

SEMANTIC STRUCTURE OF JAPANESE TENSE AND ASPECT

YUTAKA KUSANAGI

I. Introduction

When we consider the relationship between extra-linguistic phenomenon and linguistic expression, we find that the choice of a certain aspect and tense is the result of how the speaker interprets the extra-linguistic phenomenon. As far as the extra-linguistic world is concerned, a certain event occurs or a certain state exists at a certain time—either past, present, future, or a combination of these. The speaker uses different tenses and aspects (and, of course, different lexical items) depending upon how he views certain events and states.

For instance, suppose we observe that a door is open. We may say:

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| 1. to ga aiteiru. | ‘The door is open.’ |
| 2. to ga aketearu. | ‘The door is kept open.’ |
| 3. to ga aita. | ‘The door opened.’ |
| 4. to o aketa. | ‘(Someone) opened the door.’ |

These four linguistic expressions (and probably many more) are the result of the speaker's interpretation of the situation. The speaker may use sentence 1 when he simply cognates that the door is open. Sentence 2 may be used when the speaker interprets the state of the door being open as the result of someone's intentional action. If the speaker cognates a change of state in which the door goes from that of being closed to that of being opened, then he may use sentence 3. When the speaker considers that the change of state of the door mentioned above is the result of someone's action, sentence 4 may be used.

Furthermore, compare sentences 5 and 6.

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| 5. hon ga koko ni aru. | ‘There is a book here.’ |
| 6. hon ga koko ni atta. | ‘There was a book here.’ |

Sentence 5, which usually indicates the existence of a book at the time of speaking, does not exclude the fact that "the book was here in the past." And, similarly, sentence 6, which usually indicates the existence of a book in the past, does not exclude the fact that "the book may be here at present." That is, suppose a book has been here since some-time in the past up to now, then the speaker can use either sentence 5 or 6 depending upon how he interprets the situation. This is endorsed by the fact that when someone finds a book after a search he may use either sentence 7 or 8.

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| 7. a! koko ni atta. | 'Oh! Here it was (all the time).' |
| 8. a! koko ni aru. | 'Oh! Here it is.' |

When someone who has loaned us a book asks us whether we have read the book, our answer may be either sentence 9 or 10.

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| 9. yomanakatta. | 'I didn't read it.' |
| 10. mada yondeinai. | 'I haven't read it yet.' |

The fact is only that the act of reading of the book did not occur in the past, but depending upon how we interpret the situation, our answer varies.

Our observation of sentences 1 through 10 shows that there is no one-to-one correspondence between extra-linguistic phenomenon and linguistic expression. In other words, when an extra-linguistic phenomenon is observed, the speaker selects the particular linguistic expression depending upon how he interprets the extra-linguistic phenomenon. Therefore we believe that in order to find the semantic structure of a language, this process of interpretation called 'cognition' must be clarified. This paper attempts to describe the tense and aspect system of Japanese by postulating the 'cognitive structure' in linguistic activity.

II. Cognition

Here we shall consider the process in which extra-linguistic phenomenon is formalized into linguistic expression. Extra-linguistic phenomenon as a physical stimulus enters into our brain. The representation of the physical stimulus in our brain constitutes the sensory stimulus. The sensory stimulus does not exactly map the physical stimulus

because of the limitation of our senses (those of sight and hearing). The process of transmission of the sensory stimulus to the sensorium is called perception. And our interpretation of the sensory stimulus is not passive but active, being strongly influenced by the past experience, present knowledge, thinking activities, etc. This process is called cognition. Through cognition, the formalization of extra-linguistic phenomenon into linguistic expression is made.

We believe that cognition is structured and that distinctive features of the cognitive level of the speaker contribute to variations of linguistic expressions.

From this stand point, we shall analyze and describe the relationship between cognitive distinctive features and grammatical items related to the tense and aspect system of Japanese.

III. Tense

First, we shall discuss the tense system.¹ Lyons (1968: 304-5) says:

The category of *tense* has to do with time-relations in so far as those are expressed by systematic grammatical contrasts . . . The essential characteristic of the category of tense is that it relates the time of the action, event or state of affairs referred to in the sentence to the time of utterance.

Strictly speaking, there is no grammatical category which is always related to the time of utterance in Japanese. There are two grammatical units which assume this function partially, e.g.,

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| 11a. | hon o yomu. | '(I) will read a book.' |
| | b. hon o yonda. | '(I) read a book' |
| 12a. | asoko ni gakusei ga iru. | 'There are students there.' |
| | b. asoko ni gakusei ga ita. | 'There were students there.' |
| 13a. | ano eiga wa omoshiroi. | 'That movie is interesting.' |
| | b. ano eiga wa omoshirokatta. | 'That movie was interesting.' |

These two units—one represented by 11a, 12a and 13a and the other by 11b, 12b and 13b—seem to contrast with each other in terms of

¹ For further details on this discussion of Japanese tense, see Kusanagi (1972).

relationship between the time of the action, events or state of affairs and the time of utterance. That is, the former seems to indicate that the time of action, etc. coincides with or follows the time of utterance, while the latter seems to indicate that the time of action, etc. precedes the time of utterance. However, this is not always true.

