A Note on the There-Construction Verbs*

Sung-Ho Ahn (Hanyang University)

Ahn, Sung-Ho. 2001. A Note on the *There*-Construction Verbs. Korean Journal of English Language and Linguistics 1-3, 477-496. Arguing against Burzio's (1986) and Levin and Rappaport Hovav's (1995) proposal that verbs that occur in the *there*-construction are unaccusative ones, Takami and Kuno (2000) point out counter-examples to their proposal and put forth a functional characterization of the class.

This paper proposes that the class of *there*-construction verbs can be characterized in terms of the concept of unaccusativity, where verbs can be determined to be unaccusative depending on their contexts. More specifically, it proposes that only such verbs can be *there*-construction verbs as are unaccusative in a restrictive approach to argument structure as in Hale and Keyser (1993a).

1. Unaccusative Verbs of Existence and Appearance

Exploring the class of unaccusative verbs, Burzio (1986) and Levin and Rappaport Hovav (1995) propose the unaccusativity test (1), which Takami and Kuno (2000) interprets as in (2).

^{*}This work was supported by Hanyang University, Korea, made in the program year of 1999. With gratitude, I also acknowledge that part of this research was conducted during my stay at Harvard-Yenching Institute under the 2000-2001 Visiting Scholar Program, and that I am indebted in various ways to the linguists at Harvard University, MIT, and the University of Connecticut, and to the Yenching staff and colleagues. Most of all, however, Susumu Kuno's wonderful classes were a direct instigator of this research. My deep appreciation and warm thanks go to him for them and his unforgettable hospitality. I have also benefitted a lot from discussions with Dr. Heizo Makamura and Dr. Chung-Min Lee and other participants in the 2001 Seoul International Conference on English Linguistics, August 16-17, Yonsei University, Seoul.

- (1) An Unaccusativity Test (Burzio 1986)

 If a verb V occurs in the position of ___ NP PP] in the there-construction, V is an unaccusative verb (denoting existence or appearance).
- (2) Unaccusative Restriction on the *There*-Construction Only unaccusative verbs denoting existence or appearance can appear in the *there*-construction. No unergative (and transitive) verbs can.

This test is based on the following examples:

- (3) a. There are three bedrooms in this house.
 - b. There is still a serious problem with this proposal.
- (4) a. *There danced a young girl in the ballroom.
 - b. *There sang a tall middle-aged woman on the stage.
 - c. *There laughed several students during the lecture.
 - d. *There played three children in the playground.

(5) Verbs of existence

- a. There exist a number of similar medieval crosses in different parts of the country.
- b. There once lived a king who had no ears.
- c. There stood an old grandfather clock in the hall opposite the front door.

(6) Verbs of appearance

- a. There has just appeared another book by Chomsky.
- b. There occurred a tragic event yesterday.
- c. In the middle of the sea battle, there arose a storm which neither side had anticipated.

Takami and Kuno (2000), however, convincingly argue against (2) based on four sets of counter-examples to (2).¹⁾ First, unergatives apparently occur in the *there*-construction, as in (7).

- (7) a. Once there ruled a king who had no ears.
 - b. Late at night, there crept a silent band of soldiers into the small mountain village
 - c. In the afternoon, there proceeded a solemn cortege down the road to the cemetery.
 - d. I couldn't find anything so I switched chairs and in a few moments there crawled a small slimy gecko lizard off of my arm and on to the chair and the floor.
 - e. There ambled two rabbits along the path.
 - f. There raced two boys through the garden.
 - g. Suddenly, there sprang a snarling tiger from the bushes near the path.

Observe that verbs like *rule*, *creep*, *proceed*, *crawl*, *amble*, *race*, and *spring* are apparently all unergatives in Burzio's (1986) classification.

Takami and Kuno (2000) show further that even transitive verbs occur in the *there-*construction, as in (8).

- (8) a. Then, all of a sudden, there reached her ear the sound of angel voices.
 - b. There crossed her mind a most horrible thought.
 - c. There entered the room an indescribably malodorous breath of air.
 - d. But every now and again, before committing some folly or telling a palpable untruth, or when faced by a difficult decision, there suddenly enters my mind the beefy

¹John McGuire (personal communication) says that most of the examples are rather literary and wouldn't occur naturally in oral English. With this proviso, he finds the examples acceptable.

figure of the Rev. P. C. Underhill, headmaster of Wellington House in my time.

