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<https://doi.org/10.1057/s41599-023-01701-2>

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Moderate semantic minimalism: an eclectic approach to trichotomy of meaning

Abduwali Rahman¹  & Wanzhi Xu² 

In linguistic communication, the speaker's utterance simultaneously generates several levels of meaning related to Grice's distinction between what is said and what is implicated. Yet, there is a lively debate about the two notions. This study gives a general overview of three schools: Semantic Minimalism, Radical Contextualism, and Moderate Contextualism. After surveying the current controversies in these theories, it introduces a new direction: Moderate Semantic Minimalism. This eclectic approach isolates the propositional meaning as what is asserted, something intermediate between the literal level of what is said and the intentional level of what is implicated. It tends to take the minimal notion of what is said to be relatively context-independent and does not have to be a truth-evaluable proposition.

¹School of Foreign Languages, Shandong University of Technology, Zibo, Shandong, China. ²School of Foreign Studies, China University of Petroleum (East China), Qingdao, Shandong, China. ✉email: staratux@sdut.edu.cn; 19850025@upc.edu.cn

Introduction

The inferential nature of human communication is that a speaker can say less and mean more. The speaker's meaning is achieved through linguistic decoding and pragmatic inferences. Grice (1975) divides speaker meaning into two broad categories: what is said and what is implicated. What is said is recovered by the semantic processing of a sentence, allowing just reference assignment and ambiguity resolution (e.g., 1a)¹. All other pragmatic phenomena should be seen as cases of what is implicated/implicature. Conversational implicatures are divided into two sub-categories: Generalized and particularized implicatures. The former is common to a range of normal situations (1b), while the latter depends on the specific context (1c).

(1) Bill: Do you want something to eat?

Anne: I have had breakfast.

a. Anne has had breakfast at some point or other.

b. Anne has had breakfast today.

c. Anne is not hungry and hence wants nothing to eat.

Grice's dichotomy between what is said and what is implicated has brought interesting and challenging ideas in post-Gricean pragmatics and the philosophy of language. Three approaches have made several contributions to this issue. Advocates of Semantic Minimalism (Borg, 2004, 2012; Cappelen and Lepore, 2005) want to take what is said to be the minimal proposition semantically expressed by an utterance of a sentence (Grice, 1989; Seymour, 2010). By contrast, Radical Contextualism defends the position that what is said is pragmatically constructed on the basis of contextual information (Carston, 2002; Recanati, 2004, 2010a; Sperber and Wilson, 1986). Finally, Moderate Contextualism extends, at a minimum, the amount of contextual information that is required to determine what is said (King, 2013; Perry, 1993; Stanley, 2000).

After sorting out prominent rather complex proposals in the literature regarding the different meaning levels and their interpretations, we will see that the lively debates are articulated around the following three questions: (1) How is it that one can define the intuitive notion of saying? (2) What is the extent to which the truth-evaluable proposition depends on the context? (3) Does semantic content play a role in the process of utterance understanding? What is more, with the development of the philosophy of language, theoretical linguistics, experimental pragmatics, cognitive science, etc., the formal theories of meaning face additional theoretical and empirical challenges concerning the accounts for both layers of meaning (Bach, 1994a; Depraetere, 2014; Horn, 2006; Jary, 2013; Sullivan, 2019) and their interpretations (Dieuleveut et al., 2019; Politzer-Ahles and Fiorentino, 2013; Politzer-Ahles and Gwilliams, 2015; Tiel et al., 2019; Van Tiel et al., 2014). So, in this paper, we will address these issues by offering an alternative approach, that is, what we call Moderate Semantic Minimalism. The model we adopt here is eclectic: Rather than inventing a wholly original concept to cover the whole range of facts about verbal communication, it integrates ideas coming from the three theoretical perspectives, alongside Moderate Literalism (Dascal, 1983), the implicature theory (Bach, 1994a, 2006b), and Relativism (Kölbel, 2008; MacFarlane, 2005, 2012), the notion of primary pragmatic processes (Recanati, 2004), and others as well. Importantly, it makes the first attempt to accommodate the existing challenges for a theory of meaning, providing a comprehensive insight into the phenomena we all are interested in.

This paper begins with a discussion of the central tenets of three theories for linguistic meaning: Semantic Minimalism, Radical Contextualism, and Moderate Contextualism (section

"Standard approaches to meaning"). Next, it reconstructs the dispute between the three models on the above three questions, while offering a diagnosis of what's gone wrong with each of them in the current literature (subsections "What is said and semantic/pragmatic divide", "Proposition and contextual effect" and "Semantic content and psychological reality") and presenting the basic idea of Moderate Semantic Minimalism (subsection "Reassessing the middle ground: moderate semantic minimalism"). Then, it will go on to propose a three-level model of utterance meaning, which distinguishes between what is said characterized as the literal content, what is asserted construed as the pragmatically determined and directly communicated content on the propositional level, and what is implicated understood as the indirect content that the speaker intends to convey (see section "Distinction among levels of meaning"). In the final part of this section, it will also differentiate the term what is asserted from other existing terms such as 'explicature' (Carston, 2002; Sperber and Wilson, 1986), 'generalized conversational implicature' (Levinson, 2000), 'implicature' (Bach, 1994a), 'primary meaning' (Jaszczolt, 2005), 'Privileged interactional interpretation' (Ariel, 2002), as used for a certain range of facts about linguistic underdeterminacy. Finally, it discusses the three levels of meanings in more detail by taking into account factors such as context-sensitivity (subsection "Context-sensitivity"), propositionality (subsection "Propositionality"), truth-conditionality (subsection "Truth-conditionality"), locality (subsection "Locality"), and psychological reality (subsection "Psychological reality").

Standard approaches to meaning

There are three main theories regarding linguistic expressions and their context-sensitivity to propositional content, and their relation to a meaning level.

Semantic minimalism. As the name suggests, Semantic Minimalism advocates a pretty minimal account of the interaction between semantics and pragmatics. Specifically, it claims that the semantic rules of the language play a dominant role in determining the truth-evaluable content of an utterance, and the pragmatic intrusion into the truth-conditional representation is pretty minimal. In their book *Insensitive Semantics*, Cappelen and Lepore (2005) introduce the theory of 'Semantic Minimalism.' The basic idea of this theory is that the semantic content of a sentence can be compositionally determined by the meanings of words in a sentence and their syntactic arrangement. And pragmatic processes are unnecessary in constructing such post-semantic (pragmatic) content, while they are required in the recovery of the speaker's intention². Cappelen and Lepore, of course, acknowledge that there is a small set of context-sensitive expressions, as they call the Basic Set of Context-sensitive Expressions, which affect the semantic content. The Basic Set comprises the following members: the personal pronouns, like 'I', 'you', 'she', 'it', 'them', in their various grammatical forms; the demonstrative pronouns, like 'this' and 'that', in their different cases and number; the adverbs like 'here' 'now' 'yesterday' 'ago' 'hence'; and the adjectives like 'actual' and 'present' (Cappelen and Lepore, 2005)³.

Following Kaplan (1989), a semantic minimalist believes that the semantic values of these context-sensitive expressions can vary from context to context (Corazza and Dokic, 2007, p. 171). For instance, take the third personal pronoun, 'She.' Sentence (2) requires an appeal to a specific context in order to determine 'she' for 'Mary' to whom the speaker is referring. But semantic values of context-insensitive expressions should be stable and

context-independent. Beyond having been fixed the semantic value of ‘*She*,’ the semantic content of sentence (2) does not vary whether it applies to the interpretation (2a) or (2b). The two interpretations have something in common, expressing the same argument ‘*she is ready to do something*.’

(2) She is ready.

- a. Mary is ready to take an exam.
- b. Mary is ready to leave the house.

Given that such semantic content is capable of being true or false, relying solely on how the world is, semantic minimalists treat it as a (minimal) propositional content which is the same for all utterances of a sentence in every context (Borg, 2004, 2012; Cappelen and Lepore, 2005; Soames, 2002). A minimal proposition is semantically determined and context-independent. But it does not define what is said or what the speaker wants to say yet. So far, Cappelen and Lepore impose their notion of Speech Act Pluralism, according to which what is said, asserted, claimed, and stated by utterances of sentences must be determined by a wide range of pragmatic facts about the interlocutors and their shared context (2005, p. 4). For example, the speaker in the context of utterance (3) is conveying the specific meaning (3b), even though s/he cannot help but still express the minimal proposition (3a).

(3) The steel is not strong enough.

- a. The speaker said the steel is not strong enough to do something or other.
- b. The steel is not strong enough to support the roof.

As far as the level of meaning is concerned, Cappelen and Lepore (2005) impose a distinction between semantic content linguistically triggered and speech act content pragmatically inferred. Borg (2004) distinguishes semantic sentence meaning from pragmatic speaker meaning, identifying what is said with the pragmatic speaker meaning. In this sense, Semantic Minimalism originally is not interested in the boundary between what is said and what is implicated. But Seymour (2010) is engaged in this divide. There are a primary level of minimal proposition (what is said) and a secondary level of additional pragmatic meaning (what is intentionally asserted). Grice defines what is said as: “I intend what someone has said to be closely related to the conventional meaning of the words (the sentence) he has uttered” (Grice, 1975, 1989, p. 25), while the pragmatically inferred aspects of speaker meaning should be classified as what is implicated. Thus far, based on the Gricean and semantic minimalist approaches, there are two levels of meaning: what is said (to be explicated by the theory of semantics) and speaker meaning (to be explicated by the theory of pragmatics).

Furthermore, for representatives of Semantic Minimalism, semantic content can express a (minimal) proposition and have a set of truth conditions. So these theorists claim that minimal semantic content plays an essential role in figuring out the speaker’s meaning. The recognition of semantic content is bottom-up and obligatory, whereas the implementation of pragmatic content (speaker meaning) is a top-down and optional process.

Radical contextualism. There is a strong challenge to Semantic Minimalism from Radical Contextualism. Proponents of Radical Contextualism (Carston, 2002; Recanati, 2004, 2010a, 2010b; Sperber and Wilson, 1986, 2012; Travis, 2001, 2008) reject the idea that the ratio between semantic and pragmatic contribution to the truth-conditional content is minimal. Instead, they maximize this ratio. For Radical Contextualism, a formal semantic analysis of utterance meaning, where the input from context-

sensitive expressions is restricted to the Basic Set, is problematic because sentence-type meaning is too abstract to yield a truth-evaluable proposition. So there is no such thing as complete and truth-conditional content without appealing to pragmatic factors. Accordingly, every sentence is context-sensitive, and sources of context-sensitivity should go far beyond the Basic Set. For instance, in understanding the sentence ‘*She is ready*’ in Example (2), the hearer needs contextual information to provide the missing constituent ‘*what Mary is ready to do*’, even though he/she has already assigned its referential expression.

Carston (2002, p. 29) illustrates semantic under-determinacy as the essential feature of the relation between the linguistic expression and the propositions expressed, claiming that no sentence can fully encode the proposition. In her view, what is communicated is usually a set of fully propositional contents capable of being true or false (Carston, 2002). The proposition is not determined by lexical meanings and syntactic composition in a static manner. Instead, it is determined by the dynamically developing context and world knowledge (Carston, 2002, pp. 19–20). Bezuidenhout (2002) and Pagin and Pelletier (2007) summarize various contextual features that can influence propositional content, asserting that the same sentence in different contexts can express different propositions. For example, in the expression (3), instead of asserting the minimal content (3a), the speaker might have meant the propositional content (3b) in the proper context.

Radical Contextualism believes that speaker’s meaning is composed of what is said and what is implicated. But contrary to the Gricean framework, Radical Contextualism argues that what is said should be determined by pragmatic inferences and again by the wider context (Recanati, 2004). Relevance Theory (Carston, 2002; Sperber and Wilson, 1986) holds that a sentence’s semantic representation or logical form is often not fully propositional. So explicature, as the development of logical form and part of what is said, contributes to the propositional content explicitly communicated. And some effects of context on the truth-conditional content come from the linguistic material, but others result from local pragmatic processes (Recanati, 2010b, p. 25). Radical Contextualism distinguishes two types of pragmatic processes: Saturation and Modulation. Saturation takes place whenever a sentence includes a linguistically indicated variable or slot requiring contextual provision to get a complete (minimally truth-evaluable) proposition (Carston, 2009, p. 49; Recanati, 2004). In comparison, modulation occurs when there is already a minimally truth-evaluable proposition, albeit not the one that is being intended (Bach, 1994a). It is not controlled by linguistic elements but responds to pragmatic considerations (Recanati, 2012, p. 143)⁴. In light of all that, the notion of what is said in the Radical Contextualist account is richer than the minimalist notion of what is said. It further concerns the more suitable proposition, as in (1b), which is intended by the speaker and drawn by the hearer through local pragmatic processes. On the other hand, what is implicated is implicitly communicated and recovered wholly by global inferential processes (1c)⁵.

Moreover, according to Radical Contextualism, the minimal proposition has no psychological reality and needs not to be accessed in the course of utterance comprehension (Recanati, 2004). The linguistically decoded meaning contributes only the word meaning to the interpretation process on the sub-personal level. The conscious process of utterance interpretation takes place on a pragmatic level. For example, suppose that the speaker uttered sentence (4) in a restaurant setting. The hearer can directly understand this utterance as its communicated interpretation (4b) by the pragmatic process of loosening the lexicalized concept of the word “*raw*”, without combining this

process with the decoding process of the literal interpretation of this word, as in (4a).

