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# 論極小命題

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### 摘 要

本文探討極小命題成立與否的基礎。首先,本文將以 Emma Borg 為極小主義之代表,釐清極小主義者所謂的極小命題是種語句本身抽象而結構化的核心意義,並被賦予三種特色:直覺的、不變的、有真假可言的。本文論證具有此三種性質的極小命題是難以成立的。首先針對此主張的基礎——字詞本身的極小內容是一種不可再分、密碼般、概念化的對象——本文論證字詞展現在語句中的意義並非如此不變,因此難以支持極小命題的不變性。其次,本文論證,抽象而結構化的極小命題是邏輯分析後的產物,因此難以有真假值可言。

關鍵詞:極小主義、極小命題、字詞極小意義、Borg

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# On the Very Idea of a Minimal Proposition

#### Hsiu-Lin Ku\*

#### **Abstract**

Can the idea of a minimal proposition be successfully held? I will first formulate what the minimal proposition is in the minimalist's mind, taking Emma Borg as the representative. What a minimalist seeks for a minimal proposition is the abstract and skeletal core meaning of a sentence, and this faith is founded on the notion of minimal word meaning—an atomic, code-like, conceptual thing. I show that the problem of this notion of minimal proposition lies in the three features, intuitive read-off, invariantness, and truth-evaluability, that Borg ascribes to it. I shall argue, first, that positing a conceptual-like thing as the invariant minimal content of word cannot support the invariantness of the minimal proposition of a sentence, and second, that the skeletal content, as the minimal proposition of a sentence, is a grammatically analyzed product and thus is hardly truth evaluable. According to the analyses, the idea of a minimal proposition with these three features identified by minimalists cannot be maintained.

Keywords: minimalism, minimal proposition, minimal word meaning, Borg.

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# On the Very Idea of a Minimal Proposition\*

#### Hsiu-Lin Ku

#### I. Introduction

The debate between semantic contextualism and minimalism can be traced to a core problem: whether there is a so-called minimal proposition for each sentence *per se*, that is, without any contextual influence except for grammatical requirement (cf. Borg, 2004, 2012; Cappelen & Lepore, 2005). Most advocates of minimal propositions more or less agree that "a minimal proposition is a minimal projection from the semantic values of semantically valued constituents of a given sentence" (Cummings, 2010: 78). In contrast, most anti-minimalists argue that the method of minimal projection undermines such minimalness: there is no projection without contextual influence (cf. Recanati, 2004; Carston, 2002; Bezuidenhout, 1997; Crimmins, 1992). However, the two parties' debate appears to face a standstill because all cases that allegedly show contextual influence by contextualists are simply dismissed as either superfluous or irrelevant to semantics by minimalists. To rebuild the conversation, I suggest that rather than finding more cases for contextual

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<sup>&</sup>lt;sup>1</sup> For more discussion on these debatable arguments, see Borg (2004, 2010b), Recanati (2004), Bach (1994), Bezuidenhout (1997), Jaszczolt (2007), and Stojanovic (2008).

influence, one should investigate the image of minimal proposition that exists in the minds of minimalists in the first place and evaluate whether such a notion of minimal propositions is well grounded.

I take Borg's notion of a minimal proposition as the target. The main themes are as follows:

- Each word has a purely minimal content.
- There is a purely lexico-syntactically determined, but necessarily propositional, sentence-level content. (cf. Borg, 2012: x)
- "Semantic content for well-formed declarative sentences is truthevaluable content." (Borg, 2012: 4)
- "Semantic content for a sentence is fully determined by its syntactic structure and lexical content: the meaning of a sentence is exhausted by the meanings of its parts and their mode of composition." (Borg, 2012: 4)

A "purely lexico-syntactically determined, but necessarily propositional, sentence-level content" is emphasized to dispel any intervention from a speaker's intention: the grammar, syntax and lexical content alone can determine the sentence meaning. It is not surprising that in this understanding, words have their own meanings, the minimal content, for without such a stable constituent there is no self-sustained proposition of a sentence. Interestingly, among the literature in the debate between contextualism and minimalism, the implication of these themes is not quite fathomed because most foci involve how to characterize the contextual influence. Let us first inquire what is meant by a "purely lexico-syntactically determined" proposition.

It seems unquestionable for many that *intuitively* if we know each word's meaning (the minimal content) and compositional rules, we know the meaning of a sentence even without context—that is, without a specific situation in which we use the sentence. Moreover, because of its independence from the context, sentence meaning must be invariant. Borg dubs this sentence meaning—the minimal proposition—the reading-off content. Convention and disquotation appear to play the key roles here.<sup>2</sup> However, "intuitively reading-off" means nothing but the ability to intuitively make sense of a context-free sentence, which inevitably involves one's understanding or representation of the sentence and leads to different reading-off contents. Consider the example "Alex is ready". If I know who Alex is (e.g., my classmate) and what "is ready" means (e.g., being prepared to do something), then I know what the sentence "Alex is ready" means. However, if I do not know to whom "Alex" refers or under what conditions the sentence is uttered, I know that the sentence "Alex is ready" means that "someone named Alex is ready for something". Possible readings of this sentence clearly vary. Which reading is the minimal proposition of the sentence, if the minimal proposition should be both intuitively read-off and invariant?

The above questions lead a minimalist to claim that we should not assume any background information for this sentence, such as knowing to

Does this mean that a minimal proposition is the first proposition to emerge in one's understanding of that sentence? If so, then the status of the minimal proposition may be threatened because contextualists provide many examples to show that the content of a sentence that we grasp may not be the same as that identified by the minimalist (cf. Recanati, 2004). However, Borg herself accepts that this minimal proposition need not be the first or only one that must exist in each possible token of the sentence type. To determine a minimal proposition, there is no need to appeal to one's actual process of interpretation in a given context (cf. Borg, 2010a) or to the first content that appears in one's mind when one encounters the sentence.

