A constructional approach to stativity in Japanese

Natsuko Tsujimura
Indiana University

This paper deals with the relationship between the formal properties and a specific meaning associated with a class of Japanese sentences that have the verbal gerund and *iru* ‘be’ (i.e., *-te iru*). These sentences are characterized by the * -te iru* verbal morphology on a dynamic verb and a non-volitional subject that does not participate in the event denoted by the verb. The particular stative interpretation induced by these sentences cannot be attributed to the meaning of the individual lexical items. The paper argues instead that the source of the stative meaning is better explained by a constructional view, that the meaning is attributed to the construction itself.

1. Introduction

For the past 15 years, particularly following the lead of Chomsky (1981, 1986), a number of researchers have taken the hypothesis that the syntactic projection of a verb’s arguments is determined by the verb’s meaning (Levin and Rappaport Hovav 1995, Pinker 1989, Rappaport Hovav and Levin 1998). Under this hypothesis, the various patterns in which the verb’s arguments are distributed in a sentence as in (1) are a reflection of multiple meanings of the verb sweep.

(1) a. Terry swept.
   b. Terry swept the floor.
   c. Terry swept the crumbs into the corner.
   d. Terry swept the leaves off the sidewalk.
   e. Terry swept the floor clean.
   f. Terry swept the leaves into a pile.

(Rappaport Hovav and Levin 1998:97–98)
This hypothesis considers the verb *sweep* polysemous (i.e., verbal polysemy), and the difference in meaning leads to the variation in syntactic behavior. This type of bottom-to-top approach has been called the “projectionist” model (Rappaport Hovav and Levin 1998) or the lexical rule approach (Croft 1999).

In contrast, what has come to be known as the “constructional” approach (Fillmore, Kay, and O’Connor 1988, Hoekstra 1992, Goldberg, 1995, 1997, Michaelis and Lambrecht 1996, Jackendoff 1997) does not view (1) as a case of verbal polysemy; rather, the different meanings expressed in (1) result from the combination of the meaning of the structure and the meaning of the verb. As Goldberg (1995:4) puts it, “systematic differences in meaning between the same verb in different constructions are attributed directly to the particular construction.” Goldberg (1997), for example, illustrates the advantage of recognizing the *way* expression, demonstrated in (2), as a grammatical construction, as is schematized in (3) (Goldberg 1997:151–152).

(2) a. They finally made their way out of the maze.
   b. She found her way to the hospital.
   c. He breast-stroked his way across the Channel.
   d. Frank dug his way out of the prison.
(3) [SUBJ ] [V [POS S, way] OBL]], where V is a non-stative verb, and OBL codes a directional.

Goldberg argues that the motion interpretation that is shared by the examples in (2) cannot be attributed to the meaning of a particular lexical item nor the composition of the meanings of some lexical items that appear in the sentence. Instead, the specific meaning associated with the *way* expression is available only when lexical items are inserted in the construction of (3) (Jackendoff 1990, 1997).

The primary goal of this paper is to demonstrate that positing a grammatical construction is crucial to the explanation of a particular sense of stativity that the Japanese sentences like those in (4) exhibit.

   highway NOM town GEN middle ACC run
   ‘A highway runs in the middle of the town.’
   b. Doozoo-ga soko-ni tatte-iru.
   statue NOM there AT stand
   ‘The statue stands there.’
A constructional approach to stativity in Japanese

603

c. Senro-ga kooen-o yokogitte-iru.
   railroad-NOM park-ACC cross
   ‘A railroad crosses the park.’
d. Miti-ga matinaka-o tootte-iru.
   street-NOM middle of the town-ACC pass
   ‘A street passes in the middle of the town.’
e. Miti-ga kunekuneto magatte-iru.
   street-NOM winding turn
   ‘A street meanders.’

These verbs normally denote motion, but the entire sentence describes a static configuration or location of the subject. I will argue that such stative interpretation does not result from lexical polysemy of those motion verbs, nor does it come from the composition of the meanings of the lexical items that occur in the sentence. It will be shown, instead, that the stativity is induced by the construction that takes the form of (5), parts of which are semantically restricted.

(5) [SUBJ … [V-te iru]]
   where (i) the SUBJ is non-volitional, (ii) the verb is dynamic and denotes motion or change of location, and (iii) the SUBJ is not an event participant of the verb.

That is, the stative interpretation is obtained when a motion verb appears in the -te iru form, where -te is the gerundive form of a dynamic verb, and the subject is a non-volitional entity that does not participate in the event denoted by the verb. The central claim to be advanced is that the restriction of the subject, the semantic class of the verb, and the verbal morphology of -te iru do not make a direct contribution to the stative meaning, individually nor collectively. Rather, these conditions together form a construction that gives rise to the stative meaning observed with the sentences in (4).

In what follows below I will first review the proposal that the presence of -te iru is essential to the particular sense of stativity, and show that the interpretation of -te iru that appears in this construction, as is exemplified in (4), is distinct from its typical meanings such as progressive and resultative that have been discussed in the literature. The independently dynamic nature of the motion verbs that appear in this construction will then be considered to argue against an analysis that assumes lexical polysemy of the motion verbs. The meaning shift from dynamic motion to stative description emerges only when the construction schematized in (5) is recognized. Furthermore, the non-volitional subject as well as its relation to the verb will be regarded as a necessary ingredient for this construction. Finally, I will consider the similarity and
the difference between the stative construction of (5) and subjective motion sentences, which have been discussed by Matsumoto (1996a). I will argue that the stative construction and subject motion sentences are not to be reduced to a single construction, but that they belong to “a family of constructions” in the sense discussed in Jackendoff (1997) (also Fillmore, Kay, and O’Connor 1988 and Michaelis and Lambrecht 1996). These pieces of evidence point to the claim that the specific sense of stative interpretation of (4) is better accounted for by recognizing (5) as a grammatical construction and that the stative meaning is a direct consequence of the construction itself rather than the meaning of an individual lexical item or the composition of the meanings of individual lexical items.

