

A Study on Aspectual Affix *te-ir-u* in Japanese

by
Yoko EDA*

Abstract

The primary objective of this paper is to demonstrate that for the proper analysis of V1 + *te* + V2 combination of Japanese verbs it is essential to regard the first verb in the conjunctive form as a Base Verb or BV and then classify the second verb of this combination as an Aspectual Affix or AA, that combination BV + AA behaves like a single unit and that AA does not take its own arguments. I argue that by examining structure BV + AA as a single unit I can explicate not only the properties of AAs, but also which argument(s) V1 or BV of the structure BV + AA take(s), if I examine the interaction among three AAs such as *teiru*, *tearu* and *teoku* which are connected with BVs.

Key Words: Aspectual Affixes, Base Verbs, Obligatory Adjunct, Grimshaw's and Mester's Argument Transfer, Grimshaw's Argument-Structure and Agent Suppressing Rule

1. Introduction

In this paper, I will argue that the properties of AAs and the argument(s) of BV in the BV + AA combination are correctly explicated if we analyze the structures containing them syntactically. In the previous papers (1996, 1997 and 2001), I have examined *te-aru* and *te-oku*. In this paper I will examine *te-iru* in the BV + AA combination and the interaction among three AAs given above. Kindaichi (1950) first combined Japanese native verbs with AA *te-iru* and classified each verbs into four groups of verbs a) Stative Verbs, b) Continuative Verbs, c) Instantaneous Verbs and d) what he calls Type Four. His classification was based on the behavior, in other words, his classification depends solely on lexical meaning of the verb attached to AA *te-iru*. Accordingly, some problems are left unsolved. For example, *kai-te-iru* (write-AA) has two readings: progressive and perfective. Which group does the verb *kaku* belong, b) Continuous Verbs or c) Instantaneous Verbs? I argue that the problems left unsolved originate in his classifica-

* Professor, Linguistics, Germanics

tion of Japanese verbs based on meanings. Jacobson's (1991) analysis of verbs in Japanese is based on the meaning of AA *te-iru* when combined with verbs.

As I have mentioned in the previous paper (2001), to analyze the structure BV + AA syntactically, it is essential to demonstrate that the structure BV + AA is a single unit and that AA is an auxiliary verb expressing grammatical aspect of the preceding BV. Examples are given below (repeated here as (1))

(1a) V + *te* + V : *hasit-te hanin-o tukamaeru* "to run and arrest the culprit"

(1b) V + *te* + V : *hasi-te-oku* "run-do in advance"

In (1a), the first V *hasiru* and second V *tukamaeru* each takes its own arguments, whereas the second V in (1b) does not take any argument, but expresses a verbal aspect of the first V. The second V as in (1b), I treat as AA belonging to the BV + AA structure if it does not its own argument(s) by itself and forms a very small group of auxiliaries expressing grammatical aspects only. If the second V in (1b) is supposed to be a full verb and takes its own argument(s), it should be regarded as BV, not as AA. The structures I am going to examine are the ones where the second V behaves like an AA, not like a BV. I have given evidence to support that structure BV + AA is a close-knit unit. I (2001) have also mentioned that there seemed to be counterexamples, but when these are examined closely, they are actually not. One such "counterexample" is an insertion of adverbial elements such as *sae* "even," *mo* "too" or *saemo* "even..to." However, this insertion does not affect the "unity" of the structure BV + AA.

My central claims are as follows: (1) structure BV + AA is a single unit, (2) AAs have roles to choose BVs to be combined with, (3) there is a crucial difference between the sentence containing BV only and the sentence containing the same BV combined with AA, (4) by introducing Grimshaw's theory of a-structure for the analysis of aforementioned structure, I can elucidate the difference in meaning/behaviors between the two structures which seem exactly identical in structures, the numbers of arguments and the argument itself, (5) I can explain what arguments the BV in question takes by examining which BV can be combined with which AA.

In 2., I describe BV classification, and in 2.1., I refer to the arguments BV takes. In 3., I will discuss Japanese aspectual affixes and three AAs I have chosen to examine closely, in 3.1., I refer to Grimshaw's argument-structure and a-structure of BV + AA, in 3.2., Argument-Transfer and the structure of BV + AA. In 4., I will discuss the interaction of three AAs and the arguments BV takes VS. the arguments BV + AA takes applying passivization, Agent Suppressing Rule etc. 5 is conclusion.

2. Base Verbs' (or BVs') Classification

As I have mentioned (2001) I classified BVs into following five classes based on arguments each BV takes (repeated here as (2) below). To distinguish arguments which Grimshaw (1990) has adopted, I use capital letters for the arguments which I deal with in this paper.

(2) (a) Ditransitive (AGENT, GOAL, THEME)

John-ga Taro-ni eigo-o osie-ru
John-Nom Taro-Dat English-Acc teach-pres
"John teaches English to Taro."

