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With this volume the Kansas Working Papers in Linguistics marks its first decade of publication. The editors are bringing out Volume 10 in two numbers, the first of which is devoted to theoretical issues, general linguistics, and old-world-language topics. Volume 10, number 2 is the fourth in the Studies in Native American Languages series.

Volume 10, number 1 is comprised of papers on topics as diverse as the theory of the sign, the comparison of language-specific entailment systems, and ethnoresence in modern Greek. Much of the work represented here is quite original, and has seen little discussion before (Greek motherese, Igbo proverb and idiom).

The editors wish to thank all the contributors, both those whose papers appear in Volume 10, number 1, and those whose papers we did not include. We wish also to thank the faculty of the Linguistics Department of the University of Kansas for their support and encouragement for the KWPL throughout the year.
Lexicalization of Event Types in Japanese
and the Semantics of -te iru*

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I

When Japanese and English verbs are compared, one immediately notices that some pairs of verbs (each pair consisting of an English verb and its translational equivalent in Japanese) often do not manifest themselves alike, and they act very differently from each other in various syntactic environments. Although there is no objective method of comparing two verbs in two different languages, one can look at events, actions, and states themselves about which verbs predicate, since these are presumably free from the influence of the particular lexicalization process of a language. To put it differently, if an event e is lexicalized as v' in Language A and as v" in Language B and if v' and v" behave differently syntactically, then it must mean that Language A's lexicalization is different from Language B's lexicalization in so far as they 'conceive' the event e differently from each other (figuratively speaking). Then our task becomes one of examining the differences between these two lexicalization processes.

First, let us examine the types of objects verbs characterize. Here we are not speaking of semantic objects like intentions and extensions, but of objects we commonly refer to as events, actions, and states. I will use the term events to refer uniformly to these three kinds of objects which verbs predicate over.

The notion 'event' is closely tied up with our tendency to lump together a certain set of related movements, phenomena, and feelings to form a cognitive unit. Events are physically and/or psychologically real, at least in that there can be a time interval within which the event is said to be included, within this time interval, the event in question is said to be in progress or to be happening. (NOTE 1)

Regardless of how 'events' may be defined, they may be classified in terms of the temporal characteristic they share. What seems certain is that there are three discrete types of event, which I shall call natural event types. One is a type of event which can be defined in terms of moments (punctiliar or momentaneous events); the second, a type of event definable in terms of intervals (durative events); and, the third, definable in terms of intervals of indefinite lengths (stative events). The last type may be more commonly called a state, but according to the our new terminology events include events and actions, as well as states. (NOTE 2)

All three kinds of event are linguistically distinguishable from each other by the following two test frames: a) a sentence p is about an action if a) "What is happening is p" is felicitous, where p' is obtained from p by changing the tense marking to non-past in p, and b) "What has happened is that p" is felicitous. This test seems to work for most obvious cases. For ex-

ample, "John is speaking Malagasy" is an action since "what is happening is that John is speaking Malagasy" can be uttered felicitously. A sentence containing an achievement verb, such as 'discover', 'recognize', etc., fails the first, but succeeds in the second; viz: "what is happening is that John discovers the cave" is decided unnatural, but "what has happened was that John discovered the cave" is quite acceptable. Therefore, a sentence p is about a punctiliar event iff it fails in the first, and does not in the second.

Similarly, a sentence such as 'The house is yellow' fails both of these tests and it may be said to describe a stative event. A sentence is said to describe a stative event, then, iff it fails both of these tests. Then, this is defined over an indefinite period of time, and in this sense it cannot be called, properly, an event in the usual sense of the word. Events of this type include the event of the earth being spherical, the sky being blue, etc., and they are essentially these events that correspond to the more permanent (but nevertheless contingent) state of affairs (Note 3).

Our argument so far is based on the assumption that the physical world exists independently of our ability to know about it, and that the physical world is recognition-transcendent (Note 4). From this assumption, these three event types are distinguished from linguistically realized event types, which I shall call lexicalization types.