- e. At this point, there hit the embarkment a shell from our own lines.
- f. Among the rest, there overtook us a little elderly lady.
- g. Job, the sufferer, knew that after this life there awaited him everlasting life with God.

(8') ... there [[$V NP_{Obj}$] NP_{Subj}]

As shown in (8') above, the subject NPs all occur to the right the normal VPs in those examples.

Thirdly, Takami and Kuno (2000) show that whether some verbs of destruction can occur in the *there*-construction depends on whether a locative PP occurs clause-initially or an adverb like *slowly* precedes the verb.

- (9) a. *There smoldered a flag in a corner of the room.
 - b. *There burned a flag in a corner of the room.
 - c. *There dissolved a mass of ectoplasm.
- (9') a. In a corner of the room there smoldered a flag that some angry patriot had torn down and ignited.
 - b. Deep within him there smoldered an unquenchable desire.
 - c. Deep within him there burned an underlying passion.
 - d. There slowly dissolved a mass of ectoplasm.

(9") PP_{Loc} [there [V NP]] or there [slowly [V NP]]

The contrast between examples (9) and (9'), whose structure is depicted in (9"), demonstrates that whether a verb can occur in the *there*-construction cannot simply be determined by lexical properties of the verbs, as presupposed by (2).

Lastly, Takami and Kuno (2000) show that unaccuatives not denoting existence or appearance show a similar contrast as in (10)-(10').

- (10) a. ??/*There swam a man in a wetsuit carrying a harpoon towards the party of tourists.
 - b. Towards the party of tourists (there) swam a man in a wetsuit carrying a harpoon.
- (10') a. *There screamed the panther.
 - b. In this alternate world, millions of years ago, there screamed the panther, there laughed the hyena, there howled the baboon, all was as if in our own sphere.

As an alternative to (2), then, they proposes the functional constraint on the *there-*construction in (11).

(11) The *there-*construction is acceptable to the extent that the string to the left of its logical subject is interpretable as denoting existence, absence, appearance, or non-appearance of the logical subject referent observable to the speaker (or the person whose point of view the speaker is representing).

This constraint can be analyzed as the following two requirements in (11'):

- (11') a. The part of the sentence preceding the logical subject should be interpreted as denoting (coming into) (non-) existence.
 - b. The logical subject should be(come) observable to the speaker.

Though (11) (and (11')) look descriptively accurate, it raises some questions including the following: (A) How can we understand the concept of (coming into) (non-)existence?; (B) Why are the specifics in (11) or (11') required of the *there-* construction?; (C) Does it mean that the *there-*construction has nothing to do with unaccusativity?; (D) How can we understand unaccusativity?

As argued for in Levin and Rappaport Hovav (1995), the concept of (coming into) (non-)existence in (11'a) seems to be closely related to the concept of unaccusativity, and can be lexically specified as such. However, Takami and Kuno's insight in (11) is that the same concept can be specified by means of portions of a sentence larger than lexemes. This suggests a possibility that unaccusativity may be understood in a broad sense. That is, we may talk about unaccusative verbs or phrases. This implication will be pursued to a certain extent in this paper.

2. Voorst's (1988)

With regard to Burzio's (1986) classification of verbs like *walk* in (12) as unergative, Voorst (1988: 83) observes that (a small class of) normally unergative verbs may behave as unaccusative in Dutch and English when they are subcategorized for a particle of completion or for a directional PP.2)

(12) There walked into the room a unicorn.

(Voorst 1988:(7) in Ch. 3)

He then proposes that this fact can be explained by means of

²He observes that unaccusative verbs (or verbs of accomplishment) in Dutch select for the auxiliary *zijn* 'be,' not for *hebben* 'have' and cannot have impassive counterparts, and that activity verbs show the same properties when they are subcategorized for a particle of completion or a directional PP.

syntax-lexical semantics mapping rules based on event structure. In his conception, an event is delimited by the object of origin/actualization (or an entity identifying its beginning) and by the object of termination (or an entity identifying its end). And he states event structure correspondence rules as in (13).

- (13) a. The object of origin/actualization corresponds to the subject NP.
 - b. The object of termination corresponds to the direct object NP.

When an activity verb is subcategorized for a particle of completion or a directional PP, crucially, it comes to denote an event of accomplishment in Vendler's (1967) classification, which entails that the event is delimited by an object of termination, and that the surface subject denotes the object of termination. The Event Structure Correspondence Rule in (13b) links the object of termination to the direct object position at D-structure.