While the analysis of the phenomenon that the form-meaning relation in (4) exhibits adopts the constructional approach outlined above, it should not be taken as an argument against the projectionalist model as a whole (Croft 1999). This paper is not meant to evaluate the two approaches as a general theory to account for the relationship between form and meaning nor as an acquisition theory. Rather, its purpose is a more modest one: I would like to submit that partial regularity of the type observed in sentences like (4) may be better treated as a constructional idiom (Fillmore, Kay, and O’Connor 1988, Jackendoff 1990, 1997), and a constructional approach accommodates such a treatment.1

2. Evidence for the stative -te iru construction

In this section I will demonstrate that the stative meaning pertinent to the sentences in (4) cannot be analyzed as coming from the meaning of any particular lexical item or from the composition of the meanings of lexical items that appear in the sentence. For convenience, I will call the sentence type exemplified in (4) “the stative construction” throughout this paper.2

2.1 The interpretation of -te iru

The presence of the verbal morphology -te iru is a necessary condition for the stative construction. When the verbs appear in the present or past tense, the stative sense is not invoked. Consider the contrast between (a) and (b) below.
While the (a) sentences describe the spatial configuration or contiguous location of the subjects and hence bear the stative interpretation, none of the (b) sentences receives such stative reading. Not all the (b) sentences are natural, but if they are acceptable at all, they are normally understood as involving a dynamic action. For example, (7b) with the present tense on the verb describes the situation in which the statue will be placed by somebody as a future event. In other cases, the (b) sentences can be considered instances of what Matsumoto (1996) calls subjective motion, which I will discuss in Section 3 below. What is relevant here is that the (b) sentences in the subjective motion reading are interpreted as referring to some motion. In either case, the eventuality described in the (b) sentences, to the extent that they are acceptable, implies some dynamic event as its frame or base in the sense of Fillmore (1982) or
Langacker (1987), respectively. The (a) sentences, on the other hand, lack any reference to dynamic events that could possibly be posited to relate to the spatial configuration or contiguous location of the subject. In fact, in some cases, the presence of a dynamic event is not even conceivable, as is the case with (6a) and (9a), for example. The verb, thus, must appear in the -te iru form so as to receive the stative interpretation.

The verbal form -te iru has been a center of much controversy in the Japanese linguistics literature. A number of researchers have investigated how many meanings are associated with -te iru and how those meanings are derived (Fujii 1976, Kindaichi 1976, Soga 1983, Jacobsen 1992, McClure 1994, Oghara 1998, Shirai 1998, 2000, among many more). Most of the interpretations with which -te iru is associated that have been examined in the literature are exemplified in (11-15). The terms and examples are taken from Shirai (2000), with minor modifications.

(11) **Progressive**
    Ken-ga hasitte-iru.
    Ken-NOM run
    ‘Ken is running.’

(12) **Resultative**
    Asoko-ni hon-ga otite-iru.
    there-at book-NOM drop
    ‘The book is there (as a result of having fallen).’

(13) **Perfect**
    Ken-wa hon-o sansatu kaite-iru.
    Ken-TOP book-ACC three write
    ‘Ken has written three books.’

(14) **Habitual**
    Ken-wa saikin kuruma-de gakkoo-e itte-iru.
    Ken-TOP lately car-with school-to go
    ‘Ken is going to school by car these days.’

(15) **Experiential Perfect**
    Watasi-wa zyuunen-mae-ni zyukkiro oyoide-iru.
    I-TOP 10 years-before-at 10 kilometers swim
    ‘I swam 10 kilometers 10 years ago.’

Attempts have been made to account for the variety of the meanings with which -te iru is associated by examining its interaction with different aspectual classes of verbs. Shirai (2000), for one, gives the following generalizations to describe...
the relationship between the different senses of \textit{-te iru}, as is illustrated in (11-15), and aspectual classes of verbs (Vendler 1967, Dowty 1979, Smith 1991).

(16) a. Typical progressive meaning is obtained with Activity and Accomplishment (both dynamic and durative); iterative progressive appears with Semelfactives (punctual and atelic); and stative progressive appears with certain State verbs. In other words, the progressive sense is possible if and only if the inherent aspect of the verb has duration or at least is repeatable to obtain duration.

b. Resultative meaning is obtained with Achievement verbs (punctual and telic).

c. The perfect sense of \textit{-te i-} is obtained with verbs of any inherent aspect class, although State verbs generally resist an experiential perfect interpretation. In the case of Achievement verbs, it can be difficult to distinguish resultative from perfect.

d. The habitual sense of \textit{-te i-} can be obtained with any of the verb classes if the verb + \textit{-te i-} denotes a situation that occurs repeatedly on multiple occasions; it is incompatible with a gnomic situation.

Of the meanings of \textit{-te iru} instantiated in (11-15) above, progressive and resultative senses are most closely examined. In this paper we will limit our discussion to these two meanings, as the omission of the rest of the meanings would not change the central point that will be addressed below. Examples of the progressive and resultative meanings are repeated in (17-18) with additional sentences.

(17) **Progressive**

    Ken-nom run
    ‘Ken is running.’

b. Taroo-ga hon-o yonde-iru.
    Taro-nom book-acc read
    ‘Taro is reading a book.’

(18) **Resultative**

a. Asoko-ni hon-ga otite-iru.
    there-at book-nom drop
    ‘The book is there (as a result of having fallen).’

b. Sakana-ga sinde-iru.
    fish-nom die
    ‘A fish is dead.’
The sentences in (17) with the progressive -te iru refer to the ongoing events of Ken’s running and Taro’s reading a book. The examples in (18) with the resultative -te iru describe the static situations that have resulted from the book’s falling and the fish’s death. These two meanings, while having different labels, have sometimes been treated uniformly since under both interpretations durative situations are referred to (Jacobsen 1992, Shirai 1998). Shirai (1998), for example, analyzes the progressive -te iru and the resultative -te iru as describing dynamic durative situations and static durative situations, respectively. Assuming Smith’s (1991) definition of perfective and imperfective aspects that “imperfective viewpoint does not include either the beginning point or the endpoint, whereas perfective viewpoint includes both” (Shirai 1998:671), Shirai considers -te iru, whether progressive or resultative, an imperfective marker. Under the schematic representation of (19) below, the progressive -te iru refers to B while the resultative -te iru corresponds to C. “I” and “F” stand for the initial point and the final point of an event, respectively.