To summarize, I have recognized three basic event types: first, events that are definable in terms of moments, (called momentaneous or punctiliar type); second, events definable in terms of intervals (durative type); and third, events definable in terms of intervals of indefinite length (stative type).

Note that I have discussed so far the event types occurring naturally in the physical world; but emphatically NOT how languages are equipped to allow users to speak about these events. How languages allow users to speak about events is the topic of the next section.

II

Natural languages are free to lexicalize these event types to different signs (verbs, adjectives, and nouns) as best 'suits' their needs. Instead of speculating on why different languages do not lexicalize the same event or same event type precisely in the same way, I will show how the Japanese language goes about lexicalizing stative events. In so doing, I will illustrate: i) the difference between English and Japanese lexicalization processes; more interestingly, ii) a unified characterization of the -te iru construction, which connects the lexicalization and natural event types, and iii) the implications of this for study of similar aspectual systems in other languages.

First, let us look at some ways in which Japanese verbs have been classified. For the purpose of illustration, I will choose Kindaichi's classification of Japanese verbs (Kindaichi 1950). The choice was determined by two considerations. One is that his classificatory scheme bears some similarity to the classification Vendler (1967), Kenny (1962), and others have adopted for English, thus making the comparison a little easier to undertake. Secondly, his classification is the most succinct of all schemes proposed. For example,
Yashada (1968) postulates 12 possible verb classes, and a verb belongs to one of the 4x8 array slots of syntactic/semantic features, while Isami's (Isami 1964-65) verb subcategorization scheme is essentially a componential analysis which posits a number of verb-inherent features, such as continuity, movement, goal, etc. But the fact that Isami proposed a system in which verbs are classified via features that are varied in type makes it incompatible with the kind of analysis envisaged here.

Kindaichi recognizes four verb categories, and these are determined by the results of a battery of tests, much like the ones found in Vendler (1967), Kenny (1963), and Dwyer (1979). The classes of Kindaichi's classification scheme and their representative members are listed below together with their translational equivalents.

Class 1 Statives
aru 'exist', iru 'exist', wakaru 'understand', yoosuru 'need', all potential and excessive forms.

Class 2 Duratives
youma 'read', kaku 'write', warau 'laugh', kangaeru 'think', benkyoo suru 'study', aruku 'walk', hataraku 'work', suberu 'clip' and the majority of other verbs in Japanese.

Class 3 Punctuals
shiru 'know', shinru 'die', wakareru 'separate', hekkon suru 'marry', tenaru 'tong', and others.

Class 4 Durative-Statives
sobieru 'tower', sugurearu 'excell', nukideru 'excel, stand out', tomu 'be rich', niru 'resemble', and a few other verbs.

This classification seems somewhat different from the Vendler-Kenny classification of English verbs. This widely accepted system of classification for English contains four classes of verbs: Statives, Activities, Accomplishments, and Achievements. These names are given to verb classes according to the temporal properties of verbs, as determined by a series of tests. I have compelling reasons to believe that the accomplishment verbs in English can be conflated with activity verbs. I will not go into a detailed discussion to justify this view here. I will simply indicate that it is not the temporal property of the verb which determines the class membership, but the inherent property of the object NP with which the verb is used that determines the temporal property and the entailment relationship of these sentences (NOT 5). For this reason, I shall recognize only three classes of verbs in English: Statives, Activities (including Accomplishments), and Achievements, of these, the Japanese statives correspond well to the English statives, the duratives to the activities, but the durative-statives are more likely to be classified like the statives in English. The punctuals best correspond to the achievements.

