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Exploring the Interface between Lexicon and Grammar: BE and HAVE

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Abstract

In an attempt at exploring the interface between lexicon and syntax, this paper deals with two most basic verbs in English, be and have, and examines the semantic bases of be and have to account for the connections between lexical and grammatical usages. These two verbs have been extensively investigated in the previous research (e.g., Costa, 1974; Langacker, 1988; Brugman, 1988). It is the task of this paper to give a simpler, and more unified account of the semantic variants of be and have. As in Langacker (1990) and Brugman (1988), this study has been conducted within a framework of cognitive linguistics, utilizing the notion of image-schema (Lakoff, 1987; Johnson, 1987).

Both be and have are considered polysemous with multiple semantic variants. These verbs also serve as auxiliary verbs, which are used when forming passive, progressive, and perfective constructions. Moreover, the verb have has a causative function. It is our claim in this paper that seemingly different uses of each verb are semantic variants of the unitary core schema. In the case of be, the following Berelation holds across all variants: BE (X, Y), where Y is being located in X. In comparison, the unitary notion of have can be captured in terms of the HAVE (X, Y) relation, where Y is (being located) in X's space. We also suggest that be and have serve as the abstract verbs when interpreting small clause constructions.

Key Words: lexical meaning, grammatical usage, core schema, small clauses, Be, Have

Introduction

In recent years, a great deal of linguistic endeavor has been devoted to investigating the interaction of form and meaning, developing semantically-driven interface theories (Bolinger,1977; Lakoff,1987; Langacker, 1987, 1990). An interface model effaces the dividing line between form and meaning, questioning the assumption of the autonomy of syntax (Sangster 1982). Langacker (1990), for example, points out that "grammatical morphemes are meaningful, and are present because of the semantic contribution"(p. 102). Sangster (1982) notes that "the study of invariance on the formal side simply needs to be complemented at every stage by an equally intensive investigation of the semantic correlates of this formal patterning" (p. 143), in that "surface forms carry semantic information directly, the principal function of language being to convey information of one kind or another" (p. 142). A cognitive linguistics model, as represented by Lakoff (1987) and Langacker (1987), stresses the semantic motivation of a linguistic form.

This paper takes up two basic verbs in English, *be* and *have*, and attempts to give a unified account of their linguistic behaviors. The assumption here is that there is a common semantic base behind the seemingly divergent variants (uses).

Investigating the relationship between form and meaning, Bolinger (1977) makes a claim: There is one meaning for one form, and there is one form for one meaning. In this paper, we are concerned with the one meaning for one form or "monosymic" (Rule,1989) thesis. This hypothesis claims that although a form may exhibit a variety of uses, there is a common thread across the uses. Bolinger (1977: 19) notes:

"Now we find a single overarching meaning which performance variables imbue with local tinges that pass for distinct senses. The deception is like what happens when we meet an acquaintance in an unexpected setting: we may not recognize him."

In the analysis of case meanings, Jacobson (1971: 155-156) notes:

"Whatever the diversity of semantic variants, ... the unity of the case itself remains real and inviolable....all the specific contextual meanings of any case can be reduced to a common denominator."

Weinreich (1963) makes a similar claim about the polysemy of *take*:

"When we contemplate the varieties of "meanings" which a word like take has in

English (take offense, take charge, take medicine, take notice, take effect, etc.), we come to the conclusion that this is not a case not of abnormally overdeveloped polysemy of a word, but rather of its semantic near-emptiness. (p. 180)."

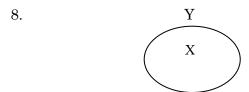
As Rule (1989: 3) points out, semantic characterization of *take* as "near-emptiness" may suggest that there is a single overarching meaning of *take*, which is elastic enough to receive a variety of contextual modulation or adjustment.

The Semantics of Be

A general understanding of *be* indicates that it is polysemous (i.e., the *be* of predication, the *be* of identity, and the *be* of existence). The sense of existence appears in "God is"; the sense of predication appears in "Joan is intelligent"; and the sense of identity in "John is the leader." *Be* has an auxiliary function as well. The empirical question is whether we can identify a common core underlying the different uses of be, as illustrated below:

- 1. Joan is a student.
- 2. Joan is intelligent.
- 3. John is the leader (of the group).
- 4. Look! Bill is running over there.
- 5. Be a nice boy.
- 6. Bill is beaten by Joan.
- 7. I think; therefore, I am.

It is our claim that there is indeed a common core, and that the semantics of be will be approached by postulating the Be-relation, a two-place predicate BE (X, Y) (cf. Miller and Johnson-Laird,1977; Jackendoff, 1983), where the variables X and Y are schematically related as follows:



The notion of schema is from Langacker (1987) and Lakofff (1987). This schematic representation of the Be-relation suggests that X is a subset of Y. This interpretation

is yet somewhat limited in that X can be not only an entity but also a process or a state. The Be-relation of X and Y can be paraphrased as 'X being located in Y'. This paraphrase would be motivated and supported by the interpretation of the primary sense of be as given in the Oxford English Dictionary.

"The primary sense appears to have been that of branch II,'to occupy a place' (i.e., to sit, stand, lie, etc.) in some specified place; thence the more abstract branch I [to have or take place in the world of fact, to exist, occur, happen]) was derived by abstracting the notion of particular place, so as to emphasize that of actual existence, 'to be somewhere, no matter where, to be in the universe, or realm of fact, to have a place among existing things, to exist."