whom the term refers or the subject with which the term coordinates. For the minimal proposition of a sentence, then, it is best to be as abstract, neutral, and skeletal as possible and, through convention or disquotation, to avoid personal associations. To what extent is the background pure enough that we arrive at the alleged minimal proposition? The only candidate left appears to be the simple, grammatically built proposition; that is, the minimal proposition appears to be the analysis down to the abstract logical structural analysis: there is an object referred to by the term "Alex" that is ready for something.<sup>3</sup> In this sense, the way we grasp it is a sort of "making-as-if"—making sense of a sentence as if there is a subject that behaves as the predicate "ready" describes, even though one probably has no idea what this subject looks like or what this predicate demonstrates. This gives us a view of how this making-as-if content can be invariant under even the most impoverished null context because the minimal proposition is more like the *core meaning* of the sentence in this sense, and the core meaning is presumably stable. This is not to say that the minimal proposition is hidden in every use of the sentence; rather, it covers all of them.4

The insistence on such a minimal proposition is perhaps understandable. It seems natural that "we can intuitively garner information from a well-formed sentence, even without context, that is capable of being true or false depending on how the world is" (Borg, 2012: 4).<sup>5</sup> From the perspective

<sup>&</sup>lt;sup>3</sup> "[W]e might allow reference and extension identification to remain *as murky as we like* without this preventing the common sense properties we use for categorizing the world from entering into genuinely explanatory hypotheses about linguistic content." (Borg, 2012: 162, emphasis mine)

In a similar construal, the sense of "making-as-if" has also been stressed; see Martinez-Manrique & Vicente (2009).

<sup>5 &</sup>quot;...it seems so natural to treat 'Snow is white' or 'Two plus two equals four' as conveying

of synonymy, without positing propositional shared content, it is difficult to explain why we believe that two different sentences express the same content.<sup>6</sup> Even the features of validity, soundness, and contradiction are based on the notion that sentences can express proposition-like content.<sup>7</sup> Moreover, the minimal proposition of a sentence is–from a minimalist's view–hermeneutically superior to the contextualists' accounts of semantic content because compositionality and the possibility of communication are accounted for by this notion instead of by permission of the unsystematic pervasion of contextual influences (cf. Borg 2004, 2012).<sup>8</sup>

However, even if contextualists may agree that there is proposition-like content for each well-formed sentence, the characteristics of that propositional content may be controversial: in what sense is such abstract, skeletal, making-as-if content *the* content of the sentence *per se*, and in what ways is such *intuitively read-off* content of the sentence also *invariant* and *truth evaluable*? The following sections argue that such a minimal proposition with these three features is untenable. In section 2, I shall first examine the invariantness of the minimal proposition of the sentence. The focus will be

information which represents the world as being a certain way, where this information is capable of being true or false depending simply on how the world in fact is, that I think we are led to posit the existence of proposition-like content at all." (Borg, 2012: 7)

 <sup>&</sup>quot;...it is natural to allow that two sentences, possibly in two different languages, can express the same content and thereby make the same claim about the world that we are tempted to think about positing a propositional content which the sentences share." (Borg, 2012: 7)
 "...arguments, expressed via natural language sentences, can be valid or invalid, sound or unsound,

<sup>&</sup>quot;...arguments, expressed via natural language sentences, can be valid or invalid, sound or unsound, or that one sentence (not just one speaker) can contradict another, yet all of these properties assume that sentences (not merely utterances) are capable of expressing proposition-like content." (Borg, 2012: 8)

With regard to compositionality and the possibility of communication, I show in another paper that it is misleading to regard the contextual influence as the opposition of two features. Because the concern here is the basis of a minimal proposition, I will not address this misleading condemnation in this paper.

on Borg's reply to the challenges of semantic complexity, which is often used to query the feasibility of the minimal content of words—the basis of the minimal proposition. I shall show that the reply does not address the core of the challenge, and I will note that the feature of invariantness is hardly maintained. In section 3, I shall examine whether the minimal proposition of the sentence in the minimalist's sense is truth evaluable. I will show that ascribing the feature of truth evaluability to such a skeletal, core, minimal proposition results in a categorical mistake and an unacceptable consequence.

# II. Can Minimal Content Support the Invariantness of a Minimal Proposition?

The minimal proposition characterized above requires a word to have its own stable, minimal content to anchor the objective, neutral, core meaning of a sentence. As Borg notes,

...the contribution words make to sentences [is] *not* as open-ended, web-like things which stand in need of contextual precisification prior to fixing their input to larger linguistic units, but rather as *discrete*, probably *atomistic*, *blob-like* things. ... [W]hat those words contribute had better (in general) be *determinate*, *context-invariant content* which, when combined in the right way, is capable of yielding truth-evaluable content. (Borg, 2012: xvii, my emphasis)

According to Borg's defense (2012: chapter 6), this *atomistic*, *blob-like* thing should be inherent in Jerry Fodor's informational atomism, according to

which words encode atomic *concepts*, revealing the mapping relation between lexical forms and mental concepts such that words *per se* can also have invariant, intuitive meaning. For example, the word "dog" encodes the concept DOG; the word "happy" encodes the concept HAPPY. In this way, the contents of lexical concepts are unstructured atoms determined by the informational relations they bear to the environment and thus do not provide further information about their semantic behavior. Contextual information is thus not involved in word meaning (or, therefore, in sentence meaning) (cf. Fodor, 1998; Fodor & Lepore, 1998). This gives a clue as to why it is helpful to sustain the sentence's invariant, intuitive, minimal proposition. This denotational style account takes the word's semantics to be "about the concept-property (mind-world) relation, hence what it is to possess a concept and how we come to possess them, that is, what the mechanisms are through which a symbol in the head locks onto a property in the external world" (Carston, 2012: 613).

However, many cases of semantic complexity force minimalism to account, because even without context, a word's contribution to or behavior in well-formed sentences can be either syntactically or semantically different. Borg takes the challenge and rejects the idea that "the complexity found in the lexicon is meaning constituting" (Borg, 2012: 166). She uses organizational lexical semantics to maintain that "one could posit complexity within the lexicon even while hanging on to the idea that word meanings are primitive, atomic elements" (Borg, 2012: 166). Let us turn to this debate and examine whether minimalism can accommodate the invariantness of minimal content and semantic complexity at the same time.

# A. Challenges Posed by Semantic Complexity

First, varying coordination with different words or subjects may lead to different readings that are not based on extra-linguistic factors, such as the following:

The beach is safe (no harmful event is likely to take place there).