- (4) The steak is raw.
 - a. The steak is entirely uncooked.
 - b. The steak is undercooked.

Moderate Contextualism. Moderate Contextualism (King, 2013; King and Stanley, 2005; Korta and Perry, 2007; Perry, 1993; Stanley, 2000, 2005; Stanley and Szabó, 2000) attempts to steer a middle ground between Semantic Minimalism and Radical Contextualism. As Semantic Minimalism states, one has to assign context-specific values for (overt) indexical words to identify the semantic meaning of a sentence. Moderate Contextualists are further interested in whether the context-sensitivity is extended to other words. For that matter, they try to clarify the notion of a truth-evaluable proposition. In Corazza and Dokic's (2007) view, a proposition of a sentence (e.g., 5) should not be a static and minimal proposition (5a). Instead, it could be a proposition (5b). Alternatively, it might be proposition (5c) or (5d), and so on. In each case, the location of the bottle is different. This opens up the possibility that there is hidden indexicality in this sentence.

- (5) Every bottle is empty.
 - a. Every bottle in the world is empty.
 - b. Every bottle in the refrigerator is empty.
 - c. Every bottle on the shelf is empty.
 - d. Every bottle in the kitchen is empty.

Stanley and his colleagues (e.g., Stanley, 2000, 2005; Stanley and Szabó, 2000) assume that a sentence's surface form differs from its logical form. There are indexical elements in the latter that are not phonologically realized in the former. In other words, sentence (5) does not seem to contain context-sensitive elements in its surface form, but its logical form contains a hidden indexical that is a salient domain. So the logical form of (5) then can be presented by:

- (6) Every bottle (D) is empty.

The domain 'D' is a kind of indexical expression. It corresponds to the semantic value of 'NP (D)', that is, as the intersection of semantic values of 'NP' and 'D'. Thus, the variability in content between different interpretations of a sentence (e.g., 5a-d) is explained by contextual variability in the hidden index. Stanley and Szabó (2000) admit that the permanent linguistic features of an utterance are insufficient to fix its propositional content unless the context warrants the indexical element⁶. Nevertheless, the contextual provision of this element is necessary for the semantic evaluation of the sentence because the indexical element interacts with the implicit variable in a binding relationship to the logical level of that sentence. For example, in sentence (5), the quantificational expression '*every bottle*' is binding a location variable to assign a semantic value to this utterance. In addition to Hidden Indexicalism, there is another strategy of Moderate Contextualism: The unarticulated constituent strategy. The example offered by Perry (1993) is saying that the sentence '*It is raining*' (7) does not have truth conditions unless it is rephrased as expressing the proposition like (7a). Thus, this sentence is in some way context-sensitive, requiring us to know where it is raining. It is used to say different things on different occasions, e.g., (7b) or (7c). In each case, the contextually salient location is an unarticulated constituent of the propositional content expressed by this sentence. It is a constituent because there is no truth-conditional content unless

the location of rain is contextually supplied. It is unarticulated because no phonological and morphological constituent can specify that location in the surface form of the sentence (Perry, 2012, p. 45)^{7,8}.

- (7) It is raining.
 - a. It is raining at location *l*.
 - b. It is raining in Jinan.
 - c. It is raining in Tsingtao.

Akin to Radical Contextualism and some versions of Semantic Minimalism, Moderate Contextualism believes that there are two levels of communicated meaning, what is said and implicature. However, for Moderate Contextualism, the category of what is said is broader than what Semantic Minimalism allows and narrower than what Radical Contextualism defines. Specifically, on the one hand, what is said is not a minimal proposition but rather a complete proposition that the speaker conveys in the context of utterance. On the other hand, the contextual process involved in determining what is said is an obligatory semantic task. No free pragmatic process is required anymore. Such a process is only necessary for the non-truth-conditional content of implicature. For instance, in cases of what is said, sentence (7) has several possible logical forms with the variable of the hidden indexical element. This variable is often saturated by a semantic value of the relative place where raining happens, just like that of the overt indexical element (Martí, 2006, p. 151). As to sentence (8), the cause-consequence relation would be seen as an implicature. There is no indexical element (overt or covert) in the logical form of the utterance. The pragmatic process involved in the relevant interpretation of (8a) is a free one. Some authors (King and Stanley, 2005) have also based their accounting for what is said on weak pragmatic effects, assuming that strong pragmatic effects can affect the later interpretation process of implicatures.

- (8) Zhang took out his key and opened the door.
 - a. Zhang took out his key and [then] opened the door.

Major challenges and a new direction

Semantic Minimalism, Radical Contextualism, and Moderate Contextualism all propose some overarching principles for linguistic meaning. It has been known that each of these theories has some advantages over the other, while at the same time suffering from several theoretical and practical challenges surrounding the account for levels of meaning and the contextual effect on the proposition, and the psychological reality of semantic content. Having presented these issues and challenges, in the following two sections we will try to deliver our responses to these challenges.

What is said and semantic/pragmatic divide. To begin, Semantic Minimalism (Borg 2012: Chapter 2, Cappelen and Lepore 2005, p. 204) says that what is said is beyond the border of semantics, and the determinant is pragmatic. The semantic interpretation of the sentence uttered is minimally propositional and relatively constant. But it is different from what is said. What is said results from various non-linguistic factors, such as the situational context and the speaker's intention. Nevertheless, for Grice (1975, 1989), what is said falls into the domain of semantics. It roughly corresponds to the minimal proposition, which includes the encoded meaning of linguistic items and the pragmatic resolutions of references and ambiguities.

However, it is argued that the minimal proposition may not be useful to capture the intuitive notion of what is said (Belligh and Willems, 2021). For instance, the utterance of sentence (9) is such a case. The mother, who utters this sentence to a child, is likely to assert that the child is not going to die from the cut on his leg (9b). It sounds very odd that she has said or asserted the minimal proposition that he is not going to die tout court (9a).

- (9) You are not going to die.
- a. You are immortal.
 - b. You are not going to die from the cut.

Radical Contextualism (Carston, 2002; Recanati, 2004, 2010b; Sperber and Wilson, 1986, 2012) emphasizes rich pragmatic effects on what is said. As a matter of speaker meaning, what is said belongs to the intended explicature of the utterance. It includes both semantically decoded and pragmatically inferred material. The pragmatic processes involved in determining it include disambiguation, saturation (including reference assignment), enrichment, and ad hoc concept construction. Under this view, a single sentence type might give rise to several explicatures (what is said) in different contexts. In the following example, sentence (10) can possibly express different versions of what is said, such as (10a–c), in different speech situations, because its reasonable interpretation should encompass the more specific and sophisticated proposition to ascertain what the speaker says in the context. And the expression (10d) could never be the representation of what is said. However, in contrast to this view, note that saying ‘*Jane has three children*’ is still acceptable in reply to the question ‘what did the speaker say?’, or more specifically, ‘what did the speaker say in three cases of (10a)–(10c)? This means that sometimes the speaker says the same thing but means something different in different contexts (Davis, 2014).

- (10) She has three children.
- a. Jane has [exactly] three children.
 - b. Jane has [at least] three children.
 - c. Jane has [at most] three children.
 - d. The speaker said that ‘Jane has three children.

Moreover, according to Radical Contextualism, what is said could be spelled out at length elsewhere in the same context, as from (11a) to (11c), which are modeled after an example presented by Borg (2012, pp. 50–51). The trouble with such an account is that it is difficult to capture the intuition that which of (11a–c), and perhaps of the indefinite number of other potentially appropriate reports, forms the best judgment about what the speaker said by sentence (11) in the same context of utterance.

- (11) The man is a great cricketer.
- a. The man over there is a great cricketer.
 - b. The man with the highest number of first-class hundreds is a great cricketer.
 - c. The man who had the highest number of first-class centuries in June 2011 was a great player of the beautiful game.

Lastly, on the Moderate Contextualist approach (Perry, 1993; Stanley, 2000), in determining what is said, contextual information is required not only to specify the meanings of overt indexical expressions but also those of hidden indexical expressions or unarticulated constituents. Interestingly, this approach to what is said wishes to rely on semantic compositionality and obligatory process, allowing just the process of saturation for the truth-availability of what is said. In this regard, Moderate Contextualism is a semantic account of what is said.

That is, what is said by utterance (12) is yielded by restricting the domain of the quantifier ‘every’ to a group of professors in domain D (12a), specifically, thereby representing the specific interpretation of (12b). However, it will be apparent that, contra this view, the hidden argument place D is not necessarily context-sensitive in some cases. For example, suppose in uttering (13), a speaker, without contextual information, may succeed in generalizing the domain of the same quantifier ‘every’ to human beings in the whole world.

- (12) Every professor wears glasses.
- a. Every professor in domain D wears glasses.
 - b. Every professor in this college wears glasses.
- (13) Every human has a head.
- a. Every human in domain D has a head.
 - b. Every human in the world has a head.

Proposition and contextual effects. Semantic Minimalism, Radical Contextualism, and Moderate Contextualism all believe that an utterance can express a truth-evaluable proposition by virtue of the contextual relation between the expression and the proposition. Nevertheless, these theories differ in the degree of context-sensitivity of expression each acknowledges in the recovery of the proposition (for a more detailed discussion, see Sullivan, 2015). Semantic Minimalism says none. Radical Contextualism says more. Moderate Contextualism says something in between. Specifically, Semantic Minimalism assumes that the truth-conditional content expressed by an utterance is the minimal proposition. For example, the proposition semantically expressed (14) can be paraphrased as (14a), independent of the contextual considerations. By contrast, Radical Contextualism assumes that a proposition should be the pragmatically enriched proposition that is actually asserted by the speaker in the context of utterance, as in (14b). Moderate Contextualism assumes that a proposition is a semantically complete proposition, and its truth value is bound by context-sensitive elements in the logical form of the sentence, as in (14c).

- (14) He is too tall.
- a. Tom is too tall to do something.
 - b. Tom is too tall to play football with kids.
 - c. Tom is too tall relative to standard X.

All representations are unsatisfactory.¹ The semantic minimalist approach to the proposition is often applied in a mechanical and unthinking way. The representation like (14a) fails to capture the intuition that such a proposition can be truth-evaluable, because that (14a) actually does not tell us what Tom is too tall for. He might be too tall to play football with kids or might be too tall to dance with Jane. The speaker would want to communicate a full propositional thought or assumption about the more specific argument, which is retrieved via pragmatic processing of expression (14) in the context of utterance.

2) To fix a proposition including but not limited to (14b), in a radical contextualist fashion, the hearer needs to know several things about the context of utterance. These things include the knowledge of the previous and the current conversational contexts, knowledge of the discourse participants, shared assumptions between them, and so on (Bezuidenhout, 2002). However, the context is substantially infinite and indefinite, and it is unfair to require so many contextual sources to determine a simple proposition. After all, it is not guaranteed that hearers can access all this information every time. See example (11a–c), for instance. Rather, a hearer might determine one of these

propositions through background knowledge and some salient and readily available information in the current context based on his/her general expectation about the language used.⁹ Furthermore, recently some authors (e.g., MacFarlane, 2005, 2012) have argued that the acceptability of a proposition depends on the context of assessment as well as the context of use (this is a point we will return to in some detail in the section “Propositionality”). So sometimes, the specific features of the context of use fail to reach a real proposition.

3) Moderate Contextualism faces difficulties similar to Radical Contextualism. According to Moderate Contextualism, to recover the speaker's meaning entailed by the proposition (14c), the hearer needs to fix the adjective phrase ‘*too tall*’ by adding a propositional component ‘e.g., *to play with kids*’ to the sentence (14) in the logical form. But this approach consistently requires the adjective phrase to specify many other hidden indexicals in order to produce the full-fledged proposition, like ‘*Tom is too tall to play basketball with kids*’ and ‘*Tom is too tall to play basketball with kids in the low house.*’ As Cappelen and Lepore (2005, p. 75) note, this strategy would render the domain of the simple phrase (e.g., ‘*too tall to*’) indefinitely large than necessary. So the binding argument proposed by Moderate Contextualism cannot be decisive for the existence of hidden expressions in determining a proposition (see also Maitra, 2007).

Semantic content and psychological reality. Finally, the bifurcation between the three views is also concerned with the question of whether semantic content plays a part in the process of utterance understanding. On the one hand, Semantic Minimalism (Borg, 2012; Cappelen and Lepore, 2005) firmly believes that semantic content is psychologically realistic and essential to all communicative interactions. To take an example, when the hearer knows that the speaker has uttered the sentence (15), but knows nothing else about the context in which the sentence is embedded, he can still ascertain what the speaker says is the semantic content of the sentence (15a). Thereby the semantic content should have the liberal truth conditions, even though what the speaker means is the pragmatic content (e.g., 15b, c). By contrast, opponents of Semantic Minimalism, both Radical Contextualism and Moderate Contextualism (Carston, 2002; Recanati, 2004; Stanley, 2000), insist that the semantic content has no psychological reality and plays no role in utterance interpretation since, on its own, it fails to deliver any truth-conditional content. The truth-conditional content should be a fully determinate proposition, and the determination is pragmatic through and through. In this sense, utterance interpretation results from enriching the incomplete logical form to deliver a truth-conditional content or fixing the values of contextually sensitive elements in the structure of sentence without going through the derivation of the minimal proposition. For example, sentence (15) produces the truth-evaluable proposition (either 15b or c) as long as the context of utterance provides the required information.

(15) The apple is red.