There are several pieces of evidence which suggest that Kindaichi's class 4, durative-statives verbs, are in fact much closer to the English statives in many ways. In fact the differences between the two groups are so minute, that class 4 verbs do not merit a separate treatment. The tests that Kindaichi used give identical results for verbs in these two classes in all but two tests. The first of these two tests is illustrated in (1)-(2).
(1) a. Yoshiko ga yosueru hon wa kore da.  
Yoshiko SUBJ need book TOP this be  
The book Yoshiko needs is this one (stative).

b. *Yoshiko ga yoshite iru hon wa kore da.  
Yoshiko SUBJ need be book TOP this be  
*The book Yoshiko is needing is this one.

(2) a. Soko ni sode iru yama wa Yari da.  
there LOC tower stn TOP Yari be  
The mountain which towers there is Mt. Yari (durative-stative).

b. Soko ni schite iru yama wa Yari da.  
there LOC tower be stn TOP Yari be  
The mountain which is towering there is Mt. Yari.

Example (1) shows that statives cannot be used with the progressive (-te iru), while the same construction is acceptable for durative-stative verbs, as evidenced in (2). The analysis of the difference is perhaps best left untouched here, until the progressive aspect has been analyzed.

The second difference between durative-statives and statives is that the statives cannot take the nagara construction, while durative statives can in some instances. Nagara is a simulative aspect marker, and is used correctly in describing two actions occurring at the same time. (3) and (4) are examples of this aspect, having a static and a durative-stative respectively.

(3) *Terebi ga ari nagara hon o yonda.  
TV SUBJ be SIMUL book ACC read  
*I read the book when/while there was a TV set.

(4) Akai kao o chi nagara sake o nomiku.  
red face ACC do SIMUL sake ACC drink  
Looking red, he drank sake.

The simulative construction is extremely unnatural, if not ungrammatical, for the majority of the durative-statives. Actually, the grammaticality of (4) is one of the rare cases. In fact, it is difficult to think of other exceptions. This claim is substantiated by the sentences (5)-(7), in which no simulative reading is possible, although they all involve durative-statives.

(5) *Yoshiko wa sukkide nagara gakko e itte iru.  
Yoshiko TOP excel SIMUL school to go be  
*Yoshiko goes to school while/at the same time she excels.

(6) *Yoshiko wa otousan ni ni nagara kaisha de hatarai te iru.  
Yoshiko TOP father to resemble SIMUL CO. at work be  
*While looking like her father, Yoshiko works for a company.

(7) *Yoshiko wa suugaku ni sugure nagara gakko e itte iru.  
Yoshiko TOP math to excel SIMUL school to go be  
*While/at the same time Yoshiko excels in math, she goes to school.
I suspect that the marginal grammaticality of at least some verbs in this category in the simulative construction is due to the fact these verbs are almost identical to statives semantically. Consider the following, in illustration of this contention. The simulative is correctly used with duratives, as in (8).

(8) Tabe nagara terebi o mita.
    eat SIMUL TV ACC saw
    I watched TV while eating.

But fails in the following three cases:

(9) *Yachi ji node tabe nagara 9 ji node terebi o mita.
    8 o'clock till eat SIMUL o'clock till TV ACC saw
    *I watched TV till 9 while eating until 8.

(10) *Ku ji node tabe nagara 8 ji node terebi o mita.
    9 o'clock till eat SIMUL o'clock till TV ACC saw
    *I watched TV till 8 while eating until 9.

(11) *Posuta o mitsuke nagara tabeta.
    poster ACC notice SIMUL ate
    *I ate while finding a poster.

Example (9) shows that the termination of both activities must be synchronous, while (10) shows that the inceptions must be synchronous. Example (11) shows that a simulative cannot be used in place of a durative. This seems to indicate that the nagara construction can only be used when interval type events are involved, but not when moment events are involved. We tentatively take the logical form of this kind of construction to be something like $\langle P \negagura Q \rangle$, then from the above examples, the following semantics for the nagara construction can be given: $\langle P \negagura Q \rangle$ is true at $<I,w>$ iff $P$ is true at $<I',w>$ and $Q$ is true at $<I'',w>$ and $I = I'* I''$, where $*$ is the intersection operator. The ungrammaticalities of (3), (5)-(7) are accounted for by the fact that the first clause of each sentence is not an interval type, but in fact it is a stative type, whose truth extends over a period of time not definable via intervals. It is therefore ungrammatical to use such adverbials as 'carefully', 'deliberately', or as the complement of the 'be forced to' construction with a stative type. Thus sentences in (12) are naturally ungrammatical since durative-statives are in fact closer to statives:

