# **Three Versions of Semantic Minimalism**

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**Abstract.** All of the semantic minimalists come together in seeking to reduce contextual inputs in semantics to a minimum, but they disagree over what this quantity may be, and more specifically, the extent to which something can still be classed as "minimal". With this issue increasingly addressed, three versions of semantic minimalism can be identified: weak, strong, and radical. They are still gathered under the tag "Semantic Minimalism", yet what they share is in fact less than their divergences as regards the minimal role of context. By revealing their divergent answers to the Range Problem and the Intention Problem, we will clearly see within semantic minimalism the schism, which is preliminary to assessing it.

**Keywords:** Semantic minimalism  $\cdot$  Context-sensitivity  $\cdot$  The range problem  $\cdot$  The intention problem

# 1 Introduction

A given sentence has its meaning, but beyond this meaning, there is what the speaker intended to communicate. Paul Grice distinguished between "sentence meaning" and "speaker meaning" - the latter being comprised of "what is said" and "what is communicated". A sentence meaning is determined by its lexical components and semantic compositionality. According to Grice, "what is said" corresponds to the propositional content of the utterance. Conversely, "what is communicated" corresponds to "what is said" plus the content inferred through contextual reasoning. Thus, the distinction between sentence meaning and speaker meaning corresponds to the distinction between semantics and pragmatics. In the wake of Grice's theories, there still lacks a clear division between semantics and pragmatics. It is here that the debate between semantic minimalism and contextualism comes in. A prominent issue in the debate concerns the quantity of contextual information needed for a sentence to have a truth value and to what extent the contribution (or influence) of context to (upon) semantics is acceptable. Minimalism proposes a formal sort of semantics, in which contextual contribution is limited to indexical reference assignment and disambiguation. Contextualism, by contrast, advocates that the contextual contribution to semantics is endemic. In this paper, what I shall focus on is the schism within semantic minimalism. Though all of the semantic minimalists come together in seeking to reduce contextual inputs in semantics to a minimum, they disagree over what this minimum is, and more specifically, the extent to which a specific semantic theory can still be classed as "minimal".

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With this issue increasingly addressed by many minimalists, three versions of semantic minimalism can be identified: weak (Cappelen & Lepore), strong (Borg), and radical (Bach).<sup>1</sup> It is indeed not easy to uncover a shared argument between them. Nevertheless, there may be one such claim:

**CT**: Minimal Semantics only licenses the syntactically triggered contextual inputs to semantic content: such as the indexicals "I", "here", whose semantic contents syntactically require contextual information to get a semantic value.

To say "grammar triggers contextual input in semantics" is actually to mean that the linguistic rules specify which contextual information is necessary for an expression to have a semantic content. "I", the first person singular pronoun, is explained as "used by the person speaking or writing to refer to himself or herself" in the dictionary, and therefore "I" is context-sensitive since context determines which user is the semantic content of "I". "She" or "that" seems less clear. Both do syntactically activate the contribution of contextual information to semantic content, and are context-sensitive in this regard. Nevertheless this seems not enough for them to be considered as getting semantic content through grammar and contextual information, because what "she", "he", "that", "there" (or etc.) are intended to refer to in any using of them may also be taken into consideration. When Peter says "she is so cute" to a friend as several girls are coming, "she" could refer to any one of the girls, and its referent accordingly depends on which girl Peter intends it to refer to. From this point of view, context-sensitivity, though indeed triggered by grammar, is also in need of speaker intention. So if the minimalists identify grammar as the trigger of context-sensitivity, it is however not the case that grammar, on its own, can limit context-sensitivity.

If context-sensitivity is exclusively justified by grammar and speaker intentions also admittedly play a necessary role in determining semantic contents of some context-sensitive expressions, there follow two key problems which any version of semantic minimalism must address:

- (1) How many context-sensitive expressions can we have (the Range Problem)?
- (2) What is exactly the role of speaker intention in determining a semantic content (the Intention Problem)?

## 2 The Range Problem

Semantic minimalists have to cope with the range problem. If they refute the contextualist view that context-sensitivity in semantics is endemic and argue for its minimal effects, it will be very naturally asked by the contextualists what the minimal effects are and how many expressions bring such effects. Likewise, seeking to reduce context-sensitivity in semantics to a minimum inevitably put the onus on semantic minimalists to specify to what extent context-sensitivity in semantics can be reduced. One of the possible ways to do this job is delimit the range of context-sensitive expressions in natural language.

<sup>&</sup>lt;sup>1</sup> The distinction between weak minimalism and strong minimalism is borrowed from Robbins [17].