- a. Zhang said the apple is red.
- b. The apple is red on its surface.
- c. The apple is red inside its surface.

However, these two claims have been thought of as rather extreme views and contested in recent years. In contrast with Semantic Minimalism, neo-Griceans (Bach, 1994b, 2012; Garrett and Harnish, 2009; Levinson, 2000) suppose that some inferences are drawn automatically and at a very low cost, based on default heuristic or standardization assumptions about pragmatic reasoning, independent of the determination of the minimal proposition. On the other hand, some authors (Capone, 2013; Genovesi,

2020; Haugh, 2002; Schulze et al., 2020) argue that the semantic interpretation might be less prominent than the pragmatic interpretation. But this does not necessarily mean that the former is theoretically useless. Although the ultimate interpretation of the utterance may not be completed by the literal content alone, the hearer still takes into account the literal interpretation of the utterance together with a set of contextual assumptions in the online process of utterance.

Reassessing the middle ground: moderate semantic minimalism. As explained in the preceding paragraphs, three schools of thought—Semantic Minimalism, Moderate Contextualism, and Radical Contextualism, tacitly assume that there is such a kind of pragmatic and direct meaning which goes beyond the literal meaning without being indirectly communicated¹⁰. However, these theories argue fiercely about whether this meaning is built into what is said (the radical and moderate contextualist views) or into what is implicated (the semantic minimalist views). Also, they have disputed for years over whether the literal content constitutes the truth-evaluable proposition regardless of the context and plays an effective role in communication (the semantic minimalist account) or not (the radical and moderate contextualist accounts). We will attempt to explain these projects, proposing the fourth and most comprehensive account: Moderate Semantic Minimalism. The key features of Moderate Minimalism are:

i. It allows for the sort of pragmatically determined aspects of meaning in question as to be classified as what is asserted, leaving the term what is said (or saying) for the semantically determined aspects of meaning, and leaving the term what is implicated (or implicature) for the indirectly communicated meaning. Quite plausibly, what is said might overlap with what is asserted in certain cases where it is relevant enough to determine that what the speaker says explicitly exhausts what he means.

ii. Following Dascal's (1983) moderate literalism, this account will not attempt to articulate a set of sufficient and necessary conditions for something to be what is said in a literal sense. The definition of what is said remains neutral about whether it is propositional or truth-evaluable. The notion of a truth-evaluable proposition is most akin to the notion developed in Relativism (Kölbel, 2004, 2008; MacFarlane, 2005, 2012; Pinillos, 2011), according to which a proposition has truth values relative to contexts of evaluation. It also allows for the possibility that there can be a speaker-intended proposition the hearer retrieved and/or be a hearer-retrieved proposition the speaker-not-intended by a single sentence.

iii. It is not a fan of the reductive approach to context or essentialist approach to context, allowing for a more or less connection between context-sensitivity and how the three meanings are determined. What is said is lexically or grammatically stipulated and, therefore, relatively context-insensitive. What is asserted is the matter of either preferred presumptions or nonce inferences, and thereby relatively context-sensitive. What is implicated involves reasoning about the speaker's mental state (beliefs, desires, intentions, suggestions, etc.), much of which is highly context-sensitive.

iv. What is asserted results from local (primary) pragmatic processes that take the information made accessible by that encoded meaning as input to yield the truth-conditional and propositional content. By contrast, what is implicated is the result of global (secondary) pragmatic processes drawn on the basis of what is said and/or asserted together with the conversational context. So far, what is said has psychological reality, serving to determine what is asserted and/or implicated.

Table 1 The distinction between various scholars concerning levels of meaning.

Accounts Meanings	Semantic minimalists	Radical and moderate contextualists	Bach and others
Linguistically encoded	What is said	What is said	What is said
Pragmatically enhanced	What is implicated		What is implicit
Indirectly communicated		What is implicated	What is implicated

In what follows, in the section “Distinction among levels of meaning”, we will propose the moderate minimalist account of the trichotomy of meaning to illustrate the first point. Next, in the section “Characterization of levels of meaning”, we further look at other points by identifying a set of properties of meaning from the philosophical and cognitive science perspectives on linguistic communication, aiming to solve additional challenges that this approach might face.

Distinction among levels of meaning

As can be seen in Table 1, in the three theories we discussed, there are two levels of meaning: What is said and what is implicated. What is said is explained by the literal reading of a sentence (16a), in the view of the semantic minimalists, plus the pragmatically enhanced reading of the utterance (16b), in the light of the moderate and radical contextualists. On the other hand, what is implicated is characterized by the indirectly communicated meaning by an utterance (16c), in the view of the moderate and radical contextualists, plus the pragmatically enhanced reading of the utterance (16b), in the light of the semantic minimalists. The dichotomy between what is said and what is implicated, although parsimonious, is over-simplistic and theoretically inadequate. Some scholars (Bach, 1994a; Depraetere, 2014; Horn, 2006; Jary, 2013; Sullivan, 2019) working in the field of pragmatics and philosophy of language intend to identify the third and intermediate level (16b) between linguistically encoded meaning (16a) and speaker intended meaning (16c), which arises in discourse by virtue of the linguistic properties of the expression-type.

- (16) It is raining.
- a. It is raining [at some place].
 - b. It is raining [here].
 - c. We have to take an umbrella.

We agree with the three-level approach to meaning. But we will have here a somewhat different conception of meaning divide and meaning properties. Concerning meaning terminology, the moderate semantic minimalist view would be that there are three distinct and independent sorts of meaning: what is said, what is asserted, and what is implicated.

What is said. Moderate Semantic Minimalism is a part company with Semantic Minimalism, assuming that what is said can be identified with the semantic content. It is also in alignment with the contextualist view about the delimitation of propositional content (although we disagree on the construction of the propositional content, see the section “Propositionality”). But, unlike both accounts, it argues that what is said is generally taken to be a pre-propositional content rather than a fully propositional one.

What is said corresponds closely to the semantic content of the sentence uttered, sincerely determined by the meaning of component expressions of the sentence and by the effects of the syntactic rules that are employed in the situation of utterance. This allows for what is said to also depend on certain contextual parameters for some expressions. These expressions include

referential pronouns (e.g., *I, he, the*), demonstrative items (e.g., *that, these*), and indexical expressions (e.g., *yesterday*). Thus, what is said refers to a literal aspect of speaker meaning which is recoverable from formal features and context-sensitive constituents in the sentence. But our position on the notion of what is said here is more minimal and more straightforward than that of Semantic Minimalism. What is said is not necessarily propositional content itself. Furthermore, in some cases, the minimal proposition needs not to be calculated (or evaluated) as a representation of what is said, and it rarely contributes to the truth-conditional content of the utterance¹¹. The speaker generates some meaning beyond the semantic meaning, and the hearer derives that meaning through pragmatic inferencing. And the determination of propositional meaning is open to some degree of inferencing, considering many communicative resources. Moreover, the speaker and hearer probably come to enrich different propositions and entertain very different truth-conditions of an utterance (Davis, 2014).

Both Radical Contextualism and Moderate Contextualism defend the view that what is said, as a full proposition, is no longer delivered by the linguistic material, but by a wide range of contextual factors (Carston, 2002; Recanati, 2004, 2010b; Sperber and Wilson, 1986), variable-binding operators (Stanley, 2000; Stanley and Szabó, 2000), or reflexive characterization (Perry, 2012). The problem with the contextualist frameworks, as mentioned already in section “What is said and semantic/pragmatic divide”, is that they saddle the understanding of what is said with too much cognitive burden since, under these accounts, the pragmatically relevant sense of what is said is supposed to be spelled out at length elsewhere. First, each indefinite range of related concepts involved in spelling out the full-fledged proposition may or may not intuitively be accessible to participants because of their restricted knowledge in the current situation. Second, the hearer’s cognitive system does not need to consider redundant or useless interpretations/propositions to grasp what the speaker is merely saying. What he/she might try to access is the most salient information in the situation of discourse. Third, what is more, worrisome is that the propositional meaning derived by the hearer may or may not be the same as that intended by the speaker.

Taken together, to treat what is said on a par with propositional content, as all three theories propose, looks problematic, unless what the speaker means has been made fully explicit by what s/he says. Then if we are right, there is no reason to expect a distinct notion of what is said. What is said would coincide with the simple literal interpretation, including the reference of names, and the resolution of demonstratives and ambiguities. But it could not be specified with its propositionality or truth-evaluability. Instead, it may be applied at the pre-propositional or non-truth-evaluable level of meaning¹². In this way, without the consideration of the extra-linguistic factors to what a certain utterance communicates, all utterances of a single expression share the same minimal notion of what is said in different speech situations and different languages (Korta and Perry, 2007), or between different people in the same situation. At the same time, a hearer can report the speaker as having said that

'it is raining' as in (16), by the words' meaning, even if he/she knows little about the specific location of the rain.

Although our view of what is said would run contrary to what semantic minimalists and contextualists hold, it is not alone. Thanks to Grice (1989), a speaker can convey a proposition by her/his utterance of a sentence. This does not necessarily mean that what is said should be counted as having propositional content. Similarly, Bach (2006a) rejects the propositional account. In his view, the semantic content of an utterance is wholly determined by the lexico-syntactic form but free from the need to peer into the truth-conditional content. Of course, as far as we are aware, there would be some exceptions to this rule. If what is said is made fully explicit through the appropriate lexical material included, it can express a semantically complete proposition. So, it would seem that no maxim is flouted or violated, and that the hearer can infer that what the speaker means is what he just says. Besides, some overt context-sensitive expressions like indexical reference, semantic entailment, and semantic presupposition can yield truth-evaluable contents on conditions that there is no need to consider other context-sensitive expressions in sentences¹³. For example:

(17) She has had breakfast today.

- a. Ann has had breakfast on the day of the utterance.

An utterance like (17) can express a complete proposition by virtue of the fact the speaker has literally committed her/him to the interpretation in (17a) by the formally represented elements such as the reference 'she' and indexical 'today'. That is, there is nothing to trigger further extra-linguistic contextual inference about this sort of propositional content. To sum up, technically speaking, as Seymour (2010) points out, saying a content *p* is one thing, and asserting another content *q* while saying *p* is another thing, whether or not *p* = *q*.

What is asserted. The term what is asserted refers to a full propositional representation of meaning associated with a certain assumption about the utterance. As we have seen, what is said proposed here seems too minimal and general to ascertain the speaker's statement. So, it is then subject to pragmatic processes which can yield a truth-evaluable proposition. For instance:

(18) There is nothing to eat here.

- a. There is nothing to eat in the kitchen.
- b. There is nothing appropriate for dinner in the kitchen.

What is said by (18) can be represented as (18a). It can itself be the content of some constituents of this sentence after the contextual assignment of the value to the demonstrative reference 'here'. But this content fails to capture what the speaker wants to assert or convey. So the quantifier 'nothing' in (18) might be restricted to the domain of food appropriate for dinner as in (18b), rather than an unrestricted set of foods. Or again, consider another example:

19. He is late.

- a. Tim is late.
- b. Tim is late for the party.

The literal content carried by what is said, as in (19a), also underdetermines the assertion the speaker makes. Even it does not suffice for giving a complete proposition or truth-evaluable entity. Thus, the argument slot has to be filled in at the illocutionary level by adding a pragmatically determined component to specify what Tim is late for, as in (19b).

Additionally, there are some ways of speaking figuratively where the speaker intends to assert more or less determinate content that departs from the semantic content of the speaker's

saying of what is said. For example, the metonymical expression 'ham sandwich' in (20) receives, employing semantic transfer (Recanati, 2004), its derived property 'the guest who ordered the ham sandwich' rather than the semantic property of the dish itself. In the understanding of metaphorical expression (21), the aspect of literal information is unspecific and irrelevant to the goal of conversation. What the speaker means is the result of the transfer of meaning by a mapping from the source domain 'butcher' to the target domain 'surgeon'. Once again, the denotation of 'freezing' in hyperbolic expression (22) is the result of adjusting the encoded concept of 'freezing' in order to capture what the speaker means in the specialized feature of the context.

(20) The ham sandwich left without paying.

- a. The guest who ordered the ham sandwich left without paying.

(21) Some surgeons are butchers.

- a. Surgical techniques of some surgeons are less than satisfactory.

(22) It is freezing.

- a. The room is much cooler.

Taken together, in all sorts of cases, we only arrive at propositional content if the contextual material is supplied. The part of what is meant in each case is communicated implicitly by either fleshing out (18), filling in of (19), or modulating (20-2) a more informative proposition for underspecified encoded meaning. Seeing that the propositional aspects of meaning are more or less remote from the formal features of linguistic items, but also closely related to the truth conditions of utterances, they should not be classified as what is said nor what is implicated but as what is asserted, an intermediate and independent meaning layer between what is said and what is implicated¹⁴.

Contrary to our and some authors (Bach, 1994b, 2012; Horn, 2006; Liu et al., 2012) definition, contextualists (Carston, 2002; Recanati, 2004, 2010b; Sperber and Wilson, 1986, 2012) take these phenomena as instances of what is said. But note that what is meant in each of these utterances is not conveyed by the sentence individually. It requires more than understanding words and how they are syntactically put together. Furthermore, the assumptions of utterance interpretation in the discourse are not introduced explicitly and realized differently in different contexts or for different people. This makes it possible that they can be defeasible or cancellable in lower-bound conditions (George and Mamidi, 2020), as shown in (23). By contrast, what is said is fixed by the word meaning and rules of composition independent of context, and so it cannot be canceled without yielding a self-contradictory sentence, as shown in (24). As a matter of fact, the sort of implicit meaning is not part of what is said.