(12) a. *Yoshiko wa wazato sunagaku ni nukideta.
    Yoshiko TOP deliberately math TOP excelled
    *Yoshiko deliberately excelled in math.

b. *Watashi wa Yoshiko o nukide saseta.
    I TOP Yoshiko ACC excel forced-to
    *I forced Yoshiko to excel.

Now, I think we have sufficient reason to do away with the durative-stative category, and conflate those verbs with the stative verbs. For the time being, then, we shall recognize only three verb classes in Japanese: statives, duratives, and punctuals.
Having divided the Japanese verbs into three classes, it seems natural for these three verb classes to match the corresponding natural event types I have postulated earlier. After all, it may be argued that verbs do describe events of all sorts, and certainly, actions and states are among them. If the relationship between the lexicalization types (i.e., verb types) and the event types (natural event types) is such that stative events are lexicalized as stative verbs, durative events are lexicalized as durative verbs, and momentaneous events as punctual verbs, then we may call the relationship unmarked. To take the case of Japanese, the relationship between lexicalization and event type is not unmarked, and this is where, I think, the subject gets more interesting.

First, let us take a well-known example from Japanese, the case of 'shiru'. Although this is commonly translated in English as 'know', the syntactic behavior of this Japanese verb is quite different from the English counterpart. The sentences below will illustrate some of the differences between 'know' and 'shiru'.

(13) Kare wa Junko o shitte iru.
he gets address ACC know be he knows the address.

(14) Kare wa derwa de Junko ga shinda no o shitta.
he TOP telephone by Junko SBJ died NOM ACC know
He was informed of Junko's death by phone.

(15) Sono koto wa mae kara shitte ita.
that matter TOP before from know be I know about it from same time ago.

It may be observed that 'shiru' is used in the -te iru form (I shall tentatively call this the progressive aspect for convenience) when the meaning conveyed resembles more closely to the meaning of 'know'. When 'shiru' is used non-paragraphally, as in the case of (14), it is best translated as 'be informed'. A difference such as this applies to most Japanese verbs that are the translational equivalents of English stative verbs, except the ones listed in the stative verb category for Japanese. The fact that a verb in one language and its translational equivalent in another behave rather differently suggests that they are not identical descriptions of the same event.

An analogous situation is often cited in semantics, in which the same entity can be referred to by two different lexical items, each in a different language. This is the mechanism of reference, by which different languages can speak about the same entity. It is also noted that the denotation set of a common noun (like 'glove') of one language may not have the same denotation set as the translational equivalent in another language. English and Japanese offer a case in point in which the denotation of 'glove' includes baseball gloves, while the Japanese translational equivalent 'tebukuro' does not.

I think there is a parallelism found between the analogy in semantics and the case at hand. Consider the state in which a speaker, say John, has know-
ledge of the fact that \( p_i \) is 3.1415... We can schematically show this by establishing a point on the time arrow at which John came to possess this piece of knowledge.

\[
\begin{align*}
\text{t} &
\end{align*}
\]

The point \( t \) is where John came to possess this piece of information for the first time, perhaps in a math class. At any point thereafter, that is at all \( t' \) and \( t'' \), John is said to know that \( p_i \) equals 3.1415... English lexicalized this event type by assigning a verb 'know' to describe the situation. Thus 'John knows that \( p_i \) equals 3.1415...' is true at any point \( t' \), \( t'' \). Notice that English lexicalized this verb over an interval of time. This is fundamentally different from the Japanese counterpart. The Japanese translational equivalent 'shiru' is a punctiliar verb, and the same event illustrated in (16) is lexicalized over a point, the point \( t \) at which the knowledge that \( p_i \) equals 3.1415... is acquired. In other words, English looks at this particular event as spanning over a period of time and considers this time interval to be a conceptual unit inherently associated with the verb. On the other hand, the Japanese translational equivalent 'shiru' is a result of a lexicalization whereby the process of acquiring knowledge, not the resulting state, is lexicalized, and consequently this process is perceived as a conceptual unit.

