Semantic Minimalism’s Truth-Evaluability: The Minimal Proposition and Semantic Uncertainty

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Abstract. Semantic minimalists argue that the semantic content of a sentence is a complete truth-conditional content that is formed by combining the syntactic structure of the sentence with the semantic values of the expressions used in the sentence, which are determined by their conventional meanings. Contextualists believe that the context in which expressions are used can leave the content of those expressions undetermined, and contexts are necessary to establish their meaning. This paper examines the debate between semantic minimalism and contextualism regarding the nature of meaning and truth-evaluability. Contrary to contextualism’s claims, it maintains that minimal propositions are truth-evaluable and tries to disprove contextualism’s criticism of minimalism by dispelling the idea that a statement without context will always have incompleteness and content shifting.

Keywords: Semantic Minimalism, Contextualism, Truth-evaluability.

1. Introduction

This paper focuses on the debate of truth-evaluability between semantic minimalism and contextualism. The main arguments of semantic minimalism will be presented in part 2. In part 3, the paper will defend the notion that minimal propositions have truth-evaluability against Ku’s argument of synonymous sentences. Parts 4 and 5 of the paper discuss two types of semantic uncertainty proposed by contextualists and provide two corresponding replies to such uncertainty.

2. An Overview of Semantic Minimalism

Semantic minimalism posits that truth-evaluability is a property of minimal proposition which is independent of any particular context or situation. Utterances whose interpretation and meaning are independent of the context in which they are used are commonly referred to as context-insensitive (CI, hereafter). CI-utterances express comprehensive, truth-evaluable propositions without reliance on the contexts in which they are uttered. In other words, sentences in natural language possess inherent meanings that can be considered complete in nature, denoting propositional contents that can be evaluated for truth. The meanings are exclusively determined by the combination of lexical elements and syntactic structure present within the sentence [1]. Consider Example I:

Example I:
Mary and John are having a Zoom meeting, talking about the weather while Mary is in London and John is in Hong Kong. The following is a dialogue in the meeting.

John: How is the weather in London?
Mary: It is raining. Actually, most of the days are rainy.

In light of our personal experiences with regular talks, Mary’s response appears accurate. If it was raining in London when Mary said, then the first statement, “It is raining,” is accurate. Given that London is influenced by oceanic climate, the second statement, "most of the days are rainy,” is likewise intuitively understandable. Semantic minimalists, however, contend that this is untrue. Notice that the quantifier ‘most’ has to be CI. That is, ‘most of the days’ refers not to the days particularly in London, but the days every human would experience. The quantifier ‘most’ in Example I behaves the same in the utterance ‘Most of the vehicles consume gasoline’. A quantifier
like ‘most’ is universally applicable in a sentence, which affects the truth-evaluability of that sentence [2]. Therefore, the second half of Mary’s answer is false because it is not true that most of the days (experienced by all humans) are rainy. The utterance ‘Most of the vehicles consume gasoline’ is true as most of the vehicles, in fact, consume gasoline.

Be aware that there are also context-sensitive (CS, hereafter) expressions. Semantic minimalists acknowledge that the extensions of these CS-expressions change depending on the context, but they reject the idea that CS-expressions may transmit truth-evaluability by themselves [3]. It is counter-intuitive for semantic minimalists to accept the pragmatic effects in a sentence. However for some CS expressions, semantic minimalists allow limited contextual influence. Borg analogises pragmatics to a horse and semantics need to tame pragmatics [1]. As an illustration, an utterance ‘He likes that’ which involves an indexical ‘He’ and a demonstrative ‘that’. This utterance, is non-truth-evaluable since ‘he’ can refer to any male individual and ‘that’ is not specified. We therefore need a context to fully understand the utterance.

3. Minimal Proposition and Truth-evaluability

It is stated that semantic minimalists argue that minimal proposition has truth-evaluability. A minimal proposition is an utterance that just conveys lexico-syntactic information; all pragmatic effects must be eliminated. It seeks to capture an utterance's truth-conditional contributions. Consider the following example:

**Example II** John is ready.
There is a referent named "John" who is ready (i.e., in a state of being prepared) for anything, which will be the bare minimum proposition of Example II. The minimal proposition functions as a biconditional truth-condition, assessing whether the referent 'John' is genuinely prepared for something. It produces a true result when John is ready and a false result when he is not [3].

One argues that the minimal proposition is unable to deal with synonymous sentences. Ku first argues that two propositions should convey the same meaning and will have the same truth condition if they are synonymous [4]. An example of (intuitively) synonymous sentences:

**Example III** (i) John beats Mary.
(ii) Mary loses the race against John.
(i) and (ii) are synonymous since both of them express the idea that John wins while Mary loses. However, the synonymous (i) and (ii) have different minimal propositions.

(i*) Some entity called John beats in some manner some entity called Mary.
(ii*) Some entity called Mary loses the race in some manner against some entity called John.
(i*) and (ii*) are minimal propositions of (i) and (ii) respectively. Ku argues that (i*) and (ii*) are not the same – two synonymous sentences are supposed to share the same minimal proposition [4]. The word ‘beat’ can be interpreted in different ways, such as physically hitting something or striking a drum or other instrument. (i*) and (ii*) therefore will lead to different propositions if we reconstruct them from their minimal propositions.