(23) She has had breakfast, but she has not had breakfast today.

(24) # She has had breakfast today, but she has not had breakfast today.

On the other hand, some minimalists (Atlas, 2005; Bart Geurts, 2010; Chierchia, 2004; Foppolo et al., 2012; Grice, 1975, 1989; Levinson, 2000) take these phenomena as what is implicated in that the communicated meaning in these cases is not linguistically given. Even though this level of meaning is implicit, implicit assumptions are more relevant to the immediate purpose of the discourse and can (or cannot) be taken into account without creating a significant coherence change (Arie, 2019). This sort of meaning directly affects

the truth condition of the utterance and serves as a premise in reasoning about another communicated assumption.

What is implicated. Setting aside various notions of what is said, there is widespread agreement among theoretical accounts about the distinction between two kinds of meaning: Directly and indirectly communicated. Consider the following example adapted from Borg (2004, p. 98):

- (25) It is raining.
- a. It is raining here.
 - b. It is raining in Licheng, Jinan, Shandong.
 - c. It is raining in Jinan, Shandong.
 - d. It is raining in Shandong.
 - e. The Jinan drought is over.
 - f. The speaker wants to stay in.
 - g. The speaker does not think they can play tennis.
 - h. You have to take an umbrella.

Utterance (25) might be used to communicate pragmatic interpretations from (25a) to (25h). Yet, the first four (25a-d) of them are somehow closer to the original utterance (25) than the second four (25e-h). The speaker asserted the propositions described in (25a-d), by building directly on what s/he has made explicit. At the same time, s/he further implied the propositions in (25e-h) indirectly by saying of expression (25) and/or asserting those propositions (25a-d). For instance, the speech act is direct in both cases of (25) and (25a-d). It is an act of assertion about the current weather. The pragmatic inferences in (25a-d) specify the truth conditions for (25) further, but all of them do not alter the illocutionary force of what the speaker says. So they cannot be counted as what is implicated. By contrast, inferences in (25e-h) are cases of what is implicated, because they are to change the illocutionary force of the utterance, to hint at something indirect that the speaker thinks in addition to what s/he says (25), or asserts (e.g., 25a-d).

By the same token, Ariel (2016, 2019) proposes the “Said” and the “That is (to say)”, and the “Indirect addition” tests to emphasize the distinction between explicated inferences and implicated inferences. For instance, the pragmatic assumption in (25a) can be faithfully reported by (25i) as the aspect of the content directly communicated. On the other hand, the pragmatic assumption in (25f) can be addressed as in (25j) through the “Indirect addition” test. Just as implicated inferences fail the ‘Said’ and the ‘That is (to say)’ tests, explicated inferences do not pass the ‘Indirect Addition’ test.

- (25) i. The speaker said it is raining, that is to say, it is raining here, in the location where the speaker and the hearer are situated.
j. The speaker said it is raining here, and in addition, she indirectly conveyed that she does not want to go out.

Now it looks *prima facie* as if the two groups of expressions can be explained by two different kinds of pragmatic inferences. The pragmatic inference in the first group (25a-d) involves expanding on what is said, but without altering the illocutionary force of the utterance. In contrast, in the second group (25e-h), pragmatic inference requires reasoning something in addition to what is said or asserted. Given this distinction, truth-conditional aspects of utterance meaning in the former case fall into the category of what is asserted, while post-truth-conditional aspects of speaker meaning represented in the latter case can be called what is implicated. What is implicated is constructed indirectly based on what is said/ what is asserted and contextual parameters. The scope of what is implicated is the most akin to Grice’s original

notion of (particularized) implicature. When Grice (1975, 1989) proposed his concept of implicature, he was interested in the case where to imply something is suggesting or hinting at something without explicitly saying it. So far, what is implicated is devoted to global rather than local aspects of interpretation compared with what is said and what is asserted.

In speech act theory terms (Austin, 1962; Searle, 1975), in our view, both what is asserted and what is implicated are constituted by the contents of illocutionary acts¹⁵. But the difference between the two meanings lies in whether or not they are acts of force non-literality and are indirect speech acts. In contrast to what is asserted, what is implicated is force-nonliteral and indirect.

What is asserted is usually of content non-literality in which an expression is not literally used to express the intuitive proposition (it might also be of content-literality in the case where it overlaps with what is said). For example, in example (25), the speaker may utter the sentence and mean it not merely as a literal saying of it but as a more specific assertion of the fact that it is raining in a specific location. The non-literality differs in the extent to which the intuitive propositions posit a difference between explicitness, as shown in (25a-d). But it does not alter their direct status. In all of these cases, the content of the illocutionary act is performed by means of utterance without involving another illocutionary act in addition to asserting the location of the rain.

On the other hand, what is implicated is figured out when an expression is not used to perform an illocutionary act with the initial force of asserting. For instance, in cases of (25e-h), the speaker may mean nonliterally as a statement (25e), willingness (25f), suggestion (25g), or directive (25h) that is made by performing the illocutionary act of asserting the location of the rain. Moreover, what is implicated is indirect as the primary illocutionary act (e.g., willingness in (25f) is performed indirectly by way of performing the secondary illocutionary act (e.g., asserting that it is raining where she is, which causes inconvenience for going out).

With respect to the perlocutionary act, the consequential effects the speaker could achieve are very different for what is asserted and what is implicated. In the former (25a-d), the speaker’s assertion will be either accepted or rejected uniformly by the hearer regardless of their explicitness, while in the latter (25e-h), the speaker would get varied effects, like approved for (25e), satisfied for (25f), surprised for (25g), executed for (25h), or not, etc., depending on the hearer’s reaction.

Given all the previous discussion, our moderate semantic minimalist formulation of meaning involves three distinct stages or levels of utterance interpretation: the determination of what is said, the recovery of what is asserted, and finally, the further derivation of what is implicated. The generative schema of levels of meaning is shown in Fig. 1.

As shown in this figure, a speaker has a communicative intention in uttering a sentence. A hearer and his/her inferential processes are involved in his/her attempt to capture the speaker’s intention and satisfy his/her communicative expectation based on the cognitive mechanism and contextual factors. To begin, what is said is realized through linguistic decoding (including lexical disambiguation and reference assignment). If the speaker makes his communicative intention fully clear by what he explicitly says, the sentence can be capable of expressing propositional meaning without positing other contextually supplied unarticulated constituents, and therefore what is said may match the hearer’s expectation about the utterance. If not (more so), then what is said is subjected to the truth-conditional analysis of what is asserted, which can be arrived at with different pragmatic processes like filling in, fleshing out, and modulating. If the hearer’s expectation is not met at the stage of what is asserted in the case where the speaker communicates something indirectly by

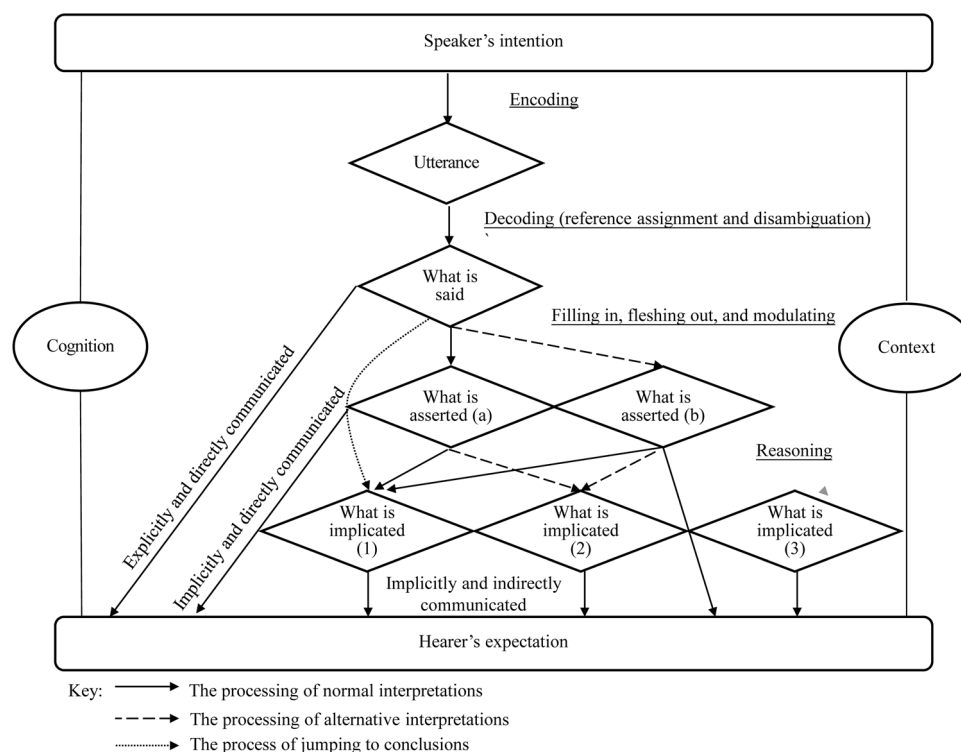


Fig. 1 Meaning levels and their generative schema. This figure shows the boundaries of different layers of meaning and their interpretative procedures.

saying of a literally irrelevant expression, what is implicated then should be derived by the wholly pragmatic inferencing, as we call reasoning. Of course, the assumptions proposed above all come from the logical perspective of meaning generation. The psychologically real process of utterance interpretation is another matter. And so the figure also indicates the following three points:

Firstly, linguistic meaning can be recovered at three distinct levels: what is said, what is asserted, and what is implicated. As an intermediate layer between what is said and what is implicated, what is asserted is an expansion of what is said and is a premise of what is implicated. Theoretically, if the hearer accesses the accurate or at least similar interpretation of what is said and asserted, then he/she can retrieve what is implicated correctly and fulfill the linguist communication successfully.

Secondly, both the speaker and the hearer are rational agents, so all of what is said, asserted, or implicated can be derived from the general presumption that both parties are interacting rationally and cooperatively to reach a common goal (Horn, 2004, p. 6). The speaker's intention and the hearer's expectation are influenced by contextual factors and cognitive strategies in the whole processing of utterance interpretation. Therefore, the hearer can stop his/her procedure when the expected level of relevant meaning is achieved and his/her expectation of communication is satisfied (Van Der Henst and Sperber, 2004). In other words, it is possible in the recovery of what is said, what is asserted, or what is implicated, that there may be some changes in their order of accessibility. Besides, there may be some cases in which the speaker's preconceived meaning in one level of representation is less central, and the hearer would jump to the higher level without psychologically taking into account it, as marked by the dotted lines in Fig. 1.

Thirdly, the linguistic under-determinacy of a proposition or thought pertains to the fact that different contexts and different presumptions in which the level of what is said is delivered can lead to different sorts of what is asserted and what is implicated as well. Specifically, the single sentence (26) may also give rise to

what is asserted, like what is asserted (a) and what is asserted (b), depending on the speaker's intention, the hearer's expectation, and the effect of context on what is said. Similarly, a hearer can derive both (26c) (what is implicated 1) and (26d) (what is implicated 2) of the same utterance in the same context. However, they can only be worked out on the condition that what is asserted is correctly recognized by the hearer. The processing of alternatives of what is asserted and what is implicated is represented by the dashed lines in Fig. 1.

(26) I have had breakfast.

- a. The speaker has had breakfast before.
- b. The speaker has had breakfast on the day of the utterance.
- c. The speaker is not hungry.
- d. The speaker does not want to be fed.

Lastly, we argued that what is asserted is more precise than what is said. But it is possible that what is asserted sometimes overlaps with what is said when a sentence successfully contributes truth-conditional aspects to the propositional content. For example, as mentioned above, the linguistic meaning of the sentence (27) may satisfy the hearer in terms of utterance interpretation without requiring more pragmatic inferences (as compared to sentence "Everyone is here") (see also Capone, 2013 on the retention of literal meaning in utterance comprehension). In this case, both what is said and what is asserted by the speaker are the same as for this expression. Furthermore, Kecskes (2021) boldly proposes that there is no difference between what is said and what is implicated as far as the speaker's intention is concerned. Especially in English as a Lingua Franca communication, what the speaker implies always coincides with the plain linguistic meaning in which the linguistic items don't trigger any pragmatic inference of the target language.

(27) Everyone who was invited is here.

Table 2 Different labels for meaning under discussion.

Term	Discourse representation	Cognitive representation
Explicatures	Truth-evaluable propositions	Nonce inferences
Generalized conversational implicatures	Utterance-type interpretations	Default inferences
Implicatures	Truth-evaluable propositions	
Primary meanings	Intended interpretations	
Privileged interactional interpretations	Salient interpretations	Either default or nonce inferences
What is asserted	Truth-evaluable propositions	

However, despite the undeniable fact that there is considerable overlap between the intuitions of what is said and asserted or perhaps even implicated, such a coincidence is not absolute. The three levels of meaning still feature different levels of propositional content. The truth condition of what is said is fixed, while that of what is asserted/implicated allows it to vary. For example, in the sense of ‘what is said of the illocutionary speech act performed in uttering (27), the truth or falsity of the utterance can be captured by the ways in which the literal interpretation perfectly tracks certain aspects of the speaker’s meaning. But in the sense of what is asserted, as depicted in Fig. 1, a wide variety of pragmatic assumptions can be allowed in the truth-conditional domain. There is still room for the possibility that the propositional content of the same utterance might be (27a) or (27b), depending on whether they are essential in understanding.