The difference may be made clearer graphically. (17) shows that 'shiru' lexicalizes the event of acquiring the knowledge at \( t \) and 'shitte iru', on the other hand, lexicalizes the state which follows the event at \( t \). In English, there is no lexicalization corresponding to 'shiru', but English does have a lexicalized verb 'know' which is very similar to 'shitte iru'.

\[
\begin{align*}
\text{shiru} & \quad \text{shitte iru} \\
| & \\
\text{t} & \\
\text{know} \\
\end{align*}
\]

This difference in the lexicalization types, despite the fact that they seem to characterize the same event type, is, by no means an isolated instance. There are a number of verbs in Japanese whose corresponding event types are lexicalized differently in English.

Let us take a second example: 'hiru' and 'resemble'. 'Hiru' is rarely used independently and it appears most often with -te iru, as in (18). English seems to lack the exact counterpart of 'hiru' and this part of the event does not seem to have been lexicalized.

\[
\begin{align*}
\text{Kare wa inu ni nite iru.} \\
\text{he Top dog to resemble be} \\
\text{He looks like a dog.} \\
\end{align*}
\]

The graphic representation might take the following form.
(19)  nite iru
      \_____/        \______________->
         \           \ resemble

The third example is the pair 'motsu' and its translational equivalent 'have'. The following pair of sentences will further illustrate the difference between the two.

(20)  Jidoosa o motte iru.  
     car ACC have be (He) has a car.

Just like the case of 'shiru', 'motsu' is lexicalized over a moment of holding something, unlike the English translational equivalent 'have', which is a lexicalization over an interval. Graphically, this appears as (21) below.

(21)  motsu--motte iru--->
     \__________________________/  
     \ having--have--->

Our fourth example is the case of 'sumu' and 'live'.

(22)  Osaka ni sume iru.  
     Osaka LOC live be  
     I live in Osaka.

The schematic representation for the difference between the two processes of lexicalization might look like (23).

(23)  sumu--sunde iru--->
     \__________________________/  
     \ live--is living--->  
     \ live

The fifth example is 'nokoru' and 'remain'. Just like the above examples, 'nokoru' is not a lexicalization of the type that matches that of 'remain', as seen in the example listed in (24).

(24)  Go nin nokotte iru.  
     five people remain be  
     Five people remain.

Again graphically, this can be shown as having the following temporal properties.
The foregoing examples are not isolated or special instances found after a long time of digging. Actually, these are found quite easily among a number of Japanese translational equivalents of English stative verbs. These example pairs make it evident that lexicalization processes are quite different in the two languages. Japanese, in these cases, lexicalizes the events as nonexistent verbs, while English does not have corresponding nonexistent verbs. English does, however, have primary verbs corresponding to the Japanese 'shitte iru', 'nite iru', 'nokotte iru', and 'nokotte iru'.

In order to investigate how widespread this phenomenon is, one can examine the following list of Japanese and English verbs that have different lexicalization types for one type of event.

<table>
<thead>
<tr>
<th>English</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>be alive, resemble</td>
<td>ikiru</td>
</tr>
<tr>
<td>be similar, resemble</td>
<td>nite iru</td>
</tr>
<tr>
<td>like</td>
<td>shitto shitte iru</td>
</tr>
<tr>
<td>love</td>
<td>shitte itte iru</td>
</tr>
<tr>
<td>hate</td>
<td>iru</td>
</tr>
<tr>
<td>know, realize</td>
<td>kiraaruku</td>
</tr>
<tr>
<td>understand, comprehend</td>
<td>itte iru</td>
</tr>
<tr>
<td>regret</td>
<td>kikai shitte iru</td>
</tr>
<tr>
<td>want, remember, recall</td>
<td>wakaru</td>
</tr>
</tbody>
</table>

One immediately notices that the translational equivalents do not match verb types. In other words, Japanese does not have a primary verb corresponding to the natural event type, as far as these events are concerned. English seems to do well since most natural event types have a normal relation to the English lexicalization processes.