Thus, the sentence "Joan is a student" is analyzed as follows: Joan and a student are the values of X and Y, respectively, and hence, Joan is located in the category STUDENT as a member. A similar analysis has been given in Jackendoff (1983, 1990). For example, Jackendoff (1983: 88) analyzes "Clark Kent is a reporter" using the notions of token and type as follows: IS AN INSTANCE OF (Clark Kent [Thing Token], REPORTER [Thing Type]), which will be roughly read as "Clark Kent is an instance of the type (=category) REPORTER."

If the variable Y in BE (X, Y) is filled in by an indefinite noun phrase, then a standard set theory applies, interpreting that X is a member of Y. The sentence "Dogs are animals" receives the same interpretation—the category DOG expressed by dogs is a member of another category ANIMAL expressed by animals.

Let us compare "Joan is a student" with "John is the leader." The sense of identity is implied in the latter sentence because of the reversibility of X and Y: i.e., "John is the leader." = "The leader is John." To explain this, we must note that both X and Y are filled by the singular definite noun phrases. The 'is a' interpretation (i.e., the interpretation of 'X is a member of Y') naturally breaks down here, because, conceptually, X completely overlaps Y. It is nevertheless important to note that the Be-relation remains constant in each case: X is (being) located in Y, or Y provides a space for X. In X is Y, the only constraint here would be that the size of set X should be equal to or small than the size of set Y.

The verb *be* takes an adjective as its complement as in "Joan is intelligent," where *Joan* is the value of X, and *intelligent*, the value of Y. Here, the Y element differs from the previous case (Joan is a student) in that the adjective *intelligent* is not a canonical category which assumes n members. Rather, it is a state of affairs

where X is (being) located. In other words, *Joan* is described as being located in the state designated by the word *intelligent*.

The progressive be

Let us now turn to the progressive *be*, as exemplified in "Bill is running over there." In order to be consistent with our analysis of the Be relation here, it is necessary to take the progressive *running* (over there) as functionally the same as an adjective or an adverb. To support this view of the progressive form of a verb, we may note that the modern form of "He was running" used to be "He was a-running" in Middle English, according to the Oxford English Dictionary. This historical fact seems to support the view that the sentence "Bill is running" is functionally the same as the sentence "Joan is in the kitchen," where the sense of "being located" is more prominent.

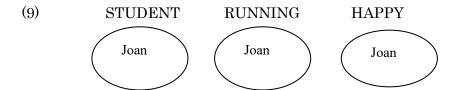
To support the analysis here, we may add that the present participle has dual functions: it has a verbal and adjectival functions simultaneously. In other words, we could argue with traditional grammarians that the present participle is in part an adjective, and it is not a full-fledged verb. This is why it cannot complete a full sentence without utilizing the verb *be*. Examples such as *running water*, *sleeping dogs*, and *flying planes* abound and clearly indicate the adjective function of the present participle.

Our claim here is that *running* as in "Bill is running" can be considered the value of Y in the Be (X, Y) relation, permitting us to interpret that Bill is now located in the continuous state of running. Here again, the Be-relation holds: Be (Bill, running).

To express the Be-relation, we are assuming the spatial relation of [X IN Y]. This presents us a task of accounting for the difference between "Joan is a student" and "Joan is in the kitchen." In the latter example, Joan's position is linguistically marked by *in*, where as in the former example, we are assuming the [X IN Y] relation. In other words, the sentence containing *in the kitchen* illustrates "the preposition being used as a Place-function that satisfies the Place argument of be" (Jackendoff,1990, p. 72). Here the question is this: Is it possible to claim that the spatial relations of [Joan in the kitchen] and [Joan IN the category STUDENT] show the same relations since the Be-relation holds in each case? A further question will be raised: Is the spatial relation of [Joan IN the category STUDENT] the same as the spatial relation of [Joan IN the state of RUNNING]?

First, [Joan IN the category STUDENT] can be rephrased as [Joan IN the state

of BEING a STUDENT]. This rephrasing seems to indicate that the second question above could be answered affirmatively. And yet, this indication may be misleading. When one says, "Joan is a student," one is concerned with a membership (i.e., be an instance of) relation. The same relation is unlikely to be applied to a sentence like "Joan is running." Nevertheless, we could argue that a common thread can still be extracted from these sentences, that is, BE (X, Y). In other words, the exact nature of Y differs according to cases, and yet, the Be-relation is always constant. The Be-relation remains schematically the same, despite the different uses of *be*, as shown below:



What is, then, the difference between Joan is a student and Joan is in the kitchen? Schematically, both look alike:



The preposition in specifies the spatial relation between X and Y. Semantically, Joan cannot be (equal to or a member of) the kitchen, and yet, the kitchen is clearly the space where Joan is located. Likewise, a student in "Joan is a student" is not a space per se, but rather, we assume the category STUDENT at the meta-level, which then permits the interpretation of [X IN Y].

X and Y are variables, and the appropriate interpretation of Be (X, Y) comes from the values of the variables. X and Y are often filled in by certain values. It is sometimes the case that Y remains unfilled, and yet, the Be-relation still holds with the sentence. The sentence "God is" is a good example here; God is the value of X, and the variable Y is unfilled (probably because it is not necessary to specify where God exists). The same account goes for "I think; therefore, I am" or "To be or not to be. That is a question." In the same vein, the expression "Let it be" will be analyzed as follows: LET (IT BE 0). Here, we do not know for sure what the pronoun *it* refers

to. Also, the space where X is located remains unknown. Thus, the message of "Let it be" is that we leave it (something) as it is (somewhere) without any hindrance.