(b) Transitive (AGENT, THEME)

John-ga mado-o ake-ru
John-Nom window-Acc open-pres
"John opens the window."

(c) Unergative (AGENT)

John-ga hasi-ru
John-Nom run-pres
"John runs."

(d) Unaccusative (THEME)

Hana-ga sak-u
Flower-Nom bloom-pres
"Flowers bloom."

(e) Psych-verb (EXPERIENCER, THEME)

John-ga kaminari-o kowagar-u
John-Nom thunder-Acc scare-pres
"John is scared of thunders."

I adopted this classification because it tells us which verb class takes AGENT as one of its arguments which plays an important role.

2.1. Arguments which BVs take

In the last section, I briefly discussed the verb classification I have adopted and described the arguments that BVs in each Class take. They are AGENT, GOAL, THEME and EXPERIENCER. There should be some more arguments named "beneficiary" or "patient." As I have already mentioned, I argue that to examine the structure

BV + AA and to make a clear distinction between two structures that are seemingly alike, it is important to limit the number of arguments necessary for my discussion.

A BV such as *aker-u* “to open” as in (2b) above takes both AGENT and THEME as its arguments and this BV can be combined with AA *te-oku*, AA *te-aru*, and AA *te-iru*, whereas a BV such as *sak-u* “to bloom” as in (2d) above cannot be combined with AA *te-oku*, nor with AA *te-aru*, but can be combined with AA *te-iru*. In fact AA *te-iru* can be combined with any BV given in (2) above, but the meaning of the structure BV + AA is different. This difference comes from the arguments BV in question takes. Both AA *te-oku* and AA *te-aru* can be combined with any BV which takes AGENT (and THEME). I will discuss the structure BV + AA closely later in this paper. Further I argue that the verb classification based on the argument(s) a BV takes tells us what kind of combinations of BV + AA are grammatically allowed, which combinations of BV + AA are not, and that the argument(s) taken by a specific BV combined with an AA is /are determined by the role of such an AA in the structure BV + AA. In addition, I have discussed in the previous paper that there seems to be another classification based on the subject marker *-ga*, the object marker *-o* etc., whereas the subject marker *-ga* in Japanese does not indicate that the NP that precedes it is the subject, but sometimes shows that the NP can be an object, depending on a specific environment. Examples are given below (repeated here as (3) and (4) below)

(3) Boku-wa mizu-ga hosii
 I-Top water-Nom want-adj
 “As far as I am concerned, water is desired.” (lit.)

(4) Boku-ga mizu-o hoss-u
 I-Nom water-acc want-pres
 “I want water.”

Sentence (3) derives from sentence (4) that underlies (3). Sentence (4) is a literary expression seldom used colloquially, and thus sentence (3) is used instead. *Boku* in (3) is Topic-marked, and it is not an argument. In Japanese, if the BV in a sentence is the BV which takes only argument, the argument is *-ga* marked, in other words, it gets nominative case, irrespective of the kind of the argument the BV in question takes. Thus “case-markers” in Japanese such as *-ga*, *-o* etc., are not always dependable for determining the functions of such “case-marked” NPs in a sentence. On the other hand, to specify the kinds of arguments each BV takes is a very useful device for analyzing the roles of the nouns in a sentence. Finally, there is another type of verbs in Japanese: Sino-Japanese Verbs (hereafter Sino Verbs) whose principal morphemes (usually written in two Chinese characters) are of Chinese origin, with the Japanese verbal element *-suru* “to do” added to them. Together with a light verb *-suru*, they can

function as verbs. They could be either transitive or intransitive. What complicates the nature of the Sino Verbs is the fact that the “verbal stems” written in two Chinese characters sometimes show their internal grammatical relationship typical of Chinese grammar. These two-character verbal stems have their internal structures such as V-NP, V-V, Adv-V and Adj-V. When one deals with such Sino Verbs, there are problems and complications arising from the fact that these Sino verbal stems have their own internal structures. This is the reason I have decided not to include Sino Verbs in the BV of my BV + AA structure.

3. Japanese aspectual Affixes (AAs)

As I have discussed AAs in 1., an AA is always combined with a BV, in other words, an AA is a second V of compound verbs in V1 + V2 construction if this second V functions as an auxiliary which takes no argument itself, loses its original lexical meaning and adds only an aspectual meaning to the preceding BV. (AA *te-oku* VS. BV *ok-u* “to put”)

In this section, I enumerate all the AAs preceded by the particle *te* and the meaning of AAs, then I discuss why I have chosen the following three AAs such as *teiru*, *teoku* and *tearu* to examine the structure BV + AA, where the particle *te* is “tacitly” appearing in the middle of such a structure.

