

# Grammaticalization within *Saru*-compounds in Japanese

Naoko TAKAHASHI

## 1. Introduction

This paper will discuss the hypothesis that the verbal morpheme *saru* [literally ‘leave; go away; quit; be away,’ and so forth] within lexical compounds in Japanese undergoes a grammaticalization process. This analysis is supported by the discussion with respect to the grammaticalization of the other verbal morphemes *komu* [literally ‘get into; do something thoroughly,’ and so forth] and *dasu* [literally ‘give; hold out; stick out; expose,’ and so forth] within lexical compounds in Takahashi (2009, 2011).

Kageyama (1993, 1996) suggests that there are exceptions to the Transitivity Harmony Principle regarding lexical compounds in Japanese. The rule defines that verbal morphemes in lexical compounds are amalgamated with certain regulations based on *argument structure*. One of the regulations indicates that a transitive verb can be combined with an unergative verb or another transitive verb, but not with an unaccusative verb. Some of the lexical compounds with the morpheme *saru* as a second element of lexical compounds are exceptions to these amalgamation processes. This paper assumes that the *sasu*-compounds does not follow the Transitivity Harmony Principle because the morpheme *saru* undergoes grammaticalization within

its lexical compounds. In order to prove this assumption, this paper will investigate the syntactic and semantic properties of this morpheme within its compounds.

First, Section 2 will analyze the data with *sasu*-compounds by examining the transitivity and unaccusativity of *sasu* itself and its compounds. In Section 3, we will investigate the aspectuality of *saru*. Section 4 will discuss whether the morpheme *saru* in lexical compounds indicates directionality like the other morphemes *komu* and *dasu*. Finally, Section 5 will summarize this paper. <sup>1</sup>

## 2. Syntactic properties of *saru*-compounds

There are about twenty examples of *saru*-compounds in Modern Japanese (Daijirin 2005). This verbal morpheme can be either a transitive verb or an intransitive verb occurring with the meaning of ‘go away,’ ‘leave,’ ‘quit,’ and ‘be away.’ That shows that the morpheme *saru* denotes a situation that ‘a thing or an agent is away:’

- (1) a. Taro-ga shoku-o sar-u (transitive)  
Taro-Nom job-Acc go.away-Pre  
‘Taro retires from a post.’
- b. Natsu-ga sar-u (intransitive)  
summer-Nom go.away-Pre  
‘The summer is going away.’

The following data shows the categorizations of *saru*-compounds based on the transitivity and unaccusativity of the first elements of the compounds, V1s:

- (2) Group 1 transitive verbs + *saru*
- a. tsure-sar-u  
take-saru-Pre  
‘take (a person) away; kidnap’

- b. mochi-sar-u  
have-saru-Pre  
'take [carry] away'
  - c. keshi-sar-u  
erase-saru-Pre  
'erase'
  - d. nugui-sar-u  
wipe-saru-Pre  
'remove; wipe off'
  - e. wasure-saru  
forget-saru-Pre  
'forget'
  - f. sute-sar-u  
throw.away-saru-Pre  
'throw away'
  - g. hounuri-sar-u  
bury-saru-Pre  
'bury; shelve'
  - h. tori-sar-u  
take-saru-Pre  
'remove; get rid of; take away'
  - i. nuki-sar-u  
remove-saru-Pre  
'remove; pass; get ahead'
- (3) Group 2 unergative verbs + *saru*
- a. tachi-sar-u  
leave-saru-Pre  
'leave; go off [away]'
  - b. tobi-sar-u (1)  
fly-saru-Pre  
'fly away [off]'
  - c. nige-sar-u  
escape-saru-Pre  
'run away; escape'
  - e.g. Hito-ga tobi-sar-u  
people-Nom fly-saru-Pre  
'People fly away.'

