Agentivity and Nonstativity in English*

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This paper discusses the semantic properties, agentivity and stativity of verbs, and investigates how such properties constrain syntactic operations in English. For this purpose, this paper critically reviews the dynamic-stativedichotomy and verb classification based on this dichotomy by Quirk et al. (1985), claiming that agentivity and stativity are two distinct concepts and thus neither is redundant to the other. The paper demonstrates that the agentively (not dynamically) used verbs cannot occur in imperatives, *Wh*-clefting constructions, and *Do-so* Substitutions. In addition, agentively used verbs readily have a future time reference with the simple present tense whereas nonagentively used verbs do not. This paper also draws analogies between nouns and verbs, and between adjectives and verbs in terms of agentivity.

1. Introduction

1.1. Purpose

Much of recent linguistic literature has shown that different components of linguistic study -- phonology, syntax, semantics, and pragmatics -- interact with each other. Similarly, the present study also deals with many syntactic operations in English which cannot be accounted for without reference to nonsyntactic concepts.

It has been widely accepted in linguistic circle that verbs can be classified in terms of the dynamic/stative dichotomy. It has also been generally assumed that agentive verbs are a subset of dynamic verbs, and thus agentive verbs are automatically nonstative verbs. The dynamic/stative dichotomy,

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however, leads to many problems in accounting for linguistic phenomena.

The purpose of this paper is to investigate how 'agentivity' among semantic properties interacts with many syntactic operations. For this purpose, the present study will first critically review the dynamic/stative properties of verbs, and then claim that agentivity and stativity are two distinct semantic properties. In order to observe the interaction of syntax and semantics, a variety of constructions will be discussed including Imperatives, Progressives, VP Fronting, VP Deletion, and Do-so Substitution.¹

1.2. Cases, θ-Roles, and Semantic Properties

In traditional grammar as well as contemporary school grammar, 'case' is a morphological concept and thus is manifested as inflectional suffix in the so-called surface structures. Such cases are 'nominative', 'genitive', 'accusative' and 'dative'.

On the other hand, semantic property [±agentive] adopted in this study can be traced back to semantic case roles proposed by Fillmore (1968). According to Fillmore, cases are semantic roles that arguments take for verbs in deep structures of propositions. Such cases include Agent, Theme (or Patient), Instrument, and Location.

The theory of case grammar gave rise to the controversy over how many different types of cases are necessary for the linguistic analysis of a natural language. Basic cases such as Agent and Theme are, however, reflected as thematic roles in the theory of formal syntax (Chomsky 1982, Haegeman 1991). According to formal syntacticians, Agent is an external argument which is θ-marked by a maximal projection, VP, whereas Theme (or Patient) is an internal argument θ-marked by a head, V. According to Fillmore and formal syntacticians, semantic roles are marked by verbs or verb phrases and are assigned to arguments.

Although semantic properties are originally due to deep semantic cases proposed by Fillmore, the properties [±agentive] and [±stative] in this study are different from those semantic roles Fillmore and his followers discussed. The former are proposed in this research as semantic features inherent in verb phrases, whereas semantic roles in Fillmore and others are marked by verbs (or verb phrases) but assigned to arguments. In

¹Even though this type of interaction is universal, the data are limited to English in this study.
other words, \([\pm \text{agentive}] \) and \([\pm \text{stative}] \) in this study are features just like \([\pm \text{sonorant}] \) in phonology, whereas Agent and Theme are semantic roles assigned to arguments.


Agentivity and stativity are established in this research as semantic properties to be marked for verbs just as ANIMATE\(^2\) or HUMAN are marked for noun phrases. Quirk et al. (1985: 177-209) draw a distinction between stative meanings and dynamic meanings of verbs. Stative meanings refer to ‘states’ whereas dynamic meanings refer to ‘events’, ‘actions’, ‘processes’, or ‘activities’. They subclassify stative verbs\(^3\) under the categories of ‘quality’, ‘state’, and ‘stance’, which are exemplified below.