Seven AAs are given below (repeated here as (5))

- (5) (a) *teiru* which has perfective, inchoative, progressive, or iterative meanings, whereas, *iru* as a full verb means “to be.”
- (b) *tesimau* means “finish V1-ing,” whereas *simau* as a full verb means “to put away.”
- (c) *teoku* implies “to do (something) in advance,” whereas *oku* as a full verb means “to put.”
- (d) *tekuru* means a transition process which is perceived to be directed toward the speaker such as *mie-tekuru* (appear-AA) “to become to appear,” whereas *kuru* means “to come.”
- (e) *teiku* also means a transition process being often observed by the speaker, whereas *iku* means “to go.”
- (f) *temiru* means “to try (to do),” whereas *miru* means “to see.”
- (g) *tearu* implies “to have been done,” whereas *aru* means “to be” or “to exist.”

Two AAs, *teiru* and *tesimau* can be combined with any BVs, whereas AA *teoku* can only be combined with BVs which take AGENT (and THEME) as its argument(s) such as *hon-o yon-deoku* (<*yomi-teoku*) (book-Acc-read-AA) “to read the book in advance.” AA *tekuru* is only combined with Unaccusative (and Psych-verb). There is an example

which seems to be combined with a BV taking AGENT and THEME as its arguments given (2001: 25) (repeated here as (6) below.

- (6) Taro-ga hiru-gohan-o tabe-te-kuru-to
 Taro-Nom lunch-Acc eat-AA-return
 “When Taro finished his lunch and returned,”

BV *taberu* in (6) is transitive, but *tabe-te-kuru* is not a structure like BV + AA, but V1-*te* V2, in other words, two verbs are combined, *te* is a conjunct meaning “and,” the whole meaning of *tabe-te-kuru* is “to eat and return.” Thus it is not a counter example.

AA *teiku* can be combined with Unaccusative like *sizun-de* (<*sizumi-te*) *it-ta* “was setting,” but not with a BV like *deru* meaning “the state of coming out.” Let us assume *de-te-iku* has the structure like BV + AA, then it is semantically ill-formed. Because *deru* means “the state of coming out” and *iku* means “to become disappearing from sight.” The combination of “coming out” and “disappearing” is discrepant. AA *tearu* is only combined with a BV which takes both AGENT and THEME as its arguments, though in the combined structure AGENT is suppressed. I will discuss this later in this section.

AA *te-miru* “to try (to do)” is combined with BV which takes AGENT (and THEME).

3.1. Three AAs or *Teoku*, *Tearu* and *Teiru*

In the last subsection, I enumerated seven AAs and discussed which AA is combined with which BV. Out of seven AAs, I have chosen the following three AAs: *teoku*, *tearu* and *teiru*. This is so because the structures BV + AA *teoku*, BV + AA *tearu* and BV + AA *teiru* show us characteristic aspectual affixes (AAs) such as (1) the structure is a close-knit unit, not a compound verb, (2) what role each AA plays in the structure BV + AA, (3) why argument structure is necessary for analyzing the structure BV + AA correctly, (4) AGENT plays an important role for determining the meaning of the structure BV + AA *teiru*, or the structure BV + AA *tearu*, (5) behaviors of three structures such as BV + AA *teoku*, BV + AA *tearu* and BV + AA *teiru* will give us better solutions to the problems, otherwise such solutions must depend solely on the “meaning.” I have examined *tearu* and *teoku* closely in the previous papers (1996 and 1997). I will discuss AA *teiru* closely.

Let us discuss briefly the characteristic of AAs following the numbers given above. As for (1), as I discussed in 1, an AA does not take any argument, has only aspectual meaning and is always combined with a BV. As for (2), an AA “selects” a BV which is combined with, and “adds” an aspectual meaning to the BV to be combined with. As for (3), three AAs give us a clear distinction between AGENT, or an external argument and other arguments or internal arguments. Firstly, AA *teoku* is only combined with a BV which takes AGENT (and THEME) as its argument(s). Secondly, AA *tearu* is only combined with a BV which takes both AGENT and THEME as its Arguments, but the resultant combined structure BV + AA has only THEME as its argument. The resultant

structure is similar to the structure BV + AA *te-iru* where the BV is Unaccusative and takes only THEME as its argument. Examples are given below.

- (7a) John-ga mado-o aker-u
 John-Nom window-Acc open-pres
 “John opens the window.”
- (7b) John-ga mado-o ake-te-ok-u
 John-Nom window-Acc open-AA-pres
 “John opens the window in advance.”
- (7c) mado-ga ake-te-ar-u
 window-Nom open-AA-pres
 “The window has been opened (by someone) / has been left opened.”
- (7d) mado-ga ai-te-ir-u
 window-Nom open (vi.) -AA-pres
 “The window is open.”