### 2.1 The Weak Answer

C&L contends that the pure indexicals and demonstratives listed in Kaplan [16] "plus and minor a bit"<sup>2</sup> constitute the full panoply of context-sensitive expressions and exhaust all contextual effects to semantic content. These expressions illustrated as follows ([14]: p. 1) comprise the so-called Basic Set:

Personal pronouns: "I", "you", "he", "she", "it" in their various cases and number (singular, plural, nominative, accusative, genitive forms); Demonstrative pronouns: "that" and "this" in their various cases and number; Adverbs: "here", "there", "now", "today", "yesterday", "tomorrow", "ago", "henceforth"; Adjectives: "actual" and "present"; Tense indicators; Some contextual elements: Common nouns ("enemy", "outsider", "foreigner", "alien", "friend" and "native"); Common adjectives ("foreign", "local", "domestic", "national", "imported", "exported").

The expressions enumerated above syntactically require context to get semantic contents, where context is construed as narrow, non-perspectival, and parameter-like. C&L uphold the Basic Set by suggesting two tests for context-sensitivity ([13]: pp. 7-8).

- "Context Sensitive Expressions Block Inter-contextual Disquotational Indirect Reports": Louis (context1) says "I am going to the Chinese market", but when Sarah (context2) provides a disquotational indirect report with "Louis said I am going to the Chinese market", this report is false since "I" in the report does not refer to Louis but to the speaker of the report, Sarah.
- "Context Sensitive Expressions Block Collective Descriptions": this is a test mainly for verbs. If in context 1 we said "Louis left", in context 2 we said "Sarah left", and we were capable to say in context 3 "Louis and Sarah left", "left" (ignoring the tense) would be context-insensitive. The reason why this is a case of context-sensitivity is that once the semantic content of "left" in the collective utterance is determined in one context, we could guarantee that this semantic content equals the semantic content of "left" in those contexts where "left" was used alone. In the Basic Set, there are no verbs, so C&L hold that verbs are not context-sensitive.

On C&L's view, all the expressions in the Basic Set pass the two tests, so they are context-sensitive and all others fall outside.

### 2.2 The Strong Answer

Prima facie, Borg's attitude to the Basic Set Assumption seems inconsistent. In Borg ([10], p. 350), she writes: "I think C&L are right to treat the Basic Set Assumption as a defining feature of minimalism, but we should be clear about exactly what this assumption commits us to." However, Borg ([11], p. 68) argues: "A first point of division among theorists in this are concerns the principle Cappelen and Lepore 2005

<sup>&</sup>lt;sup>2</sup> Not precise enough as we see, "plus and minor a bit" blurs the scope of context-sensitive expressions, and in fact neither weak nor strong versions of semantic minimalism give a neat and definite scope.

use for defining their notion of minimalism: namely, allegiance to the 'Basic Set Assumption'... my variety of minimalism does not endorse this principle."

On the one side, Borg is clear that minimalists cannot bypass the range problem, otherwise she would not comment on the Basic Set Assumption. On the other, the superficial inconsistency we indicate above becomes unsurprising if we notice that what is stressed by her version of minimalism is not the number of context-sensitive expressions in a language but the mechanism a full-blown minimal semantics can accommodate. According to Borg [8, 11], this mechanism is the so-called "formal route to semantic content"<sup>3</sup>. To some extent, it is because of this very mechanism that she doubts whether C&L's allegiance to the Basic Set Assumption is prudent enough. One of her worries arises with respect to the demonstratives: they notoriously require the current speaker intentions to be involved in reference determination, which seemingly threatens the formal route to semantic content due to the nebulous nature of speaker intentions which are not formally traceable. Thus, given that Borg does not remove demonstratives from the Basic Set, she has to combine three things to defend the "formal route to semantic content": (1) the object referred to by this demonstrative in a context indeed exhausts its semantic content; (2) to fix this referent depends on speaker intentions; (3) the current speaker intentions are semantically irrelevant.<sup>4</sup>

Setting aside how and whether Borg can hang on all of them (which will be addressed in the next section), it is now necessary to explain why Borg's answer to the range problem is stronger than C&L's even if she does not identify fewer numbers of indexicals than the Kaplan's list. First, Borg is not tempted to regard a commitment to the range of context-sensitive expressions as the crux of semantic minimalism, and thus the range problem itself becomes of secondary importance, which, in fact, downplays the contextualist challenge arising in terms of this issue. In comparison with C&L's strategy of directly responding to such a challenge, Borg's downplaying it is obviously stronger. Second, she ([10], p. 358) claims, "...not only that every contextual contribution to semantic content must be grammatically marked but also that those features contributed by the context must themselves be formally tractable." Therefore, if the semantic content of an expression counts as context-sensitive, the context-sensitivity involved here must not only be grammatically marked but also be formally tractable. Clearly, Borg puts more constraints on acceptance of an expression as contextsensitive, and in other words, she is more austere in delimiting the range of context-sensitive expressions.