- (27) a. Everyone who was invited by Gary is here.
b. Everyone who was invited by Irwin is here.

Terminological explanations. To ensure clarity and understanding about our strategy here, we attempt to explain the difference between our term what is asserted and other sibling terms. Ever since Grice (1975) introduced his concept of implicatures, theorists have used different labels such as: ‘explicature’ (Carston, 2002; Sperber and Wilson, 1986), ‘generalized conversational implicature’ (Horn, 2004; Levinson, 2000), ‘implicature’ (Bach, 1994a), ‘primary meaning’ (Jaszczolt, 2005, 2009), ‘Privileged interactional interpretation’ (Ariel, 2002), and so on, to designate the pragmatically determined aspects of meaning. These are not merely terminological issues but different ways of demarcating the boundary between meaning components in terms of their discourse and cognitive representations. The relationships between what is asserted and a series of related concepts are listed in Table 2.

To begin with, both explicature and what is asserted are the results of local pragmatic processing, based on the direct computation of the speaker’s intention, to yield something truth-evaluable or propositional. Nevertheless, we might have a different position on the mechanism involved (or the effect of contextual information) in the derivation of the real proposition. Relevance theorists (Carston, 2002; Sperber and Wilson, 1986) assume that the intuitive proposition or truth condition is relative to the context of utterance, while we adopt the view that it is relative to both the context of utterance and the context of assessment. Secondly, both sorts of meaning are associated with similar linguistic expressions, although in our terminology, the linguistic expression which is not part of propositional meaning lies outside the scope of what is asserted. Thirdly, for relevance theorists, as the development of logical forms, explicatures are nonce and context-driven inferences, resting on cognitive effects and processing effort. Nevertheless, from our standpoint, it is also possible that some types of what is asserted might be generated automatically and independently of context, by default usage of certain linguistic expressions in a certain social context.

The theory of GCIs and our proposal of what is asserted agree that the literal aspects of meaning can constitute what is said and that pragmatic aspects of meaning go above and beyond what is said. But we are to exclude the certainty that all sentences are capable of yielding a complete proposition or determining truth-condition based on their semantic property alone. (Neo) Griceans (Chierchia, 2004; Grice, 1975; Levinson, 2000) classifies pragmatic aspects of meaning as implicatures. They believe that the pragmatic content of the utterance that comes from extra-linguistic sources does not contribute to the truth-conditional content of the speaker’s utterance, because it can be suppressed in a particular context. By contrast, we argue that the example of what is asserted is the direct derivation of propositional content from a certain linguistic expression in the context of utterance. Moreover, in relation to interpretation, we also hold somewhat different opinions. The theory of GCIs predicts that GCIs are default inferences and computed automatically based on linguistic knowledge, background information, and mutual belief, without any physical circumstance. But we believe that contextual processes also serve as mediating factors that may influence the derivation of what is asserted.

Our main thesis is inspired by Bach’s (1994a) theory of conversational implicature. Both of us are consistent with the general fact that the communicated but unsaid material contributing to the informationally added interpretation cannot be part of what is said, given that it is delivered in some implicit way by appealing to pragmatic inferences, but neither can it arise by the Gricean pragmatics since it directly affects the truth-condition of utterance. Furthermore, the propositional content illustrated by implicature or what is asserted can then be used in further pragmatic reasoning to arrive at further and indirectly communicated contents of utterance. At the same time, we also differ from Bach in what we do with the respective notions of what is said and implicature/what is asserted. The first issue is connected to the propositionality of what is said. Bach considers two cases of implicatures. In the first case of expansion, what is said is a minimal proposition, but what the speaker means (implicature) is a more specific proposition (Bach, 1994a, 2010). In the second case of completion, the sentence in question is semantically incomplete to determine any propositional entity. What is said in this sense is not a proposition but merely a propositional radical, requiring completion into a proposition (Bach, 1994a, 2006b). Although we agree with his radical semantic minimalist view on semantic incompleteness (Bach, 2006a), we don’t agree with the certainty (for his expansion case) that what is said can make up a single proposition on its own, unless it has made what is meant fully explicit. The semantic contents determined by what is said are virtually not propositional. Instead, the proposition is taken to be a truth evaluable content and arrived at the level of what is asserted, rather than what is said, via some kind of pragmatic processing of the semantic interpretation of the sentence uttered. For this reason, our notion of what is said is narrower than Bach’s, since it possibly excludes the idea of minimal proposition.

Another divergence between the two theoretical perspectives is related to the scope of what is asserted and implicature. Bach eliminates figurative uses of language such as hyperbole, metaphor, and metonymy from the category of implicature. The reason might be that he is interested in sentence non-literality rather than constituent non-literality. However, as discussed above, although the interpretation of certain figurative uses of words and phrases involves a greater departure from their encoded meaning, it may very well be realized through the semantic change, just as much as the case of sentence non-literality is. Accordingly, some instances of non-literal (figurative) meaning which contribute to the truth-conditional content can fall into the category of what is asserted (see also Footnote 14). Besides, the minimal proposition coinciding just with what is asserted in the exceptional cases is perfectly acceptable (see Footnote 11, for instance). Therefore, our category of what is asserted is broader than Bach's category of implicature, since it includes certain figurative uses of language and literal uses of language as well, if necessary.

The last array of issues concerns the recovery of implicature and what is asserted. According to Bach, implicature is seen as the standardized interpretation of an utterance in that it attaches to the linguistic form of the sentence uttered. In other words, the recovery of implicature is short-circuited (Bach, 1994b, p. 279), without being generated from what is said in the context (Bach, 2001, pp. 259–262, 1998, pp. 712–713). Of course, the frequent use of an expression during social interaction might indeed result in its becoming routinized and conventionalized to express a certain type of nonliteral meaning. The standardized or dominant meaning has the potential to arise automatically in whatever context we find this sort of expression. But as we have doubts about the standardized assumption, it is not the case for some underdeterminate expressions. These expressions might have many possible interpretations, and the most plausible one among them can vary from context to context without having the guarantee of standardization. Thus, we base our claim primarily on the intuition that some pragmatically determined interpretations are conventionalized and preferred in some circumstances and obtained automatically through linguistic clues only; while others are context-dependent and pragmatically constructed, requiring both processing of linguistic information and processing of contextual clues.

Following Bach (1984, 1994a), Jaszczolt (1999) states that a sentence type has a unique semantic representation (either underspecified or underdetermined) that corresponds to the standard and default interpretation of the sentence. Such an interpretation can be achieved automatically, utilizing the generalization and stereotypes of everyday life, without taking into account all other alternatives or relevant considerations. However, instead of adopting a pragmatic perspective, Jaszczolt proposes to advocate the notion of default semantics, according to which the default meaning can be recognized with the help of communicative intentions that “intrude” in the semantic representation. Jaszczolt admits that intentions and their default values come in degrees. The default value with strong intention triggers the default semantics of the utterance, while the context governs the departures from the default value.

Accordingly, Jaszczolt (2005, 2009) distinguishes primary meanings from secondary meanings based on the assumed strength of the intentionality of the mental state. The primary meaning, be it explicit or implicit, is the most salient interpretation of utterance as intended by the model speaker and retrieved by the model hearer, independently of its relation to the structure of the uttered sentence. She also demonstrated that primary meanings are cognitively real outputs of pragmatic processing of all available information merged in mental representation,

thereby constituting the strong social, cultural, or connive default. So as opposed to secondary meanings, primary meanings are hard to cancel.

Jaszczolt's notion of primary meaning reflects the dynamic cognitive success of communicative interchanges, where pragmatic aspects of utterance meaning are naturally incorporated into semantic constructs through dynamically introducing degrees of intentions. We are inclined to agree with her proposals. But as noted above, the default semantic theory is responsible for the level of sense in terms of cognitive representation, not necessary for levels of meaning in terms of discourse representation. In this theory, the primary meaning is not restricted to the domain of literality. It can either coincide with what is said or asserted, or implicated. It is also the same for secondary meaning.

Ariel (2002) takes one further step and uses interactional accessibility/salience as the main criterion for ascribing a privileged status to levels of meaning. Ariel characterizes the term privileged interactional interpretations as those context-based meanings, which are taken to be the sincere commitment to a true proposition and as constituting the speaker's relevant contribution to the real discourse. Moreover, the privileged interactional interpretations vary across different contexts and different individuals. Specifically, different contexts lead to different candidates for the privileged interactional interpretation, and different participants (either the speakers or the hearers) can also choose differently, even within the same context. Hence, all linguistic meaning, literal meaning, explicature, and implicatures can plausibly be perceived as privileged interactional interpretations.

Fortunately, our intuitive notion of what is asserted and Ariel's theory of privileged interactional interpretations share the key intuition that the establishment of a full propositional form that evaluates the truth condition of utterance is not absolute, but instead variable. The propositional meaning adopted might be different for the speaker and the hearer, and not just the pragmatically affected meaning, but rather, the literal meaning can also constitute the privileged interpretation/what is asserted. But like Jaszczolt (2005, 2009), Ariel (2002) also has no more to say of the ontological distinction between linguistic meaning, literal meaning, explicature, and implicatures, while we attempt to say about it in keeping with the key arguments of the theory of the privileged interpretation.

In sum, linguistic theories differ from each other along two dimensions of levels of meaning. From the vertical dimension, the GCI, explicature, and implicature theories offer frameworks for explaining how levels of meaning are generated in the discourse context. Theories of primary meaning and privileged interpretation give cognitive accounts of meaning realization from the horizontal dimension during online comprehension. Thus far, our account of what is asserted attempts to integrate both dimensions by employing the three-fold distinction between vertical levels of meaning (from a logical point of view) and stating the dynamic operation of pragmatic processes that can affect these meanings in a horizontal way (from a psychological perspective).

Characterization of levels of meaning

To defend the moderate semantic minimalist account for meaning theory, it will be useful to clarify the difference in status between levels of meaning, especially between what is said and what is asserted¹⁶.

Context-sensitivity. Since Grice (1975), the pragmatic landscape has taken much of an interest in how context contributes to utterance meaning. It is uncontroversial that referential

expressions like indexicals and demonstratives are context-sensitive. Yet, there is little agreement beyond this point. Our view is that what is said is relatively context-independent, what is asserted is relatively context-dependent, and what is implicated is highly context-dependent.

First consider what is said. Semantic Minimalism is committed to the view that what is said can be seen as context-independent. Radical Contextualism argues that context sensitivity is everywhere. For Moderate Contextualism, the truth lies somewhere in between the two extremes. Moderate Semantic Minimalism agrees with Semantic Minimalism that, except for referential expressions, what is said contains no context-sensitive construction. What is said is a meaning literally expressed by the utterance of a sentence. On the one hand, the literal meaning of a sentence is the standing meaning that it is invariant across contexts (Heck, 2002; King and Stanley, 2005). In this sense, what is said should be context-free. But the recovery of what is said requires not only sentence decoding but also deductive inferences. The reason is that linguistic expressions can be characterized by multifunctionality, as they occur in different contexts and with different interpretations (Belligh and Willems, 2021). For example, the indexical expression '*she*' might refer to Jane, whom the speaker intends to refer to in one context, and Mary in another. Thereby, what is said seems to be context-dependent. But the context-sensitivity in question really is associated with particular deictic expressions like person ('*I*,' '*she*,' '*we*'), place ('*here*,' '*there*'), and time deictics ('*now*,' '*today*'). For example, the person deictic '*she*' always directs hearers to the contextually salient female, amounting to the demonstration of any utterance of this expression. This shows that, although some deductive inferential processes are required to get from the encoded meaning to a form of what is said, they are mandated by compositional rules which underpin the assessment of the semantic value of obviously context-sensitive expressions in the context of utterance (Kaplan, 1989). Accordingly, what is said is relatively context-independent, even if contextually relevant, it is dictated by the lexico-syntactic elements of a sentence.

Moreover, within the pragmatic literature, there has been a long-standing controversy as to the context dependence of the phenomenon identified as what is asserted by us. Theorists can be divided into two camps. On the one hand, there are defaultists (Chierchia, 2004; Levinson, 2000)—a school of thought associated with Semantic Minimalists—who assume that pragmatic inferences involved in determining GCIs are licensed by certain pragmatic principles or heuristics. So, under this account, what is asserted becomes default and goes through unless subsequently canceled in a particular context. On the other hand, contextualists (Carston, 2009; Recanati, 1989; Sperber and Wilson, 1986) consider what is asserted as highly variable and more context-sensitive. They argue that a sentence itself is semantically underspecified and must be enriched in the specific context to determine what the speaker means by the utterance of a sentence. In general, both accounts seem arbitrary. As a matter of fact, some types of what is asserted are context-sensitive, while others are context-insensitive, depending on several factors, including linguistic property, actual context, and sociocultural knowledge.

First of all, as a pragmatic phenomenon, what is asserted is often indeterminate and is a disjunction of several possible interpretations (Hirschberg, 1985, p. 24). Different assumptions are retrieved by pragmatic inferencing, and different versions of what is asserted are conveyed by a sentence in different contexts of utterance. For instance, interpretations of numbers and temporal expressions depend on the situational context. Consider example (28), if the context of the sentence is about a train or plane ride, this sentence can be interpreted as (28a), while in a context where the speaker is talking about a party, it can be interpreted as (28b).

(28) John will arrive at 7 pm.

- a. John will arrive exactly at 7 pm.
- b. John will arrive around at 7 pm.