For example, as mentioned above, sentence 12b does not necessarily exclude the situation in which 'the students are still there.' Moreover, sentence 13b usually does not mean that movie 'was interesting but is not any more.'

Furthermore, these units often have nothing to do with the relationship between the time of reference and the time of utterance when they appear in dependent clauses. Observe the following sentences:

- 14a. *heya o deru toki sayoonara to iu.*
 'When (he) leaves the room, (he) says good-bye.'
- b. *heya o deru toki sayoonara to itta.*
 'When (he) left the room, (he) said good-bye.'
- c. *heya o deta toki sayoonara to iu.*
 'When (he) has left the room, (he) says good-bye.'
- d. *heya o deta toki sayoonara to itta.*
 'When (he) had left the room, (he) said good-bye.'

In sentence 14b the action of 'leaving the room' occurs before the time of utterance, while in sentence 14c this action occurs after the time of utterance. That is, the use of these grammatical units in dependent clauses as in the case of sentences 14b and 14c conflicts with their usual use as in the simple sentences 11 through 13.

In short, the Japanese category of the grammatical units under consideration, strictly speaking, does not indicate the direct relationship between the time of extra-linguistic phenomena and the time of utterance but indicates the indirect relationship between them.

This indirect relationship can be explained when we consider an item in the speaker's cognition. Whenever we speak about an event or state, we focus on a certain point or period of time and see whether a certain event or state under consideration exists at this point or in this period of time. Therefore, grammatical tense is not determined directly by the time of the extra-linguistic phenomenon *per se* but indirectly through the focused point or period of time. Depending on

where the focus is in comparison with the particular point (which is usually but not necessarily either the utterance time or the time of another focus), two kinds of tense markers appear in Japanese. That is, if the speaker's focus precedes the point of comparison, the 'pre-ceptive' tense is used, while if the speaker's focus coincides with or follows the point of comparison, the 'non-ceptive' tense is used.

IV. Aspect

We shall now turn to aspect. Hockett (1958: 237) says:

Aspects have to do, not with the location of an event in time, but with its temporal distribution or contour.

Any event, whether it may be a long-lasting action or a momentary change, must have all perceivable stages such as beginning, duration and ending. Here again the speaker's cognition plays an important role. From the semantic point of view, aspect must be interpreted as the manner in which extra-linguistic phenomenon, whether it be a state or event, is cognated. Or more precisely, it concerns that part of the state or event which is focused on. Observe the following:

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| 15a. | hon o yomu. | '(Someone) will read a book.' |
| b. | hon o yonda. | '(Someone) read a book.' |
| 16a. | hon o yondeiru. | '(Someone) is reading a book.' |
| b. | hon o yondeita. | '(Someone) was reading a book.' |

In the case of sentences 15a and 15b, the speaker simply expresses an action which has occurred in the past (15b) and his intention of doing something in the future (15a). However, sentences 16a and 16b implies a particular reference time such as those indicated in sentences 17:

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| 17a. | <i>ima</i> hon o yondeiru. | '(Someone) is reading a book <i>now</i> .' |
| b. | <i>kare ga kita toki</i> hon o yondeita. | '(Someone) was reading a book <i>when he came</i> .' |

In other words, the sentences of 16 and 17 indicate that a particular action (reading) is or was in a particular aspect (in continuation) at a certain focused point of time.

If we consider aspect as the way in which an event or state stands at a certain point, it could be interpreted as either the beginning (18), the continuation (20), or the ending (22) of the event or state, or the point immediately after the beginning (19) or immediately before the end (21) of the event or state;

18. hon o yomi hajimeteiru.
'(Someone) is beginning to read a book.'
19. hon o yomi hajimeta tokoroda.
'(Someone) has begun to read a book.'
20. hon o yondeiru (tokoroda).
'(Someone) is reading a book.'
21. hon o yomi oeyooto shiteiru.
'(Someone) is about to finish reading a book.'
22. hon o yomi oeru tokoroda.
'(Someone) is finishing reading a book.'

However, the productive auxiliaries *hajimeru* and *oeru* can semantically be considered as actions *per se*. Therefore, *hajimeta tokoroda* in 19 can be interpreted as the completion of the action of (*yomi*) *hajimeru* and *oeyootoshiteiru*, as before the start of the action (*yomi*) *oeru*. Therefore, in a strict sense, aspect only indicates the continuation of an event (only sentence 20 whose verb is marked by morpheme *-ir-* from the above examples).