The case is much different for Japanese. In Japanese, as we have just seen, there are no primary verbs corresponding to these event types. We are then tempted to say that Japanese is functionally and communicatively inadequate in so far as speakers' linguistic needs are concerned.
IV

The linguistic mechanism in Japanese whereby this gap is filled is the -te iru construction. In the light of the preceding discussion, it is quite natural to consider the -te iru construction to be that linguistic device which changes the punctiliar lexicalization type to a durative type, a movement toward a more stable/static type. This explanation correctly predicts the use of the -te iru construction in all the examples previously cited (viz. (13), (14), (15), (17)→(25)).

In the following section, I will show that this analysis holds for durative verbs as well. Durative verbs are relatively homogeneous, and when -te iru is used with these verbs, as in (26), it has two interpretations.

(26) Yoshiko wa hanaretto o yonde iru.
Yoshiko TCP Hamlet ACC read be
Yoshiiko is reading Hamlet.

The ambiguity is between two equally plausible interpretations. One is a habitual reading, and the other is the right-now reading. The two readings seem to be easily separated by examining whether the sentence holds at the reference time (i.e., 'now' in this case). That is, if the sentence holds true at the reference time, it will generally have the right-now reading; otherwise, the habitual reading (NOTE 6).

The right-now reading is of course interpreted in terms of an interval I, (and I is defined to be a set of moments in, such that n:\q\in\I'. The semantics of this reading is simply as follows: p is true at <i, w> iff t(i), and at all m in I, p' is true, where p is the sentence in question, p' comes from p by stripping of the -te iru component, and t is the reference time. This states that a sentence such as (26) is true only when there is an interval during which Yoshiko reads the book uninterrupted, which is exactly what we would like to capture in the right-now reading.

The second, habitual reading will have the following semantics. The sentence p is true at <i, w> iff there exist a few non-overlapping intervals (i_1, i_2, \ldots , i_n) in I such that p' is true at <i_1, w>, <i_2, w>, \ldots , <i_n, w>. The alert reader will have noticed that the notion of 'a few' is open to various interpretations, but I have no way of knowing how many times actions have to be repeated to qualify for a habitual reading. The tendency to interpret a sentence in one way or the other depends largely on the speaker's knowledge of the world, the cut-off point is closely related with the kind of predicates (viz. the difference of frequency between 'He is always studying' vs. 'He is always losing his keys'). In addition, some predicates tend to have inherent habitual readings (e.g., lose, find, discover, and other punctiliar verbs). A clear indication that a sentence should be given a habitual interpretation is when the predicate is accompanied by adverbs of frequency (such as 'always', 'as a rule', etc). These are factors I will not elaborate here.

The second part of the semantics stipulates that (26) is true iff there are a few pragmatically determined time intervals previous to the reference time during which Yoshiiko was reading Hamlet. Notice that this semantic does
not preclude the possibility of the right-row reading, since a (marginal) sentence like 'Yoshiko is reading the book for a month' is truly ambiguous between the two readings if uttered when Yoshiko is seen reading the book.

The most interesting case is perhaps the use of the -te iru construction when the verb is a punctiliar verb, since this phenomenon seems to contradict our analysis that an event described by this device necessarily spans over a period of time. This is curious in that punctiliar events, by definition, cannot span over a period of time, which should mean that the -te iru construction and punctiliar events are inherently incompatible.

(27)    Iru ga shinde iru
do SBV die  be
      The dog is dead.