The Passive BE

Let us now move to the passive *be*. Langacker (1980, 1990) holds that the passive *be* is indeed meaningful. He compares *be* with *do*, claiming that both show considerable overlap in the range of uses. Langacker discusses the examples below:

- 11. a. I did something terrible.
 - b. Those clothes just won't do.
 - c. What does she want?
- 12. a. Don't be noisy!
 - b. He is tall.
 - c. We were attacked by bandits.

According to Langacker, (11a) is a canonical form of the active *do*, describing the exertion of volitional control over an activity. This use of *do* has a semantic value approximating "execute" or "carry out." Langacker says very little about (11b) except that it is more abstract and roughly means "suffice" or "be suitable." He considers (11c) is a case where "all sense of volitional control is bleached away...leaving only the process of corresponding to the landmark within the active *do*" (p. 135).

Turning to the semantic variants of *be*, Langacker notes that (12a) "is perfective, and describes the volitional control of activity lending itself to characterization by an adjectival complement" (p. 136). It roughly means "act in a particular manner" and is somewhat similar to the active *do*. The use of (12b) has "the profile of a schematic imperfective process" (p. 136), hence corresponding to the case of the auxiliary *do*.

Comparing be and do, Langacker (1990) observes:

"one variant of each predicate designates the willful control of some kind of activity. Each also has less active, imperfective variants without intimation of volitional control... It is not inherently implausible to claim that the auxiliary uses of *be* and *do* might represent limiting cases along the clines of activity and specificity."

(p. 136)

As for the properties of the passive be, Langacker (1990) claims:

"[the passive be] is seen to be intermediate between BE [main verb be] and DO [main verb do] as they normally function in auxiliary constructions. [The passive be] is like DO internally, in that there is no presumption that all its component states are identical. However, it is like BE functionally, in that it combines with an atemporal structure and gives it a temporal profile. With BE, this autonomous structure is stative (a simple atemporal relation), consisting of a single static configuration. With the passive be, on the other hand, it is a complex atemporal relation, consisting of a series of potentially distinct configurations viewed holistically." (p. 138)

Langacker takes the position that the prototypical notion of [BE] has become more and more attenuated into the passive *be*. While agreeing with Langacker's analysis, we might as well try to simplify it, using the Be-relation throughout all uses of *be*. First, notice that *be* can be used to form quasi-perfective sentences such as the following:

- 13. Winter is gone.
- 14. The sun is set.
- 15. My wrist is all swollen.

These examples take the form of [be + past participle], which "designates a state characterized as the final state in a process" (Langacker,1990: 129). These are classified as perfect sentences, and yet, semantically, they are closer to the passive constructions in that the subject of each sentence is simply located in the state described by the past participle. In this regard, "Winter is gone" parallels to "The door is closed"; the difference is that the agent is not implied in the former sentence, while it is either explicit or implicit in a passive sentence. The point to be made here is that the Be-relation applies to perfective sentences using be.

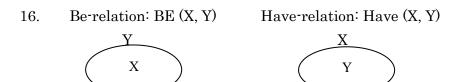
One could argue that be can describe "the volitional control of activity lending itself to characterization by an adjectival complement," (Langacker 1990: 136) as in "Be quiet." Langacker (1990: 136) notes that "it means approximately 'act in a particular matter', and is thus somewhat akin to the active do." To be consistent with the foregoing argument, we could interpret this variant of be as the one focusing on the state or the result as described by an adjectival complement. Emphasizing the intended state of affairs (goal), we could get someone to do something to reach that goal. The point here is that the Be-relation as discussed above still holds even with

a sentence like "Be quiet."

Returning to the passive construction, we add that *be* is the appropriate selection to form a passive, in that it only serves to situate the subject X in the state designated by the past participle. To give this answer more persuasion, we need to look at the semantics of *have*, which we will discuss in the next section.

The Semantics of Have

The suggested Be-relation will be more interesting if we compare it with the Haverelation. In BE (X, Y), it was suggested that the size of set X is equal to or smaller than the size of set Y. This situation is reversed for HAVE (X, Y), as illustrated below:



It has been often suggested that be and have are semantically related (e.g., Anderson, 1971; Ikegami, 1991; Gallagher, 1969). For example, "There is a book on the table" can be paraphrased as "The table has a book on it." Ikegami (1991) discusses the typological contrast between BE-language and HAVE-language. He suggests that a BE-language uses schema WITH X BE Y in order to represent a situation in which X possesses Y. Typologically, English is a HAVE-language, while Japanese is a BE-language. Thus, the English sentence "John has two children" can be typically translated into "John ni wa kodomo ga futari iru" (which literally means "With John, two children are [exist]") in Japanese. This example also shows that be and have are interestingly related. In this paper, we propose that the schematic representations given in (16) capture the interrelationship between the two verbs in a simple manner. We also claim that those simple schemas explain the variants of the two verbs, serving their overarching common bases.

As discussed above, the Be-relation indicates that subject X is situated or located in Y, where Y can be a category, a place, a state, or a process. Our claim has been that this relation holds across all uses of *be*, whether it is a main verb or an auxiliary verb. This claim goes along the line of the one meaning for one form thesis (Bolinger1977).

To discuss the semantics of *have*, we may first note that we are using the term *relation*. We consider verbs to be "relators." In the case of transitive verbs, a verb

relates two nominal elements. Thus, for example, in the sentence "John breaks the ice," we have two nominal elements, John and the ice, which are semantically related by the verb *break*. We express the semantic relation as a two-place predicate as in Break (John, the ice).