(19) —————>I—————>F—————>

A B C (Shirai 1998:671)

Under Shirai’s analysis, both progressive and resultative interpretations of -te iru reflect the imperfective viewpoint, and hence neither I nor F is included in B and C when he identifies the progressive -te iru as B and the resultative -te iru as C. For example, the ongoing running action described in (17a) refers to B, without involving the points at which Ken’s running starts and at which his running ends. Similarly, the state resulting from the event of the book’s falling depicted in (18a) refers to C. It is relevant to our later discussion to mention that while the final point of the event is viewed as not being included in the resultative -te iru, the event named by the verb is (cognitively) present in the resultative interpretation. In (18b), for example, -te iru refers to the C phase of (19) as a static durative situation where the fish is described to be in the state of being dead; the verb sin ‘die’ does designate the content of a dynamic event that leads to the static situation, and thus the presence of the event cannot be denied. That is, a static durative situation referred to by -te iru cannot exist without also identifying a dynamic event that brings about a consequential state. Furthermore, the final point of the event named by the verb and the resulting state that -te iru refers to are temporally connected. The point I wish to emphasize is that while in the resultative reading the final point cannot be focused because -te iru is an imperfective marker under Shirai’s analysis, the presence of such a final point of the event (as well as the event itself), which is
denoted by the verb, is in fact assumed to be present. That is, the presence of a final point can be regarded as a piece of information that is not profiled (Langacker 1987) by the word but is presupposed.3

This last observation distinguishes between the resultative interpretation as is instantiated by the sentences in (18) and the interpretation of -te iru that appears in the sentences in (4), which are repeated below as (20).

(20) a. Koosokudooro-ga mati-no mannaka-o hasitte-iru.
   highway-NOM town-GEN middle-ACC run
   'A highway runs in the middle of the town.'

b. Doozoo-ga soko-ni tatte-iru.
   statue-NOM there-at stand
   'The statue stands there.'

c. Senro-ga kooen-o yokogitte-iru.
   railroad-NOM park-ACC cross
   'A railroad crosses the park.'

d. Miti-ga matinaka-o tootte-iru.
   street-NOM middle of the town-ACC pass
   'A street passes in the middle of the town.'

e. Miti-ga kunekuneto magatte-iru.
   street-NOM winding turn
   'A street meanders.'

It may seem that -te iru in these sentences bears the resultative interpretation since it can be viewed as referring to static durative situations. A closer examination, however, reveals an interesting difference between the interpretation of -te iru in (18) and that in (20). As is pointed out by some researchers (Yoshikawa 1976, Kunihiro 1985, Jacobsen 1992), there are no dynamic events that would potentially result in the static situation that is described in (20). The spacial configuration of the highway described in (20a), for example, is not viewed as a result of a dynamic action named by the verb, i.e., running, which would be the typical interpretation that the resultative -te iru has. More significantly, there is no connection, temporal or otherwise, between the running event named by the verb and the static durative situation, i.e., the spatial configuration of the highway. Even if -te iru in (20a) refers to Phase C of (19), the initial and final points that correspond to I and F would not be related to the verb. That is, the initial and final points cannot even be inferred for (20a) simply given the meaning of the verb hasiru 'run'. This paints a completely different picture from (18): in these sentences, the final point F is identified as
the moment at which the book falls or the fish dies, and Phase C corresponds to
the static durative situation of the book or the dead fish that results from the
event denoted by the verb. Thus, there is clearly an event denoted by the verb
and a static situation resulting from the event in (18).

The discussion presented above illustrates a different semantic nature of -te
iru. The interpretation of -te iru in (20) does not resemble the resultative -te iru
nor the progressive -te iru. While it may be still possible to maintain the general
claim that -te iru presents a durative situation, I have demonstrated that the
interpretation of -te iru observed in (20) does not quite fit the prevalent
analyses of -te iru due to its interesting interaction with the verb.

2.2 The source of the stative interpretation

I will demonstrate in this subsection that verbs that appear in (4), repeated
below as (21), are dynamic in nature and hence cannot be the direct source of
the stative interpretation in (21).

highway-nom town-gen middle-acc run
'A highway runs in the middle of the town.'
b. Doozoo-ga soko-ni tatte-iru.
statue-nom there-at stand
'The statue stands there.'
c. Senro-ga kooen-o yokogitte-iru.
railroad-nom park-acc cross
'A railroad crosses the park.'
d. Miti-ga matinaka-o tootte-iru.
street-nom middle of town-acc pass
'A street passes in the middle of the town.'
e. Miti-ga kune-kuneto magatte-iru.
street-nom winding turn
'A street meanders.'

Notice that these verbs, hasiru ‘run’, tatu ‘stand’, yokogiru ‘cross’, tooru ‘pass’,
and magaru ‘turn’, are motion verbs and denote dynamic actions. As dynamic
motion verbs, they most frequently appear with agentive subjects, and for this
reason imperative/request sentences with these verbs are acceptable. Consider
the following.4


(22) a. Kooen-de hasitte kudasai.
   park-at run please
   'Please run in the park.'

b. Sono miti-o yokogirinasai.
   That street-ACC cross
   'Cross that street!'

c. Hanaya-no kado-o magatte!
   florist-gen corner-ACC turn
   'Turn the corner of the florist!'

Imperative/request sentences like those in (22) suggest that the motion verbs in and by themselves cannot induce stativity. That is, the stative interpretation cannot be attributed to the meaning of the verbs in (21), but rather it is the semantic property that belongs to the construction in which these verbs appear.\(^5\)

It should be pointed out that upon closer examination, the stative interpretation associated with this construction is, in fact, not restricted to motion verbs. Included in the larger verb class are *katamuku* 'lean, tilt', *tukideru* 'stick out', *motareru* 'lean', *tonariau* 'be adjacent', *kuttuku* 'attach', *nobiru* 'stretch', *kabusaru* 'cover', and *burasagaru* 'hang'. These verbs refer to change of location in relation to another entity. Examples of these verbs in the -te iru form are given below.

(23) Uti-ga migi-ni katamuite-iru.
   house-NOM right-to lean
   'The house leans to the right.'

(24) Taroo-ga me-ga tukidete-iru.
   Taro-NOM eyes-NOM stick out
   'Taro's eyes stick out'

(25) Yama-ga hutatu kuttuite-iru.
   mountain-NOM two attach
   'Two mountains are adjacent to each other.'