As I have mentioned (1997), sentence (7a) whose BV *aker-u* takes AGENT and THEME as its arguments can be passivized, whereas sentence (7b) which contains the structure BV + AA *te-ok-u* cannot be passivized. This is so because AA *te-ok-u* chooses the BV which takes AGENT and THEME as its arguments to be combined with. If sentence (7b) is passivized, AGENT is suppressed and (7b) becomes ungrammatical. This is good evidence to support my claim that AAs choose BVs to be combined with. Let us examine (7c) and (7d) above. Both sentences seems similar superficially: Both BVs take only one argument, namely, THEME and they have the structure BV + AA. But the meanings are different. The differences come from the difference of the internal structures. BV *aker-u* is transitive, but I argue that AGENT must be suppressed (after applied AGENT suppressing Rule to the BV) when *aker-u* is combined with AA *te-ar-u*. As a result *ake-te-ar-u* implies “the change of state,” in other words, someone opened the window, as a result, the window is being left opened. On the other hand, BV *ak-u* in (7d) is Unaccusative, does not take AGENT, thus *ak-u* is only combined with AA *te-iru*. The combined structure *ai-te-iru* means adjectival “to be open,” in other words, the structure in question means only “state of being open.” The difference can be explained if I introduce Grimshaw’s (1990:40) event structure. I will discuss it later in 3.3. Now let us examine the sentence given below.

- (8a) John-ga mado-o ake-te-ir-u
 John-Nom window open-AA-pres
 “John is opening/has opened the window.”
- (8b) John-ga mado-o moo ake-te-ir-u
 John-Nom window already open-AA-pres
 “John has already opened the window.”

Aker-u in sentence (8a) is combined with AA *te-iru*. The combined structure has either perfective, progressive (or iterative) meaning. However, if the structure cooccurs with an adverbial *moo* as in (8b), only one reading is possible. If sentence (8a) cooccurs with another temporal adverbials such as *tugi-kara tugi-e-to*, *ima*, etc., the sentence has only one meaning. The differences in meaning are determined by adverbials such as *moo* “already,” *ima* “now,” *tugi-kara tugi-e-to* “one after another” etc. These adverbials which cooccur with the structure BV + AA *te-iru* where the BV takes AGENT as one its argument(s), I call Obligatory Adjuncts.

As for (4), I discussed above. To sum up, BV which takes AGENT as one of its arguments can be combined with three AAs such as AA *teoku*, AA *tearu* and AA *teiru*. The meaning the structure BV + AA *teiru* is determined by whether BV takes AGENT as one of its argument(s) or not. When the BV in question does not take AGENT, the structure means “state.” When the BV in question takes AGENT, the meaning of the structure BV + AA *teiru* is determined by one of the adverbials such as *ima* “now,” namely, Obligatory Adjunct (hereafter OA). The structure BV + AA *tearu* and the structure BV (when it takes only THEME argument) + AA *teiru* seem to have similar internal structures, as I have already discussed above, the former BV as in (7c) “originally” takes two arguments AGENT and THEME, but AGENT is suppressed when the BV is combined with AA *tearu*. As a result, the structure BV + AA *tearu* takes only THEME argument, meaning “change of state.” On the other hand, the latter BV as in (7d) takes only THEME argument, meaning “state.” Thus the resultant structures are actually different in meaning, though on the surface they look alike structurally because of the suppressed argument AGENT.

As for (5), let us examine the following examples given below.

- (9a) (=7b) John-ga mado-o ake-te-ok-u
 John-Nom window-Acc open-AA-pres
 “John opens the window in advance.”
- (9b) John-ga kono miti-o arui-te-ok-u
 John-Nom this road-ACC walk-AA-pres
 “John will walk this road in advance.”

BVs both in (9a) and (9b) seem to have the same arguments, namely, AGENT and THEME on the surface. Let us assume both BVs are Transitive. If BV in question is Transitive, then the BV can be combined with AA *tearu*. The resultant Sentence which contains BV + AA *tearu* is the same as (7c) above. When BV *aruk-u* in (9b) is combined with AA *tearu*, the sentence containing the structure BV + AA *tearu* will be given as in (10) below.

- (10) *kono miti-ga arui-te-ar-u
 this road-Nom walk-AA-pres

Sentence (10) has become ungrammatical, after AGENT is suppressed after ASR is applied to (10). This shows that *o*-marked NP was not a THEME argument. Thus the resultant sentence (10) has no argument. As I have mentioned in (2) above, BV should have at least one argument. I argue that BV *aruk-u* in (9) is Unergative which takes only AGENT argument. When BV *aruk-u* is combined with AA *tearu*, AGENT must be suppressed by ASR. The resultant structure as in (10) becomes ungrammatical. In fact, *o*-marked NP in (9) is an OA. Let us assume NP in the subject position *John-ga* is AGENT argument because sentence (9b) is grammatical where BV *aruk-u* is combined with AA *te-oku*. If the BV in question is Unergative, BV *aruk-u* can be combined with AA *te-iru* and the structure BV + AA should have either perfective or progressive meaning in a sentence as in (11) below.