To capture the essence of *have*, we must introduce the notion of *space*, or the Have-space. The following discussion in this section centers around the nature of the Have-space, and the question of how the Have-space accounts for the semantic variants of *have*.

The Oxford English Dictionary gives an account of the signification of *have* below:

"From a primitive sense 'to hold (in hand)' *have* has passed naturally into that of 'hold in possession,' 'possess,' and has thence been extended to express a more general class of relations, of which 'possession' is one type, some of which are very vague and intangible. ...Like the two other generalized verbal types *be* and *do*, *have* also tends to uses in which it becomes a mere element of predication, scarcely capable of explanation apart from the context, and at length an auxiliary verb."

This account well accords with the process of semantic attenuation discussed by Langacker (1990), who explains the process in detail:

"for a person who possesses an object does not necessarily hold it or make any other kind of physical contact...energy transfer implied by possession of this sort does not represent any actual instance but is only potential (or at most habitual)...There is further attenuation when the notion of energy transmission is generalized and interpreted abstractly as applying to any kind of control or access...A precisely analogous change figures in the evolution of have into a marker of perfect tense. In that case, however, the relevant sense of have is one in which the target is not a thing but rather a process construed atemporally and expressed by a past-participial complement...the precursor of the perfect have is assumed to have profiled a relationship of relevance or potency between its trajector (specified by the subject) and the prior event described by the complement...On this interpretation, He has finished would indicate, roughly, that the subject stands in a relationship of accomplishment vis-à-vis the finishing, or that the prior occurrence of finishing remains relevant to him." (pp. 338-339)

Assuming Langacker's position, we show below that a theory using the notion of the Have-space can account for the following variants in a consistent and simple manner:

- 17. We have apples.
- 18. I have a shower at seven sharp.
- 19. He has a big nose.
- 20. We have a problem.
- 21. We have finished the project.
- 22. I'll have John bring his girlfriend to our party.
- 23. I have to read these books.

Sentence (17) is ambiguous among several readings. It could mean that each one of us has an apple (apples) in our hand. It could also mean that we have apples somewhere around us, but not in our hands. On another reading, it could mean that we eat apples (for breakfast), and the list goes on. As often suggested, multiple senses of *have* are highly context-sensitive. Our claim is, however, that there is a common thread of all senses.

The Have-relation of Have (X, Y) will be construed as Y being in X's Have-space. Then what kind of space would that be? The notion of Have-space will be understood as one's perceived territory or one's experiential space, where most of one's daily activities are being conducted. The Have-space, which includes the processional space as its prototype, needs to be broad enough to cover diversified semantic variants of *have*. Brugman (1988: 245) suggests that "the abstract relation of 'interest' ... contains the common denominator of meaning for all uses of HAVE." Another word for the abstract relation of interest is 'a shared sphere of influence' (Langacker 1975:385), in which the potential for influence is held by the subject (Brugman 1988: 50). Our notion of HAVE-space is similar to Langacker's 'shared sphere of influence'.

According to a dictionary, the verb *have* is related to *possess*, *own*, *keep*, and *belong to*. While *have* takes an NP [+human] as its subject, *own* and *possess* take only human subjects as the following comparison suggests:

- 24. The table has four legs.
- 25. ?The table owns four legs.
- 26. ?The table possesses four legs.

We may also note that *own* and *possess* are statives, not allowing dynamic usage. *Keep* is differentiated from *have*, in that *keep* involves the sense of [+durative]. "John kept it" thus implies that John maintained the state 'John has it' for a given period of time. The verbal phrase *belong to* is also related to *have*: the difference is that *belong to* is used only as the [possessional] sense, not in the [positional] sense. In this respect, *belong to* is more similar to *own* and *possess* than to *have*:

- 27. The pen belongs to him.
- 28. ?The pen belongs to him in his hand.
- 29. ?John owns a pen in his hand.
- 30. ?John possesses a pen in his hand.
- 31. John has a pen in his hand.

The Have-space is a space not restricted by the features [human][positional /possessional] and [durative]. The range of senses conveyed by *have* is broad: "It is ... possible to 'have' physical objects, attributes, states, ideas, titles, diseases, and even the services or assistance of someone" (Miller & Johnson-Laird, 1976, 571).

The interpretation of the Have-space depends on contextual modulation and specification. Thus, when we say, "John has apples," we interpret the sense of *has* on the basis of the available information. As mentioned above, the sentence could mean "John eats apples" or "John keeps apples (in the refrigerator)." As Gruber (1976) points out, the reading of *have* in "The house has a roof" is ambiguous between possessional and positional senses. The reading of *have* is also ambiguous between temporal and nontemporal senses, as seen in the contrast between "Joan has a book in her hand" and "Joan has a nose on her face" (see Gallagher, 1969; Costa, 1974 for potential semantic readings of *have*).

Thus, as suggested earlier, the common base of *have* has to be broad enough to cover these readings or interpretations. The notion of "possessional space" (cf. Miller and Johnson-Laird 1976) represents the most prototypical aspect of *have*, and yet, it does not sound broad enough to permit the possible senses available in the verb. In this paper, we are using the notion of 'experiential space' to characterize the semantic nature of Have-space. With 'experiential space' and 'possessional space,' we can explain why the verb *have* can be used both in "John has a pen" and "John has a shower at six every morning." In short, in the two sentences, we take a pen and a shower as being within John's HAVE space.

According to Brugman (1988), in the NP HAVE NP construction, the concept of alienable and inalienable possession has some explanatory power. For example, the following are presumably due to the difference between alienable and inalienable.