The children are safe (they cannot be harmed).

The shovel is safe (no harm can result from its use). (cf. Recanati, forthcoming)

What is the minimal content of the term "safe", even with null contextual information?

Second, with regard to the intra-linguistic relation, Pietroski (2005: 263-264) presents a case in which "eager" and "easy" may occur in a similar syntactic structure but may lead to different readings, not because of what they contribute in that syntactic structure but because of their own original behaviors:

...we need to capture the following idea: the meaning of "easy" is lexicalized so that when this word combines with "to please" and "John" constraints on grammatical structure and compositional semantics conspire to ensure that John is said to be an individual who is easily pleased; while the meaning of "eager" is lexicalized so that when this combines with "to please" and "John", John is said to be an individual who is eager to be a pleaser. We want to know more about these facts, which seem to be symptoms of how lexicalization interacts with (syntactic and semantic) composition in natural language. However, just saying that "easy" has the semantic properties that it has, or that "eager" applies to what it applies to, tells us nothing about how "easy" and "eager" differ [in this syntactic combination]. (Pietroski, 2005: 263-264)

We know that the sentence "John is easy to please" means "It is easy for us to please John", and the sentence "John is eager to please" means that "John is eager that he please us". However, we also know that the sentence "John is easy to please" cannot mean "It is easy for John to please us", and the sentence "John is eager to please" cannot mean "John is eager for us to please him". What we know negatively here is that beyond concept-like entities, there must be substantive features we ascribe to "easy" and "eager" such that even within the same syntactic structure, they exhibit different influences on interpretation policies.

Moreover, in some circumstances, we think that a particular set of verbs is used appropriately, whereas another set is not. For example, "hit" can be well matched with the preposition "with" and "against", as in the following pair:

I hit the wall with the bat.

I hit the bat against the wall.

However, the word "cut" is not so matched, as in the following pair:

I cut the rope with the knife.

I cut the knife against the rope. (cf. Borg, 2012: 170)

We know that the first pair of sentences expresses the same thing, but the second pair does not. The preposition "with" is an instrumental with in both pairs of sentences, yet the preposition "against" is a locatum against in the first pair but not in the second. Why can "hit" cooperate well with these two prepositions, but "cut" cannot? It seems that the alteration is accepted in the case of hit, the verb of motion followed by contact, but cut, the verb of motion followed by specific effect, cannot be. Words make their own semantic contributions to sentences, which is involved in the way we construct their meaning – the motion followed by what – and thus place limitations on the legitimacy of forming sentences. They exhibit the internal features of the relations and properties among expressions such that there may be the same syntactic combination without the same policy of reading, and they may interact differently with the same prepositions; however, a simple denotation cannot demonstrate this phenomenon.

Third, nouns also play different roles and cannot simply be viewed as fixing concept-like entities. Consider the case of "London". It is used to refer to an object, here, a city. However, sometimes the word is used not to refer to a city but to a concept, a dimension of the country, or something else. Similarly, in James Pustejovsky's cases,

The exam lasted for several hours.

Bill was confused by the exam. (cf. Pustejovsky, 1998)

The first sentence refers to the event of the exam itself, whereas the second sentence refers to the questions that compose the exam. Verbs also exhibit polysemous behaviors. For example, we do not think that the term "open"

exhibits the same function in "open a door", "open a letter", and "open a file" (Pustejovsky, 1998: 300-302).

Can denotational-style semantics explain these complex word behaviors? Semantic complexities show that linguistic terms may perform or contribute differently when combined with different terms; moreover, such terms may cause different syntactic readings. The fact that words vary in their behaviors in sentences appears to conflict with the notion that they embody invariant content.

# B. Organizational Lexical Semantics

For Borg, only intra-linguistic cases require greater semantic elucidation. Other cases are extra-linguistic; that is, they are more concerned with *knowledge of the world* than with *knowledge of words*. Take the "safe" cases above for example: precisifications in the three cases are attempts to make the meaning of "safe" more specific than the minimalist wants it to be. These are all fine pragmatic enhancements of the meaning of "safe", but the literal meaning or the minimal content of the word is one that covers all of them (cf. Borg, 2012). Although a word's behavior in different kinds of sentences may partly depend on what we know about the world (the pragmatic enhancements), this does not affect the thesis that the minimal content of a word is conceptual, atomic, and independent of context.

Conversely, the intra-linguistic relation is the case that Borg hopes to capture through organizational lexical semantics (OLS), thereby continuing to maintain that minimal content can be combined with the notion of the intra-linguistic relation. As Borg emphasizes, a word has its own minimal

content. However, when it is placed in a syntactic structure, additional content might emerge from the organizational structure built by the words themselves combined with other expressions. For example, "'ready' always means *ready*; the content of this expression is exhausted by the property in the world to which it refers. However, the term 'ready' is categorized within our lexicon as belonging to a set of two-place adjectives, a set of terms requiring both a subject and an object. Thus, information associated with the term itself tells us that the logical form of sentences containing 'ready' must always have the form ' ready " (Borg, 2012: 202). Similarly, the intra-linguistic relation cases of "easy", "hit", and "cut", involve different categorizations that provide new information about their associations with other words such as prepositions. Accordingly, in the "safe" case, we may need to posit two different lexical readings for "safe" depending on what arguments the expression can take (i.e., "x is safe" iff x is safe to y vs. "x is safe" iff x is safe from y) because these different readings affect sentence structure (cf. Borg, 2012).

Note that for Borg, this new organizational information is not intrinsically part of the meaning of a word; instead, it is more likely to constrain our *competence with the word*:

...additional information doesn't constitute the meaning of a word nor does it impose any condition on the possession of the word's meaning, instead it imposes constraints on our *competence with the word*. The thought is that the additional information *emerges as part of the organizational structure of the lexicon, telling us something* 

about the meaning of words but where this information is in addition to, and extraneous to, word meaning *per se*. In this way...posit an additional level of lexical organization which is capable of grouping word-meaning pairs into different categories. (Borg, 2012: 194)

Assuming that words have minimal content (in a minimalist sense), OLS incorporates the intra-linguistic relation into the later cross-organizational framework between words but denies them as constitutive of word meaning. In this way, the minimal content (in a minimalist sense) appears to be maintained <sup>9</sup>

## C. Concept-like Posited Content vs. Semantic Potential

The cornerstone of a minimal content thesis and OLS, as explicated above, is as follows:

- (i) The minimal content is an atomistic, blob-like, concept-like thing.
- (ii) Semantic complexity involves either pragmatic enhancement, which is not the subject of semantics, or it involves organizational semantic operation, in which possible co-opted features should be accommodated by categorizations of words.
- (iii) However, these features are not constitutive of word meaning.