#### 2.3 The Radical Answer

The Basic Set Assumption is refuted and shrunk in the radical minimalism argued by Bach [3, 6, 7]. Bach [6] distinguishes three kinds of indexicals: automatic indexicals, whose stable meanings (or character in Kaplan's sense) determine the semantic

<sup>&</sup>lt;sup>3</sup> In this passage, Borg explains what the so-called formal route to semantics is: "According to minimalism, the only reasoning processes involved en route to recovery of semantic content are deductive, computationally tractable processes." ([11], p. 114).

<sup>&</sup>lt;sup>4</sup> This point benefits from an anonymous reviewer.

contents relative to contexts, such as "I" and "today"; discretionary indexicals (or true demonstratives), whose references are determined by speaker's referential intention, the context in this case functioning as constraints on that intention and "on the hearer's inference as to what that intention is" ([6], p. 9), such as "now", "then", "here", "we", "you", "she", "this" and "that"; hidden indexicals, whose occurrences should be assumed for some particular sentences to express the truth-evaluable proposition, e.g. in "it is raining" a location and time where it rains seems required for the sentence to be a definite, truth-evaluable proposition like "it is raining in Lyon on 20 June 2015". The same thing is true of "John is ready" (ready for what?), "Louis is a fan" (a fan of what?), "the hospital is on the left" (on the left of what?).

On Bach's view, context-sensitive expressions are merely automatic indexicals. Discretionary indexicals get their references through speaker's referential intentions. Nevertheless, they are, though semantically incomplete, context-insensitive: context just plays a role in constraining speaker's referential intentions. Those reports and terms<sup>5</sup> above are also semantically incomplete, expressing propositional radicals, rather than propositions, and the hidden indexicals are thus not context-sensitive. It is crucial to note that semantic incompleteness and non-propositionalism are two grounds on which the number of context-sensitive expressions radically shrinks: discretionary and hidden indexicals make the sentence containing them semantically incomplete, yet the sentence does not need contexts to assign semantic values to these indexicals for expressing a proposition inasmuch as it can express a propositional radical rather than a proposition. Hence, these indexicals are context-insensitive.

### 2.4 Controversy on Non-propositionalism and Semantic Incompleteness

The greatest controversy here occurs over semantic incompleteness and nonpropositionalism. C&L show no hesitation when they enumerate demonstrative pronouns (part of discretionary indexicals in Bach's term) in the Basic Set, and in addition, C&L advocates that the utterance of "John is ready" is true just in case John is ready, and the proposition semantically expressed here is complete: John is ready. It is the typical form of "minimal proposition" conceived in C&L's version of minimalism. There is no semantic incompleteness here in the proposition. As just noted, Borg may think that the Basic Set Assumption is dubious since the semantic contents of the demonstratives listed in the Basic Set could not be determined without speaker intentions (disruptive for the formal semantics she wants for minimalism). But what really matters for her is that how to get rid of the negative effect of speaker intentions on semantic contents of the demonstratives: she does not think of the demonstratives as semantically incomplete. Additionally, Borg regards propositionalism as an important feature of her minimalism. Even with regard to sentences in which hidden indexicals appear, Borg [8] formulates "liberal truth-conditions", for example: the utterance of

<sup>&</sup>lt;sup>5</sup> These examples of hidden indexicals are tagged as "weather and other environmental reports ('it is raining')", "terms with missing complements('John is ready')", "relational terms ('Louis is a fan')" and "perspectival terms ('the hospital is on the left')".

"John is ready" is true in a context c iff John is ready for something in c.<sup>6</sup> By contrast, Bach defends semantic incompleteness and non-propositionalism by three arguments.