Secondly, on the other hand, the determination of what is asserted for some kinds of expressions (just like indexical expressions) is more directly associated with linguistic forms themselves. The processes of figuring out what is asserted triggered by such expressions depend on the semantic properties of expression types. For example, the most natural interpretation of the cardinal number "*n*" is construed as '*exactly n*' when it is used in the non-rounded form, as in (29), while it can be interpreted as '*about n*' when it is used in a rounded form, as in (30).

(29) Zhang has three children.

- a. Zhang has exactly three children.

(30) Zhang has an income of 5000 Yuan each month.

- a. Zhang has an income of 5000 Yuan or more/less each month.

Thirdly, some other expressions are socially motivated. In a linguistic community, the frequent usage of a certain expression can be stored in the long memory and become the preferred and natural way of determining what the speaker intends to assert. Therefore, the utterance constructs the standardized and stereotypical meaning in the given socio-cultural context (Grundy, 2008, p. 223). Such an utterance/expression type meaning can be constructed automatically, operating on general background knowledge or privileged ground, without reference to the special features of the context of utterance. For example, interpretations of perfective sentences tend to be constrained by socio-cultural conventions, whether the speaker intends to report a person's daily activities and experiences, as in (31) or non-daily ones, as in (32). In the former case, the most natural and preferred interpretations of utterances are their standardized interpretations (31a). On the other hand, these types of expressions in the latter case have distinctly different behavior, what is communicated can be the minimal propositions (32a). Once again, for the category of possessives, the alienability probably affects their comprehension. In the absence of special circumstances, the inalienable possessive expression (33) suggests that the finger Robin broke was his own (33a), whereas the alienable possessive one (34) seems to convey that the house Robin entered was not his own (34a).

(31) Jack has had breakfast.

- a. Jack has had breakfast today.

(32) Jack has had caviar.

- a. Jack has had caviar before.

(33) Robin broke a finger.

- a. Robin broke his own finger.

(34) Robin went into a house.

- a. Robin went into someone else's house.

In the literature on pragmatic inferences, there is a tacit consensus that what is implicated is implicature that depends on specialized features of the context and goes through a consideration of what the speaker said/ asserted and of what the speaker might have said/asserted (but did not) by her/his utterance. As noted, both what is asserted and what is implicated are correlated

with context, since both of them go beyond what is said. However, there is a difference between them in terms of their reliance on context. Pragmatic processes in recovering what is asserted are sensitive to, in a relative sense, contextual information that applies to local properties of meaning representation, without altering the illocutionary force of an utterance. On the other hand, pragmatic processes in determining what is implicated are sensitive to further contextual information that is located outside the language faculty. And pragmatic inferences associated with what is implicated can be as long and involve as many complex assumptions as the speaker wishes (Recanati, 2004). Therefore, what is implicated is strongly affected by contextual factors as compared to what is asserted.¹⁷

Our present understanding of context sensitivity is empirically adequate as well. To begin with, numerous studies have shown that the realization of what is asserted is influenced by the context of utterance. For example, Politzer-Ahles and Fiorentino (2013) observed that, in understanding sentences that give rise to a scalar implicature, the reading time for the target segment in the last sentence was significantly longer in the lower-bound context relative to the upper-bound context, while such a pattern was not observed for sentences that do not prompt the implicature. This would mean that compared with what is said, what is asserted is context-dependent. Hartshorne and Snedeker (unpublished data) have similar results that after reading the implicature trigger phrase (e.g., (only) some of her homework), the complement of the target segment took less time to read in the upper-bound context than in the lower-bound context (961 vs. 1266 ms).

In addition, recent studies also discussed the impact of linguistic items on meaning construction. Tiel et al. (2014, 2019) found that the rates of scalar inferences varied across different scalar items. The item ‘some’ was more strongly associated with the scalar inference, while the scalar inferences of other items were not quite as strong. Dieuleveut et al. (2019) showed that all three meanings: the literal meaning, primary and secondary scalar implicatures (GCI), were constructed for “some” and “almost” items, whereas the primary implicature could not be constructed for “numerals” and “plural” items.

Furthermore, some authors initially focus on social constraints to utterance comprehension. For instance, in the experiment conducted by Liedtke (2011), participants were presented with eight types of experimental items and were asked to perform the intuitive judgment task. The results showed that for the sentence ‘I’ve had breakfast’, its enriched interpretation ‘I’ve had breakfast this morning’ was accepted more often than the minimal interpretation ‘I’ve had breakfast earlier in my life’ (98.3% vs. 71.4%). In contrast, for the sentence ‘I have sailed’, participants significantly favored the minimal interpretation ‘I have sailing experience’ over the enriched interpretation ‘I have sailed this morning’ (97.6% vs. 58.1%).

Propositionality. Semantic Minimalism, Radical Contextualism, and Moderate Contextualism all share the assumption that what is said must be a unique proposition, despite their disagreement over the nature of the proposition or the notion of what is said. According to Semantic Minimalism, a minimal proposition semantically expressed suffices to capture what a speaker says, regardless of contextual information (35a). Radical Contextualism argues that what is said must correspond to a full-blown proposition in the actual context of use (35b). In the moderate contextualist view, what is said is identical with a complete proposition that is representable by the syntactic or logical form of the sentence (35c). We disagree with all three parties. Any strong tendency to attribute what is said to a certain kind of proposition on its own is untenable. Roughly speaking, what is said may well

be a pre-propositional object prior to the propositional (what is asserted) and/or post-propositional ones (what is implicated). Before getting to that, we should clarify the precise nature of the proposition.

(35) He has finished.

- a. Smith has finished [something].
- b. Smith has finished [the exam].
- c. Smith has finished [NP].
- d. Smith has finished [the pragmatics exam].
- e. Smith has finished [the final pragmatics exam].
- f. Smith has finished [the final pragmatics exam yesterday].

First, Semantic Minimalism maintains that a proposition is to be the proposition that the linguistic materials can fully determine in virtue of the semantic and syntactic rules of language (Cappelen and Lepore, 2005). However, since the implicit argument in (35) is not marked in the lexico-syntactic form of the sentence, the hearer needs to appeal to the contextual information to capture the truth-evaluable proposition. Radical Contextualism and Moderate Contextualism rightly emphasize that a complete proposition is not the semantic content of the sentence, but it results from the pragmatic effect on the semantic content. Unfortunately, such a proposition should be treated differently than what is said so far as it (35b/c) is not explicit in what the speaker literally says. A speaker often uses relatively brief sentences in everyday conversation rather than much longer or more cumbersome sentences (Bach, 2010, p. 129). At that time, the hearer (s) may arrive at propositions at different rates (e.g., 35b or 35e, f) within a single what is said based on their different expectations about the utterance.

Recently, a brand of Relativism has surfaced in the literature. Advocates of Relativism argue that a complete proposition can be evaluated as relativized to some non-classical parameters, such as a perspective (Kölbel, 2004), assessment (MacFarlane, 2005), frame of reference (Pinillos, 2011), in addition to the classical parameters traditionally conceived, such as a linguistic or contextual parameter. Relativism (MacFarlane, 2005, 2009) departs from Semantic Minimalism in rejecting the view that a single sentence can express a complete and determinate proposition by linguistic meaning. It also differs from Radical Contextualism in that it takes a truth-evaluable proposition to be relative not just to contexts of use but also to contexts of assessment. Finally, contrary to what Moderate Contextualism tends to assume, Relativism makes it implausible to specify a truth-evaluable proposition based solely on the lexico-syntactically required objects in the context of utterance. Although relativist theorists differ in their proposals of paradigm for a truth-evaluable proposition, they all commit themselves to the truth of an assessment-sensitive proposition. We do not want to put too much weight on this. To be sure, Relativism is the view that the proposition expressed by a sentence uttered is not absolute in the context of use in which the assertions (or speech act) is performed but instead is variable in the context of assessment in which the use of that sentence (or speech act) is being assessed.

So far, the ideas motivated by Relativism can be applied to various cases of propositional content we are interested in. The example (35) can serve as an instance. The proposition expressed by this sentence should not be constant as an absolute matter and can vary in truth-value according to the parameter of reference invoked in the circumstance of evaluation, even with the physical environment fixed. In such a circumstance, there is the speaker’s use of the object argument in the context of utterance and the frame of the object argument that the communicator (either speaker or hearer) would have to determine by the esthetic

parameter in the context of assessment. The assertion of the object “exam” in proposition (35b) expresses something about the communicator’s sense of this object. In (35d) and (35e), the assertions correspond to the class of the exam and the more restricted class in the enriched sense. The proposition (35f) is evaluated with respect to the class of the object and the time associated with the event. In this way, the argument slot can be extended indefinitely for truth-evaluable propositions. All these propositions, taken on their own, are truly asserted as long as their evaluations are relativized to different frames of the referential parameter.

It is also worth noting that a proposition can be truly asserted in some circumstances but not in others. The reason is that the range of communicators in linguistic communication, the dynamic nature of utterance interpretation, and the ways in which these communicators process the indeterminate utterances, are obviously broader than simple categories of the speaker and hearer and their meaning construction. This leads to the indeterminacy and variability of propositional content in meaning reconstruction. For instance, proposition (35d) might be false as used in the context of utterance and asserted in the context in which the communicator is thinking about the semantics exam, even though there is nothing inconsistent with the use of this sentence or with the speaker’s saying of what is said. Consider another case of the sentence (35) again. Suppose that Smith is eating something while doing his homework. Here, communicator A may believe/assert that (35d), while communicator B may believe/assert that (35f). That is, (35d) is true for communicator A and false for communicator B, and vice versa. Nevertheless, it does not seem that the two different propositions responsible for a single saying are not correct at all. Each of them can be evaluated as true or false relative to the context of the assessment, as long as the two communicators might have different perspectives. Communicator A’s assertion is about her relevant frame of object argument in the sentence (35), and communicator B’s assertion is about his relevant frame of object argument in the same sentence. So, the communicator who affirms and the communicator who denies the proposition are each right.

All of this shows that propositional content is the unrestrictedly quantified proposition. *Prima facie*, it would seem that the relativist approach permits us to account for the distinction between proposition and what is said. What is said is the technical notion of semantic content, involving the recognition of elements in the natural structure of a sentence uttered. More often than not, it is an underspecified and less-fledged concept. Taken on its own, it is not a complete proposition and is not ready to be evaluated for the truth. It takes place at the level of pre-propositional content that the hearer needs to figure out before reaching the real level of propositional content (what is asserted). For example, the speaker of the sentence (35) says something meaningful in the larger sentential context but without commitment to the truth of her/his utterance. So we can use it in many different ways in order to arrive at different kinds of propositional contents/what is asserted at different rates of truth-evaluability (e.g., 35b, d–f). Also, the speaker can say the same thing when s/he asserts two different things in the different contexts of use and assessment. For example, the same sentence (35) will express a truth-evaluable proposition in the context of (35b), while it will express a distinct proposition in the context of (35d).

Contra what is said, a proposition is a theoretical notion of thought that the utterance is about in a discourse exchange. It is used to mean what we believe, doubt, deduce, suppose, and other attitudes about saying (King, 2013; Pinillos, 2011). It is construed as requiring that it can be evaluated as true or false and can

function as the result of rich inferential processes (Wilson and Carston, 2019). Since the truth value of a proposition is defined pragmatically (rather than semantically), it is relative to the communicator, either the speaker or hearer, from different perspectives. Here the context of utterance and the context of the communicator’s assessment jointly determine this proposition. Thus, this leads to the correct result in cases where the very same utterance may yield one type of proposition by one communicator and another type of proposition by another communicator, insofar as different propositions in the same or different contexts are suitable for these communicators to believe, assert or judge by different evaluative parameters.

Here are some considerations that allow us to see different perspectives of the speaker and hearer involved in getting to propositional content. On the one hand, every natural language contains infinitely many sentences whose contribution to propositional content depends on several factors. And a speaker is trying to make her/his propositional intention evident by using a very simple expression with a finite knowledge of semantics available in the current context. So there are some cases in which s/he is saying something to assert another thing in her/his mind, but not necessarily fully realizing or grasping all the elements included in her/his act of saying (Seymour, 2010). On the other hand, a hearer already has certain beliefs, desires, perceptions, concerns, and thoughts present in her mind (Korta and Perry, 2011, p. 103), some of which could potentially induce the hearer’s expectations about the utterance in the current speech situation, and therefore affect the truth-value analysis. This amounts to saying, not surprisingly, that the single utterance for the speaker and the hearer, respectively, can possibly generate two divergent versions of what is asserted. In such a case, we could not say that what is literally expressed (by the speaker) and understood (by the hearer) is not part of what is said, even if it fails to determine propositional content on its own. All in all, what is said should not be straightforwardly classified as propositional, because unlike what is asserted, it has a simple meaning but no propositional condition.

However, it is also worth reminding ourselves here that although in most cases a propositional meaning is exhausted by what is derived from pragmatically derived components of the content of what is asserted, at least in the case of what is asserted overlapping with what is said, the propositional meaning can be exhausted by the literal meaning of the sentence uttered, as Capone (2013) suggests. Suppose for instance that ‘*Smith has finished the final pragmatics exam yesterday*’(35f) is one that is literally expressed by the indicative utterance of the sentence ‘*He (or Smith) has finished the final pragmatics exam yesterday*’, the linguistic meaning of this sentence is sufficient enough to acquire the propositional meaning on its own accord.

Tacitly, theories share the assumption that what is implicated is the result of the post-propositional accommodation of the pragmatic inference, based on what is said/ asserted associated with the (pre-) propositional content.