To maintain Borg's solution—that these possible complex behaviors come from the categorizing system—there must be the original content, the minimal content, for the later organizational work. In her construal, "...though 'easy' simply means *easy*, and all that is required to understand the term *per se* is to grasp the concept of easiness, still full competence with the term entails understanding how the logical form of sentences containing theses terms are constructed" (Borg, 2010b: 70).

The problem is, first, Borg's reply does not address the main point in the challenges by semantic complexity, that is, the flexibility manifested in the intuitively grasped content of the word in different sentences. In the above cases of semantic complexity, the sentences are deprived of possible contextual influences, the source of pragmatic enhancement, but what one *intuitively* grasps is *still* not exactly the same content, the so-called invariant minimal content of the word. If one of the features of minimal content is intuitively grasped, it is not a wise choice to relegate these cases again to the so-called irrelevant pragmatic realm.

However, it might be argued that minimalists do not commit "psychological intuitive grasping" but rather "logical intuitive grasping". That means that minimal content does not need to be what we intuitively grasp in *those* different sentences; rather, *intuitively* the core, concept-like, minimal content is acknowledged to be the basis of sentence meaning and later flexible application and categorization. In other words, in the order of semantic analysis, there is a need for such minimal content. However, this transformation of the sense of "intuitively grasping" produces the second problem: the so-called invariant, concept-like minimal content is not necessarily the basis of the flexibility of a word's contribution to the sentence meaning and categorization, even in the order of semantic analysis. In fact, in the view of meaning construction, even the core, concept-like content of a word is one of the results of the meaning construction of the word. Let me explicate this point.

Imagine that one learns the word "fast" in a situation such as an automobile race. He watches the cars speeding by and people saying, "That

BMW is really fast!" The situation leads him to construct meaning for "fast" with features such as the speed a racing car shows. 10 Imagine one day that his friend introduces him to a bus driver and says, "He is a fast driver". The communication flows well, and as they shake hands, they talk about driving skills. In this situation, some new features for the meaning of "fast" are constructed, such as the speed a driver shows. Moreover, he may construct a higher-level feature for the term that it is applicable to both persons and autos. Then, imagine that one day he is finally old enough to get a driver's license, and the driver's education instructor reminds him, "That is the fast lane; you better not drive slowly in that lane." The communication still flows, and questions and answers occur. In this situation, the term "fast" receives another feature, such as the speed applied to a venue and the feel of the speed as a contrast between two styles. It is difficult to say that at the beginning of learning the word "fast" the subject has grasped the concept FAST simply in the automobile race. It is also difficult to say that after the first encounter with the word "fast" the subject has grasped the concept FAST to apply it to later situations/sentences because the later situations/sentences are simply not the same. It is not to say the subject does not have any idea of the meaning of "fast". Rather, it is unclear that the core, concept-like, minimal content of the word is the basis of the flexibility of the word's roles in sentences. 11

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Note that there is no presumption that the learner has already had the concept SPEED.

<sup>&</sup>lt;sup>11</sup> The case is transformed from Evans' examples:

<sup>(</sup>a) That parked BMW is a fast car.

<sup>(</sup>b) That doddery old man is a fast driver.

<sup>(</sup>c) That's the fast lane (of the motorway). (Evans, 2007: 48)

In (a), *fast* is used to describe some object that potentially exhibits rapid locomotion. In (b), it is attached to a person not because of his own rapid locomotion but to indicate his behavior while driving. In (c), *fast* relates to a venue that offers permission to engage in rapid locomotion. The

Instead, this situation indicates that what supports the flexible contribution of the word to the sentence's meaning comes from the process of meaning construction. Recanati (2005) proposes that words are not primitively associated with abstract "conditions of application" that constitute their conventional meaning (as in the Fregean view); instead, they are associated with particular applications. Suppose one wants to learn a predicate P. The learner observes the application of P in a particular situation S; she then associates P and S. At this stage, the "meaning" of P for her is what makes P applicable to S. In a new situation S', she will judge that P applies only if she finds that S' sufficiently resembles S. To be sure, it is possible that S' resembles S in a way that is not pertinent to the application of P. The application of P to S' will then be judged as faulty by the community, which will correct her. For this learner, the learning phase consists of noting a sufficient number of situations that, like S, legitimate the application of P as opposed to those, like S', that do not legitimate it (cf. Recanati, 2005). The "meaning" of P for the learner can thus be thought of as a collection of legitimate situations of application, that is, a collection of situations to which the community members agree that P applies. We shall call the situations in question source-situations. Future applications of P will be underpinned by the judgment that the situation of application (or target-situation) is similar to the source-situations. What we construct through such a collection of situations is the *semantic potential* of a word, which includes features such as

the subject's figure, location, internal relations, and semantic aura (referred to as *Farbung* by Frege) that color overall semantic appearance.

This semantic potential captures the important feature of semantic activity: the flexibility of the word's contribution to a sentence. The conditions for applying P to a given use involving a given target-situation S' are a set of features that S' must possess to be similar to source situations. The features or set of features that will be triggered or activated will not be exactly the same for every possible use or application; they will depend, among other things, on the target situation. One target situation may be similar to the source situations in certain respects, and another target situation may resemble them in different respects. This is why there may be different uses of a word in context. Not every legitimate applied situation is exactly the same, and there is always some salient facet or feature that makes the greatest contribution. What a word contributes to a sentence is thus sensitive to the context or the situation, and this explains the multiple semantic features of the word "fast" in the above case. However, even once

<sup>&</sup>lt;sup>12</sup> I leave a more detailed characterization of the activation of semantic potential to another paper. Here, it suffices to demonstrate the possibility of construction and evolution of a word's semantic potential.