Voorst's proposal provides a far-reaching implication about the problematic cases (7)-(10). It might be possible to say that the verbs that occur in the *there*-construction, including transitive ones, are those that can become unaccusative due to its optionally subcategorized constituents, modifiers, and others.

Voorst's (1988) system, however, is not free of problems. First, the surface subject *a unicorn* in (12) denotes the object of origin/actualization as well as the object of termination. This might cause a contradictory situation to arise: Rule (13a) is supposed to link it to the subject NP, while rule (13b) is supposed to link it to the direct object NP. Hence, his system requires a slight stipulation that rule (13b) has priority over rule (13a).

Another minor problem for Voorst (1988) is that even though it is quite clear that (some) activity verbs become verbs of

accomplishment when subcategorized for a particle of completion or a directional PP, his system doesn't show systematically how the semantic class of such verbs are changed. His system in fact seems to lack theoretical principles to force or guarantee such a change. This is a problem of underspecification. In the next section, we explore a way to overcome this problem in Hale and Keyser's (1993a) restrictive approach to argument and event structure.

3. Hale and Keyser's (1993a) Lexical Relational Structure

Hale and Keyser proposes that their Lexical Relational Structure (or LRS), a syntactic structure resembling Larson's (1988a) VP-shell structure in the lexicon, may represent the predicate-argument relations and event structures systematically and configurationally. The syntactic principles they assume to constrain the LRS may provide a deep motivation for the unergative-unaccusative switch Voorst observes.

Hale and Keyser begins with the fundamental questions reproduced in (14) (Their (21)):

- (14) a. Why are there so few thematic roles?
 - b. Why does Baker's (1988) Uniformity of Theta Assignment Hypothesis hold?

Their answer is that it is so because language has the LRS which consists of a small inventory of head categories {N, V, A, P} and their projections, and which is constrained by syntactic principles like (15).

- (15) a. Unambiguous Projection: Projections are unambiguous.
 - b. Full Interpretation: No superfluous categories or projections are allowed.

c. Locality of Predication: The relation of predication must be locally realized (Williams 1980, Rothstein 1983).

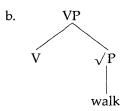
The principle of Unambiguous Projection requires binary branching and X'-theoretically allows a head to take a single specifier and a single complement only. The principles (15b-c) specifies that (16) holds for the LRS.

(16) An internal VP (or vP, here) can have its specifier only when it has a predicative complement, AP or PP.

As implied in (16), the LRS categories and projections and their relational statuses correspond to elementary meanings: V relates to (dynamic) events; N, to entities; A, to states; and P, to interrelations. Further, specifiers relates to (traditional) thematic roles: for example, [NP [V VP]] relates to the role of agent; [NP [V PP/AP]], to the role of theme; and so on. And complementation relates to implication; for example, [V VP] relates to causal relations; [V PP], to changes of states; [V AP], to changes resulting in a state; and so on.

Under this theory, the verb *walk* as in (17a) will have an LRS like (17b).

(17) a. A unicorn walked.3)

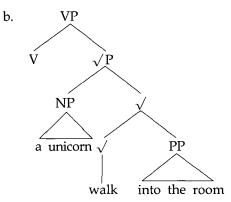


As shown in (17b), unergatives don't have their specifiers in LRS

 $^{^3}$ Instead of NP, in the b tree, we use the root phrase, \sqrt{P} . With this, we extend the set of categories for the LRS slightly.

representations, and the \sqrt{P} cannot have a specifier (owing to (15b-c)). When the verb is subcategories for a directional PP as in (18a), owing to the same principles, the inner VP (or \sqrt{P} , here) must have the specifier, as shown in (18b).

(18) a. There walked into the room a unicorn.



Given this, one might say that [walk into the room] may function as an unaccusative phrase. If the V raising is sensitive to the unaccusative feature, we may say that v' may move to the higher V producing the surface order (cf. Larson's (1988b) predicate raising analysis of extraposition).

One remaining problem is, the LRS representation in (18b) cannot capture the fact that the NP [a unicorn] is the causer of the event, because what it can say of the NP is that it is a theme. We will return to this problem later.

What analysis can the Takami and Kuno cases receive in the Hale and Keyser system? Takami and Kuno's (2000) functional constraint on the *there*-construction, reproduced in (11), is based on their insightful observation that with the problematic cases, somehow, the string preceding the logical subject is interpretable as denoting existence, absence, appearance, or non-appearance of the logical subject even though crucially the verbs involved are mostly action verbs, intransitive or transitive. Then, the problem

is, how can we capture the additional interpretations?