- (11) John-ga kono miti-o arui-te-ir-u.
 John-Nom this road-Acc walk-AA pres
 “John is walking / has walked this road.”

Sentence (11) is grammatical and two readings are possible. If the structure cooccurs with an OA like *ima* “now,” sentence (11) has only “progressive” meaning. If sentence

(11) cooccurs with an OA like *moo* “already,” (11) has perfective meaning. Sentences (9), (10) and (11) is good evidence to tell us which argument(s) the BV in question takes. In other words, if the BV can be combined with all three AAs given above, and if each sentence containing the structure BV + AA is grammatical, the BV takes at least two arguments, namely, AGENT and THEME. If the BV can be combined with either AA *teoku* or AA *teiru*, the BV in question takes the only AGENT argument. If the BV in question can be combined with only AA *teiru*, the BV takes the only THEME argument. Lastly, let us examine the sentences containing Psych-verb like *kowagaru* “to be scared of” given below.

- (12a) John-ga kamonari-o kowagar-u
 John-Nom thunder-Acc scare-pres
 “John is scared of thunders.”
- (12b) John-ga kamonari-o kowagat-te-iru
 John-Nom thunder-Acc scare-AA-pres
 “John is scared of thunders.”
- (12c) *John-ga kamonari-o kowagat-te-oku
 John-Nom thunder-Acc scare-AA-pres
- (12d) *kaminari-ga kowagat-te-aru
 thunder-Nom scare-AA-pres
- (12e) *John-ga kowagar-u
 John-Nom scare-pres

Sentences (12a) and (12b) are grammatical, but (12c), (12d) and (12e) are not. Sentence (12c) tells us that *-ga* marked NP is not AGENT. (12d) tells us that an argument other than AGENT is suppressed by ASR and it has become ungrammatical. Compare sentence (12a) with (12e). Sentence (12e) is devoid of a necessary argument, namely, a THEME argument, and (12e) becomes ungrammatical. Sentence (12b) is grammatical, but (12b) does not have progressive meaning nor perfective meaning. *Kowagat-te-ir-u* means “state.” From the data given in (12), we can tell that BV *kowagar-u* is a Psych-verb which takes EXPERIENCER and THEME as its arguments. This is the reason I have chosen such three AAs.

3.2. Argument Structure and A-Structure of the Structure BV + AA

In (1), I have argued that the structure BV + AA is a close-knit single unit, though a couple of adverbs such as *sae* “even,” *mo* “too,” and *saemo* “even ... too” can be inserted right after the particle *te* and that AA or V2 is regarded as an aspectual affix (AA) which does not take its own argument. As I have already mentioned Grimshaw’s Argument Structure (hereafter a-structure) and Grimshaw’s and Mester’s Argument Transfer in the previous paper (2001), I will explain briefly the theory of Argument Transfer and how I modify this theory to make it for analyzing the structure BV + AA in 3.2.1. In 3.2.2., I will briefly explain Grimshaw’s a-structure and show how her theory is applied to the structure BV + AA.

3.2.1. Argument Transfer and the Structure BV + AA

Grimshaw’s and Mester’s theory of Argument Transfer (1988) is a theory to explore

the predicate-argument complex associated with *suru* “to do” and to show that its properties can be derived from the interaction of complex predicate formation with a particular theory of a-structure representation. Complex predicate is formed by the combination of Sino-Verbs and light verb *suru* “to do.” According to Grimshaw and Mester, irrespective of internal structures of Sino-Verbs, their *suru* complex is a combination of original Sino-Verbs + *suru*, where Sino-Verbs behave like the nominal theta-marker or noun, and *suru* is thematically incomplete or “light,” thus the noun “lends” argument(s) to *suru*, turning *suru* into a theta-marker. They say that there are two argument transfers: (1) Complete Transfer where *suru* absorbs all arguments of the noun, leaving the Noun with no theta-marking capacities. In this case all arguments are theta-marked by the Verb *suru*. The illustration (16) in their paper is given here as

(13) below. (2) Partial Transfer where noun such as *keikoku* “warn” retains the Theme role, and the transitive verb *suru* assigns the transferred roles Agent and Goal outside NP. Their illustration (13) is given here as (14) below.

- (13) (=16) a. *keikoku* (Agent,Goal,Theme)
 b. *suru* () <acc>
 c. *keikoku* () + *suru* (Agent, Goal, Theme) <acc>

- (14) (=13) a. *keikoku* (Agent,Goal,Theme)
 b. *suru* () <acc>
 c. *keikoku* (Theme) + *suru* (Agent, Goal) <acc>

As I have discussed the structure BV + AA being a close-knit single unit and an AA being an affix, not taking argument(s), I assume all the argument(s) BV takes is /are transferred to the structure BV + AA, (not just an AA). In other words, I assume Complete Transfer when a BV is combined with an AA.