There might be some doubt that the semantic potential view seems to claim that the semantic potentials of words (i.e., their meanings) seem to be manifested only in the specific contexts in which they are used, yet we seem to understand perfectly, for example, what "x is larger than y" means even though the context is unspecific. My reply is that from the semantic potential view, if we never construct the semantic potential for the phrase "is larger than", we cannot understand this sentence "x is larger than y". When understanding this sentence, we have called out the relevant semantic aspects of "is larger than" and then made sense of the sentence in an abstract, imagined context. In fact, "x" and "y" may activate different roles in other sentences, such as, "The point (x, y) satisfies the line equation x+y=1", where x and y play the coordinates rather than some individuals as in the sentence "x is larger than y". We do understand some plain sentences with null context, but we have made some modulation in understanding them based on what we have constructed from past contexts; we have put the sentences into some imagined contexts to make sense of them.

the target situation has been fixed, the relevant dimensions for evaluating the similarity between that situation and source situations remain under-determined (cf. Recanati, 2002). Those dimensions will vary as a function of the subject of conversation, the concerns of the speech participants, and other factors: "we cannot survey in advance all the possible dimensions of similarity between the source situations and possible target situations" (Recanati, 2005: 8). This indicates the flux of the word's semantic potential: there is always the possibility of modification in the construction of semantic potential.

Thus arises the third problem of Borg's reply. One major problem with the notion of minimal content, particularly with OLS, is the perplexity of the order of the meaning construction. OLS appears to imply that the core abstract concept-like minimal content of a word precedes the co-opted information or features in categorization. However, it is possible that the categorization of co-opted information is a hothouse for the abstract core minimal content. We do not begin with an invariant concept-like thing as the minimal content of the word and then form the organizational semantic construction. Instead, we construct word meaning gradually (without presuming an end), and the core concept is extracted from this construction. For example, in the "ready" case, it is possible to construct an evolution for it: a learner's learning of the word "ready" begins with the form Borg suggests, "\_\_ready\_\_", such as, "You are ready for the walk", "I am ready to go out" (imagine a mother talking to a one-year-old child, and imagine what features the child uses to grasp the meaning of the phrase). However, one day, the learner encounters new usages without the form suggested, such as, "Get ready?", or cases with new features for the semantic potential of "ready",

such as, "She is very ready at excuses." In this flux of the semantic potential for "ready", the learner garners some features of these slightly different uses, and the core, concept-like content is abstracted with gradual vividity. Once it is possible that one's learning of a phrase begins with the form that is supposed to occur in categorization but develops the concept later, the precedence of the encoded concept over other features simply fails. The categorization is part of the construction of semantic potential, and the alleged concept-like minimal content is more like a post-semantic posit, yet there is no reason to claim that such a posit *is* the basis of categorization.

Therefore, to reply the "the logical intuitive grasping" view, although the order of semantic analysis suggests we need a basis to compose the sentence meaning, there is no reason to limit the basis to the fixed, core, minimal content. The modulated content of a word can be the basis of composition, and the process of modulation between words in a sentence need not to be bottom-up; rather, it can be top-down. In other words, to arrive the sentence meaning, there is no need to start from the so-called, abstract, core, minimal content. Just like the "safe" case of semantic complexity, the intuitive content of the word "safe" in those sentences is different because of the modulation with different companied constituents in different sentences, and it is *those* that join the composition of the sentence meaning.

It seems that there is tension between "intuitively grasping" and "invariant". Whether it is psychological or logical intuitive grasping, we simply cannot find the source of the feature of invariantness for the content of the word and, if so, for the minimal proposition of the sentence.

# D. Intuitively Encoded Concept Again: Defending the Semantic Potential View

One may further wonder why the semantic potential view is better than taking the concept-like thing to be the invariant, minimal content of a word, a question that has been debated elsewhere. Robyn Carston once doubted whether the concept can do this job. She mentions that there may be some words that do not encode concepts but instead express conceptual schemas, pointers, addresses in memory, procedures, or inferential constraints—such as open, happy, and tired—whose content is formed by mapping "to an address (or node, or gateway, or whatever) in memory" (Carston, 2002: 361-363). The "encoding relation" is also questionable; we simply cannot ensure either that it is the mental lexicon that encodes the word's meaning or that it is the application of the word that is inscribed in the mental lexicon. <sup>14</sup>

Despite the possible queries and the complexity of the discussion regarding Fodor's atomism, Borg does not present a defense on this issue. I suggest that perhaps the main reason for positing the concept-like thing as the minimal content of a word, despite these possible challenges, is that we undoubtedly can form such an *intuitive* concept regardless of the different psychological representation that may occur in the actual utterances of words. Facing such *intuitiveness*, the better way to dispel its charm is to fathom the source of such intuitiveness.

<sup>&</sup>lt;sup>14</sup> By contrast, the semantic potential view is more appropriate for psycholinguistics and the development of word learning. (cf. Waxman & Lidz, 2006)

What is the source of the intuitive, concept-like, minimal content for a word? What we intuitively ascribe to a word is perhaps better described as the most vivified or activated features in contexts. Because we are inclined to set the standard, the stereotype, the concept, for the word, it is not unusual to posit those features as invariant, concept-like content for the word; it never exhausts the entire semantic potential of the word because it is not exactly "the invariant role" that a word may contribute to every sentence, as the phenomenon of semantic complexity has demonstrated, where what we encode of the word in different sentences still depends on the coordination between the constituents in sentences. That we can construct a lexicalized. encoded concept for a word does not imply that we shall posit it as the fixed meaning of the word or as the literal contribution it makes to every sentence (note that this encoded concept is also *formed* through contextual usage). Perhaps we smuggle the invariantness from "centrality" or "frequency". The CONCEPT may be invariant, which may yet need more support, but the word's role in the sentence is not. 15

Perhaps such solid intuitiveness or insistence on an encoded concept to be the invariant minimal content of a word is related to another insistence.