(26) Miti-ga massugu nobite-iru.
   road-NOM straight stretch
   'The road stretches straight.'

Although the verbs in (23-26) may not strictly belong to the class of motion verbs, they all refer to change in position, location, or spatial configuration. In particular, the basic meanings that many of these verbs have may be characterized by what Levin and Rappaport Hovav (1995:127) call the "assume position"
sense that English verbs like *stand, sit*, and *lie* have: it "describes an animate being coming to be in a position under his or her own control."\(^6\) The assume position sense of these verbs can be illustrated by the following examples.

(27) a. Takai ki-ni burasagat-tara abunai.
   tall tree-onto hang-if is dangerous
   'Hanging from a tall tree is dangerous.'

b. Watasi-ni motare-naide kudasai.
   I-onto lean-not please
   'Please don't lean on me.'

   son-top always father-to attach-only-is
   'My son always stays close to his father.'

In these sentences, volitional agents undergo some motion to come to be in the hanging, leaning, or adjacent position in relation to a referent individual. That is, they do involve some motion which ends up in a particular position, and in this sense, their dynamicity cannot be denied. Given the dynamic nature of the verbs in (27), this suggests that the stative interpretation of (23-26) does not come from the meaning of the verbs. Instead, as is the case with motion verbs in (21), the nature of the interpretation observed with these change of location verbs points to the same conclusion: that is, the stative interpretation is the semantic property that belongs to the construction.\(^7\)

Incidentally, a range of data similar to those in (23-26) has been discussed by Matsumoto (1996b) and analyzed as an instance of "subjective change" expressions. His representative examples are below (p.124).

(28) a. Sono heya-wa maruku natte-iru.
   the room-top round become
   'The room is round.' (Lit. 'The room is in the state of having become round."

b. Kono enpitu-wa nagaku natte-iru.
   this pencil-top long become
   'This pencil is long.' (Lit. 'This pencil is in the state of having become long.'

c. Ie-ga ni-ken kuttuite-iru.
   house-nom two-Class stick together
   'There are two houses which (almost) touch each other.' (Lit. 'Two houses are in the state of having stuck together.'
He argues that these sentences are characterized as follows.

(29) A -te iru expression can describe the unexpected (unusual) character of the referent of its subject NP as the result of a subjectively induced hypothetical process of change from its expected (normal) state to the state being described. (p.130)

He further elaborates on (29) by saying that (p.130): “An object of an unexpected or unusual character is somehow felt to have undergone a change from its expected or usual state, and in this way an abstract process of change is induced in the mind of a conceptualizer. The resultative expressions under consideration are based on this kind of process.”

While Matsumoto makes interesting observations, I am not totally convinced that the examples in (28) as well as similar ones in (23)–(26) involve an abstract change, even in the conceptualizer’s mind. First, Matsumoto argues that the sentences in (28) present some “unexpected” or “unusual” characters to trigger subjective change. Although such an unexpected or unusual character could be posited for (28a), it seems that there is nothing so unusual about a pencil being long and two houses almost touching each other. Even if an unexpected character is imaginable under a certain context, it is not clear why it should give rise to the presence of change, however abstract it may be. Second, subjective change is presumably a phenomenon similar to subjective motion, as is discussed in Matsumoto (1996a, 1996c), in that both invoke human conceptualization of abstract motion or change. However, while subjective motion can be accompanied by expressions of change of location and temporality as evidence for the presence of motion (see Section 3), no such evidence is provided for the presence of abstract change. Third, the majority of Matsumoto’s examples crucial to his argument include the verb naru ‘become’, and it is with respect to these examples that his argument seems more convincing. Such a correlation makes one wonder whether what Matsumoto attempts to capture is rather a property of the verb naru. That is, the meaning of naru refers to some change, and what Matsumoto calls subjective change might directly result from this meaning of the verb. A referee points out that Matsumoto’s subjective change expression could be grouped together with the stative construction discussed in this paper, but for the reasons that I have just stated above, I do not regard (23-26) as having any relation to what Matsumoto calls subjective change.

It is worth noting that the semantic properties the motion verbs in (21) display seem to exhibit an interesting characteristic. It is well known that
Japanese employs a number of morphologically related transitive-intransitive pairs, including examples such as *kowasu*(tr.)*-kowareru*(intr.) ‘break’, *tokasu*(tr.)*-tokeru*(intr.) ‘melt’, and *mageru*(tr.)*-magaru*(intr.) ‘bend’. Some of the motion verbs discussed above also display such pairs. For example, *tateru* ‘make/let stand’ and *toosu* ‘make/let pass’ are the transitive counterparts of *tatu* ‘stand’ and *tooru* ‘pass’, respectively. In each case, the transitive verb is the causative version of the intransitive verb, and hence the pairs can be considered causative-inchoative doublets. This relation is illustrated in (30–31) below.

(30) a. Kodomo-ga boo-o massuguni tateta.
    child-NOM stick-ACC straight made stand
    ’The child made the stick stand straight.’
    b. Boo-ga massuguni tatta.
    stick-NOM straight stood
    ’The stick stood straight.’

(31) a. Sono mon-kara kodomo-o toosita.
    that gate-from child-ACC let pass
    ’I let the child pass through that gate.’
    b. Kodomo-ga tootta.
    ’The child passed.’

The passivized causative sentences are similar to the inchoative sentences. This is shown in (30).

    stick-NOM straight stand-pass-past
    ’The stick has been made stand straight.’
    b. Kodomo-ga sono mon-kara toos-are-ta.
    child-NOM that gate-from pass-pass-past
    ’The child was let pass through that gate.’

Interestingly, the passive form of *tateru* ‘make/let stand’ and *toosu* ‘make/let pass’ cannot replace the intransitive verbs, *tatu* ‘stand’ and *tooru* ‘pass’ in (21). The substitution results in either a sentence with a different meaning as in (33a) or an ungrammatical sentence as in (33b).

(33) a. Doozoo-ga soko-ni tate-rarete-iru.
    b. *Miti-ga matinaka-o toos-arete-iru.