(1) a. Mary is Canadian.  
   b. Mary has blue eyes. [quality]
(2) a. Mary is tired.  
   b. Mary has a bad cold. [state]
(3) a. James lives in Copenhagen.  
   b. The city lies on the coast.  
   c. His statue stands in the city square. [stance]

The ‘quality’ sense of stative verbs is defined as “relatively permanent and inalienable properties of the subject referent” whereas the ‘state’ and ‘stance’ senses of verbs are less permanent. However, Quirk et al.’s distinction between these three subtypes of stative verb is not clear-cut and even confusing. They list be tall and resemble as having the ‘quality’ and ‘state’ senses respectively. Yet, this classification does not seem to be plausible. Consider the following examples:

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\(^2\)Lower-case capital letters in this paper are notational symbols representing semantic (or phonetic) properties.

\(^3\)Even though the term ‘statively used verbs’ is more appropriate than ‘stative verbs’ since the same verb can be used both in stative and dynamic senses (for example, know and understand), for convenience we will stick to the latter term throughout this paper.
(4) Mary is tall. [quality]
(5) Mary resembles her mother in looks. [state]

If Mary in (4) is a four or five year old girl, we cannot conclude that 'being tall' is a 'permanent and inalienable property' of the girl. Moreover, if 'being tall' should be the 'quality' of the referent, why is 'resembling somebody' not part of the 'qualities' of the referent? The property of 'resembling somebody' is relatively more permanent and inalienable than the property of 'being tall'.

Dynamic meanings of verbs refer to 'events', 'actions', 'processes', or 'activities', as mentioned above. In this sense, dynamic verbs are often used synonymously with 'event verbs' or 'action verbs'.

Quirk et al. list some important characteristics which distinguish dynamic verbs from stative verbs. Firstly, dynamic verbs readily occur with frequency adverbials whereas stative verbs do not. 4

(6) a. I have driven sports cars quite frequently. b. I swim three times a week. [dynamic]

(7) a. * I have known the Smiths quite frequently. b. * Tom has understood Mary many times. [stative]

Secondly, only dynamic verbs can freely occur in imperative and progressive constructions whereas stative verbs cannot.

(8) a. Learn how to swim. b. She is learning how to swim. [dynamic]

(9) a. * Know how to swim. b. * She is knowing how to swim. [stative]

Thirdly, dynamic verbs easily work with pseudo-cleft constructions with a do proform (hereafter Wh-clefting). In the same constructions, stative verbs are not permissible.

(10) a. What she did was (to) study Korean. [dynamic] b. * What she did was (to) understand Korean. [stative]

4 Quirk et al. (1985: 177) insightfully point out an analogy between nouns and verbs: An abstract noun referring to an event can be singular or plural, and the corresponding verb can be pluralized through the use of frequency adverbials.
However, this dichotomy of dynamic/stative verbs leads to some problems. The characteristics listed above do not represent properties of dynamic verbs. Rather, most of them represent properties of agentive verbs.

Agentivity in verbs is closely related to AGENT, the most typical semantic role of a subject assigned to an argument. An agentive participant in a proposition is an animate being which controls the happening denoted by the verb. Likewise, an agentive verb denotes some happening which is controllable by an animate being. In this way, the same concept can be expressed by both a verb and a noun.

Since agentivity in its sense implies controllability, agentive verbs are often confused with dynamic verbs. Whereas the most prominent semantic property of agentive verb sense is controllability, that of dynamic verb sense is 'activity' or 'mobility'. Many agentive verbs, but not all of them, are dynamic verbs as is shown in the following sentences:

(11) He drinks wine almost every night. [+dynamic, +agentive]
(12) I have been sitting here for over two hours. [-dynamic, +agentive]
(13) It rained all day long yesterday. [+dynamic, -agentive]

Among the three characteristics of dynamic verbs discussed above, compatibility with imperative and Wh-clefting constructions is confined to agentive verbs only, not to dynamic verbs in general. Consider the following examples:

(14) a. Learn how to swim. [+dynamic, +agentive, -stative]
    b. *(Water,) Boil quickly! [+dynamic, -agentive, -stative]
    c. * Know how to swim. [-dynamic, -agentive, +stative]

(15) a. What she did was (to) study Korean. [+dynamic, +agentive, -stative]
    b. * What the water did was (to) boil. [+dynamic, -agentive, -stative]
    c. * What John will do next year is (to) understand Korean. [-dynamic, -agentive, +stative]

(14b) and (15b) show that dynamic verbs cannot occur in imperative and Wh-cleft constructions unless they are agentive. (14c) and (15c) support the observation that only agentive verbs occur with imperative and Wh-clefting constructions.