3.2.2. Grimshaw’s Argument-Structure and the Structure BV + AA

As I have mentioned Grimshaw’s theory of Argument-Structure in the previous paper (2001: pp. 33ff.), I explain her theory briefly: a-structure is a structured representation which represents prominence relations among arguments. The prominence relations are jointly determined by the thematic properties of the predicate (via the thematic hierarchy) and by the aspectual properties of the properties. The external argument is the most prominent, and the internal arguments also have prominence relative to each other. She gives three pieces of evidence for positing a structured a-structure: theta-marking in a light verb, compound constructions and the behavior of the psychological verbs. She claims the structured a-structure has two dimensions: the Thematic Dimension and the Aspectual Dimension. As I have pointed out, Grimshaw’s

a-structure contains no information about particular theta-roles but only information about the relative prominence of the arguments. Hence, two verbs with different theta-roles but the same prominence relations will be indistinguishable as far as a-structure is concerned. A pair of verbs cited from Grimshaw (1990: 8) are given below.

(15) (=2) *murder* (x (y))
Agent Theme

(16) (=3) *fear* (x (y))
Exp. Theme

For an agentive verb like *murder*, a-structure prominence relations are those given in (15) above. For an agentive verb, the Agent is always the most prominent argument. The same prominence relations hold for psychological verbs like *fear* as in (16) above. In (16) the Experiencer is the most prominent argument and the Theme is less prominent. However, those two verbs have the same a-structure prominence relations. Grimshaw claims that if we look at the verbs mentioned above from aspectual dimension, the difference between Agent argument and Experiencer argument is distinguishable, namely, Agent is always the most prominent argument thematically and aspectually, whereas Experiencer in (16) is the most prominent thematically but not aspectually. She claims that she explores the interaction of thematic prominence with aspectual prominence, developing a theory of one class of the psychological predicates which explains many of their properties, and she thinks that this leads to a theory external arguments which predicts properties of externals. Thus her theory will ultimately give us a clue to explain the grammatical behavior of various verb classes in Japanese. Accordingly Grimshaw's theory of hierarchically structured a-structure offers solutions to the problems concerning external arguments of both English and Japanese verbs.

According to Grimshaw (1990: 40), the aspectual dimension is a projection of an abstract event structure (e), which always includes two subparts, the first sub-event act (<activity) and the second sub-event (s / cos (< state or change of state)) given as in (17) below.



She claims that event template in (17) determines prominence, assigning the maximally prominent position in the aspectual dimension to an argument participating in the first sub-event, regardless of the actual lexical semantic representation of the predicate. If all events are constrained by this template, activities will always fit the first slot

in the template, and an existential state or a change of state will always fit the second slot. Thus the single argument of an unaccusative verb will never count maximally prominent and will never qualify as external.

Here I pick up three answers or solutions given by Grimshaw, which are closely related to the explication of the properties of the structure BV + AA. Firstly, theta-marking gives an answer to the definition of an external argument, since theta-marking always proceeds from the least to the most prominent, namely, to the external argument. Secondly, an external argument is the most prominent aspectually and thematically. Thirdly, from the two dimensional account we can predict whether a predicate has an external argument or not, and if so, which of its arguments qualifies.

How should I modify Grimshaw's a-structure? To examine the structure BV + AA under the theory of a-structure, I have given evidence that structure BV + AA is a single unit and behaves like a single verb. Because her theory of a-structure is a structured representation which represents prominence relations among arguments which "verbs" take. The same prominence relations hold for the structure BV + AA. As I have discussed above, I assume all the argument(s) BV takes is /are transferred to the structure BV + AA when a BV is combined with an AA and behaves like a single verb. In other words, I assume Complete Transfer when a BV is combined with an AA. What I want to point out here is that the number and the kind of argument (s) each BV takes is the same as the structure BV + AA takes when the BV in question is combined with an AA in question. However, the behavior of the structure BV + AA and that of single BV are not identical. For example, if a BV is Transitive and takes AGENT and THEME as its arguments, such as *aker-u* "to open," the sentence containing the BV can be passivized, whereas the sentence contains the structure BV *aker-u* + AA *teoku*, namely, *ake-te-oku*, cannot.