(33a) is acceptable but only in the following sense: *tatu* ‘stand’ constitutes homonyms with *tatu* ‘is built’, and (33a) is acceptable only in the latter meaning.
Furthermore, (33a) implies an agent while (21b) does not. (33b) is not acceptable under any interpretation. It suggests that the tight semantic relation between the morphologically related transitive-intransitive pairs that some of the motion verbs display cannot be transferred to the sentences in (21). Put differently, the specific meanings of the intransitive motion verbs observed in (21) are not shared by their transitive (or causative) counterparts although such is normally the pattern in other syntactic environments. We thus conclude that the meanings that the motion verbs in (21) bear should be distinguished from the verbs in isolation, and that such difference in meaning results from the specific environment in which these verbs appear.8

2.3 Non-volitional subject

Another piece of evidence that the stative interpretation belongs to a grammatical construction rather than to an individual lexical item comes from the condition on the subject. We have observed above that the -te iru morphology constitutes a necessary condition for the stative interpretation. It is not sufficient, however. The necessity of an additional condition is shown by the selection of the subject: as soon as the subjects in (21) are changed to volitional agents, the sentences lose the stative interpretation in which spatial configuration is described. Instead, they are interpreted as dynamic and progressive. Consider the examples in (34), which are different from (21) only in the volitionality of the subjects.

(34) a. Kodomo-ga mati-no mannaka-o hasitte-iru.
   child-NOM town-GEN middle-ACC run
   ‘A child is running in the middle of the town.’

b. Gakusei-ga soko-ni tatte-iru.
   student-NOM there-at stand
   ‘The student is standing there.’

c. Inu-ga kooen-o yokogitte-iru.
   dog-NOM park-ACC cross
   ‘A dog is crossing the park.’

d. Sensyutati-ga matinaka-o tootte-iru.
   athletic team-NOM middle of the town-ACC pass
   ‘An athletic team is passing in the middle of the town.’

e. Kuruma-ga kado-o magatte-iru.
   car-NOM corner-ACC turn
   ‘A car is turning the corner.’
As the translation indicates, these sentences are interpreted as progressive. Hence, the non-volitional subject NP as well as -te iru comprise a construction for which the stative interpretation is responsible.

Recall that we have discussed above that the stative construction is not restricted to motion verbs but includes change of location verbs, as we observed in (23-26). Many verbs that belong to this class normally select non-volitional subjects, but there are some that exhibit more freedom for the selection of the subject. As is predicted, with those verbs the stative interpretation ceases to exist once the subject is changed to a volitional agent. This is shown below.

(35) Otoko-to onna-ga kuttuite-iru.
man-and woman-NOM attached
‘A man and a woman are closely together.’

(36) Tanaka-to Satoo-ga tonariatte-iru.
Tanaka-and Sato-NOM be adjacent
‘Tanaka and Sato are adjacent.’

(37) Inu-ga neko-no ue-ni kabusatte-iru.
dog-NOM cat-GEN top-at cover
‘A dog is on top of a cat.’

(38) Kodomo-ga soko-ni burasagatte-iru.
child-NOM there-at hang
‘A child is hanging there.’

The subjects in these examples are all volitional agents, and the sentences bear the resultative interpretation. A major difference between (35–38) and (23-26) is that there are dynamic events that lead to the resulting states described in the former but there are no such events assumed in the latter. In (35), for example, we can readily assume the presence of a dynamic event in which a man and a woman move toward each other closely enough for physical contact. It should be remembered that such a dynamic event is not inferred in (23-26). These sets of examples, thus, clearly demonstrate that lack of volitionality in the subject, together with the verbal morphology, is essential to the stative construction in (21).

Thus far, I have argued that the construction that consists of a non-volitional subject, a dynamic verb, typically a motion or change of location verb, as well as the -te iru verbal morphology gives rise to the stative meaning. As a referee points out, however, one may argue that the constructional environment that leads to the stative meaning would not be able to distinguish between the stative interpretation in (39) and the resultative reading in (40), both of which seem to satisfy the conditions that I have proposed above.
(39) a. Koosokudooro-ga mati-no mannaka-o hasitte-iru.
   highway-NOM town-GEN middle-ACC run
   ‘A highway runs in the middle of the town.’
b. Miti-ga matinaka-o tootte-iru.
   street-NOM middle of the town-ACC pass
   ‘A street passes in the middle of the town.’
c. Miti-ga kunekuneto magatte-iru.
   street-NOM winding turn
   ‘A street meanders.’

(40) a. Koosokudooro-ga kowarete-iru.
   highway-NOM break
   ‘A highway is broken.’
b. Botan-ga torete-iru.
   button-NOM come off
   ‘A button has come off.’
c. Kugi-ga magatte-iru.
   nail-NOM bend
   ‘A nail is bent.’

Notice that the subjects in (40) are non-volitional, the verbs denote dynamic events although not all are necessarily motion or change of location verbs, and the verbs appear in the -te iru form. And yet, the sentences in (40) do not have the stative interpretation; rather, they have the resultative meaning. I would like to claim that the difference in meaning between (39) and (40) has to do with the nature of the relationship between the subject and the verb in these two groups. In (40) the subject is the theme of the verb; in (40a), for example, a highway undergoes the change of state denoted by the verb, and similarly in (40c), a nail is what gets bent. That is, semantically, the subjects in (40) are all participants of the events named by the verbs. This point may be reinforced by passive sentences with morphologically related transitive and intransitive (or causative and inchoative) verb pairs. While the verbs in (40) are intransitive, they all have morphologically related transitive counterparts. With these transitive counterparts, passivization leads to grammatical sentences. Consider the following.

(41) a. Koosokudooro-ga kowas-are-te iru.
   highway-NOM break (tr.-pass
   ‘A highway has been broken.’
b. Botan-ga tor-are-te iru.
   button-nom take off (tr.)-pass
   'A button has been taken off.'

c. Kugi-ga mage-rare-te iru.
   nail-nom bend (tr.)-pass
   'A nail has been bent.'

The verbs kowasu ‘break’, toru ‘take off’, and mageru ‘bend’ are transitive counterparts of the intransitive verbs kowareru, toreru, and magaru in (40), and the direct object of the former is identical with the subject of the latter. In contrast, a parallel situation is not obtained in (39): while not all the verbs in (39) employ their transitive counterparts, at least tooru ‘pass’ and magaru ‘turn, bend’ exhibit transitive verbs that are morphologically related to them, i.e., toosu and mageru. With these transitive verbs, passivization is impossible, as is illustrated below.

    street-nom pass (tr.)-pass
    'A street is passed.'

    street-nom bend/turn (tr.)-pass
    'A street is bent/turned.'