Another problem related to Quirk et al.'s classification of verb properties
is that they regard [-stative] as redundant for [+agentive]. According to them, agentive verbs are automatically nonstative verbs. However, there are some instances in which stative verbs are used agentively.

(16) James lives in Copenhagen.

(17) People were lying on the beach.

(18) I have been sitting here for over two hours.

[-dynamic, +agentive, +stative]

(19) I love you more and more every day.

[+dynamic, -agentive, -stative]

The verbs - live, lie, sit - in sentences (16)-(18) are used statively since they describe the uninterrupted 'state' of living, lying, and sitting of the referent. Also, the verbs are used agentively since the subject referent has control over the relevant state. These verbs, however, cannot be interpreted as used dynamically because there is no implication of any activity or event.5

On the other hand, the verbs love and know in (19) and (20) respectively are used dynamically, not statively, since they occur with a frequency adverbial or a process adverbial. Nor are they used agentively since the subject referent cannot have control over 'loving' or 'knowing'. This observation leads to the conclusion that agentivity and stativity are separate concepts and neither of them is redundant to the other.

By the analogy between nouns and verbs mentioned earlier in footnote 5, we find the same relationship between verbs and adjectives.6 Agentive verbs behave in the same fashion as agentive adjectives. Even though adjectives are characteristically static, some adjectives such as careful, ambitious, nice, and talkative behave agentively. On the other hand, stative adjectives such as pretty, tall, and old do not occur with the progressive aspect or with the imperative, just as stative verbs cannot:

5 Quirk et al. (1985: 205) classify this type of verb, which intermediates between the stative and dynamic categories, as 'stance'. However, they do not give any systematic analysis of this type of verb in terms of semantic property.

6 Some adjectives have already been examined in examples (1a), (2a), and (4) above in discussing semantic properties of verbs. In this sense, verbs and adjectives can be grouped as predicates.
(21) a. Be careful not to hurt her feelings.
   b. * Be tall/old/pretty.

(22) a. Tom is being ambitious/careful about his business.
   b. * Mary is being pretty these days.

Likewise, we can draw an analogy between adjectives and nouns.

(23) a. Be ambitious and industrious.
   b. Be an ambitious and industrious boy.

(24) a. * Be young/tall.
   b. * Be a young/tall/five-year old boy.

3. Nonsyntactic Constraints on Syntactic Operations: Agentivity

In the course of critical review of dynamic/stative dichotomy in the preceding section, we have touched upon some syntactic operations including imperative, progressive, and Wh-cleft constructions. We observed that being dynamic is not enough to prohibit the verb from occurring in imperative and pseudo-cleft constructions, and that being agentive is the crucial concept which decides compatibility with these constructions. In this section we will further discuss how agentivity constrains other syntactic operations.

3.1. Do-so Substitution and Agentivity

*Do-so* is a VP substitution commonly used but with some constraint, as shown below.

(25) a. John listened to classical music, and Mary did so too.
   \ [+dynamic, +agentive, -stative]\n   b. * John likes classical music, and Mary does so too.
   \ [-dynamic, -agentive, +stative]\n
(26) a. John studied Korean, and Mary did so too.
   \ [+dynamic, +agentive, -stative]\n   b. * John understands Korean, and Mary does so too.
   \ [-dynamic, -agentive, +stative]\n
These examples seem to lead to a conclusion that *Do-so* substitutes for dynamic verbs only. However, the following examples show that *Do-so*
Substitution can replace only agentive VPs.