First, it is not enough for an expression to be context-sensitive that the speaker can mean something different when she uses the expression in different contexts. As Bach ([6], p. 178) argues, "it has to be the content of the expression itself that varies, and it has to be the context, in a way determined by the meaning of the expression, that makes the difference." When we explain the meaning of automatic indexicals by virtue of the "content-character" framework of Kaplan, we can show that they satisfy those requirements: the referent of "I" varies when different speakers say "I" because the character of "I" specifies that the content of "I" is a function of the context which is constituted by a set of parameters such as <the speaker, the time, the place>; as the name of this kind of indexicals hints, the process of explaining their meaning is automatic, and the recovery of their meaning has nothing to do with the intentional features of the context of utterance. But this is not the case for the discretionary indexicals due to the unavoidable involvement of speaker intentions in their semantic contents: different speakers at different times in different places could refer to the same object in using "that" since the speaker intentions, destroying that function mentioned above, can make this happen. Kaplan suggests adding a demonstration, such as "pointing at the object" the speaker intends to refer to, to the determinant elements of the semantic content of demonstratives, but it is sometimes unnecessary in the case, for instance, where someone says "that is terrible" after she has put a jackfruit in her mouth; there is no demonstration needed here for recovering the referent of "that". Stokke [18] proposes the inclusion of speaker intentions into context so that it will be feasible to make context determine the content of demonstratives. Bach rejects this inclusion by arguing that speaker intentions are not part of context (this point will be detailed later).

Second, we must distinguish two things: the intention, in using the discretionary indexicals, to refer to something and the intention for the discretionary indexicals to have a certain semantic value. [1]<sup>7</sup> According to Bach, when we use a discretionary indexical, what is really happening is that the speaker is referring to something and directing the hearer to the thing she is referring to and the discretionary indexical is like the signal of what the speaker is doing; but no intention of endowing the discretionary indexical with a semantic content is involved here. So, if any utterance of a discretionary indexical lacks a determinate semantic content owing to the former kind of

<sup>&</sup>lt;sup>6</sup> Prima facie, "liberal truth-conditions" seems to indicate that "John is ready" (relative to a context) alone cannot express a complete proposition since the complete proposition (truth-condition) is "John is ready for something in c" and it therefore seems that Borg stands in the same line with Bach in this regard. However, Borg construes a liberal truth-condition for the utterance of "John is ready" whereas Bach refutes that "John is ready" expresses any truth-evaluable proposition. As Bach ([7], p. 91) notes: "A great many sentences, such as 'Jerry is ready', 'Tom is tall', and 'Leaves are edible', do not express a proposition independently of context. It does not follow that such a sentence expresses a proposition relative to a context, for it may not express a proposition at all. Many supposed cases of context sensitivity are really instances of something else: *semantic incompleteness*."

<sup>&</sup>lt;sup>7</sup> This distinction is from the unpublished work "Reference, Intention, Context: Do Demonstratives Really Refer" of Bach.

speaker intentions, it makes no sense to say the semantic content of a discretionary indexical itself varies in different contexts and it will then make no sense to say it is context-sensitive. Given that the semantic contents of discretionary indexicals are dependent on speaker intentions, they are semantically incomplete since the involvement of intentions means that those indexicals contribute to communication rather than have semantic contents.

Third, Bach thinks that propositionalism<sup>8</sup> overloads the minimalists with accounting for why a sentence including hidden indexicals, which intuitively seems not to express a complete proposition, actually does. "John is ready" seems not to express a complete proposition, for it cannot be truth-evaluable until what John is ready for is specified; that part can only be fulfilled by the context. While C&L and Borg conceive the "minimal" truth-evaluable propositions as the move to discard that semantic intuition, Bach propounds "a minimalism without propositionalism" which not only accommodates the ordinarily semantic intuition but also preserves minimalism. For Bach, the idea of non-propositionalism is not hard to accept if we think as follows:

"Since these [the propositions] are made up of building blocks assembled in a particular way, it makes sense to suppose that in some cases such an assemblage, put together compositionally from a sentence's constituents according to its syntactic structure, might fail to comprise a proposition" ([3], p. 436).

C&L doubt the assumption about semantic incompleteness and ask "what are the criteria by which one sentence is deemed semantically incomplete and another complete?" ([4], p. 3) Bach provides two such criteria:

α. "A (declarative, indexical-free) sentence is semantically incomplete if it fails to express a proposition." ([3], p. 440)

 $\beta$ . "A sentence is incomplete just in case what the speaker means has to go beyond the sentence meaning." ([3], p. 441)

Both are rejected by C&L. Regarding  $\alpha$ , there is a vicious circle; whether or not a sentence is semantically incomplete depends on whether it fails to express a proposition, but if we want to know whether or not there is a well-formed proposition expressed by a sentence, it seems that we have to know whether or not the sentence is semantically complete. Regarding  $\beta$ , there seems to be a rule made here for what the speaker cannot mean, e.g., she can't mean a proposition radical and what she means should be a complete proposition. According to C&L,

"We are locked into a rather tight circle: draw the complete/incompleteness distinction by an appeal to what speakers can mean; characterize what speakers can mean by an appeal to the complete/incomplete distinction." ([15], p. 4).