The role that the subject plays in (41) is sharply contrasted with that of the subject in (42): a street has absolutely no relation to the dynamic events that the verbs in (42) name in the same way that the subjects in (41) demonstrate. For example, while a nail is a crucial participant of the bending event in (41c), a street can in no way be part of a bending (or turning) event in (42b). Thus, the semantic relation between the subject and the verb that appear in the stative construction in (39) is quite different from the situation observed in (40). Based on the important role that the relation between the subject and the dynamic verb plays, we revise the representation of the stative construction along with the conditions under which it appears as follows.

(43) [SUBJ … V-te iru], where (i) the SUBJ is non-volitional, (ii) the verb is a dynamic verb describing motion or change of location, and (iii) the SUBJ is not an event participant of the verb.

To summarize thus far, we have demonstrated that neither the meanings of individual lexical items, including morphemes, nor the composition of the meanings of those lexical items, can straightforwardly account for the stative
interpretation observed in (21). I have argued that the presence of -te iru morphology on the dynamic verb and a non-volitional subject which is not an event participant of the verb together induce the stative interpretation as the semantic characteristic of the stative construction. These pieces of information globally gathered throughout a sentence constitute a grammatical construction, and the stative interpretation belongs to the construction itself. Thus, the phenomenon we have observed in this section illuminates an advantage of a constructional approach to the form-meaning relationship that the stative construction in (21) displays.

Before closing this section, I would like to touch on the connection between the stative construction that we have discussed above and the verb class that Kindaichi (1976) categorizes as Type IV verbs.9 In classifying Japanese verbs based on their aspectual properties, Kindaichi recognizes a group of verbs that must appear in the -te iru form: they include sobieru ‘tower’, sugureru ‘excel’, zubanukeru ‘excel’, arhirureru ‘be common’, takai hana-o suru ‘have a high nose’, among others. These verbs cannot be used in the present and past tenses in the sentence final position, as the (b) sentences below demonstrate. Consider the following contrasts.

(44) a. Hujisan-ga sobiete-iru.
   Mt. Fuji-nom towers
   ‘Mt. Fuji towers.’
   b. *Hujisan-ga sobieru/sobieta.

(45) a. Ano gakusei-wa sugurete-iru.
   that student-top excel
   ‘That student is outstanding.’
   b. *Ano gakusei-wa sugureru/sugureta.

   this style-top be common
   ‘This style is too common.’
   b. *Kono sutairu-wa arhirureru/arihureta.

(47) a. Tanaka-no musuko-wa takai hana-o site-iru.
   Tanaka-NOM son-top high nose-ACC do
   ‘Tanaka’s son has a high nose.’

Kindaichi admits that these verbs refer to states, but singles them out as an independent verb class (separate from the stative class) based on the morpho-
−logical characteristic. There are several similarities between the stative constructions and these Type IV verbs significant to our discussion: (i) both appear in the -te iru verbal form; (ii) both have non-volitional agent subjects; (iii) neither assumes a dynamic event that would result in the state described by the verb; and (iv) both refer to inherent attributes of the subject. That is, the stative construction and the sentences with Type IV verbs appear in the same syntactic form, and describe the subjects by referring to their inherent attributes that are not prone to change under normal circumstances. This situation, then, can be viewed in construction terms: that is, both cases are instantiations of the same construction which is associated with the particular stative interpretation, and Type IV verbs are discerned only in the stative construction whereas non-Type IV verbs discussed in this paper can be, but need not be, realized in the stative construction. Crucially, non-Type IV verbs achieve the stative interpretation only when they are in the stative construction simply because such interpretation is a property that belongs to the construction itself. It should be pointed out that there is a major difference between the stative construction we have been discussing in this paper and Type IV verbs. The verbs that we have examined above can independently be used as dynamic verbs whereas Type IV verbs not only cannot be used independently of -te iru as sentence-final predicates, but also do not have the use as dynamic verbs at all. Due to this difference, I believe that Type IV verbs do not quite fit the environment illustrated in (43) and hence require an independent analysis.

Finally, it is worth comparing the constructional approach advanced in this paper with Yoshikawa's (1976) analysis of the stative interpretation of -te iru. Yoshikawa states that there are two types of verbs that give rise to the stative interpretation: one is a lexically determined class of verbs that do not denote process,10 and the other is a group of process verbs that sometimes can induce the stative interpretation under some conditions. For example, his list of verbs that belong to the second class includes haeru 'grow', tuzuku 'continue', hedateru 'keep distance, put something to create a barrier', tooru 'pass', and hashiru 'run' and hebarituku 'stick', among others. Yoshikawa, however, does not make explicit the nature of the conditions under which process verbs can be interpreted as stative. The conditions in (43), thus, overcome Yoshikawa's problem by maintaining lexical semantic properties that are relevant to the stative construction, as is stated in (43-ii), and at the same time by identifying the environment in which the stative interpretation is expected to arise, as in (43-i) and (43-iii).11
3. The stative construction and subjective motion

It should be remembered that in Section 2.1 above, we have discussed that it is necessary for motion verbs to take the morphological form of *-te iru* in order to induce the stative interpretation as is observed in (21). We have further pointed out that if motion verbs appear in the present or past tense, they could receive the interpretation of what Matsumoto calls subjective motion (Talmy 1983, Langacker 1987, Matsumoto 1996a,c). In this section, after pointing out the similarity and difference between subjective motion and the stative construction, I wish to claim that they are not to be reduced to a single construction but could belong to a family of constructions in the sense of Jackendoff (1997), thereby providing further support for grammatical constructions in Japanese.

Following works by Talmy (1983) and Langacker (1987), Matsumoto (1996a,c) discusses subjective motion expressions in English and Japanese such as those in (48).

(48) a. The highway runs through the mountain.
   b. Kono miti-wa massugu/kaigan-ni sotte hasiru.
      this road-top straight/shore along run
      ‘This road runs straight/along the shore.’
   c. Miti-wa kawa-o watatte-kara totuzen migi-ni magaru.
      road-top river-acc cross-after suddenly right-to turn
      ‘The road suddenly turns to the right after crossing the river.’