It might be suggested that if the encoded concept of a word "x" is understood as the kind of explanation that every competent speaker will (try to) offer when asked for the meaning of "x", then we may have a possible method to obtain the intuitively grasped, invariant across context, encoded concepts for words. However, whether the antecedent of the conditional statement can be taken for granted or be easily achieved is questionable. For instance, what type of explanation for the word "dog" is the one that every competent speaker will offer? It might best be the description in the dictionary, such as "an animal with four legs and a tail, often kept as a pet or trained for work, such as hunting or guarding buildings" (Oxford Advanced Learner's Dictionary). However, other dictionaries may have different characterizations on different aspects, such as "a domesticated carnivorous mammal that typically has a long snout, an acute sense of smell, non-retractile claws, and a barking, howling, or whining voice" (Oxford Living Dictionaries). Which one is the intuitive description?

namely, the insistence on the notion of "meaning" as something that must be stable and that can be noted. However, it appears that "meaning" does not inhere in linguistic symbols, although we loosely use the expression "word meaning". "Meaning" is the significance that we identify in a situation or context. As a result of this significance, the role or function of every subject, predicate, or symbol emerges in a given context or situation; we ascribe significance to these symbols. Through multiple applications to similar events or structures, the significance of a word is gradually settled, conventionally, historically, or personally. However, this settlement does not indicate *fixed* content of the word but instead a comparatively stable semantic potential for the word; there remains space for flexible modulation, for the word to interact with different expressions or have new usages. <sup>16</sup>

This may raise another concern that prevents one from accepting the semantic potential view that it seems to make word meaning either rather huge or rather empty: huge because one may doubt whether the semantic potential view implies that the word meaning equals a set of (all) possible potentials of the word (cf. Borg, 2012: 183-190) and empty because one may find there is no correct word meaning. This concern is misleading. A semantic potential view will not single out word meaning with null context. Specifically, the notion of word meaning in this type of concern is a matter

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Through language translation, it is easy to show that what we grasp or translate is not *the* invariant, encoded concept but the semantic feature of the word used in that situation. See Kecskes (2008): "When we compare two or more languages or translate something from one language to the other, we realize that different languages have developed different ways of prompting the required cognitive constructions...Translating from one language to another requires a reconstruction of cognitive and cultural configurations that were prompted by one language and a determination of how another language would set up similar configurations with an entirely different meanings prompting system and prestructured background" (2008: 392).

of how to identify a *fixed* meaning for a word, but this is not what a semantic potential view will do. Instead of finding the (fixed) word meaning, a semantic potential view turns the question to how we construct semantic features and relations for words and how these features can be applied and associated. There will be no asking for the meaning of a word but for what the word contributes to the sentence in a certain context; this is different from trying to define a CONCEPT. Moreover, it is never claimed that a semantic potential construction is complete such that a specific construction is tantamount to *the* meaning of a word. If the construction is used effectively in communication, it will remain; if not, it will be modified, not immediately deleted. This is where the label "semantic potential" is useful. Once the fixed word meaning is no longer a target, there will be a loosening of the correctness of word meaning because what we have is not correct word meaning but the correct word usage in a certain context, and this is a more appropriate fit with the flexibility that we show in language usage: An adjustable work cannot result from an inflexible source. Perhaps it is minimalism that shall tell us how we can form or grasp the invariant concept at the very first encounter with the word and why the logical analysis of the sentence justifies the invariant, concept-like, minimal content for the word. 17

Borg is correct that "we can intuitively garner information from a well-formed sentence, even without context, that is capable of being true or false depending on how the world is" (Borg, 2012: 4). However, this *garnering* demonstrates that the content that we garner from a well-formed sentence is never without potential information from the context. In addition, to respond to Borg's other concern that word meaning could be open ended in the contextualist's stance; the word's contribution is not actually open ended but instead requires contextual precisification to fix its input to larger linguistic units. Word meaning is limited because the construction is limited to the experience; it is not random. It requires contextual precisification because it is constructed from a meaning-emergent construction unit. The way it is ascribed a role is also part of its role in a sentence.

# III. Truth Evaluability?

The above discussion is intended to show that the notion of a concept-like minimal content of a word is untenable. Thus, it is difficult to support the notion of the intuitively read-off, invariant, minimal proposition of a sentence. The sense that minimal content is "intuitive" or "encoded" arises from imagination in a null context, but the imagination itself arises from the semantic potentials constructed for the word. The impression of "invariant" arises from the expectation of post-semantic posited conceptual meaning, but this posited meaning is also one feature of the semantic potential for a word's contribution to the sentence, which is hardly supportive of an invariant content of the word. We are left with another impression that such minimal content is "truth evaluable": If what Borg seeks in the minimal proposition of a sentence is a type of skeletal, "making-as-if", core meaning, in what sense can this type of content be truth evaluable?

This abstract, skeletal notion of a minimal proposition is neither unusual nor unique. It is also possible to characterize it as a "reflexive proposition", which, according to Recanati, is a proposition determined solely by the rules of the language before saturation occurs. For example, the reflexive proposition for the sentence (*u*) "I am French" is "the utterer of *u* is French." This reflexive proposition, which does not presuppose saturation, is quite close to Borg's view on minimal content because in most cases, saturation proceeds by appeals to the speaker's intention or any other contextual factors (cf. Recanati, 2004: 66). Why "reflexive"? Because the content is abstracted

from the full-bodied proposition stated in context. When no other parameters or indices remain, the only object one can re-represent is the schema abstracted from the established proposition. However, for Recanati, this type of proposition will not be truth evaluable in any sense. In Borg's view, a minimal proposition is truth evaluable because for each well-formed sentence, the minimal proposition that it expresses can be justified if there is a possible state of affairs to be satisfied. Recanati would disagree because such content is simply *reflexive*; it might be too abstract or skeletal to be truth evaluable. Let us examine whether this grammatically analyzed product has significant, determined truth-value.

Compare the following two distinct sentences, in which (2) is supposed to be the core, skeletal, minimal proposition of (1):

- (1) Alex is ready.
- (2) Some entity named Alex is ready for something.

Recanati emphasizes that a sentence is truth evaluable only if it can be used in some context, or if saturation occurs. Regarding (1), Recanati would consider it truth evaluable if it can be used in some context, but when we analyze it into (2), a reflexive proposition of (1), (2)'s reflexibility restrains it from being subject to saturation. However, Borg may regard (2) as the minimal proposition of (1) and as truth evaluable regardless of its analyzed style. For most minimalists and perhaps competent English users, (2) is truth evaluable even without being used in a certain context because we can imagine some circumstance in which there is such an entity and such movement as the predicate describes, and we can then judge it to be true or false.