Bach replies to the criticism:

"Such questions have to be settled on a case-by-case basis and what they're asking for is a general criterion. However, the lack of a general criterion does not show that the distinction is bogus. After all, there is no criterion, no principled basis, for distinguishing men who are bald from men who aren't. Would C&L argue, regarding men

<sup>&</sup>lt;sup>8</sup> As Bach ([3], p. 435) claims, propositionalism is "the conservative dogma that every indexical-free declarative sentence expressed a proposition".

with at least one hair on their heads that either they're all bald or that none are? Would they proclaim that these are our sole options?" Bach ([4], p. 3).

To sum up, C&L's weak version accepts the Basic Set as the range of context-sensitive expressions in that all the expressions therein pass their two tests for context-sensitivity; Borg's strong version puts more constraints on accepting an expression as semantically context-sensitive in order to protect her formal route to semantics from the nebulous speaker intentions; Bach's radical version minimizes the Basic Set to automatic indexicals on grounds of semantic incompleteness and non-propositionalism.

# **3** The Intention Problem

If the demonstratives are assumed to be context-sensitive expressions, it is natural to ask how contexts and speaker intentions cooperate in determining the semantic contents of the demonstratives. The answers of the three versions diverge.

#### 3.1 The Radical Answer

One important distinction should be kept in mind: narrow-context (NC) versus wide-context (WC). According to Bach [2], this distinction can be qualified as follows:

- NC: the identity of the speaker and the hearer, the time and place of an utterance
- WC: Narrow context + anything relevant for the hearer to arrive at the speaker's communicative (e.g. referential) intention

Bach holds that only NC contributes to the semantic contents of context-sensitive expressions; WC is taken into account for "whether the speech act is being performed successfully and felicitiously", it thus lies within pragmatics. Also, the speaker intention according to Bach is not counted as a parameter of either NC or WC. It mainly determines the content of semantically incomplete expressions like discretionary indexicals. He provides three arguments for separating speaker intentions from context.

First, speaker intentions are in effect the communicative content but not the context of communication. In ordinary communication, the speaker, in using "that", intends to refer to something and intends the hearer to get the thing she refers to, and she still intends the hearer to get her intentions. These intentions appear as part of communicative information, and communication is endowed with them, otherwise it would not be "communication". Hence, we say that speaker intentions are brought into play as the content exchanged between the speaker and the hearer in communication but not as the context which seems "behind" or "around" the communicative stage.

Second, WC involves the cognitive facet of the surroundings in communication such as "salient mutual knowledge" and "relevant common background knowledge" between interlocutors, and "the current state of conversation" (the information already delivered), the "physical settings" that the participants in conversation cognitively access. As Bach ([5], p. 1) argues, the role of WC is pragmatic, and it consists in

constraining "what a hearer can reasonably take a speaker to mean in saying what he says" and "what the speaker could reasonably mean in saying what he says." But speaker intentions serve a different role: they determine what the speaker actually mean.

Third, for context to explain how expressions used in communication are interpreted, there has to be a symmetry between the access the speaker and the hearer respectively have to the effect of context. ([5], p. 2) Namely, they mutually acknowledge which items in context are contributing to the communicated meaning. In ordinary conversation, this is a necessary condition which allows the talk to proceed successfully. In this sense, speaker intentions should not be included in context, because apparently speaker intentions are not directly accessible to the hearer while they are to the speaker, and accordingly there is not the necessary symmetry between the speaker and the hearer.

With the arguments Bach provides in mind, we can now sum up Bach's general position on the relationship between semantic contents of indexicals, contexts, and speaker intentions:

- NC determines the semantic contents of context-sensitive expressions: automatic indexicals;
- Speaker intention determines the reference of semantically incomplete expressions (e.g. discretionary indexicals);
- WC is pragmatically but not semantically relevant (e.g. identifying speaker intentions, providing the conditions of the successful and fecilitious speech act).

#### 3.2 The Strong Answer

Borg ([8], pp. 29–33) identifies two exclusive kinds of features of context: objective and perspectival (intentional). She advocates that full-blooded formal semantists should have no hesitation to appeal to the objective features of context for figuring out semantic values of all context-sensitive expressions; so-called objective features of context here are to be understood as narrow context in Bach. She argues: "specifically, though 'objective' features of the context of utterance, like who is speaking, when they are speaking and where they are located, are admissible, richer features, which require access to the speaker's mental state, are not similarly admissible." ([8], p. 39) And she continues to insist that "allowing current speaker intentions to be semantically relevant runs counter to the ethos of formal semantics". ([11], p. 113),

Borg's version of minimalism pursues all the way the formal approach to semantics whose aim is only to specify the formal features of linguistic expressions. One point should be noted however: so called "formal features" means the "repeatable, code-like and normative aspects of linguistic meaning" ([8], p. 21), and identifying these features are deductive, computationally, tractable processes. But, as is said above, Borg's formal semantics is jeopardized by the intention-sensitive terms like demonstratives. How to characterize their semantic content is therefore a necessary work for her.