(27) a. John *listened* to the music, and Mary did so too.  
\([+\text{dynamic}, +\text{agentive}, -\text{stative}]\)

b. *John *heard* a strange sound last night, and Mary did so too.  
\([+\text{dynamic}, -\text{agentive}, -\text{stative}]\)

(28) a. John *studied* Korean, and Mary did so too.  
\([+\text{dynamic}, +\text{agentive}, -\text{stative}]\)

b. *The tops of the trees *waved* in the wind, and the branches did so too.  
\([+\text{dynamic}, -\text{agentive}, -\text{stative}]\)

(29) a. The price of oil has *dropped* sharply.  
\([+\text{dynamic}, -\text{agentive}, -\text{stative}]\)

b. *The price of oil has *dropped* sharply and the price of gas did so too.

(30) a. John *fell* off the chair.  
\([+\text{dynamic}, -\text{agentive}, -\text{stative}]\)

b. *John *fell* off the chair, and Bill did so too.

(31) a. John *died* of cancer last year.  
\([+\text{dynamic}, -\text{agentive}, -\text{stative}]\)

b. *John *died* of cancer last year, and Bill did so too.

The verbs *hear* and *wave* in (27b) and (28b) and the verbs *drop*, *fell*, *die* in (29), (30), and (31) are used dynamically, but not agentively, and these nonagentive verbs cannot be substituted for by *Do-so*. This observation demonstrates that *Do-so* Substitution can replace only agentive VPs, and this observation conforms to our intuition that *Do-so* implies some control or purpose on the part of the agent.

In connection with *Do-so* Substitution, we come to think of VP Deletion. VP Deletion is, like *Do-so* Substitution, commonly used for the purpose of ellipsis. Consider the following examples:

(32) a. John *listened* to the music, and Mary did too.  
\([+\text{dynamic}, +\text{agentive}, -\text{stative}]\)

b. John *heard* a strange sound last night, and Mary did too.  
\([+\text{dynamic}, -\text{agentive}, -\text{stative}]\)

(33) a. John *studied* Korean, and Mary did too.  
\([+\text{dynamic}, +\text{agentive}, -\text{stative}]\)

b. *John *understood* Korean, and Mary did too.  
\([-\text{dynamic}, -\text{agentive}, +\text{stative}]\)
(34) a. The price of oil has *dropped* sharply.  
    b. The price of oil has *dropped* sharply and the price of gas did too.  
       [+dynamic, -agentive, -stative]

(35) a. John *fell* off the chair.  
    b. John *fell* off the chair, and Bill did too.  
       [+dynamic, -agentive, -stative]

(36) a. John *died* of cancer last year.  
    b. John *died* of cancer last year, and Bill did too.  
       [+dynamic, -agentive, -stative]

We observe from the examples above that VP Deletion can replace a dynamic VP, regardless of its agentivity.

So far we have observed that Do-so Substitution is sensitive to agentivity of the verbs whereas VP Deletion can replace a VP as far as it is used dynamically. This observation conforms to our intuition that Do-so implies some control on the part of the agent whereas VP Deletion does not imply any control or purpose on the part of the agent but still implies an action or an event of some sort.

3.2. Imperative Constructions and Agentivity

In Section 2, we saw that only agentive verbs occur in imperative constructions. Relevant examples will be repeated below for the sake of convenience and more examples can be easily added.

(37) (=14)  
a. Learn how to swim.  
   [+dynamic, +agentive, -stative]  
b. * (Water,) Boil quickly!  
   [+dynamic, -agentive, -stative]

(38) a. Study Korean every day.  
   [+dynamic, +agentive, -stative]  
b. * Hear the music every day.  
   [+dynamic, -agentive, -stative]

(39) a. Watch me, and then try to copy what I do.  
   [+dynamic, +agentive, -stative]  
b. * See what’s going on over there.  
   [+dynamic, -agentive, -stative]

(40) a. Jump off the cliff.  
   [+dynamic, +agentive, -stative]  
b. * Fall off the chair.  
   [+dynamic, -agentive, -stative]
The verbs above are all dynamically used and (b) sentences show that
dynamic verbs are not compatible with imperatives unless they are used
agentively. In this connection, we find that “Tell/ask/advise someone to _____”
constructions, which are similar to imperative constructions, show the
exactly same pattern.

