, H., editors, *Quantifiers*, *Deduction*, and *Context*, pages 1–32. CSLI.
- Grice, H. P. (1989). Logic and Conversation. In *Study in the Way of Words*. Harvard University Press.
- Kamp, H. and Partee, B. (1995). Prototype theory and compositionality. *Cognition*, 57(2):129–191.
- King, J. and Stanley, J. (2007). Semantics, Pragmatics, and the Role of Semantic Content. In *Language in Context*, pages 133–181. Oxford University Press.
- Lasersohn, P. (2012). Contextualism and Compositionality. *Linguistics and Philosophy*, 35(2):171–189.
- Martí, L. (2006). Unarticulated Constituents Revisited. *Linguistics and Philosophy*, 29(2):135–166.
- Partee, B. (1989). Binding Implicit Variables in Quantified Contexts. In *Proceedings of the Chicago Linguistics Society*, volume 25, pages 342–365.
- Partee, B. (2007). Compositionality and coercion in semantics: The dynamics of adjective meaning. *Cognitive foundations of interpretation*, pages 145–161.
- Recanati, F. (2004). Literal Meaning. Cambridge University Press.
- Roberts, C. (2012). Information structure: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics*, 5:1–69.
- Roberts, C. (2017). Linguistic convention and the architecture of interpretation. *Analytic Philosophy*, 58(4):418–439.

¹⁶It is often said that pervasive context-dependence undermines compositionality at the level of what is said. But see Szabo (2010) and Lasersohn (2012) for helpful discussions on why that claim is misguided. See also Partee and Kamp (1995) and Partee (2007) for discussions on how compositional semantics interacts with context-dependence in modifier-noun constructions.

 $^{^{17}}$ For more striking cases of meaning recalibration, see Clark and Clark (1979) and Armstrong (2016).

Schoubye, A. J. and Stokke, A. (2016). What is said? *Noûs*, 50(4):759–793.

Stanley, J. (2000). Context and logical form. Linguistics and philosophy, 23(4):391–434.

Stanley, J. (2007). Review of François Recanati's Literal Meaning. In *Language in Context*. Oxford University Press.

Stokke, A. (2016). Lying and misleading in discourse. *Philosophical Review*, 125(1):83–134.

Szabó, Z. (2010). The determination of content. Philosophical studies, 148(2):253–272.