- 32. a. I have a missing tooth.
 - b. ?I have a missing \$5 bill. (Brugman 1988:65)

Sentence (32a) appears to present a problem to our HAVE-space analysis, if we take the HAVE-space as a possessional space only. Clearly, the sentence does not mean that I possess something Y. However, we define the HAVE space as also representing the X's experiential space. This interpretation of the HAVE space permits us to read (32a) as meaning "I am experiencing tooth-missingness" (Brugman 1988: 67).

The power of our analysis becomes obvious when we consider the constraint on the use of *have*: the complement Y is always within X's Have-space. This suggests that the activity involved in the so-called dynamic sense of *have* is limited within X's Have-space. What is suggested here applied to the following cases:

- 33. Have some more coffee.
- 34. Let's have a dance.

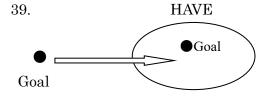
The 'Have-space' constraint dictates that the intended activities should be (easily) available to the interlocutor when one utters one of these. The imperative form in "Have some more coffee" suggests that you should cause the state of affair "You have some coffee" to happen. One could argue that the dynamic sense of *have* is not intrinsic to the verb per se; rather, it might come available to us as a result of manipulating tense, aspect, and/or mood. Nevertheless, when one says, "Joan is having dinner now," we feel a sense of activity involved in the normal reading of the sentence. Our position about this issue is that *have* indeed permits a non-stative (dynamic) interpretation under the constraint that an activity denoted by a non-stative sentence should be confined within the Have-space.

With reference to this constraint, an interesting contrast can be observed between "take a bath" and "have a bath." Both expressions are sometimes considered dialectical variants, which are semantically interchangeable. "Take a bath" is preferred in American English, and "have a bath" is preferred in British English. This may be true, but a little more seems to be involved in the contrast between 'Have a V' and 'Take a V' constructions.

A detailed analysis between *take* and *have* constructions has been made by Wierzbicka (1988). Here, we are only concerned with the constraints on the interchangeability of the two constructions above. Consider the following (37 and 38 are based on Wierzbicka 1988):

- 35. a. She has a bath every morning.
 - b. She takes a bath every morning.
- 36. a. The newly-born baby has a bath every morning.
 - b.? The newly-born baby takes a bath every morning.
- 37. a. She has a look at the document.
 - b. She takes a look at the document.
- 38. a. She has a listen to what he said.
 - b.?She takes a listen to what he said. (In American English, "take a listen" is an acceptable collocation.)

The reason that (36b) sounds awkward comes from the semantic properties of *take*. The semantics of *take* reveals that some kind of voluntary action is involved in the act of taking. *Take* also involves a movement from one point [source] to another [goal], where the goal would be within the Have-space. Thus, the semantics of *take* will be schematized as follows:



A newly-born baby does not usually initiate the activity of bathing by him/herself. Thus, sentence (36b) sounds awkward. The comparison between (37) and (38) involves the difference in the semantics of *look* and *listen*. *Look* is basically an action verb (Gruber 1967). The meaning will be expressed roughly as "X's paying visual attention." This meaning motivates the use of a locative which indicates where the visual attention is being paid. It also explains why it is possible to say "Look and see," while the expression "See and look" sounds strange. In order to see something, we have to look. The important point here is that the observer can see whether the subject is looking at something or not, in that the subject usually move his/her head to look at something. Thus, it is possible to say, "Look back," "Look down," "Look up"

and the like. *Listen* is similar in meaning to *look*, since it involves auditory attention paid to some stimulus. The difference is that listening to something does not require a bodily movement. You can listen to what a person in your back is saying without moving your ears. This explains the limited options available for *listen* as to the prepositional choice. This also suggests that *look* is more active than *listen* at least in terms of the bodily movement (Wierzbicka 1988). This may, in turn, account for the unusual collocation of "take a listen" (However, this collocation is permissible in American English today).

We are still left with an explanation about why Americans tend to prefer *take*, while British people tend to prefer *have*. The explanation is perhaps cultural as suggested by Wierzbicka (1988: 340-341): the *have a V* pattern carries "the hedonistic connotations," while the *take a V* connotes "a decisive, pre-planned, goal-oriented ring." A fuller explanation of this, however, goes beyond the scope of this paper.

The Auxiliary Use of Have

The point to be stressed here is that the Have-relation always abides by the constraint that Y must be within X's experiential space. How do we then explain the auxiliary use of *have*, using the notion of the Have-space? Let us look at the account given by the Oxford English Dictionary here again:

"As in the other Germanic (and Romanic) languages the various moods and tenses of *have* are used with the past participle of another verb, to form a series of compound or 'perfect' tenses of the latter, expressing 'action already finished at the time indicated' ... This use arose directly from sense 2 b, the object possessed having in agreement with it a passive participle of a transitive verb as attribute complement; thus, I have my work done = 'I possess or have my work in a done or finished condition,' whence, by inference of antecedent action from result, the actual sense 'I have done my work': cf. the series 'Have you the article ready?' 'Have you the article completed?' 'Have you completed the article?'

Historically, the auxiliary *have* in the perfect construction was indeed a main verb. But in modern English, the situation is different; the possessive sense seems to have been lost in the perfective *have*. Gallagher (1969: 47-48) suggests that "since the two structures, possessive and perfect, are connected through a continuous historical development, one should look for a continuing connection in modern English." Our conclusion about this point would be that there is a semantic motivation behind the

perfect have in modern English.