4. The interaction of Three AAs and Argument (s) BV Takes

I have discussed the argument(s) which single BV takes and the argument(s) which the structure the BV in question + AA takes. I have also discussed that whether the sentence which contains the structure BV + AA becomes grammatical or not is determined by whether the AA has chosen the BV which can be combined with. For example, AA *te-oku* must always be combined with a BV which takes AGENT (and THEME) as its argument(s). Thus sentence which contains the structure Unaccusative BV + AA *te-oku* becomes ungrammatical. Since each AA chooses a BV /BVs to be combined with, I argue that whether the sentence containing the structure BV + AA is grammatical or not is determined by what argument(s) each BV takes, and that by comparing a sentence containing the structure the same BV + AA *te-iru* with another sentence containing the structure the same BV + AA *te-oku* or AA *te-aru*, we can tell the arguments the BV in question takes. For example, if a sentence containing BV *aruk-u*

“to walk” +either AA *teiru* or AA *te-oku* is grammatical, but a sentence containing the same BV + AA *te-aru* is not, we can tell that the BV in question takes only AGENT as its argument. The difference between sentence (7c) and (7d) above can be explained by introducing Grimshaw’s abstract event structure repeated here as (18a) and (18b) respectively shown below.

- (18a) (=7c) mado-ga ake-te-ar-u
 window-Nom open-AA-pres
 “The window has been opened (by someone)/
 has been left opened.”
- (18b) (=7d) mado-ga ai-te-ir-u
 window-Nom open (vi.) -AA-pres
 “The window is open.”

The structure BV + AA in (18a) shows the second sub-event, namely, change of state, whereas the structure BV + AA in (18b) shows the sub-event, namely, state. As I have mentioned above that each AA chooses the BV, and that a sentence containing a BV which takes both AGENT and THEME as its arguments and a sentence containing the structure the same BV + AA *te-oku* behave differently. The former sentence containing a single BV can be passivized and the resultant sentence is grammatical, while AA *te-oku* does not “allow” to be passivized if the BV in question is combined with AA *te-oku*. Because AA *te-oku* can only be combined with a BV which takes AGENT (and THEME). Passivization must suppress AGENT (or Williams’ (1987a) Implicit Argument). As for Psych-verbs, as I have discussed in 3.1., by combining each three AAs with the BV, we can solve the problems. There is one more problem which is left unsolved, given by Kindaichi (1993). Let us examine the following two sentences given below.

- (19) John-ga ano kado-o magat-te-iru
 John-Nom that corner-Acc turn-AA-pres
 “John is turning / has turned the corner.”
- (20) kono miti-ga magat-*te-iru*
 this road-Nom winding-Adj
 “This road is winding.”

Sentence (19) has either progressive or perfective meaning. This tells us that *magar-u* “to turn” takes AGENT, but does not tell the kind of *o*-marked NP, namely, whether it is THEME or OA. To examine the *o*-marked NP, we combine AA *te-aru* with it. As we have already seen, AGENT argument must be suppressed when the BV in question is com-

bined with AA *te-aru*. The resultant sentence is given below.

- (21) *ano kado-ga magat-*te-aru*
 that corner-Nom Adj-AA-pres

Sentence (21) tells us the original *o*-marked NP is raised to the subject position when AGENT is suppressed and that *ano kado-ga* in sentence (21) is not THEME argument. As a result, (21) becomes ungrammatical, in other words, it does not show the second sub-event, namely, change of state. Because the resultant sentence (21) has no argument. On the other hand, sentence (20) means “state.” Sentence (20) seems to be similar to sentence (21), but by comparing the structure BV + AA *te-iru* with the structure BV + AA *te-aru* or the structure BV + AA *te-oku*, we can tell that which class of BV it is. Thus I claim that by examining the structures BV + AA *te-iru* / AA *te-aru* / AA *te-oku* and by comparing the sentences containing the structure BV + one of three AAs I have chosen one by one, we can tell the argument(s) that the BV in question in the structure BV + AA takes. We can tell the difference between the sentence containing the structure BV + AA *te-aru* and the sentence containing the structure BV + AA *te-iru* assuming each BV takes one argument, namely, THEME. Though both sentences are grammatical, it does not mean they have the same internal structures. We can tell the differences in meaning by introducing Grimshaw’s abstract event structure.

4.1. *furu* as in *Ame-ga furu-u*.

As I have mentioned in 3.1., the meaning of the sentence containing the structure BV + AA *te-iru* where the BV takes AGENT as one its arguments is determined by the insertion of an OA such as *moo* “already,” or *ima* “now.” On the other hand, if the BV in the structure BV AA *te-iru* does not take AGENT, the sentence containing the structure BV + AA *te-iru* has only one reading, namely, “state.” But the following examples seem to be counterexamples.

- (22a) Yuki-ga fut-te-iru
 snow-Nom snow-AA-pres
 “It is snowing/It has snowed.”

- (22b) Yuki-ga ima/moo fut-te-iru
 snow-Nom now/already snow-AA-pres
 “It is now snowing (progressive)./It has already snowed (perfective).”

- (23a) Ame-ga fut-te-iru
 rain-Nom rain-AA-pres
 “It is raining./It has rained.”

- (23b) Ame-ga ima/moo fut-te-iru
 rain-Nom now/already rain-AA-pres
 “It is now raining (progressive)./It has already rained (perfective).”