In this vein, we observe that the change of interpretation is mostly aspectual, concerning whether it is a process, or a state, or an accomplishment, or an achievement. Even though it denotes a process as an unergative verb, for example, the verb rule in (7a) comes to have an interpretation which existed ... ruling would have, as pointed out by Takami and Kuno (2000) and shown in (19b).

- (19) a. Once there ruled a king who had no ears. (=(7a))
 - b. Once there was a king who ruled (a country) and who had no ears.

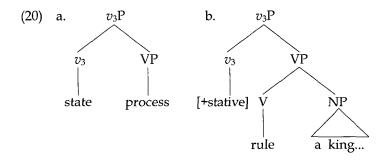
So, the problem is, how can we capture such a change in interpretation? We cannot simply change the aspectual properties of the lexical item rule, which is a verb of activity or process; rather, an embedding structure of aspectual properties should be assumed.

We propose that the solution should be found in an "embedding" structure: a stative containing a process component. If a stative head in the LRS can take a process-type inner VP, it may be interpreted as denoting a state implying that a process has taken (or is taking) place.⁴⁾ This state might be said to represent the meaning of existence related to the process that Takami and Kuno (2000) pinpoint.

More specifically, we will adopt the idea of v-projection or voice projection (a la Chomsky 1995; Kratzer 1994). This v can be causative or non-causative, as pointed out in Marantz's (1997).

⁴Other possibilities might include formulation of an adjunct rule in Jackendoff's (1990) Lexical Conceptual Structure theory, or a specification of event structure in Pustejovsky's (1995) generative lexicon theory, or enrichment of the Lexical Relational Structure with multi-tier structures (as in Jackendoff (1990), Ahn (1994), and others). I leave possible explorations for these alternatives for future research.

Let's adopt his notation, v_1 ('causative') and v_2 ('inchoative'). Can this be non-eventive, or stative? No, in Hale and Keyser's (1993) system: V is always eventive. That is, there is a systematic gap of [stative [process]] in possible combinations of verbal projections. What if their system is enriched with the Chomsky-Kratzer v-projection as in here? One may say that v is different from V in that it allows for the interpretation of stativity (cf. Ahn 2001a,b). Let's call this stative light verb v_3 . Unless configurations (20) are precluded on a principled ground, hence, the current proposal will serve to fill up a slot in possible combinations of aspectual types.

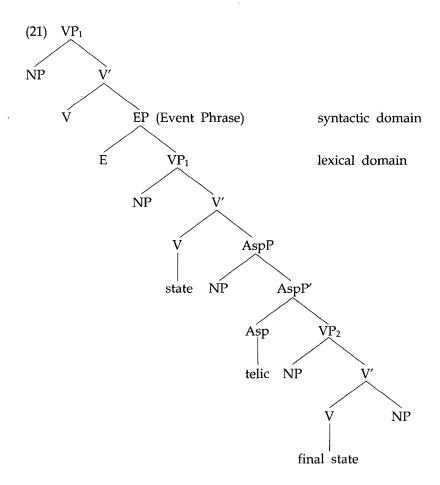


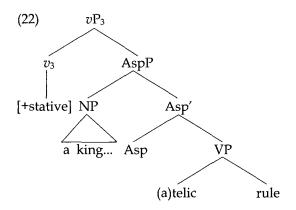
Again, the same problem as in (18b) persists: the agentive-instigator property of the NP [a king ...] cannot be captured in the LRS in (20b).

This problem can be solved in an interesting way in Travis (2000), where a similar type of configuration has already been proposed. Based on the verbal morphology and syntactic facts in Malagasy and Tagalog, Travis proposes the following as in (21): First, the LRS should be more elaborated so that the causation configuration [V VP] should be of two kinds, which are divided by a functional head E(vent): syntactic and lexical.⁵⁾ The E-internal VP consists of two V-projections which are mediated by an Asp(ectual) projection. With respect to the lexical domain, the

⁵Malagasy causatives are repeatable.

transitive accomplishments in Malagasy consists of three ingredients: (i) a morpheme indicating a state, (ii) a morpheme of telecity, (iii) the root describing the final state. She further proposes that Asp theta-marks its specifier. Probably, English won't need this full-fledged structure, but the [Spec, AspP] position in (21) seems to provide the position that we need to cure the problem(s) noted in (18b) and (20b): If the structure in (21) is slightly generalized as (22) so that VP_2 may denote a state or process or others, it can subsume (20b).