To explain the semantic base, let us first note that the notion of experiential space can be extended to temporal space. Then consider the following contrast between simple past and present perfect sentences:

- 40. We broke up.
- 41. We have broken up.
- 42. I have been driving for two hours.

Sentence (40) interprets the event as something happened in the past; by contrast, (41) implies that the event still remains relevant to the speaker. Both the past tense broke and the past participle broken equally indicate the completed action; the only difference between (40) and (41) is that the use of have expands the temporal space of PRESENT and serves to treat the event within the present space. The temporal space of PRESENT here is the speaker's current experiential space. The choice between past and present perfect highly depends on how an event is perceived and conceptualized by the speaker. In other words, the perfect have marks the speaker's interpretation of 'being present.' With the notion of current experiential space, we could interpret sentence (42) as 'my driving for two hours is perceived or experienced within the present space.'

In discussing two-place constructions, Brugman reveals that the contracted version of "He's got a book" is OK, while the noncontracted version of "He has got a book" sounds a little awkward. Here, her proposal is that *got*-extension turns the verb *have* into an auxiliary (Brugman 1988: 104). Here, the contracted form of *have* loses its power of the HAVE space. Why does this happen? Probably because *have* and *get* are similar in meaning, and there's no reason to doubly mark the sense of possession. The contracted *have*, however, semantically marks 'current relevance.'

Compared with *be*, the Have-relation carries a stronger sense of 'X's control over Y.' This might well explain why a perfective construction chooses *have*. When one says, "Joan has beaten Bill at a chess game," we assume that Joan is responsible for the event of beating Bill. Joan's beating Bill at a chess game has taken place within Joan's experiential space according to the speaker's perception of the event. As we noted earlier, *be* can be used to form a quasi-perfect sentence such as "Winter is gone." If a sense of activity is implied, *have* tends to be preferred as in "Winter is gone, and spring has come." In this respect, Brugman (1988:83) compares the following sentences:

- 43. a. The race is finished.
 - b. My wrist is swollen.
 - c. He is risen.

It is often the case that the *very* test distinguishes a participial-adjective from a participial verb. The test only works for (43b). With this, Brugman claims that the VP-en has two different interpretations independent of the presence of BE or HAVE. Does this present a problem to our schematic analysis of BE? Our analysis is neutral and robust with respect to the semantic differences of the VP-en. Thu, we can paraphrase the above as follows: The race is in the state of being finished; My wrist is in the state of being swollen; He is in the state of being risen.

The difference between the Be-relation and the Have-relation seems to hold even with idiomatic expressions such as *have to* and *be to*. Following Bolinger (1968), we assume that the infinitive *to* tends to have future orientation in meaning. With this assumption, consider the following:

- 44. a. The students have [to submit their papers by next Monday].
 - b. The students are [to submit their papers by next Monday].

The bracketed parts fill in the Y slots of the Have- and Be-relations. The sense of obligation emerges in (44a), because 'submitting their papers by next Monday' is being conceptualized as being within the students' experiential space. Sentence (44b) sounds more objective and neutral because the Be-relation simply situates the students in a state where an action is to be performed in the future. In connection with the possessional reading of *have* in *have to*, we may note that the sentences below, for example, are semantically related, and that the *have* in (45a) clearly indicates the possessional sense (Brugman 1988:216).

- 45. a. I have something to tell you.
 - b. I have to tell you something.

The Causative Have

Let us now consider the causative *have*, along with *let*, *make* and *get*. Our claim here is again that the causative *have* is a variant of the Have-space. First consider different types of causative sentences:

- 46. Joan got Bill to come.
- 47. Joan had Bill come.
- 48. Joan made Bill come.

The semantics of causation has been fully discussed by Talmy (1976), Lyons (1977), Cattell (1984), and Wierzbicka (1988). We'll deal with the causative *have* in relation to *make* and *get* just in passing.

Let us start with comparing *have* and *make*. Syntactically, sentences (46) and (47) are identical, and the difference rests on the semantics of the two causative verbs. Talmy (1976) distinguishes have from make by discussing the means by which the causing is done.

have specifies that the causing is done by means of giving instructions that are to be followed...so that, accordingly, it is not appropriately used where the influenced agent is not an infant or animal. (p. 107)

This explains why the following sentence sounds strange.

49.?I had the squirrel leave its tree.

50. I had the two month baby drink banana juice.

Talmy (1976: 197) notes that "make seems to specify that the causing is done by means of threats (i.e., contingent assurances of causing pain)." Thus, the following results will be expected:

- 51. I made him clean the garage by threatening to cut his allowance (if he didn't).
- 52. ?I made him clean the garage by promising to raise his allowance (if he did). (p. 107)

With respect to "perspective" (Fillmore 1977), both causative verbs highlight the consequences of the causing. This highlighting is predictable to a certain extent when we consider the prototypical meanings of have and make. The complement is [Bill come] for the two verbs. The interpretation of (46) would be that Joan had something Y, where Y is the event [Bill come]. This implies that Joan had the result

she had intended to cause.

The same interpretation can be made with respect to *make*. The semantics of *make* involves transformation of something into something else, thus suggesting some kind of force. Sentence (47) would be read as Joan made something Y, where Y is the event [Bill come]. There is a slight difference between (46) and (47). With (46), only the result is perspectivized. With (47), however, the semantic perspective includes not only the result [Bill come] but also the initial state of [Bill not come]. Introduction of the causative *get* makes the function of *have* clearer.