In (22) and (23), the structure BV *furu* (“to snow,” “to rain” respectively) + AA *te-iru* has either progressive or perfective reading. The meaning is determined by adding OA such as *ima* ‘now’ or *moo* ‘already.’ In my analysis, if the structure BV + AA *te-iru* has either progressive or perfective reading, the BV in question has AGENT as its argument. If the BV takes AGENT as its argument, as in (22) and (23), the BV can be combined with AA *te-oku*. Examples are given as in (24) below.

- (24a) *Yuki-ga fut-te-oku
 snow-Nom snow-AA-pres
- (24b) *Ame-ga fut-te-oku
 rain-Nom rain-AA-pres

Why are both (24a) and (24b) ungrammatical? Because each BV in (24a) and (24b) does not have AGENT as its argument, but THEME as its argument. If the BVs in question have no AGENT, the structure BV *fur-u* + AA *te-iru* shows only “state,” but not progressive nor perfective. (22) and (23) seem to be counterexamples. But if we examine them closely, the BV *fur-u* is combined with the subject-noun which expresses ‘weather’ such as *yuki* “snow,” *ame* “rain,” *hyou* “hail,” or *arare* “hail.” As in (22) and (23), the number is limited. In addition, if we assume the BV *fur-u* has AGENT as its argument, it can be combined with AA *te-oku* and the sentence containing the structure BV *fur-u* + AA *te-oku* must be grammatical. But as we have seen in (24a) and (24b), the sentences have become ungrammatical. As a result, we can tell that the argument the BV takes is THEME, not AGENT. In English, the same interpretations are possible as in (22) and (23). Thus BV *fur-u* is not a counterexample. My claim holds for proper analysis.

5. Conclusion

I have demonstrated that for proper analysis of the V + *te* + V construction it is essential to regard the first V as a BV and the second V as an AA if the second verbal element (AA) expresses a very limited range of aspectual meaning such as perfective, progressive, iterative etc. There is a clear distinction between a compound verb like *hasit-te-yasumu* (run-and-rest) and the structure BV + AA like *hasit-te-iru*. Each V in a compound verb takes its own argument(s), whereas the second V, namely, AA in the structure BV + AA does not take any argument, but adds an aspectual meaning to the

preceding verb BV (=V1) which expresses the “core lexical meaning” of the V + *te* + V construction and *te* between BV and AA is used as a bound morpheme, that is, semantically an empty morpheme. The structure BV + AA behaves like a single unit and AA does not take any argument(s). Though both the structure BV + AA and the same single BV takes the same kind of argument(s), each sentence containing either the single BV or the structure BV + AA is different in meaning. These differences are derived from structural differences and they can be explained by introducing Grimshaw’s a-structure and abstract event structure, and applying Grimshaw’s and Mester’s Argument Transfer to the structure BV + AA. The problem has been solved by introducing an OA to the structure BV + AA *te-iru* like *ake-te-iru* which has two readings: perfective and progressive. When the structure in question cooccurs with an OA like *ima* “now,” *ake-te-iru* has only progressive meaning. It is a good device to solve the sentence which has either progressive or perfective meaning. In addition, if the structure BV + AA has either progressive or perfective meaning, the BV in the structure BV + AA *te-iru* should have at least AGENT argument as its argument. If the BV in question has an AGENT argument, the BV can be combined with AA *te-oku*, and the sentence containing the structure BV + AA *te-oku* should be grammatical. Only exception is BV *furu* whose subject NP always expresses “weather” such as *ame* “rain,” *yuki* “snow,” *arare* “hail,” or *hyou* “hail.” BV *furu* seems to be a counterexample. Because the NP which occupies the subject position in a sentence containing BV *furu* + AA *te-iru* is not AGENT. As we have seen in (22) and (23), the same thing is true of English. I do not regard *furu* as a counterexample. Abstract event structure also gives us a solution to explain the differences between sentence (7c) and sentence (7d).

Ogihara (1996) tried the ambiguity of AA *te-iru* semantically, I claim that syntactic analysis will give us better solutions if I first give evidence that the structure BV + AA behaves like a single unit, secondly if I apply Argument (complete) Transfer to the structure BV + AA. When the combined structure is ambiguous in meaning, I can give the solution by introducing OA to the structure BV + AA *te-iru*. The structural differences between (7c) and (7d) are: AGENT is suppressed by ASR when BV *aker-u* is combined with AA *te-aru* and the resultant structure *ake-te-aru* has only THEME in (7c). On the other hand the structure BV + AA, namely, *ai-te-iru* has only THEME argument and ASR is not applicable to the structure. BV *ak-u* in (7d) is Unaccusative and nothing affects the structure BV + AA in question. AGENT plays an important role in the structure BV + AA *te-iru* and the structure BV + AA *te-aru*.

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