Truth-conditionality. According to pragmatic theory, the truth-condition of utterances is constructed when utterances of the sentence can be asserted by the state of affairs they reported are true. In this sense, the bearer of truth-conditionality of an utterance should not be what is said, but rather what is asserted.

For Cappelen and Lepore (2005), the linguistically encoded meaning of an utterance yields truth-conditional content. In Grice’s (1975) view, truth-conditional content is wholly determined by what is said. For example, the sentence ‘*Mary is ready*’ expresses the minimal proposition (36a) and delivers something true in any context where there is anything that Mary is ready for.

Similarly, the sentence '*Mary is not ready*' expresses the minimal proposition (36b) and presumably expresses something true in any context in which she is not ready. But suppose Mary is ready to leave, but she is not ready to meet her brother. As Borg (2007) acknowledges, there is a paradox between the two minimal propositions if they stand together as in (36c), although the two sentences are made true in isolation. Moreover, the non-truth-conditionality of semantic content is immediately obvious in figurative language. The truth condition of metaphorical expression (37) is not determined by the surface-level meaning of the utterance, but rather by the communicative intention behind the utterance (37a).

(36)

- a. Mary is ready [to do something].
- b. Mary is not ready [to do something].
- c. #Mary is ready [to do something] and Mary is not ready [to do something].

(37) Susan is an angel.

- a. Susan is kind at heart as an angel.

Sperber and Wilson (1986) point out that semantic interpretation is so abstract that it cannot obtain a truth value. The truth-conditional interpretation should depend on a range of pragmatic processes involved in adjusting and augmenting the linguistic meaning of the sentence uttered (Jary, 2016). Corazza and Dokic (2007) claim that the truth-condition of an utterance is a relative (not absolute) notion, willing to embrace the truth-condition as in the following theorem:

(38) Pat is too tall.

- a. If *u* is an utterance of '*Pat is too tall*,' and *s* is the situation in which *u* occurs, then [*u* is true iff Pat is too tall relative to *s*]¹⁸. (Corazza and Dokic, 2007, p. 180).

Theorem (38a) allows for truth-conditions of utterances of the sentence (38) to rely on circumstances in which these utterances are to be evaluated. If an utterance is evaluated in the jockey situation, (38) is likely to be true. If it is assessed in the basketball situation, (38) is expected to be false. Further, as outlined in the previous section, relativists claim that the truth-condition of an utterance might be assessment-sensitive, relative to the context of assessment as well as the context of use.

Drawing on all three of the other views, there are good reasons for thinking that what is said semantically expressed is not determinate enough to afford us a specific truth condition (unless it is a fully explicit representation of the asserted content) and pragmatic features of the utterance are relevant to truth conditions of a given utterance. But to say this does not mean that there is no truth-conditional meaning involved in what the speaker says. So, it is also essential to recognize the discrepancy between the truth-conditionality and intuitive judgment of what is said. This assumption is motivated by the concern that an utterance can be evaluated as true or false relative to a context, while a sentence can be judged true or false, independently of its truth-conditionality. For example, utterance (39) has several interpretations, like (39a, b).

(39) There is a bear behind you.

- a. There is a toy of a bear behind you.
- b. There is a real bear behind you.

Upon hearing the word '*bear*' in the utterance, the hearer arrives at the nonliteral interpretation of this word as '*toy of a bear*'. Nevertheless, the literal interpretation of (39) can be judged as true, even if there is no real bear behind the hearer. Or again in:

(40) Tom is meeting a woman in the coffee shop this evening.

- a. Tom is meeting his client in the coffee shop this evening.

The speaker would be conveying the truth-conditional meaning (40a). But consider the case. Suppose the speaker utters (40) in the case where Tom is going to meet his sister and falsely conveys the alleged meaning (40a). We still can judge her/him to be speaking truly but misleadingly.

The examples above show that utterances can be differed in truth conditions, not because they differ in semantic content, but because they differ in pragmatic features (Cappelen, 2007, p. 12). Jary (2016) also maintains that an utterance can be judged as true or false, yet this does not mean that it should be identified with the truth condition. Accordingly, what is said does not have a truth-condition, but it is still supposed to be judged as true, whether evaluated as true or false.

In most theories (Bach, 2004; Grice, 1975; King and Stanley, 2005; Recanati, 2004; Sperber and Wilson, 1986; Stanley, 2000), what is implicated does not contribute to the truth-conditional aspect of utterance meaning. We follow them in adopting this position. What is asserted is the case of truth-conditionality of utterance, as it deals with the development of a complete proposition. The pragmatically strengthened meaning of a semantically under-determinate expression is a more specific meaning than its literal one, contributing to a truth-evaluable and propositional content in the context of utterance. By contrast, the pragmatic inference associated with what is implicated is calculated from the utterance in a particular context given the view of conversation as a shared goal-directed action between the speaker and hearer over and above the basic meaning directly expressed (either explicit or implicit) in this utterance. So the relation of what is implicated with an utterance is non-truth-conditional.

Locality. There is also an intense debate in the field of pragmatics over whether levels of meaning are computed locally or globally. A meaning is assumed to be local if it is word-or-structure-based, global if it is computed after a complete proposition has been determined. To begin with, according to the Semantic Minimalist account, what is said is introduced locally, triggered by a grammatically articulated constituent, and what is asserted (and implicated as well) is computed globally based on the output of grammar/semantics. Grice (1975, 1989) claims that it is by saying something that a speaker intends to implicate something else and the hearer is assumed to pragmatically infer the intended meaning by following some assumptions about how the conversation precedes the conversational maxims. Therefore, the hearer must first determine what is said or the minimal proposition before figuring out what the speaker is implicating.

The opposite suggestion claims the processing of what is asserted (GCI for neo-Griceans and implicature for Bach) is necessarily local but that of what is said (the minimal proposition) and what is implicated might be global. Default inferences about what is asserted are stored in the grammatical form (Chierchia, 2004) or mandated by a set of default heuristics (Levinson, 2000), and retrieved automatically whenever their triggers are encountered. And all alternatives or all relevant considerations arrive at subsequent processes that cancel the 'not excellent' assertion which is computed in the first half. Non-default inferences (or the recovery of all other alternatives, including what is said) are a function in shaping up the hearer's final interpretations and conform to a global process rather than a local one. In other words, global consideration of reasonable interpretations motivates the hearer to change his assumption

about the standardized or conventionalized interpretation of what is asserted.

The processing paradigm proposed by contextualists assumes that what is asserted is derived from local inferential processes, whereas implicatures are derived from global ones. As soon as the first word of a sentence is produced, the entire pool of pragmatic processes, such as saturation, enrichment, and loosening, may be called on. These processes are local in that they are operated online before the whole sentence has been processed (Carston, 1997). According to Carston, the results of local pragmatic processing are ad hoc concepts, which could become constituents of an overall representation of the truth-conditional proposition (what is asserted). And this proposition is taken to be used in the global inferential process that leads to the recovery of what is implicated. Recanati (2005) also states that the pragmatic modulation processing of explicature recovery takes place locally. The hearer can directly determine the enriched notion of what is said by fixing the pragmatic values, resulting from the pragmatic processes which locally operate on the semantic values of every context-sensitive expression.

Among these, an approach, which claims that what is asserted (and what is said) is local whereas what is implicated is global, will be favored. Firstly, we will give up the assumption that pragmatic processes of what is asserted operate globally based on formal operations over syntactic content. As Recanati noted, in the utterance ‘*There is a lion in the courtyard*’, the lexical item ‘*lion*’ can be interpreted as the thing that is in the courtyard is not a real lion but a statue of a lion. Such a non-literal interpretation can be retrieved immediately as soon as the lexical item enters the computation, not after ascertaining the literal interpretation that ‘*there is a real lion in the courtyard*.’ On the other hand, what is implicated arises globally because the hearer reasons why the speaker chooses a particular utterance in the context of utterance. This reasoning process is viewed as structured by appealing to the formation of hypothetical premises and conclusions, where what is asserted is a prerequisite for what is implicated.

This issue of the locality of inferences is admittedly one that can be settled experimentally. A large number of studies have shown that hearers often take less time to calculate what is asserted than what is said. For example, Storto and Tanenhaus’s (2005) experiment demonstrates that the exclusive (implicature) interpretation of the disjunction ‘or’ is computed online and integrated locally into the utterance of the disjunction. The results of Grodner et al. (2010) showed that participants’ gaze fixation on the scalar term ‘some’ (348 ms) was as fast as for the non-scalar term ‘all’ (338 ms) or ‘none’ (418 ms), leading to a conclusion that the scalar implicature is accessed immediately and not delayed relative to the literal interpretation. On the other hand, more recently, Feng et al. (2021) found that both the generalized and particularized implicatures share the multivariate fMRI pattern of language processing and only the latter elicits the ToM-related pattern. Then the authors conclude that the processing of generalized implicature and that of particularized implicature involve similar neural representations, but the processing of particular implicature is more effortful relative to the generalized implicature due to the temporal priority of the generalized implicature.

Psychological reality. The last point of contention between competing theories of meaning concerns the psychological reality of what is said and what is asserted. Semantic minimalists (Borg, 2004; Cappelen and Lepore, 2005) and Griceans (Geurts, 2010; Dieussaert et al., 2011; Grice, 1989) posit an essential role for what is said in a theory of utterance comprehension. The minimal proposition is responsible for the

intuition about the truth-condition of an utterance, while pragmatic inferences explain the presence of non-truth conditional contents. So uncovering what is asserted and implicated would require the computation of what is said and observation of conversational maxims.

Neo-Griceans (Chierchia, 2004; Horn, 2004; Levinson, 2000) make the opposing prediction. They do not believe that the hearer must first compute what is said in order to recover pragmatic interpretations. What is asserted is calculated by the automatic and effortless system, independently of the determination of the literal meaning/minimal proposition. Bach (1994a) further argues that in everyday language use, the hearer cannot consciously recognize what is said. What is available to him/her is what is communicated (implicature and implicature)¹⁹. In other words, the hearer figures out what is asserted on the fly, not after or without the benefit of determining what is said. Nevertheless, he/she still can distinguish what is asserted from what is implicated because the hearer should do some conceptual filling in or fleshing out what the speaker says before he/she goes on to figure out the indirect interpretation of what the speaker intends.

Interestingly, contextualists are divided into three camps in their assessment of pragmatic processing. Some scholars (Bezuidenhout and Cutting, 2002; Nicolle and Clark, 1999) claim that what is implicated can be recovered directly and immediately, without interpretative processes first going through what is said or what is asserted. Others assume that all pragmatically inferred meanings, including what is said, are concurrently processed and constructed in parallel (not sequentially) by the existence of an underlying Relevance mechanism (Carston, 2002; Sperber and Wilson, 1986). And some others (Bott and Noveck, 2004; De Neys and Schaeken, 2007; Huang and Snedeker, 2009) consider what is asserted to be a time and resource-consuming process compared to what is said.

On the one hand, along with Semantic Minimalism, we believe that what is said has a psychological reality and involves the mental stage in the online processing of utterances. That is, the hearer constructs a semantic analysis of a sentence as soon as the words of the sentence are encountered. Nevertheless, our reasons for believing this are somewhat different from semantic minimalists. As we have assumed from the start, what is said by an utterance can amount to the explicit and literal content, but not necessarily to the propositional content. What a hearer is grasping during the entire comprehension process is the pure (rather than complete) semantic content, together with its integration with contextual information. While the explicit content of what is said as in sentence (41a) is particularly useful when this sentence seems to convey or assert an obvious truth, but in (41b), it is not determinate enough to give a specific truth condition. Here what is asserted is helpful, calling for contextual input.

(41)

- a. There is nothing suitable to eat.
- b. There is nothing to eat.

Moreover, notice that there are some exceptional cases of the highly conventionalized and predictable patterns of discourse (e.g., conventionalized indirect speech-acts and figurative uses of language) in which what is asserted and implicated may become attached to certain classes of expressions and become the most stereotypical interpretation of them. In those cases, as is advocated in neo-Gricean pragmatics (Bach 1998; Levinson 2000), the non-literal meaning may override the semantic content. For example, in expression (42), the interpretation of what is asserted has been conventionalized as the literal meaning, which is now a metonymy with the same meaning as in (42a). So

Table 3 The main properties of levels of meaning.					
	Context - sensitivity	Propositionality	Truth-conditionality	Locality	Psychological reality
What is said	—	—	—	+	+
What is asserted	+	+	+	+	+
What is implicated	+	+	—	—	+

this sort of interpretation fits in with the idiomatic expression (43) as well.

(42) Kate likes wearing a rabbit.

 a. Kate likes wearing rabbit fur.

(43) It is raining cats and dogs.

 a. It is raining very hard.

After all, no matter how minor is its contribution to the intended content, the literal interpretation of what is said still takes the lead in the processing. For instance, faced with a sentence (42) in a conversational situation in which the interlocutors are cooperative and well-informed on the issue they discuss, the hearer can be consciously aware of the fact that the speaker is saying something about Kate and the way she dresses and that one can wear fur but not the animal itself. At the same time, s/he can reach the stage of processing this expression in virtue of the linguistic construction and contextual modulation on metonymy understanding.