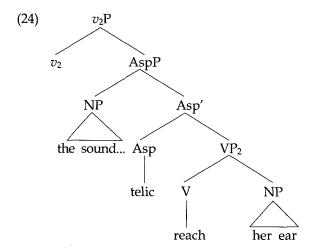


The same analysis may apply to all the cases in (7b)-(7f). The directional or path PPs will find their places in VP. It will probably be able to take care of (7g), where the NP comes to exist in the perception of the speaker, if something like (BE) COME replaces [+stative] in (22).

Travis observes that the [Spec, AspP] NP denotes a non-volitional agent or an instigator, which seems to apply to the problematic cases in (7) too. That is, the following examples are not acceptable.

- (23) a. *There intentionally walked into the room a unicorn.
 - b. *There intentionally raced two boys through the garden.

A similar analysis may apply to the problematic cases in (8), if the following LRS is set up for them. Notice that the object NPs in (8) all denote a kind of Location, to which the entity denoted by the subject NP travels. The VP [reach her ear] may be interpreted as unaccusative and move to the light verb.

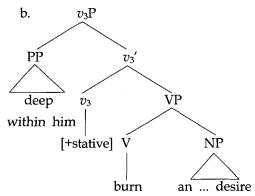


Case checking and other operations will be done not unlike other cases.

The cases in (9)-(10) have a slightly difference characteristic: If Takami and Kuno's observations are sound, they need to have their locative phrase preposed to the sentence-initial position. Another thing to notice is that it is hardly the case that a certain thematic relation holds between the preposed adverbials and the verbs. For example, Consider example (9'c), repeated as (25a). The PP [deep within him] is simply an adjunct with regard to the verb burn.

Although it is not clear what gives rise to the difference between (9) and (9') and between (10) and (10'), perhaps, a kind of functional facilitation happens, where the interpretations of the preposed constituents facilitate the introduction of v_3 on top of the predicative VPs. We believe that this functional facilitation should be related to the adjuncts' relation to (perhaps, direct modification of) v_3 as in (25b), which partially represents (25a).

(25) a. Deep within him there burned an underlying passion.



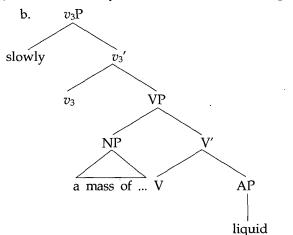
In (25), we have generated the clause-initial PP as if it were a specifier of the light verb $v_{3.6}$) Our hunch is that although it is not an immediately available or preferred option, it might be possible that the PP serves to introduce the stative light verb $v_{3.}$

Concerning (9d), however, we cannot say that the adverb introduces v_3 : there is a semantic clash between them. But if we adopt Chomsky's (2000, 2001a,b) derivational approach, for example, we may say that the adverb may combine with the [[V liquid] v_3] complex, which is produced by head movement in syntax.

Another issue is how the verb *dissolve* should be analyzed. This verb denotes a change of state where a solid becomes liquid.⁷) Since the final state is indicated either as PP or as AP in Hale and Keyser's LRS approach, let us suppose that sentence (9d), repeated as (26a), will have a structure like (26b).

⁶An alternative will be to generate the PP as a pseudo-predicate complement to the verb *burn*, which would serve as a copula and take the NP as its specifier.

⁷The Advanced Learner's Dictionary of Current English lists 'disappear' as a sense of this verb too.



(26) a. There slowly dissolved a mass of ectoplasm. (=(9d))

So, even though it is not clear how we can account for the distinction between sentences (9c) and (9'd), we can say that the reason why the verb *dissolve* can occur in the *there-*construction is that it is basically an unaccusative verb.⁸)

4. Concluding Remarks

This paper has tried to show that the Travis (2000) extension of Hale and Keyser's (1993) LRS system can capture most of the facts Takami and Kuno (2000) observe, although there are surely some remaining problems that await a more detailed investigation. This research suggests the following, among others:

(27) a. When understood as a lexical and phrasal category's property, unaccusativity doesn't seem to be totally

⁸If the distinctions between (9) and (9') and (10) and (10') are real, we might need a Takami-Kuno-type functional constraint at least for them, even though the question remains how we could integrate formal and functional conditions.

unrelated to the there-construction.