Based on Langacker (1987), Matsumoto (1996a:184) explains that sentences like (48) “involve the conceptualizer’s mental tracing along a path for the purpose of computing the configuration or location of the entity expressed in the subject NP.” A typical situation for the Japanese example in (48), for instance, is the one in which a guide on a tour bus makes a descriptive remark about the road as the bus moves along the path. In Matsumoto’s terms, subjective motion expressions “describe the configuration or extent of linear entities in terms of the motion of something else which moves in contiguity with them” (p.188).

According to Matsumoto, subjective motion expressions are governed by the following two conditions: the path condition and the manner condition.

(49) a. The path condition: Some property of the path of motion must be expressed.
b. The manner condition: No property of the manner of motion can be expressed unless it is used to represent some correlated property of the path. (Matsumoto 1996a:194)

These conditions are important to account for the range of data below (modified from Matsumoto (1996a:195)).

(50) a. "Kono miti-wa hasirimasu.
   this road-top run
   'This road runs.'

   b. Kono miti-wa massugu/kaigan-ni sotte hasirimasu.
   this road-top straight/shore along run
   'This road runs straight/along the shore.'

(51) a. Sono miti-wa nanbokuni hasirimasu.
   that road-top north-south run
   'That road runs from north to south.'

   b. *Sono miti-wa yukkuri hasirimasu.
   that road-top slowly run
   'That road runs slowly from north to south.'

The path condition of (49a) is intended to account for the difference between (50a) and (50b): the former lacks an expression to describe a property of the path of motion. The contrast between (51a) and (51b) is explained by (49b): *yukkuri 'slowly' in (51b) describes the manner of motion, and hence violates the manner condition.

Subjective motion and the stative construction share some characteristics. Subjective motion expressions generally refer to the configuration or location of an entity by way of mental tracing of a path. Such an entity, realized as the subject NP, is a non-volitional agent, and it is not a participant of the event denoted by the verb. Thus, the nature of the subject NP is the same in the two phenomena. Furthermore, the range of verbs that appear in subjective motion verbs, i.e., motion verbs, are also common in the stative construction. On the other hand, there are some differences between the two.

Matsumoto emphasizes that subjective motion does involve motion. Since motion is characterized as involving change in location over some stretch of time, he claims that change in location and temporality are essential properties of subjective motion. Relevance of temporality to subjective motion accounts for the presence of temporal phrases like *for a while, as in (52).

(52) The highway runs along the coast for a while.
Similarly, Japanese subjective motion allows for temporal expressions like *moo sugu* ‘soon’ and *sibaraku* ‘for a while’, suggesting that motion is indeed involved. Consider the following, taken from Matsumoto (1996a:211) with slight modification.

(53) Kono miti-wa moo sugu mati-no mannaka-o toorimasu.

this road-top soon city-gen center-acc go through

‘This road will go through the center of the city soon.’

Furthermore, I believe the verbal morphology in these two phenomena is distinct. Subjective motion expressions are most natural with verbs in the present tense whereas the stative construction is characterized by the *-te iru* form. This difference is in fact manifested by the distribution of temporal expressions of the kind we observed in (53). This is illustrated below.

(54) a. Kono miti-wa moo sugu mati-no mannaka-o tootte-imasu.

this road-top soon city-gen center-acc go through

‘This road will go through the center of the city soon.’

b. *Kono miti-wa moo sugu mati-no mannaka-o tootte-imasu.

this road-top soon city-gen center-acc go through

(55) a. Kono miti-wa sibaraku mori-no naka-o tooru.

this road-top for a while forest-gen inside-acc go through

‘This road goes through a forest for a while.’

b. *Kono miti-wa sibaraku mori-no naka-o tootte-iru.

this road-top for a while forest-gen inside-acc go through

The verbs in the (a) sentences are in the present tense, and the temporal phrases are acceptable. This confirms that these sentences express subjective motion. The verbs in the (b) sentences have the morphological shape of *-te iru*, and this morphology and the non-volitional agent that is not an event participant of the verb suggest that the (b) sentences are instances of the stative construction. As is predicted, these sentences are not compatible with the temporal expressions. That is, temporality, which characterizes motion according to Matsumoto, is missing in the (b) sentences. As I have shown in previous sections, instead, what is expressed in the (b) sentences are stative descriptions of the spatial configuration that the subjects occupy. While subjective motion and the stative construction share the selection of the subject NP and the reference to the spatial configuration of the subject NP, they exhibit a fundamental difference in the verbal morphology and dynamicity. The situation we have been looking at can be captured in construction terms. One of the fundamental properties subjective
motion expressions exhibit that is similar to the stative construction is that the
meaning expressed in subjective motion cannot be traced back to the meaning
of particular lexical items, but rather is a property that is ascribed to the
construction. That is, subjective motion expressions indeed form a grammatical
construction. The subjective motion construction is like the stative construction
in the selectional restriction on the subject, the relation of the subject to the
verb, and a particular verbal morphology, but departs from it in the exact
morphological shape of the verb and the presence of a XP that describes some
property of the path of motion. Thus, the subjective motion construction may
be schematized in (56a) while the stative construction is represented in (56b).

(56) a. [SUBJ XP V], where (i) the SUBJ is non-volitional, (ii) the verb is a
dynamic verb describing motion, (iii) XP describes some property of
the path of motion, and (iv) the SUBJ is not an event participant of the
verb, and (v) the verb is in the present/(past) tense.
b. [SUBJ ... V-te iru], where (i) the SUBJ is non-volitional, (ii) the verb
is a dynamic verb describing motion or change of location, and (iii)
the SUBJ is not an event participant of the verb.