So far, more often than not, what is said plays a certain basic role in the process of language comprehension. In daily conversation, the speaker might intend to communicate a particular meaning by using figurative language. But since the linguistic code is the uncontroversial source for interpretation, what is said semantically expressed could be essential to the pragmatic processing of utterance involved in cases of what the speaker asserts and implies. Without explicit information carried by what is said as evidence, the hearer may fail to understand the speaker’s intention and to fulfill the linguistic exchange successfully.

Lastly, we also find Recanati’s (2004) suggestion that the availability of what is asserted is a prerequisite for what is implicated to be calculated very plausibly. As we have seen, both interpretations of what is said and asserted can be directly captured by the local processing of constituents of the sentence (whether articulated or unarticulated), since both are relatively close to the explicit information about the sentence’s context. So the primary pragmatic processes of completion, expansion, or semantic transfer to produce a truth-evaluable proposition must take place before the secondary processes which are involved in the recovery of the speaker’s intended meaning/what is implicated in that context of utterance. For example, in sentence (44), the possessive construction at the level of what is asserted (44a) is the case of pragmatic enrichment, specifying the possessive relationship between Xiao Hong and the finger. This kind of pragmatic process provides the proper input to analyze what is implied (44b) by this utterance.

(44) Zhang: Can Xiao Hong help me to wash clothes?

 Li: She cut a finger.

 a. Xiao Hong cut her own finger.

 b. Xiao Hong cannot help Zhang to wash clothes.

Now we are surveying some sorts of experimental data that favor our account of the cognitive role of levels of meaning. Doran et al. (2012) was a pioneer in implementing a truth-value

judgment task in the study of the distinction between what is said and GCIs (what is asserted). The authors found that GCIs (including types of Levinson’s Q-I-R-based implicatures) were less likely to be incorporated into truth-conditional meanings when compared to necessary contextual elements (Deictic, ellipsis, indexical, and pronoun resolution) of what is said, suggesting that one can isolate a level of meaning corresponding to what is said that is exclusive of GCIs. Results from Jang et al. (2013) fMRI study show that comprehension of the explicit literal meaning took less time (about 1450 ms) than both the moderately implicit (above 1700ms) and highly implicit meanings (above 1800ms). Brain regions associated with linguistic comprehension revealed differential degrees of activation between the explicit meaning and both implicit meanings. These findings suggest that what is explicitly said is often quite different from what is implicitly meant. The recovery of the speaker’s intentional meaning appears to involve working with semantic analysis of what is said and so to be constrained by pragmatics. The conformity test of Sternau et al. (2015) indicated that the bare linguistic meaning and explicature have the same degree of strength in terms of the choice proportion, response time, and scale rating measures, having a priority over the strong and weak implicatures. However, their second deniability test revealed that the deniability of bare linguistic meanings was reliably lower than that of explicatures, demonstrating the unique property of what is literally said.

Summing up, Table 3 shows the distinctive, though not sufficient, features of what is asserted as compared with what is said and what is implicated.

Given the five properties of each level of meaning, as listed in Table 3, we can therefore make a comparison between what is said, what is asserted, and what is implicated. What is said is, to some extent, context-insensitive, simply not capable of expressing propositional and truth-evaluable contents, and it is deeply devoted to the local aspect of sentence interpretation, but it has a psychological role to play in verbal communication. What is asserted shares all the basic features. Namely, it is context-sensitive, propositional in contrast with what is said, and local as compared with what is implicated. In addition, what is asserted has the property of being truth-evaluable, which is distinguished from the other two levels of meaning, and the property of psychological reality which is shared by the other two types. Finally, the most characteristic feature of what is implicated is that it is computed globally rather than locally.

Conclusion

This study set out to develop an eclectic theory of utterance meaning. It examined how Semantic Minimalism, Radical Contextualism, and Moderate Contextualism try to elicit intuitions about what is said and the boundary between what is said and what is implicated. Having clarified the nature of the debate in the current literature, it then proposed an alternative approach: moderate semantic minimalism. The major contribution of this approach is to combine the three theories and other theories of meaning characterization and understanding, to account for the triple distinction between what is said, what is asserted, and what is implicated. This approach used the term what is said simply as

the label for the literal aspect of speaker's meaning. It adapted Grice's term of what is implicated for the category of indirect method of the intended meaning. Further, it introduced the term what is asserted for the pragmatically determined aspect of meaning, which may not be explicitly contained in the surface form of sentences and not worked out by the mechanism of what is implicated, is taken to be the independent level of what is asserted, between what is said and what is implicated. It further establishes the presence of what is said in the relation between the linguistic expression and its literal meaning, and that of what is asserted in the relation between the linguistic expression and the proposition it is used to express. It considers the possibilities that there might overlap between what is said and what is asserted, and be different sorts of what is asserted for the speaker and hearers at the same time of utterance. It also suggests that what is said is relatively context-free and not propositional nor truth-conditional yet. But it can be judged as true relative to the literal interpretation and works as a starting point for the pragmatic construction of meaning.

Received: 23 August 2022; Accepted: 19 April 2023;

Published online: 16 May 2023

Notes

- Jaszczolt (1999) distinguishes two types of ambiguity: linguistic ambiguity (including lexical and syntactic ambiguity) and interpretive ambiguity. The former arises at the sentential level. It is resolved by choosing the contextually relevant reading of the lexical item which varies as different persons, things, places, and events, or either by the syntactic arrangement of meaningful constituents, to obtain the logical form or the formal semantic representation. On the other hand, interpretive ambiguity arises at the utterance level. And it is resolved by utterance processing where the underspecified/underdetermined semantic representation is pragmatically inferred into a propositional form to assign interpretive truth conditions to the utterance. In this paper, the term "ambiguity" is used solely when referring to linguistic ambiguity, particularly lexical ambiguity.
- Jaszczolt (1999) also recognizes three kinds of intentions: referential, informative, and communicative. The first one of these intentions is essentially audience directed and responsible for the indexical terms (e.g., a particular individual or object) (see Bach, 1987, p. 66). The second is used to inform an audience of something, whereas the last one refers to informing the audience of one's informative intention (see Sperber and Wilson, 1986, p. 29; Wilson and Sperber, 2004, p. 255). Since the informative intention is embedded in the communicative intention, here we will use the term 'intention' in its broadest sense to refer to both types of intention.
- There is a divergence in the set of context-sensitive expressions within semantic minimalists. According to Cappelen and Lepore, the semantic value of context-sensitive expressions might be fixed by the mixture of the narrow (objective, unintentional) context as well as the wide (subjective, intentional) ones (Cappelen and Lepore, 2005). Borg makes a different claim. Allowing only for the narrow features of context (the agent, time, and location of utterance), she does not posit the rich and intentional features of the context in the determination of the semantic content (Borg, 2004).
- Recanati (2004) further introduces three kinds of modulation: Enrichment, loosening, and semantic transfer. For enrichment, semantic material is freely inserted into what is meant from lexical meaning and syntactic structure. The loosening emerges when a predicate in the literal content is not appropriate, requiring a modified interpretation. Finally, semantic transfer occurs in the case of transferring the semantic value from the linguistically encoded content to pragmatically inferred content.
- Relevance theorists claim that explicatures (what is said) and implicatures result from the same processes in parallel, under the guidance of the principle of relevance. However, Recanati (2002, 2004) has put forward a slightly different proposal. According to him, the primary process of determining what is said should take place before the secondary process of inferring implicatures.
- Instead of adopting the Moderate Contextualist position, Seymour (2010) wants to defend the Semantic Minimalist account that literal meaning suffices to determine propositions, by expanding Cappelen and Lepore's "Basic Set" with certain hidden indexical elements.
- In their recent book, Korta and Perry (2011, pp. 102–113) distinguish three instances of unarticulated constituents: grammatically incomplete (in cases like 'On the mantle'), grammatically complete but truth-conditionally incomplete (in cases like 'It is raining'), and grammatically and truth-conditionally complete but not correct (in cases like 'I invited everyone to the party.')
- Concerning the notion of the unarticulated constituent, two points should be considered. Firstly, Perry (1993) agrees with the proponents of Hidden Indexicalism that unarticulated constituents are not presented in the surface form of the sentence, and they are undoubtedly responsible for the determination of truth-conditionally relevant propositions. However, Perry believes that unarticulated constituents are not binding indexical variables in the logical form of the sentence, instead provided by the context of utterances. Secondly, although both Perry (1993) and Recanati (2002) points out that unarticulated constituents are provided by contextual information, Perry's approach is somewhat dissimilar to Recanati's idea. According to the latter, unarticulated constituents are supplied via processes of free enrichment as wholly belonging to the pragmatic status. For Perry, unarticulated constituents are semantically forced, being used to account for the semantic understanding.
- Instead, proponents of Radical Contextualism (i.e., Relevance Theory) might argue that what enables us to fix a proposition is an inferential mechanism of mutual adjustment, between different meaning representations, which is guided by the principle of least effort in computing cognitive effects. And now the questions arise, how do we quantify the balance between the cognitive effort and the cognitive effect regarding complex expressions and/or contexts for different individuals? It would seem that the pragmatic inferences involved in enriching under-specified logical form in order to determine a full-blooded proposition with truth conditions are no-ending continual processes. Hence, an utterance would be likely to have different cognitive effects and needs a different degree of cognitive effort to grasp what the speaker means and what the hearer wants to know.
- The notion of literal meaning has been defined as linguistic meaning that is direct, sentential, specified by grammar, and context-free (see Kecskes, 2013, pp. 119–122 for a review). Note that both the literal meaning (here equated with what is said) and what is asserted (what we are proposing) are responsible for the direct speech act, even though the second is pragmatic and relatively context-dependent.
- Even if the minimal proposition of a sentence possibly contributes to the truth condition of the utterance, but this sort of proposition should not be counted as what is said, but as what coincides with what is asserted. For example, the sentence 'I have eaten caviar' is likely to have the preferred interpretation of minimal proposition 'the speaker has eaten caviar before', rather than any more specific interpretation like 'the speaker has eaten caviar on the day of utterance'. And this minimal proposition by itself contributes to what is asserted. This case would run contrary to Recanati's (2004, p. 90) strong proposal that "there is no level of meaning which is both propositional and minimalist."
- Some writers (e.g., Bach, 1994b; Seymour, 2010; Witek, 2015) prefer to account for what is said in terms of Austin's (1962) notion of locutionary act.
- In support of our view, Capone (2006, pp. 645–646) points out that in contrast to an utterance, a sentence does not express a complete proposition, unless all the sentence's references are fully explicit.
- The semantic minimalist account of figurative language typically treats cases of non-literal (figurative) meaning as instances of what is implicated where the speaker says one thing and communicates something else (Grice, 1975). By contrast, the contextualist account classifies them as part of what is said (Nogales, 2012; Recanati, 2004; Wilson and Carston, 2007). It offers the compelling argument that interpretations of non-literal utterances (including metaphor, metonymy, and hyperbole) and that of literal utterances (including reference assignment and lexical disambiguation) are the different results of the same processing mechanism through which the communicative content is arrived at by the interaction between the encoded concept, contextual information, and some pragmatic principles. We agree with the latter account but here reject the association of non-literal interpretations with the category of what is said.
- But when formulating Austin's (1962) idea of three types of speech acts, Levinson (2000, p. 23) argues that sentence meaning corresponds to the locutionary speech act, utterance type meaning to illocutionary, and speaker meaning to perlocutionary. See also Korta and Perry (2011, p. 4) for a similar suggestion.
- Another set of properties of meaning, we are not dealing with in this paper, has been discussed in the literature: cancelability, non-detachability, non-conventionality, and calculability (Atlas, 2005, p. 60; Grice, 1975; Horn, 2004), re-enforceability, universality (Levinson, 2000, p. 15), and indeterminacy (Hirschberg, 1985, p. 24; Sadock, 1978). Amongst them, cancelability is the most amazing and well-understood. In Grice's view, the cancelability of conversational implicatures was used to cover two distinct situations: explicit cancellation and implicit cancellation. In the first case, the speaker utters the lexical content (like "but not..." or "I do not imply that...") that explicitly entails the negation of a putative implicature. While in the second case, the implicature is to be implicitly canceled in an uncooperative context where the contextual information is incompatible with it. For arguments against explicit cancellation, see Weiner (2006) and Jaszczolt (2009). For the discussion of the contextual cancellability of implicatures/explicatures/implicatures, see Levinson (2000), Chierchia (2004), Carston (2002, p. 138), Wilson and Sperber (1981), and Bach (2001). For some alternative accounts, see Carston (2004) and Wilson and Sperber (2004). For recent arguments against the view that explicatures can be

cancelled in Relevance Theory, see Capone (2009) and Burton-Roberts (2010). We do not want to pursue the debates here.

17 Of course, it might be the case that some kinds of what is implicated often become conventionalized for particular social purpose. Thus, the expression 'Can you pass me the salt' can be interpreted as an indirect request to pass the salt rather than a literal question about whether the hearer can pass the salt. The regular association between the utterance and its indirect meaning can short-circuit the inferencing process and go straight to the implied meaning that is a request, via the associative process (Morgan, 1978).

18 If: if and only if.

19 This position is in line with Recanati's (2004) availability principle.

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Acknowledgements

This study is supported by the National Social Science Foundation of China (Grant No. 20BY066). We would like to thank Professor Xinren Chen for his careful reading of the original manuscript and for his helpful suggestions. We also thank two anonymous reviewers for their insightful comments.

Competing interests

The authors declare no competing interests.

Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

Informed consent

This article does not contain any studies with human participants performed by any of the authors.

Additional information

Correspondence and requests for materials should be addressed to Abduwali Rahman or Wanzhi Xu.

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