First of all, Borg strictly distinguishes "semantic content" from "reference fixing (determination)". According to her, the latter presumes epistemic constraints on the

object referred to by a referential expression. Obviously, identifying the referent of "that" is a process constrained by some epistemic state, and in other words, reference fixing process is intention-dependent. This is unacceptable in Borg's semantic picture. However, without reference fixing in semantics, where can we eventually find or know which object is referred to by the term "that"? This problem necessitates Borg's characterization of "semantic content" itself. Borg [8] defines this semantic content as a syntactically generated singular concept. Understanding a sentence in which a demonstrative occupies the subject position is tantamount to entertaining a singular thought which is merely syntactically driven:

"Entertaining a singular thought, where this is individuated syntactically, becomes entertaining a thought which relates in a specific, intimate way to an object, a thought whose truth depends on how things stand with a particular object, but which does not require that the agent is currently in a position to (non-descriptively) identify the object her thought is about." ([8], pp. 187–188).

She explicitly admits that this contention borrows from, and is even based on Fodor's notion of "language of thought". For Fodor, thought is syntactically driven, and all that happens in thought is a syntactical computation; in other words, thought reflect the syntax of language. Thus, the semantic content of a demonstrative involves no more than a singular concept in Fodor' language of thought and knowing how to single out the reference of a demonstrative from all other things becomes a postsemantic notion. In this way, the effect of speaker intentions is wiped off the semantic contents of demonstratives.

Another problem arises then. If the semantic content of a given demonstrative is just a singular concept which is extraneous to the external world, how is it possible to get the truth condition (proposition) of the sentence containing the demonstrative in subject position? Borg comes up with an extremely weak notion of "truth condition" for answering to this question. As she argues, for the utterance "that is mine", minimal semantics just simply produces its truth condition as follows: "If t is a token of 'that is mine' uttered by  $\beta$ , and the token of 'that' therein refers to  $\alpha$  then t is true iff  $\alpha$  is  $\beta$ 's." ([8], p. 206) That is to say, what is specified by this weak notion of "truth condition" is nothing more than the concept of  $\alpha$  belongs to  $\beta$ , and also, this sort of truth condition merely represents the knowledge about what would be the case not about what is the case for the utterance to be true. Thus, the actual object and speaker to which  $\alpha$  and  $\beta$  respectively refer are not contained as constituents in the truth condition in that identifying that object and speaker is semantically irrelevant. In short, Borg's "truth condition" no longer denotes ways the world is (or might be) but just represents ways the world would be for a sentence to be true.

It is now clear that Borg wipes off the speaker intention from her minimal semantics generally by the three steps: (1) distinguish semantic content from reference fixing, (2) redefine the concept of "semantic content", and (3) provide a weak semantic notion of truth condition. Nonetheless, as we have indicated, Borg insists that the object referred to by a referential expression exhausts its semantic content, and it seems a thorny problem to keep consistent between the semantic content defined as a singular concept and the semantic content exhausted by the object. Finally, we may outline her general positions on the relationship between semantic contents of indexicals, contexts, and speaker intentions, as follows:

- Objective context determines the semantic contents of all context-sensitive expressions: pure indexicals and true demonstratives.
- Perspectival context (i.e. speaker intentions) is semantically irrelevant.

### 3.3 The Weak Answer

It is widely but not universally acknowledged that we would be closer to pragmatics if we allow more space to speaker intentions in determining semantic contents. Concerning the Intention Problem, C&L's semantic minimalism is a weak version in that they take for granted the role of speaker intentions in semantic contents. In their view, the content of a context-sensitive expression, fixed by speaker intention, still stays at the "semantic" level, and it is consistent with semantic minimalism that wide context, or particularly, speaker's referential intention is semantically relevant. On their view of determining the proposition semantically expressed, there are five steps:

- a. Specify the meaning (or semantic value) of every expression in the sentence;
- b. Specify all the relevant compositional meaning rules for English;
- c. Disambiguate every ambiguous/polysemous expression in the sentence;
- d. Precisify every vague expression in the sentence;
- e. Fix the semantic value of every content sensitive expression in the sentence.