- b. The unique interpretations that Takami and Kuno observe can be regarded as resulting from a process of [unergative \rightarrow unaccusative] switch, which is to introduce a stative light verb v_3 .
- c. Travis's (2000) characterization of achievements as a special combination of states and telecity, and more generally the Hale and Keyser-Travis approach is empirically further supported to encode event information into syntactic phrase structure in terms of phrase structure. In fact, it suggests that achievements are a particular instance of the combination of aspectual properties where a stative one takes an eventive one as its complement.

There are many unanswered questions. Among others, a prominent one is how to distinguish the present cases with achievements. With the former, the relevant state and process are to temporally overlap, while with the latter no such overlapping is possible.⁹⁾

All in all, the characterization of the *there*-construction verbs seems to prove to be another case where functionalists and formalists can learn from one another to be able to understand the principled structure and the interpretive dynamics of human language more accurately.

References

Ahn, S.-H. 1994. A multi-tier approach to thematic relations. *Inmwunkwahak Nonmwuncip* 1 ('Papers in Humanities'), 177-204. Research Center

⁹As Makamura (2001) did for the verbs of locative inversion, we may take Pustejovsky's (1995) headed event structure as a promising path to explore, but we leave it for future research.

- for Humanities, Seowon University, Chongju.
- Ahn, S.-H. 2001a. What can Korean say about minimalism? Paper read at Harvard ISOKL-2001, Harvard University, Cambridge, Mass.
- Ahn, S.-H. 2001b. Grammaticalization of stativity and event argument structure. Paper read at the September 21, 2001 KGGC colloquium, Seoul.
- Burzio, L. 1986. Italian Syntax. Dordrecht: Reidel.
- Chomsky, N. 1995. The Minimalist Program. Cambridge, Mass.: MIT Press.
- Chomsky, N. 2000. Minimalist inquiries: the framework. In R. Martin, D. Michaels, and J. Uriagereka, eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, 89-156. Cambridge, Mass.: MIT Press.
- Chomsky, N. 2001a. Derivation by phase. In M. Kenstowicz, ed., *Ken Hale: a Life in Language*, 1-52. Cambridge, Mass.: MIT Press.
- Chomsky, N. 2001b. Beyond explanatory adequacy. Ms. MIT, Cambridge, Mass.
- Hale, K. and S. J. Keyser. 1993a. On argument structure and the lexical expression of syntactic relations. In Hale and Keyser 1993b.
- Hale, K. and S. J. Keyser, eds. 1993b. *The View From the Building 20*. Cambridge, Mass.: MIT Press.
- Jackendoff, R. 1990. Semantic Structures. Cambridge, Mass.: MIT Press.
- Kratzer, A. 1994. On external arguments. *University of Massachusetts Occasional Papers* 17: *Functional Projections*, 103-30. GLSA, University of Massachusetts, Amherst.
- Larson, R. 1988a. On the double object constructions. *Linguistic Inquiry* 19, 335-91.
- Larson, R. 1988b. Light predicate raising. Lexicon Project Working Papers 27. the MIT Center for Cognitive Science, MIT, Cambridge, Mass.
- Levin, B. and M. R. Hovav. 1995. *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
- Marantz, A. 1997. No escape from syntax: don't try morphological analysis in the privacy of your lexicon. *U. Penn Working Papers in Linguistics* 4, 201-25. Department of Linguistics, University of Pennsylvania.
- Pustejovsky, J. 1995. *The Generative Lexicon*. Cambridge, Mass.: MIT Press. Rothstein, S. 1983. *The Syntactic Forms of Predication*. Doctoral dissertation. MIT. Cambridge, Mass.
- Takami, K. and S. Kuno. 2000. The *there-*construction and unaccusativity. Manuscript of a chapter of *Unaccusativity and Unergativity* (in preparation), Harvard University, Cambridge, Mass.
- Travis, L. 2000. Event structure in syntax. In C. Tenny and J. Pustejovsky, eds., Events as Grammatical Objects: The Converging Perspectives of Lexical Semantics and Syntax, 145-85. Stanford, CA: CSLI.
- van Voorst, J. 1988. Event Structure. Amsterdam: John Benjamins

Publishing Co. Williams, E. 1980. Predication. *Linguistic Inquiry* 11, 203-38.

안성호 서울시 성동구 행당동 17번지 한양대학교 영어교육과 우편번호: 133-791 전화번호: 02) 2290-1145 E-mail: shahn@hanyang.ac.kr

접수일자: 2001. 8. 17. 게재결정: 2001. 9. 11.