(41) a. I advised John to study/learn Korean.
    b. * I advised John to understand/know Korean.

(42) a. I told Mary to listen to classical music.
    b. * I told Mary to hear a strange sound.

Some verbs can be used agentively according to the context, although
they are characteristically nonagentive in nature; hence they occur in
imperative constructions.

(43) a. Understand me.
    b. Know yourself. / Know this poem by heart by next week.

(44) a. Don’t be sad
    b. Don’t fall off the chair.

In (43), we find that the verbs, understand and know, are used agentively.
In other words, the speaker calls for volition or commitment on the part of
the agent, the hearer, towards ‘understanding’ or ‘knowing’. Similarly, (44a)
and (44b) are interpreted as “Try not to be sad”, and “Try not to fall off
the chair” respectively. Thus, verb phrases – be sad and fall – in (44) are
used agentively, and hence acceptable in imperative constructions.

3.3. Agentivity of Present-Tense Verbs with Future Reference

Another interesting constraint of agentivity upon syntax concerns the
present tense verbs which have a future reference. As is well known, the
simple present is often used to refer to future events when they are
determined in advance or they are part of a plan. A superficial glance at the
following examples would reveal that semantic property does not control the
use of the simple present to refer to the future.

(45) a. It is Saturday tomorrow. [-dynamic, -agentive, +stative]
    b. The term starts tomorrow. [+dynamic, -agentive, -stative]
    c. He retires next month. [+dynamic, -agentive, -stative]
d. The match takes place next Thursday.

\[+\text{dynamic}, -\text{agentive}, -\text{stative}\]

(46) a. We listen to Beethoven's Symphony No. 5 tomorrow.

\[+\text{dynamic}, +\text{agentive}, -\text{stative}\]

b. * We hear the strange sound tomorrow.

\[+\text{dynamic}, -\text{agentive}, -\text{stative}\]

(47) a. John studies Korean tomorrow. \[+\text{dynamic}, +\text{agentive}, -\text{stative}\]


\[-\text{dynamic}, -\text{agentive}, +\text{stative}\]

(48) a. The Red Sox are playing tomorrow.

\[+\text{dynamic}, \pm\text{agentive}, -\text{stative}\]

b. * The Red Sox are winning tomorrow.

\[+\text{dynamic}, -\text{agentive}, -\text{stative}\]

From the sentences in (45), we might consider that only nonagentive verbs can be used to refer to the future time with the simple present. However, the sentences in (46) and (47) counterclaim this misleading observation because the simple present of agentive verbs refers to the future time whereas that of nonagentive verbs cannot.

A more careful analysis of the sentences in (45) through (47) reveals a pattern for acceptability of the sentences. Future reference implied in (45) is different from that in (46) and (47). The sentences in (45) are not seen as purely referring to the future time; they are simply pointing to a certain time in the calendar or timetable which does not have any starting or ending point. On the other hand, the sentences in (46) and (47) are seen as purely referring to future time. This explanation provides a plausible explanation of the acceptability difference between (a) and (b) in (46). The verb in (a) is used agentively and thus a volitional plan is implied on the part of the agentive subject, whereas no such plan is implied in (b).

From the observations so far, we can establish a general, systematic account that only agentive verbs can be used for a pure future time reference with present tense. This observation is confirmed by acceptability judgment of the two similar sentences in (48). In fact, (48a) is ambiguous: the verb may be interpreted as being either agentive or nonagentive. If it is used agentively (meaning 'they decide/plan to play tomorrow'), its acceptability is predicted from acceptability of (46a) and (47a); if used nonagentively, the sentence is understood as talking about the timetable as in
(45). (48b) is unacceptable in the same fashion that (46b) is out.

3.4. Progressive Constructions and Agentivity

Progressive constructions do not seem to be sensitive to agentivity, but are restricted to dynamic use of verbs, as shown below.