From this specification of the proposition semantically expressed, it is clear that C&L are not concerned at all with what may be relevant in the determination of the proposition in question or how semantic content is fixed or how context is employed for reference determination. As they claim, "the exact nature of the reference fixing mechanism" is out of their consideration. And another argument echoing their accommodating stance on the role of speaker intentions is given in Cappelen's [12] criticism of the semantic/pragmatic distinction. He argues that the distinction is not theoretically worthwhile.

"There is no such thing as the semantics-pragmatics distinction and looking for it is a waste of time. No such distinction will do any important explanatory work. You can... label some level of content 'semantic content', but in so doing no interesting problem is solved and no puzzling data illuminated." ([12], p. 3).

As Bach and Borg hold, the NC/WC distinction corresponds to one aspect of the semantics-pragmatics distinction. Given that Cappelen thinks of the semantics/ pragmatics distinction as a matter of terminology, the NC/WC distinction therefore loses all its interest for Cappelen. Hence, when Cappelen confirms that speaker intentions (a key element of the NC/WC distinction) are involved in the semantic contents of context-sensitive expressions, the general idea seems to be that speaker intentions are a prerequisite of meaning for languages. Imagine a possible world where there are tokens similar to those of our languages, but where there are no agents: in such a world, those tokens would be meaningless. It is of course a trivial idea, and that's why C&L decidedly thinks that it would be cheating if someone claimed that the semantic content didn't depend in any way on speaker intentions. ([14], p. 149).

#### 3.4 Real Divergence on Speaker Intentions

Prima facie, Bach and Borg differ in terms of the relationship between semantic contents of indexicals, contexts and speaker intentions, while C&L, taking the determinants of semantic contents for granted, only specify the steps in which a proposition is semantically expressed. However, the real divergence actually lies in what kinds of speaker intentions play the determinant role and how that role plays out for each side.

Borg [9] describes two options. First, there are "conventional speaker intentions" as constitutive of meaning (semantic content). Borg identifies this kind of speaker intentions in the Gricean explanation of utterer's meaning; as Borg reformulates it, "An agent means something by a given act only if she intends that act to produce some effect in an audience, at least partly by means of the audience's recognition of that intention." Furthermore, in the Gricean model analyzed by Borg, utterer's meaning delivers "the semantic content of a sentence where there is a convention among a community of speakers to use an expression of type x in the way specified by the given instance of utterer's meaning."9 Given the Gricean project to the effect that its sentence has its semantic content via utterer's meaning in a language community and conventional speaker intentions perform an explanatorily indispensable role in explaining utterer's meaning, conventional speaker intentions have a role in determining constitutive semantic contents. Thus, such conventional speaker intentions seems to be the theoretical formulation of the speaker intentions seen as a precondition of meaning for languages in the trivial thought experiment above. Second, there are "current speaker intentions". Borg [9] identifies it in Sperber and Wilson's (hereafter S&W) relevance theory. In relevance theory, "relevance" is a technical term: in a specified communication, an interpretation of a communicative act (e.g., an utterance of a sentence) is relevant only if during the communicative event the cognitive cost of processing the interpretation is outweighed by the cognitive benefits of that processing. And the "interpretation" here means that the addressee succeeds in getting what the speaker intended to communicate by the utterance of a sentence. In addition, for S&W, semantics is a decoding process which is the first step in linguistic comprehension, and it cannot but deliver an incomplete, non-propositional, and non-truth-evaluable logical form. In order to arrive at the propositional or truth-evaluable content for the utterance in every communicative event, speaker intentions are necessarily required in a further step after the semantic decoding. The speaker intentions mentioned here are current speaker intentions, because they should be "always" ongoing in order for the utterance in question to have a propositional content.

Notably, these two kinds of speaker intentions are brought into play with different theoretical motivations. Conventional speaker intentions in the Gricean project are, according to Borg, considered as an intrinsic part of meaning. And they play a necessary role in the philosophical explanation of where meaning comes from. In contrast, current speaker intentions are required as part of a theory about the mechanism of pragmatic interpretation in every communicational event. Additionally, Borg's distinction on speaker intentions is effectively similar to but just terminologically different

<sup>&</sup>lt;sup>9</sup> Borg's analysis of Grice as a conventionalist is however debatable.

from Bach's distinction between the intentions for indexicals to have semantic values and the intentions, in using indexicals, to refer to something. Thus, we could dub their distinctions together as Semantic-Intention (SI)/Pragmatic-Intention (PI) distinction.

Borg [9] considers that only SI (but not PI) is the determinant constitutive in semantic contents of all the indexicals, while C&L ignore the SI/PI distinction and leave the door open for both to play a role in semantics. On Bach's side, speaker intention is distinguished from context, and SI is just involved in semantic contents of automatic indexicals (pure indexicals), PI discretionary indexicals (true demonstratives).