However, if we expand the meaning of aspects of an event to include those immediately before or after an event, we can say such expressions as 18, 19, 21 and 22 above as well as 23 and 24 below are expressions indicating aspects.

23. hon o yomootoshiteiru '(Someone) is about to read a book.'
24. hon o yonda tokoroda '(Someone) has just read a book.'

Here we shall only discuss aspect in the strict sense below.

One seeming peculiarity of Japanese concerning aspect is that in addition to the meaning of a regularly repeated event, or habit, the same linguistic form could indicate two different extra-linguistic phenomena, e.g.,

25. kare wa hon o kaiteiru.
26. kare wa ima denki o keshiteiru.

Sentence 25 usually indicates the continuation of an action, while sentence 26 usually indicates the state resulting from an action. Therefore, sentences 25 and 26 usually mean, respectively:

25a. He is writing a book.

26a. He has turned off the light (so the light is off).

This distinction has been often used as a criterion to categorize Japanese verbs (for instance, see Kindaichi (1950)). However, sentences 25 and 26 can indicate the opposite situation, respectively. Therefore they could also mean:

25b. He has written books (so he has publications).

26b. He is turning off the lights.

We may notice that the assignment of a particular meaning is dependent on the interpretation of the situation. For instance, if the number of books involved in sentence 25 is large, it would be impossible for "him" to be writing them at the same time. Therefore, it should have the meaning of 25b. If the number of lights involved in sentence 26 is just one, then the meaning of 26b is impossible because the action of 'turning off the light' must be done instantaneously.

Furthermore, it is difficult to see to which category (that of *kaku* or that of *kesu* above) some verbs belong, that is, the native speaker may not know exactly what particular action or state these verbs indicate, e.g.,

27. *tatteiru*

28. *suwatteiru*

29. *akai yoofuku o kiteiru*

If we consider such verbs as *tatsu*, *suwaru*, and *kiru*, as belonging to the same category of *kaku*, the above sentences would mean, respectively:

27a. (Someone) is standing.

28a. (Someone) is sitting.

29a. (Someone) is wearing a red dress.

On the other hand, if we consider these verbs as belonging to the category of *kesu*, the same sentences would mean, respectively,

27b. (Someone) has stood up.

28b. (Someone) has sat down.

29b. (Someone) has put a red dress on.

And we note that for either meaning (*a* or *b*), the sentences indicate the exactly same situations.

In short, aspect in Japanese under consideration indicates that the speaker cognates that a particular event or state covers the entire duration of time focused. On the other hand, if the speaker cognates that an event or state only partially overlaps the duration of time focused, then aspect is not marked.² Grammatical aspect marker *-ir-* itself does not directly indicate whether the expression with aspect indicates an action in progress or a state resulting from a change or action but rather the meaning of the grammatical forms is dependent upon the meaning of the particular event or state indicated by the verb phrases in the sentence.

V. Conclusion

We have discussed Japanese tense and aspect semantically in terms of the relationship between the cognition of the speaker and grammatical category. This relationship is presented in the diagram on p. 51. We may add that in order to further clarify this area, we have to analyze the relationship between this system and other cognitive distinctive features such as 'change', 'intention', 'state' and others.

² This is also the case when we use the aspect marker *-ir-* to indicate a habitual action. When we talk about a habitual action, the focused period of time is a long period of time including the utterance time. When the speaker cognates that this action covers the entire period of focused time because it is repeated, aspect is indicated. Meanwhile if the speaker cognates that each action occurs independently, then aspect is not used since each action simply overlaps the focused period partially.

DIAGRAM

Extra-linguistic phenomenon	Cognition	Linguistic form
R	$\subset F \uparrow S$	non-pre
R	$\subset F \rightarrow S$	pre
R	$\not\subset F \uparrow S$	neg, non-pre
R	$\not\subset F \rightarrow S$	neg, pre
R	$\supset F \uparrow S$	asp, non-pre
R	$\supset F \rightarrow S$	asp, pre
R	$\not\supset F \uparrow S$	asp, neg, non-pre
R	$\not\supset F \rightarrow S$	asp, neg, pre

Legend:

- R —event or state
 F —focus
 S —speaking time
 non-pre—non-precive tense form
 pre —precive tense form
 neg —negative form
 asp —aspect marker
 $A \subset B$ — A is included in B
 $A \rightarrow B$ — A precedes B in terms of time
 | —not applicable

Note: If there are two events or states (R_1, R_2), then F represents the focus for R_1 , and S , the focus for R_2 . In this case the linguistic form in the diagram stands for that for R_1 .

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