(28)    Sono keikaku wa moo kimatte iru.
the plan TOP already decide be
      The plan has already been decided.

(29)    Sono dokutsu wa nno mitsukatte iru.
the cave TOP already discover be
      The cave has already been discovered.

(30)    Santakumono wa kawaite iru
laundry TOB dry  be
      The laundry is dry.

Together with examples (17)-(25), the above examples are actually additional evidence for my analysis of -te iru. In all these cases, the momentaneous lexicalization type has been changed to a durative type, by way of the -te iru construction, in order to indicate that the state which obtained some time before still obtains. The semantics for this is relatively easily formulated: p is true at <t',w> if p' is true at <t',w> where i=(t'→t''). This semantics requires a sentence like (17) to be true just in case there was a moment in the past (relative to the reference time) at which the knowledge was obtained for the first time.

It is quite obvious, I hope, that the function of -te iru in changing the lexicalization type to a durative one. I have tentatively called the -te iru construction the progressive aspect, but I think this terminology is misleading. It is evident that -te iru is better called a stativizing device (grammaticalized stativizer), whose role is to change a 'wrong' lexicalization type to a more static one, in such cases where the communicative and functional needs of the speaker warrant the correct lexicalization type.

This view specifically predicts a few interesting phenomena. I contend that the so-called progressive aspect in English may be the manifestation of the same linguistic process, and be better analyzed in the spirit of the analysis adopted here. It is very suggestive to note that the progressive aspect cannot be used, in most cases, with the manifested stative verbs. This indicates that the progressive aspect in English is another instance of correcting a wrong lexicalization type to the correct one; that is, it is a process in which a non-stative predicate is turned into a kind of stative. I think this explanation might directly lead us to a more plausible analysis of the English Progressive. (NOTE 7)
More universally, my analysis predicts that whenever a language user encounters a wrong lexicalization type for the given event type which it is supposed to reflect, there will always be a linguistic mechanism by which this mismatch is corrected, so as to keep the communicative function of the language intact. I predict further that all languages have a set of type-change-over mechanisms, unless, of course, all relevant portions of an event have been lexicalized.

V

With this background, I think it is time to return to the problem of verb classification and think about this a little more objectively. In categorizing verbs into syntactic classes, there exists an assumption that there are discernable and consistent differences among these classes of verbs which justify the classification itself. The classical method of categorizing verbs has been to subject a verb to a battery of tests and see how the results pattern with those of others. But there is abundant evidence suggesting this assumption may have to be called in for re-examination. The problem lies in the heterogeneity of these verb classes, where members of the same verb class are often found to behave quite differently from each other in various syntactic environments. This, in turn, suggests that we may be in need of more verb classes, and thus opens up the undesirable possibility for an arbitrary number of verb classes ad infinitum depending upon the precision with which we classify them. This suggests that there is a difficulty in establishing discrete verb classes which raises doubt whether classification itself is linguistically meaningful. I have tentatively suggested three verb classes in Japanese, noting that the fourth class (the durative-statives) suggested by Kindichi is clearly untenable. I have thus reduced the number of the verb classes in Japanese from four to three in order to show how each class might correspond to each natural event type. I do not think, however, that there are inherent verb classes that are discrete and clearly identifiable via a series of tests, if the classification criteria are based on the lexicalization types of the verb.

We are often reminded of the difficulty of classifying English verbs in tight classes when we encounter bona fide stative verbs like 'be silly', 'lie', 'stand', etc., used in the progressive as well as in the non-progressive forms. I think that by the time we have discovered all the relevant tests to place each verb in the proper verb category, we will have to have as many verb categories as the number of verbs themselves. We should realize that each verb is, in terms of a lexicalization type, placed on a spectrum or a continuum of stability, such like the color spectrum obtained when sunlight is separated into different colors. The erroneous assumption that a verb class must be homogeneous internally is the key to the reason why the Vendler/Pennycook/Kindichi type of verb classification cannot provide the answer to the heterogeneous behavior of verbs in terms of temporal aspects.