In discussing the semantics of the causative *get*, we must note that it requires the infinitive *to*, while *have* and *make* can take the bare infinitive. The semantics of *to* is characterized as having the feature [+goal]. Thus, the inchoative *get* goes happily with *to*. In "Joan got Bill to come," the presence of the infinitive *to* suggest that the sentence does not say explicitly that Bill came. Rather, the inchoative *get* suggests that the subject did something that caused [Bill to come]. In contrast, the causative *have* carries the feature [+resultative].

The semantics of *have* must explain the two possible interpretations of the sentences below:

- 53. He had his watch stolen.
- 54. He had his hair cut.

In (53), the event of his watch having been stolen is against his will under the normal interpretation, whereas in (54) the event of his hair having been cut accords with his will under the normal interpretation. The use of *have* in "He had the watch go to Mary" is neutral in terms of the subject's intention or not. It would be possible to interpret the two sentences above differently given a certain frame of reference. The point is that the verb *have* only sets an experiential space where X and Y are related, and it is neutral with respect to intentionality. This is different from *make*, since the causative *make* permits only one interpretation.

Brugman (1988) gives a detailed account of the types of the predicational complement of HAVE constructions and identifies what she calls "the core of the lexical network" (p. 211).

55. a. I had the socks darned in no time.

[Resultant Event/State]

b. I had Walrus feed the chicken.

[Causative]

- c. I had rain falling on me all day.
 [Attributive/Existential]
- d. I had tomato sauce get on my new silk blouse.
 [Affecting Event]

	Stative	Active
Subject	Resultant E/S	Causative
+control	NP1:Stimulus	NP1: Agent
	55a	55b
Subject	Attr-Existential	Affecting Event
-control	NP1: Experience	NP1: Patient
	55c	55d

Brugman (1988:211) explains as follows:

"The horizontal axis presents the basic opposition of Stativity vs. Activeness. Along the vertical axis is a differentiation on the basis of whether or not NP1 has control of or responsibility for the entity or state of affairs expressed as part of the (matrix) predicator--in other words, what the Semantic Role of the subject is. ..."

The question here is whether we could treat these cases as variants of the HAVE-space suggested in this paper. We read the HAVE-space as the subject's experiential space. The causative use of *have* in (55b) seems to be a bit off the notion of an experiential space, and yet, if we note that "in general with HAVE-constructions, the emphasis is on the result of the act to the exclusion of manner and means" (Brugman 1988:133), the notion of *experience* can be expandable to include the causative reading.

Needless to say, the notion of the HAVE-space is far from exhaustive with respect to the semantic potentials of *have*. As Brugman (1988) persuasively documents, an adequate analysis must acknowledge the existence of environmental influences on the use and appropriateness of HAVE-constructions. In this paper, we have only emphasized the generalizing capacity of abstraction, realizing that "all details of a language deserve equal attention and that the description of general principles need not entail a sacrifice in describing fine details" (Brugman 1988,

p.196).

Small Clauses and Abstract BE / HAVE

Be and have function as auxiliaries in English, probably because they are cognitively most fundamental verbs (for psychological implications, see Fromm 1976). In this section, we pursue a possibility that these two basic verbs serve as abstract verbs when interpreting sentences containing 'small clauses'.

The notion of small clause has been used to refer to "a sequence which could form an independent sentence if it had the copula, but from which the copula is missing" (Cattell 1984: 189). [John a fool] in the sentence "I consider John a fool" is a standard example of a small clause since it could be read as [John BE a fool]. We broaden the definition of small clause to refer to any sequence of words from which a clause is recoverable with the abstract verb BE or HAVE. The bracketed parts in the following sentences are considered here to form small clauses.

- 56. John made [Mary a good husband].
- 57. John made [Mary a good nurse].
- 58. John got [Mary a car].
- 59. John got [Mary angry].
- 60. John saw [Mary home].

What puzzles us is the comparison of (56) and (57). Formally, the two sentences are alike, and yet, the semantic interpretations radically differ. This remains to be a puzzle as long as we are treating the sentences only as a maGatter of syntax. If the abstract BE and HAVE are introduced, however, the semantic difference becomes transparent, as shown below:

- 61. a. John made [Mary HAVE a good husband]
 - b. John made [Mary BE a good nurse]

Also consider sentences (58) and (59). In the first sentence HAVE is the relator of Mary and a CAR, and in the second, BE is the relator of Mary and angry. BE or HAVE is not necessary when there is a specific verb as in John got [Mary to eat] or John made [Mary eat]. The claim here is that in a small clause, BE or HAVE is selected to relate the two elements within the clause.

So-called dative constructions will receive the same treatment (for a detailed

analysis of dative constructions, see Green [1974] and Larson [1988]). The sentence "John gave Mary the book" contains a small clause, i.e., [Mary the book], where the realtor is HAVE. Thus, the sentence will be interpreted as 'John did something that caused Mary to HAVE the book' (Miller and Johnson-Laird 1976). At this point, we must note that the Have-space is carried over to the abstract HAVE in a small clause, thus permitting multiple interpretations. Oehrle (1976) discusses the sentence "Nixon gave Mailer a book," which permits three interpretations.

- 63. a. Nixon temporarily handed over a book to Mailer.
 - b. The ownership of a book transferred from Nixon to Mailer.
 - c. Mailer was able to write a book thanks to Nixon.

The ambiguity here seems to be explained in terms of the intrinsic vagueness of the Have-space. What is constant, however, is the relation Mailer HAVE a book, although the interpretation of the causing factor varies contextually.