The resemblance of the two constructions, then, presents another instance of a
family of constructions along the lines discussed in Fillmore, Kay, and O'Con-

4. Conclusion

In this paper I have demonstrated that the stative construction exemplified in
(21) and its meaning are better handled by a constructional approach. The
stative interpretation observed in those examples cannot be attributed to the
meaning of the verb or any individual lexical item, nor the composition of the
meanings of the words and morphemes that appear in the sentence. I have
argued instead that the stative construction should be recognized as a grammat-
ical construction in Japanese and the stative meaning that describes inherent
attributes belongs to the construction as a whole. While the projectionist model
plays a major role in accounting for numerous syntactic behaviors as well as
acquisition data (Pinker 1989), at least the stative construction in Japanese
described in this paper provides a piece of evidence that the recognition of the
stative construction as a grammatical construction can better explain the stative
meaning that is not predictable given the meaning of individual lexical items
A constructional approach to stativity in Japanese (Croft 1999). Even within the projectionist model, then, if the degree of such predictability decreases, it may be more economical and create less burden to attribute an apparently idiomatic meaning to the construction itself.

Notes

* I am indebted to two anonymous referees whose challenging and insightful comments have helped me clarify many issues and sharpen my arguments. I would also like to thank Bernard Comrie for answering numerous questions and providing me with excellent editorial advice, and Stuart Davis for reading several draft versions of this paper and patiently discussing various issues with me.

1. Jackendoff (1990) treats the way-construction as a kind of “constructional idiom,” which he characterizes as “a specialized syntactic form with an idiomatic meaning.” (p.221) Also see Jackendoff (1997) for the analysis of the ‘time’-away construction and its relation to the way-construction and the resultative construction.

2. As a referee points out, the stative meaning that is characteristic of what I call “the stative construction” amounts to the “adjectival” meaning of -te iru that Teramura (1984) discusses. He contrasts the “adjectival” meaning with the “aspectual” meaning, which will be taken up and elaborated on below.

3. I would like to thank an anonymous referee for drawing my attention to this view.

4. Imperative/request sentences can be formed in a variety of ways that often result in different levels of politeness. (22a) and (22c) are formed with the gerund of the verb, hasitte and mugatte, and they can further add kudasai ‘please’ to make the request more polite. (22c), thus, is considered a casual request. (22b) is formed by the stem of the verb, yokogiri, and nasai (a suffix for an order), resulting in a formal order.

5. A referee questions my argument for the dynamic interpretation of the verbs in (21) based on imperative/request, and states the following:

“...But exactly the same argument can be made for the ordinary progressive. The ordinary progressive — ’She is running in the park,’ ‘She is crossing the street’ — is stative. For example, they cannot occur in the imperative/request, and they cannot themselves form progressives:

(i) *Please be running in the park.
(ii) *Be crossing the street!
(iii) *She is being running in the park.

In other words, T’s argument applies just as well to ordinary progressive -te iru as to stative -te iru.”

First, it seems that there is a terminological difference. The referee assumes that the construal of the event denoted by the progressive construction is aspectually stative, a view to which I do not subscribe in this paper. That is, I am using the terms “progressive” and “stative” to refer to non-overlapping aspectual types. Under the terminology that I am adopting here, the referee's sentences “She is running in the park” and “She is crossing the street” are progressive
but not stative. Second, my argument focuses on the dynamic nature of the verbs in (21) when they are not accompanied by -te iru. In that light, (22) serves our purpose to demonstrate that the stative interpretation does not come from these verbs in and by themselves.

6. The assume position meaning of stand, for example, is exemplified by Yvonne stood (up) (Levin and Rappaport Hovav 1995:127).

7. A referee points out that the example in (i) below “demonstrates that in English, a resulting state of affairs of an assume position verb can be described with the progressive.

(i) The congregation is standing.

This referee calls (i) “progressive state,” which makes me think that there may be a terminological difference mentioned in footnote 5. Again, my use of “progressive” is not to be taken as a subtype of stative.

The verbs in (27), when they appear in -te iru along with agentive subjects, can be interpreted as either progressive or resultative although the distinction of these two readings is often quite fuzzy. However, I would like to emphasize the fact that the stative interpretation I am discussing in (23–26) is of an entirely different nature from the progressive or resultative interpretation of the verbs in (27) appearing in the -te iru form together with agentive subjects, and this situation is completely on a par with (21).

8. Croft (1991) analyzes the relationship among causative, inchoative, and passive verbs in terms of the causal chain. According to him, “events are segments of the causal network” (p. 262), and the causative, inchoative, and passive sentences in (30a), (30b), and (32a) can be captured as forming a causal network, as is schematized below, taken from Croft (1991:262–263).

(i) Causative: The rock broke the window.

\[\text{rock} \rightarrow \text{window} \rightarrow \text{CAUSE BECOME BROKEN}\]

Inchoative: The window broke.

\[\text{window} \rightarrow \text{BECOME BROKEN}\]

Stative: The window is broken.

\[\text{window} \rightarrow \text{BROKEN}\]

This analysis based on the causal network can straightforwardly be applied to (30a), (30b), and (32a) in accounting for their connection to each other. It is crucial, however, that the eventuality denoted by these verbs in the stative construction cannot be captured in relation to their morphologically related transitive counterparts or their passive forms. That is, the connection among causative, inchoative, and passive verbs is totally broken, and accordingly there is no network to be posited in the case of the stative construction.

9. I would like to thank one of the referees for making me see more clearly the connection between the stative construction and Type IV verbs.
10. This class of verbs overlap with Type VI verbs to some extent.

11. I would like to thank one of the anonymous referees for making this point clear to me.

12. A referee claims that the distributional facts in (54–55) may not be limited to stative -te iru, but could be observed with ALL progressives, citing the English examples below, although (s)he is not sure about the cross-linguistic relevance of this.

   (i) *John is reading for three hours.
   (ii) *John is reading the book soon.

   The phenomenon that I have been discussing seems to show variation between English and Japanese in that Japanese progressive -te iru can take at least temporal phrases that express duration of an event, unlike (i–ii) above, as is shown in (iii–iv).

   (iii) Gakusei-ga dote-o sibaraku hasitte-ita.
        student-nom bank-acc for a while was running
        ‘A student was running on the (river) bank for a while.’

   (iv) Taroo-wa hon-o san-zikan yonde-iru.
        Taro-top book-acc three-hour is reading
        ‘Taro is reading a book for three hours.’

   While the Japanese equivalent of (ii) is also ungrammatical, the contrast between (i–ii) and (iii–iv) indicates a clear division in this regard between the two languages.

References


Author’s address

Department of East Asian Languages and Cultures
Goodbody Hall 248
1011 E. 3rd St.
Indiana University
Bloomington, IN 47405
tsujimur@indiana.edu