I have emphasized that whether an event is lexicalized in one type or the other depends on how the language in question 'chooses' to lexicalize it. The second important point is that the progressive allows the speaker's subjective view of the event (as lexicalized by a particular type of verb) to become grammaticalized. The interaction between the lexicalization types and the grammaticalized change-over mechanism (to ire, and the English progressive) is central to the correct analysis of this linguistic mechanism (NOTE 8).
This in turn explains the residual data left unaccounted for (namely (1) and (2)). In these sentences we noted that so-called durative-static verbs in Japanese can be used in either the progressive form or as a bare verb without any serious difference in meaning. According to our hypothesis, this means that durative-statics are those verbs whose temporal properties are located precisely between 'durative' verbs and 'static' verbs; and for this reason, I think, Kindaichi aptly named these verbs durative-statives.

Lastly, I think this kind of study can be used profitably for language teaching. In teaching Japanese, I have often encountered students who use the -te iru form when it is inappropriate, and students who did not use -te iru when required. I am certain that some of these mistakes come from interference by transferring verb categories in the student's native language to the translational equivalent in the target language. This seems to result from the assumption on the students' part that the lexicalization category is directly transferrable as long as the correct translational equivalent is obtained. It is thus desirable for foreign language teachers to have this kind of information for more effective teaching. In addition, many a student will be saved from making inappropriate transfers if lexicalization type information were made accessible in dictionaries.

NOTES

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1. I might note here in passing that it may well prove to be the case that the existence of language is precisely the reason why we can perceive certain phenomena as cognitive units.

2. The idea that the physical world may be segmented into different stages of stability was more straightforwardly presented by T. Givon in _On Understanding Grammar._

3. Perhaps more permanent events may include those events expressed by necessary truth.

4. I should perhaps say that truths regarding the physical world may not be known in their entirety and perhaps some truths concerning it may never be revealed to man. In this sense I am saying that the physical world is recognition-transcendent. I have defended this position and argued against the non-realist view of the world in _Nara_ 1985c.

5. See _Nara_ 1985c.

6. I think the habitual reading of this type (both in English and Japanese and presumably in many other languages) comes from a process which may be called 'grammatical flouting'. Grammatical flouting occurs in a syntactic situation analogous to the pragmatic situation in which a conscious violation of pragmatic rules gives rise to a secondary meaning. Grammatical
floating occurs when a grammatical rule is consciously violated, and as a result it produces a new usage previously disallowed. See Nara 1985b (forthcoming).

7. See Nara 1985b (forthcoming). An analysis of the progressive in the same vein has been conceived independently by Nufwene for English. To my knowledge, he is the only one who suggests the analysis in a fashion proposed here. Although his approach is quite different from mine and does not offer any semantics, he similarly concludes that the progressive is a gramaticalized stativizer, a view that is perhaps becoming more dominant recently.

8. Nufwene’s analysis is quite interesting and has much in common with my approach. His analysis seems to fall short, however, in very crucial areas. He correctly recognizes that stativity in English is not a matter handled in a binary manner (i.e., in terms of +/− stativé), and proposes, instead, a scale of stativity, on which various verbs are placed. In his analysis, then, a verb will have a feature [n stativé], where n would be a variable ranging over a set of positive integers. Suppose that m for the agent punctiliar verb, and a more stable verb would have a corresponding larger integer assigned to it. Suppose further that this approach was implemented in the analysis of verbs in both Japanese and English. This will yield ‘know’ to be [n stativé], and ‘shū’ ([x stativé], where, from evidence presented in this paper, it would have to be the case that x=1. His analysis implies that x=1, but our data indicate otherwise. This could not be explained since his level of analysis stops at the verb level (lexicalization level) and thus fails to take into account various ways in which different events may be lexicalized. I believe that determining the type of events first is the more promising avenue of approach, which, incidentally, can account for different kinds of progressive in languages other than English.

REFERENCES