This paper argues that the example offered by Ku is misleading: the ‘race’ in (ii) actually offered a context for Example III. People interpret 'beat' in (i) as ‘defeating somebody’ because people substitute (i) into the contextual understanding of (ii). (i) and (iii) are considered synonymous by proposing sentence (iii):

(iii) Mary is beaten by John.
It is difficult for people to determine the context of 'beat' in (i) and 'beaten' in (iii) directly, whether it refers to the outcome of a race or the ‘beating’ in the physical sense. In this case, the minimal propositions of (iii) should be (iii*):

(iii*) Some entity called Mary is beaten in some manner by some entity called John.
Since understanding sentences involves contextual interpretation rather than reducing them to isolated syntactical and logical products, Ku also argues that it is problematic to claim the minimal
proposition has truth-evaluability. For this reason, we intuitively reject (i) and (i*) as synonymous [4]. This paper rejects this notion by proposing Example IV:

**Example IV** (iv) Qucponti beats Xeopcets.

(iv*) Some entity called Qucponti beats in some manner some entity called Xeopcets.

The question is, why do we need such an ‘understandable context’ for truth-evaluability? In Example IV, (iv*) is the minimal proposition of (iv). Even if we have trouble understanding Qucponti and Xeopcets, (iv*) is still intuitively truth-evaluable since (iv*) is true iff Qucponti in some manner some entity called Xeopcets and wrong if not. Are (iv) and (iv*) synonymous? The answer is yes as they have the same cause-and-effect relationship. Qucponti is the entity that is performing the action of beating while Xeopcets is the entity that is being defeated. Regardless of the specific wording used, the underlying meaning remains the same and this is true in the case of (i) and (i*).

4. **Contextualism’s Semantic Uncertainty**

Contextualism posits that expressions often have underlying or implicit elements that require context to be fully understood and the impact of pragmatic effects on the semantic content is quite important [5,6]. There is uncertainty between them since we are unable to discriminate between statements and their underlying meanings without knowing the precise situations. 'Semantic Uncertainty' is the term used to describe this ambiguity.

The very first Semantic Uncertainty introduced by contextualists is Context Shifting. Consider an utterance *u*. *u* is semantically undetermined if one intuitively perceives that *u* conveys different meanings in varying contexts without any explicit context-sensitive expressions in *u*; thus, a definition of Context Shifting is given as follows:

**Context Shifting** The meaning of an utterance changes depending on the context of that utterance, resulting in a shift in the truth value of the proposition expressed.

Consider an utterance *u*, ‘The battery is durable’. There are two conceivable truth-conditions: either the battery is powering my phone continuously, or the battery is plugged into an electric car. When the battery is supporting the phone, let the utterance be *u*1, and when it is supporting the car, let it be *u*2. Clearly, the truth value differs with context in that *u*1 is intuitively true while *u*2 is false. When the truth value of an expressed proposition changes while the relevant facts stay constant (i.e., the battery does not change in its capacity, quality, etc., within different contexts), *u* is CS, which means that the proposition has several interpretations depending on the context of the utterance [6].

Incompleteness is another Semantic Uncertainty. Contextualists argue that one cannot determine the truth value of an utterance obtains incompleteness, which is defined below:

**Incompleteness** An utterance that does not express a complete proposition on its own and requires additional context to fully understand its meaning.

Example II is an example of incompleteness. Obviously this example does not offer a complete proposition that the John is ready for what. Bach argues that an utterance like this is only a sentence fragment therefore no truth value can be assigned [7]. We cannot find it truth-evaluable by evaluating the syntactic constituents of this utterance alone and consequently the pragmatic effects are required.

5. **Reply to Context Shifting and Incompleteness**

5.1. **Context Shifting and Vagueness**

Contextualists can explain intuition and evaluate if the criteria are satisfied in any particular potential world by linking *u* to truth-conditions, which are sets of conceivable worlds where each world is either a member or non-member of those sets [8]. However, this is not the case. The utterance must be true or false in any possible world if it has determinate truth conditions [8]. The truth value
of a proposition expressed by \( u \) cannot be associated with different truth conditions in which vagueness plays its role.

Take ‘The battery is durable’ as an example. Is the battery durable? The truth value of the expressed proposition is either TRUE or FALSE. In a possible world where the battery is charged for a while, can we claim \( u_1 \)? If we can, it can be problematic to determine the ‘durability’ of the battery since ‘charged for a while’ is vague. The battery is durable iff it can support the phone long enough but for how long? We may further ask, is this possible world a world in which we can claim the battery to be durable? The answer is no. This possible world does not offer a determinate TRUE or FALSE for the utterance which has determinate truth conditions.

5.2. Instability and Slippery Slope

To answer the question of why ‘John is ready’ is semantically incomplete, we must identify what makes it complete as claimed by contextualists. According to them, an extra contextual element must be added to grasp the truth value of the original utterance as follows:

\( (v) \) John is ready [for the gym].

\( (v) \) intuitively expresses that ‘John is ready for the gym’ is true iff John is ready for the gym.

Cappelen and Lepore mentioned the instability of incompleteness arguments which questioned why determine the extra contextual element so that we can determine the original utterance [9]. If we consider ‘John is ready’ incomplete as it fails to address the question "John is ready [for what]," then why is not \( (v) \) also considered incomplete as it does not answer the question ‘John is ready for the gym [to do what]’?

The instability of incompleteness arguments put out by Cappelen and Lepore are comparable to Borg's critique of the slippery slope. Before establishing the truth conditions, if we accept the idea that additional contextual information is required to supplement the constituents for utterances, we risk going down a slippery slope where the additional contextual element requires further precisifications, which in turn require further precisifications, and so on [10]. In essence, if we permit the addition of additional contextual information to the initial utterances, then we will have a variety of questions to respond to within one utterance.

6. Conclusion

The paper argues against the necessity of examining context to determine the truth-evaluability of minimal propositions, as they exhibit the same cause-and-effect relationship. Additionally, this paper criticized Context Shifting by highlighting how Bowker's vagueness and incompleteness can be countered by Cappelen and Lepore's instability and the slippery slope from Borg. However, it is important to note that inappropriateness and indeterminacy are also forms of semantic uncertainty, and further criticism is required to fully defend semantic minimalism.

References