Indeed, truth evaluability is a dispositional property. Being truth evaluable is not actually having truth-value. The proposition expressed by a sentence in a context is truth evaluable if the conditions it expresses can be evaluated as either true or false in some circumstance of evaluation. We need not actually evaluate the proposition to determine its actual truth or falsity to know that it is truth evaluable. However, does (2) genuinely have this dispositional property? The impression that we can obtain for (2)'s truth-value or we can imagine (2)'s truth condition in some way is a result of simply focusing on (2), regarding it as another independent sentence and dismissing its relation to (1). However, the previously *analyzed style* of (2) should not be neglected. To fathom this issue, I shall return to the notions of literal meaning, truth condition, and minimal proposition in Borg's construction.

#### A. The Liberal Truth Condition

It is Borg's basic tenet that the "grasp of the literal meaning is the grasp of a truth condition, which is constructed on the basis of the formal features of the expressions in play and, though entertaining this truth condition is a mental matter, it does not require inferential reasoning about the speaker's state of mind to recover" (Borg, 2004: 208). The "mental matter" means that the grasper analyzes the sentence as a syntactically generated singular concept, that is, into a logically analyzed product. For example, "to grasp the literal content of an utterance of 'that is mine', one needs only entertain a thought of the form:  $\alpha$  belongs to  $\beta$ " (Borg, 2004: 206). The proper truth condition for a token of "that is mine" is simply represented in following T-sentence:

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. (Borg, 2004: 206)

To put this in a propositional style, the sentence "That is mine" has the minimal proposition that the object  $\alpha$  referred to by "that" belongs to the utterer  $\beta$ .

Moreover, for the example "Oscar cut the sun",

[O]ne can possess knowledge of the correct truth-condition for an utterance like "Oscar cut the sun" even if one doesn't know (in any substantial, non-descriptive sense) to whom this token of the name refers (for example, if one can't perceptually identify the referent). ... [And] it's enough for knowledge of truth-conditions that one knows that Oscar (whoever or whatever he is) stands in the cutting relation to the sun (however the general property of cutting may be realized on this occasion). (Borg, 2004: 241, my emphases)

To put this in a propositional style, the sentence "Oscar cut the sun" has the minimal proposition that some object referred to by "Oscar" stands in a cutting relation to the object referred to by "the sun."

To recap, the literal meaning of a sentence is its truth condition, and it is a mental matter to entertain the truth conditions, that is, to analyze the sentence into formal products. This forms the alleged minimal proposition.

One interesting point is that Borg actually gives some new sense to the notion of the truth condition: it is a *liberal* truth condition. For Borg, the truth condition (i.e., the minimal proposition she characterizes) is liberal in that it

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"clearly admit[s] of satisfaction by a range of more specific states of affairs" (Borg, 2004: 230). For example,

- (a) If u is an utterance of 'Jane can't continue' in a context c, then u is true iff Jane can't continue something in c.
- (b) If u is an utterance of 'Steel isn't strong enough' in a context c then u is true iff steel isn't strong enough in c.
- (c) If u is an utterance of 'Fido is bigger than John's dog' in a context c, then u is true iff Fido is bigger than John's dog in c. (Borg, 2004: 230)

Such a truth condition indeed is sufficiently abstract, as mentioned above, such that a multitude of different situations can satisfy it—it "covers all." For example, the conditions in which Jane can't continue sleeping, or Jane can't continue running, can satisfy the minimal proposition of "Jane can't continue" that "there is some object named Jane, and the object fails to keep performing something in some manner". As stated in section 1, to avoid any contextual information and intervention of the speaker's intention's, the three referring nouns in the above three utterances must mean "some object called \_\_\_\_\_". In addition, there may be different ways of continuing, being strong, or being bigger, so these predicates must mean simply CONCEPTs. Their minimal propositions then shall be logically analyzed products, just like the minimal proposition of the sentence "Alex is ready" is more appropriately stated as "there is an object referred to by the term 'Alex' that is ready for something."

#### B. The Semantic Crisis

Borg's construction, however, is problematic. Recall that the literal meaning of a sentence is its minimal proposition, a logical analyzed product. Such minimal proposition is the truth condition, but in liberal style, allowing a variety of the state of affairs. It seems that the minimal proposition can be truth-evaluable not because it by itself expresses some determinate truth condition but because there are some distinct states of affairs that satisfy the minimal proposition—it admits of satisfaction by a range of more specific states of affairs. Do we have to accept this type of truth evaluability? For some, the answer might be negative. In particular, if we follow the truth-conditional semantics, a sentence's meaning is its truth condition, which must express the *determinate* state of affairs that hold for the sentence to be true. However, in Borg's construction, what a minimal proposition expresses is not a determinate state of affairs but a liberal, indeterminate content (abstract and skeletal), whose truth-evaluability depends on other states of affairs. Such construction is very different from the widely held view of truth-evaluability.

A more serious problem for Borg's construction is that it will give rise to a semantic crisis, i.e., it cannot deal with synonymy. It seems that the minimal proposition in Borg's construction is not the truth-condition of the sentence in traditional truth conditional semantics, according to which, by truth condition, we know *which* state of affairs must hold for the sentence to be true. However, in Borg's characterization, we cannot require the liberal truth condition to categorize a determinate state of affairs. Consequently,

what we regard traditionally as a truth-condition is more like Borg's state of affairs, and the minimal proposition in her characterization cannot be the truth conditions we regard. The minimal proposition seems to be separated from those conditions that satisfy it, its satisfying state of affairs (conditions). What part provides the explanation of the sentence's meaning? Is it the minimal proposition part (the abstract, skeletal part) or the state of affairs part? How do we speak of synonymy if the present notion of truth condition is not the one that we are familiar with?