(49) a. John is studying Korean. [+dynamic, +agentive, -stative]
    b. * John is understanding/knowing Korean. [-dynamic, -agentive, +stative]

(50) a. John is enjoying Mary's hospitality. [+dynamic, +agentive, -stative]
    b. * John is liking Mary's hospitality. [-dynamic, -agentive, +stative]
    c. I am liking Mary more and more.7 [+dynamic, -agentive, -stative]

(51) a. Students are joining our swimming club. [+dynamic, +agentive, -stative]
    b. * Students are belonging to our swimming club. [-dynamic, -agentive, +stative]

From the examples above, we find that as far as the verbs are used in the dynamic context, they allow the progressive aspect. This finding can be accounted for by the observation that being progressive requires some 'action' or 'process', regardless of the controllability of the action or process.

In connection with the progressive constructions, we note that some verbs which are stative in nature are used dynamically (and sometimes agentively).

(52) a. The neighbors are friendly. [-dynamic, -agentive, +stative]
    b. The neighbors are being friendly. [+dynamic, +agentive, -stative]

(53) a. Mary resembles her mother in looks. [-dynamic, -agentive, +stative]
    b. Mary is resembling her mother more and more. [+dynamic, -agentive, +stative]

In (52a), (be) friendly is used statively; in (52b), however, it is in the dynamic (and agentive) frame. In other words, (52a) is describing the nature

7 We classify the verb like in this sentence as a dynamically used verb since its compatibility with more and more implies 'process' or 'change or state'.
of the neighbors whereas (52b) suggests that 'friendliness' is a form of controllable behavior. (53a) is describing the resemblance in looks between Mary and her mother, and this type of characteristic is not changeable. On the other hand, (53b) suggests that Mary is undergoing physical change.

4. Concluding Remarks

In this paper, we discussed the semantic properties, agentivity and stativity of verbs. We observed that these semantic properties constrain syntactic processes by examining Do-so Substitution, VP Deletion, Wh-cleft constructions, imperative and similar constructions, present tense with future reference, and progressive aspect.

From the discussion of the data, we found the following: First, we noted that Do-so Substitution can replace only agentive VPs whereas VP Deletion can replace a dynamic VP, regardless of its agentivity. This observation accounts for our intuition that Do-so implies some control on the part of the agent whereas VP Deletion does not imply any control or purpose but still implies an action or an event of some sort. Second, we found that imperative and Wh-cleft constructions apply only to agentive VPs. This finding also conforms to our intuition that imperative and Wh-cleft constructions require some volition or commitment on the part of implied agent. Thirdly, we observed that when some sort of volitional plan is implied only agentive VPs easily have future time reference with the simple present tense. Lastly, we saw that progressive constructions, which are compatible with dynamic verbs, are not sensitive to agentivity. This finding can be accounted for by the observation that being progressive requires some 'action' or 'process', regardless of the controllability of the action or process.

The research findings lead us to the following conclusion: First, the dynamic-stative dichotomy is insufficient, if not misleading, as semantic properties of verbs. Agentivity must be viewed as a distinct concept, and thus agentive verbs are not a subset of dynamic verbs. In other words, agentivity and nonstativity are two distinct properties; [+agentive] implies [-stative], but [-agentive] does not necessarily imply [+stative]. Lastly, agentivity (and all other semantic properties) are not registered in the lexical entry, but must be determined from the contextual meaning of the whole clause.

This research confirms the analogies between nouns and verbs, and
between adjectives and verbs suggested by Quirk, et al. A dynamic verb can represent plurality by means of the use of frequency adverbials whereas an abstract noun referring to an event can be pluralized by a plural marker. Likewise, verbs and adjectives show similarities with respect to their sensitivity to agentivity in syntactic behaviors. This observation demonstrates that semantic properties must be discussed within the framework of interaction between word classes.

This study has some pedagogical implications. Korean learners of English have problems in understanding and using syntactic operations, such as Do-so Substitution, VP Deletion, Wh-cleft constructions, imperative and progressive constructions. The solution of the problems lies in the proper understanding of the distinction between dynamic, agentive and stative verbs.

References


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