# 4 Concluding Remarks

The schism within semantic minimalism in terms of the range and intention problems can now be wholly formulated.

In Bach's radical version, context-sensitive expressions are only automatic indexicals whose semantic contents depend on NC and SI. Discretionary indexicals are semantically incomplete and PI determines their references. Hidden indexicals express propositional radicals due to non-propositionalism.

In Borg's strong version, context-sensitive expressions are comprised of pure indexicals and true demonstratives. Given that the semantic contents of true demonstratives are defined as syntactically generated singular concepts and identifying their references is considered as a post-semantic task, the semantic contents of both kinds of indexicals depend on NC and SI. Additionally, PI and WC fall outside the semantic considerations. Contrary to Bach, Borg considers propositionalism as part of her minimalism, and the sentence containing hidden indexicals express a "liberal true condition".

In C&L's weak version, all the expressions in the Basic Set are context-sensitive. Postulating the so-called hidden indexicals and semantic incompleteness is untenable, and thus the sentence, like "John is ready", allegedly containing hidden indexicals, express a proposition: John is ready. Moreover, the semantics/pragmatics, NC/WC, SI/PI distinctions are all ignored and C&L take them to be theoretically unimportant.

As is seen, though all the three versions of semantic minimalism hold that contextsensitivity is exclusively licensed by grammar, their specific answers to the range and intention problems totally diverge, which, on this point, results in the three distinctive pictures of semantic minimalism. Surely, each minimalist can have a distinctive point of view of semantic minimalism, but the specification of these three versions may make us recognize its often neglected diversity.

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# References

- 1. Bach, K.: Reference, Intention, and Context: Do Demonstratives Really Refer. Unpublished Work
- Bach, K.: The semantics-pragmatics distinction: what it is and why it matters. In: Turner, K. (ed.) The Semantics/Pragmatics Interface from Different Points of View, pp. 65–84. Elsevier Science Ltd., Amsterdam (1999)
- Bach, K.: The excluded middle: semantic minimalism without minimal propositions. Philos. Phenomenological Res. 73(2), 435–442 (2006)
- 4. Bach, K.: Minimalism for Dummies: Reply to Cappelen and Lepore. http://online.sfsu.edu/~kbach
- 5. Bach, K.: Why speaker intentions aren't part of context (2009)
- Bach, K.: Context dependance (such as it is). In: García-Carpintero, M., Kölbel, M. (eds.) The Continuum Companion to the Philosophy of Language, pp. 153–184. Continuum Press, London (2012)
- Bach, K.: The lure of linguistification. In: Penco, C., Domaneschi, F. (eds.) What Is Said and What Is Not, pp. 87–97. CSLI Publications, Stanford (2013)
- 8. Borg, E.: Minimal Semantics. Oxford University Press, Oxford (2004)
- 9. Borg, E.: Intention-based semantics. In: Lepore, E., Smith, B.C. (eds.) The Oxford Handbook of Philosophy of Language, pp. 250–266. Clarendon Press, Oxford (2006)
- Borg, E.: Minimalism versus contextualism in semantics. In: Preyer, G., Peter, G. (eds.) Context-Sensitivity and Semantic Minimalism: New Essays on Semantics and Pragmatics, pp. 339–359. Oxford University Press, Oxford (2007)
- 11. Borg, E.: Pursuing Meaning. Oxford University Press, Oxford (2012)
- Cappelen, H.: Semantics and pragmatics: some central issues. In: Preyer, G., Peter, G. (eds.) Context-Sensitivity and Semantic Minimalism: New Essays on Semantics and Pragmatics, pp. 3–22. Oxford University Press, Oxford (2007)
- Cappelen, H., Lepore, E.: A tall tale: in defense of semantic minimalism and speech act pluralism. Can. J. Philos. 34(Suppl.), 2–28 (2004)
- Cappelen, H., Lepore, E.: Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism. Blackwell Publishing Ltd., Hoboken (2005)
- 15. Cappelen, H.: Reply to bach. In: PPR Symposium on Insensitive Semantics (2006)
- Kaplan, D.: Demonstratives. In: Almog, J., Perry, J., Wettetein, H. (eds.) Themes from Kaplan, pp. 481–563. Oxford University Press, Oxford (1989)
- Robbins, P.: Minimalism and modularity. In: Preyer, G., Peter, G. (eds.) Context-Sensitivity and Semantic Minimalism: New Essays on Semantics and Pragmatics, pp. 303–319. Oxford University Press, Oxford (2007)
- 18. Stokke, A.: Intention-sensitive semantics. Synthese 175(3), 383–404 (2010)