Consider one more *give* example: "The captain gave Fred a kick at the goal." The interpretation of the sentence would be either 'Fred had a chance to kick at the goal' or 'Fred was kicked by the captain at the goal.' Whatever the interpretation of 'a kick' might be, our analysis goes: The captain did something to cause Fred to HAVE a kick.

Wierzbicka (1988) uses the notion of HAVE in a narrow sense [physical possession], and classifies double-object constructions into eight semantic categories.

- 64. a. transfer: Jim threw Betty an apple.
 - b. speaking of future having: Bill promised/refused Sue a watch.
 - c. making: Jack knitted Jill a jumper.
 - d. preparing for use: Jim fried Betty an egg.
 - e. entertaining: She read us a story.
 - f. telling: Bill wired Sue the news.
 - g. teaching: Sam taught Fido a trick.
 - h. showing: Tim showed Sam a picture.

Category (e) may not seem to fit the notion of Have-space, if we take it in a restricted sense. However, we could, along with Green (1974), capture the Have-space more broadly. As Green (1974) discusses, even a sentence like "Peter will telephone Beverly the news" could be analyzed using the broadly defined Have-space: Peter

telephone Beverly, and as a result, Beverly HAVE the news. Perceiving something is part of our perceptual experience. In the same vein, we analyze (e) as follows: She read a story, which caused us to HAVE it. The Have-space could be taken as the invariant core underlying the eight semantic categories in (64).

Our analysis of small clauses assumes the presence of HAVE and BE as syntactically hidden meanings. This analysis is not yet unproblematic. Brugman (1988:73-74) compares the two sentences below:

- 65. a. I had him angry the moment I walked in the door.
 - b. I had him be angry so that the children wouldn't tease him any more.

Brugman notes a semantic difference. In (65a), the adjective *angry* predicates a property not under the control of its attributant. In (65b), such control is intended. The presence of be thus makes a difference. Within the framework suggested in this paper, we analyze (65a) as: I had [him BE angry the moment I walked in the door]. This analysis looks the same as (65b). The difference would be that the abstract BE is neutral with respect to tense and aspect. Thus, the linguistic context of (65a) motivates the interpretation that 'he WAS angry the moment I walked in the door.' In contract, (65b) suggests a future-oriented action (he BE angry) and the presence of be strongly suggests futurity or unrealized action. What is constant in either case is that the subject of a HAVE-sentence is an "interested party," or the potential of influence is held by the subject (Brugman, 1988, pp. 49-50). Thus, the presence of *be* serves as a marker of futurity, a function that abstract BE does not possess.

GET in relation to BE and HAVE

Before concluding this paper, let us briefly discuss the semantics of *get*. Our hypothesis is that *get* is defined in terms of BE and HAVE. In other words, *get* has the function of triggering the state of affairs expressed by BE and HAVE. Consider the following sentences:

- 66. John got Bill a ticket for the concert.
- 67. John got Mary angry.
- 68. John got a ticket for the concert.
- 69. John got angry.

Sentence (66) will be interpreted as 'John did something that caused Bill to HAVE a ticket for the concert' as in (70). Likewise, sentence (67) will be interpreted as 'John did something that caused Mary to BE happy' as in (71).

- 70. John got [Bill HAVE a ticket for the concert]
- 71. John got [Mary BE angry]

In (68) and (69), the same interpretation applies, producing (72) and (73), respectively.

- 72. John got [John HAVE a ticket for the concert]
- 73. John got [John BE angry]

A sentence like "John got on the bus" might be similarly interpreted as: John got [John BE on the bus]. In earlier English, the following usages were observed, supporting our suggested interpretation:

- 74. I'll get me to a place more void. (Julius Caesar II, iv, 37)
- 75. Get thee to a nunnery. (Hamlet III, i, 14)
- 76. Get thee away. (The Comedy of Errors I, ii, 16)

Interpreting "John got angry," we are assuming that John caused the state of his emotional feelings to change from "being not angry" to "being angry." In other words, if Mary's words are the direct cause of his getting angry, John simply responded to her words and changed his mood. This is what is meant by "John caused himself to BE angry."

A rule drawn here is that get triggers the BE or HAVE state unless there is a specific verb indicating others. In "John got Mary to drive home," the specific verb drive indicates a particular state of affairs. In principle, the semantic interpretation of a *get* sentence containing a small clause picks one of the following:

- 77. a. X causes Y to HAVE something
 - b. X causes Y to BE something
 - c. X causes Y to DO something, where DO is always replaced by a specific verb.

In other *get* sentences containing no small clause, either the Be-state or the Have-state is selected. Thus, our rule seems to apply to all *get* sentences, although a more careful analysis of the interrelationship of *be*, *have*, and *get* awaits future research.

Final Remarks

In this paper, we discussed the semantics of *be* and *have*, attempting to give a unified account of semantic variants. We suggested that the semantics of *be* should be approached by postulating the Be-relation BE (X, Y), where X is (located) in Y. This Be-relation is the overarching common thread of seemingly different uses of *be*. We also suggested that the overarching common thread of *have* should be captured in terms of the HAVE (X, Y) relation, where Y is (being located) in the X's experiential space.

The comparison of the Be and Have relations suggested that the subject of *be* is more passive than the subject of *have* in terms of which (X or Y) provides a space to which. This seems to explain why *be* and *have* are used to form passive and perfective constructions, respectively. It was also suggested that *be* and *have* serve as the abstract verbs when interpreting small clause constructions, although the argument advanced there was admittedly very rough, and certainly requires much more elaborations and specifications (cf. Goldberg 1992).

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