According to traditional truth conditional semantics, if two sentences are synonymous, they have the same literal meaning and thus the same truth condition. However, in Borg's picture of minimal proposition, are two sentences synonymous in the sense that they share the same minimal proposition, and thus the same satisfying conditions, or do they simply share the same minimal proposition but not the satisfying conditions? It could be that when two sentences' minimal conditions are satisfied by the exact same group of possible states of affairs, then they are synonymous. However, this is not quite the case because the possible states of affairs that satisfy a minimal proposition are likely infinite, and Borg has admitted that the liberal style truth condition does not aim to give a definite range of possible satisfied states of affairs (cf. Borg, 2004: 237-242), let alone determine a group of possible states of affairs that satisfy two sentences. Another method might be suggested to approach this awkward situation, that is, two sentences are synonymous if they satisfy *some* possible states of affairs, regardless of other possible unshared states of affairs. However, this method appears so loose that two sentences are easily synonymous because their minimal

conditions are quite abstract, such that it is easy to have the same satisfying state of affairs. This is not the ideal choice either.

Perhaps it is better to say that when two sentences are synonymous, they share the same minimal proposition only. However, as mentioned previously, for the following pair of sentences:

- (1) Alex is ready.
- (2) Some entity named Alex is ready for something.

where (2) is the minimal proposition of (1), even (2) may itself be a sentence such that its meaning—its minimal proposition—is what is expressed by sentence (2) itself. However, can we say (1) and (2) are synonymous? One must hesitate to say so. If they are not synonymous but (2) is the (skeletal style) minimal proposition of (1), this makes the minimal proposition at stake a rather odd product. It is a theoretically absurd consequence that a sentence's core, minimal proposition "covers all" but is not synonymous with the original sentence. (I shall come back to this point later.)

To make matters worse, it is possible that two sentences could be synonymous, but they do not share the same minimal proposition. For example,

Seabiscuit beats War Admiral.

War Admiral loses the race against Seabiscuit.

We normally think that these two sentences are synonymous. However, if we follow Borg's characterization, their minimal propositions would be respectively:

Some entity called Seabiscuit beats in some manner some entity called War Admiral.

Some entity called War Admiral loses the race in some manner against some entity called Seabiscuit.

Note that since "beat in some manner" is sufficiently abstract, and the two entities are also deprived of any substantial feature to show their possible relation (for example, they are humans, animals, or cartoon characters), the satisfying states of affairs for "beat" are likely "the type of beat with fist", "the type of beat on a drum", or "the type of beat that indicates being hard or difficult." It seems to be difficult to determine from their minimal propositions whether they are synonymous. However, any competent English user would say that they are synonymous without examining their minimal propositions.

I am not sure if there is a better method to regulate any notion in this construction to fit the special notion of minimal proposition, especially when one still insists on certain features, such as validity and synonymy (section 1). Allow me to present another aspect to demonstrate the origin of the problem: why do we intuitively reject (1) and (2) as synonymous? I suggest that they are not intuitively synonymous, mainly because when we understand those sentences within a null context, we actually put them in some certain imagined context and *make sense of* them *in some manner*, and we find that the type of understanding of sentence (1) is not the same as how we understand (2), the logical analyzed product. Specifically, the mental matter in linguistic interpretation is not to analyze the sentence into syntactical and logical entities but to put the sentence in an understandable context to make

sense of it. The problem then is not that we posit such skeletal, analyzed, core content as the minimal proposition for a sentence; rather, we posit it *and* then claim it to be truth evaluable. In saying that (2) is the minimal proposition of (1), we are conducting a logical analysis of a sentence, which is a type of meaning postulation regarding the concept of "Alex" as a name of a person or an object. The analysis reveals the underlying structure of the sentence and knowledge of the grammatical status of a word but not the *full* meaning of the sentence. This is not to say (2) itself cannot be an independent sentence with truth condition; it is definitely possible that one asserts (2) in some circumstance and that we can ascribe a truth condition to it. Rather, if (2) is a grammatically analyzed product from some other sentence and saturation is irrelevant here, ascribing it a truth condition is a categorical mistake: a propositional format is not a genuine proposition with truth-evaluability.

In fact, it is difficult to talk about a sentence's meaning with null context because even "imagination" is another context. The grammatical analyzed product manifests the structure of the sentence but not what we understand about the sentence. The way we ascribe a truth condition to a sentence involves how we construct the meaning of the constituents of the sentence, but the construction may not be revealed by grammatical analysis. Without any context or background (e.g., whether "Alex" refers to a person or an animal or a cartoon character, whether "ready" is a kind of motion or state or posture), even if we can grammatically *understand* (1) into (2), we are not entitled to ascertain that (2) must be true or false. In Dummett's words, what if we can find neither such an object nor such a predicate? In that case, the sentence simply has no truth-value (Dummett, 1993).

# IV. Concluding Remarks

The intention of this paper is not to deny that we have encoded concepts for words, core meaning for a word, or intuitive content for sentences (even if what we intuitively grasp may not be exactly the same). However, it is untenable to posit an abstract, skeletal, core, minimal content with three features: intuitively grasped, invariant, and truth evaluable. These three features of the minimal content are under scrutiny in this paper, and it is suggested that from the view of semantic potential, at best, the alleged invariant core meaning is only one aspect of a word's semantic potential, and its invariantness across context is not guaranteed. The phenomenon of semantic complexity demonstrates that a word's behaviors and contribution to sentences are diverse such that not only can a denotational account of word meaning not accommodate this phenomenon but also that there is no such invariant word meaning to serve as the basis for the minimal proposition of a sentence. Although Borg attempts to respond through OLS, this approach simply reveals the perplexing order of a word's semantic potential construction. The alleged concept is not superior to the other possible (new) semantic information; rather, the concept is what we grasp and form through many uses of the word in different contexts. Without support from the minimal content of the word, the skeletal, making-as-if, core proposition of a sentence is hardly invariant. Moreover, truth evaluability is not a feature of such a proposition because it is a kind of logical analysis rather than the full meaning of a sentence. In sum, we have

some conceptual-like, encoded content for words, and we understand a legitimate sentence in a propositional form. However, this does not mean that words can only contribute *that* content to sentence meaning, nor does it imply that *that* content is the basis for the later application. That we can intuitively understand the content of a sentence with null context does not entitle us to claim that *that* content is the invariant meaning of the sentence. To posit this blob-like invariant minimal content to support a murky skeletal minimal proposition as invariant, intuitive, and truth evaluable is to neglect the very nature of meaning construction—the semantic potential—and to make a categorical mistake.

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