- d. hashiri-sas-u  
run-saru-Pre  
'run off [away; along]'

(4) Group 3 unaccusative verbs + *saru*

- |  |   |
|--|---|
| <p>a. sugi-sar-u<br/>pass-saru-Pre<br/>'pass away; pass by'</p>    | <p>e.g. Toki-ga sugi-sar-u<br/>time-Nom pass-saru-Pre<br/>'Time flies.'</p>                       |
| <p>b. hiki-sar-u<br/>withdraw-saru-Pre<br/>'take [carry] away'</p> | <p>e.g. Shio-ga hiki-sar-u<br/>tide-Nom withdraw-saru-Pre<br/>'The tide is out.'</p>              |
| <p>c. kie-sar-u<br/>disappear-saru-Pre<br/>'disappear'</p>         | <p>e.g. Omoide-ga kie-sar-u<br/>memory-Nom disappear-saru-Pre<br/>'The memory disappears.'</p>    |
| <p>d. tobi-sar-u (2)<br/>fly-saru-Pre<br/>'fly away [off]'</p>     | <p>e.g. Tekki-ga tobi-sar-u<br/>enemy's.plane fly-sar-Pre<br/>'The enemy's plane flies away.'</p> |

Now, we need to take into account whether there are any cases which violate the Transitivity Harmony Principle. According to Kageyama (1993), there are four patterns that do not follow the principle:

- (5) a. \*unaccusative + transitive  
b. \*unaccusative + unergative  
c. \*transitive + unaccusative  
d. \*unergative + unaccusative

First, let us check the unaccusativity of the independent intransitive *saru* verb carefully using the following examples:

- (6) a. Toki-ga sar-u  
time-Nom saru-Pre  
'Time flies.'
- b. Shio-ga sar-u  
tide-Nom saru-Pre  
'The tide is out.'
- c. Omoide-ga sar-u  
memory-Nom saru-Pre  
'The memory fades.'

- d. Tekki-ga sar-u  
 enemy's.plane-Nom saru-Pre  
 'The enemy's plane is away.'

Now, we apply the *te-morau* 'have someone to do' test (Kageyama 1993) to the data in (6) in order to check whether *saru* in (6) is an unaccusative or unergative verb:

- (7) a. \*John-ga toki-ni sat-te-mora-u  
 John-Nom time-Dat saru-Conj-have-Pre  
 '[lit.] John has the time go away.'
- b. \*John-ga shio-ni sat-te-mora-u  
 John-Nom tide-Dat saru-Conj-have-Pre  
 '[lit.] John has the tide go away.'
- c. \*John-ga omoide-ni sat-te-mora-u  
 John-Nom memory-Dat saru-Conj-have-Pre  
 '[lit.] John has the memory disappear.'
- d. ?John-ga tekki-ni sat-te-mora-u  
 John-Nom enemy's.plane-Dat saru-Conj-have-Pre  
 '[lit] John has the enemy's plane go away.'

Thus, the test above shows that an independent intransitive verb *saru* itself could be unaccusative not unergative since it cannot occur with *te-morau* 'have someone to do.' If this is correct, the combination pattern between two unaccusative verbs in (4) is perfectly fine. However, the patterns in (2) and (3) would have a problem. Let us examine the combination pattern in (2) carefully:

- (8) transitive verbs + *saru*
- a. Taro-ga Hanako-o tsure-sar-u  
 Taro-Nom Hanako-Acc bring-saru-Pre  
 'Taro takes Hanako away.'
- b. Taro-ga omoide-o wasure-saru  
 Taro-Nom memory-Acc forget-saru-Pre  
 'Taro forgets the memory.'

- c. Taro-ga sakana-kara hone-o nuki-sar-u  
 Taro-Nom fish-from bone-Acc remove-saru-Pre  
 ‘Taro removes bones from the fish.’

If we take the V1s from the sentences in (8), the sentences in (8') become ungrammatical:

- (8') a. \*Taro-ga Hanako-o sar-u (compare with *tsure-saru*  
 Taro-Nom Hanako-Acc saru-Pre ‘take away’)  
 ‘[lit] Taro leaves Hanako.’
- b. \*Taro-ga omoide-o saru (compare with *wasure-saru*  
 Taro-Nom memory-Acc saru-Pre ‘forget’)  
 ‘?Taro leaves the memory.’
- c. \*Taro-ga sakana-kara hone-o sar-u (compare with *nuki-*  
 Taro-Nom fish-from bone-Acc saru-Pre *saru* ‘remove’)  
 ‘?Taro leaves bones from the fish.’

The results above shows that at least the morpheme *saru* in *saru-* compounds in (2) or (8) is not a transitive verb since the combination pattern of “a transitive verb plus a transitive verb” has to be acceptable. Moreover, there might be a strong possibility that *saru* in (8) cannot be an unaccusative verb, either, since the combination pattern of “a transitive verb plus an unaccusative verb” is not allowed in the Transitivity Harmony Principle. Therefore, we can conclude that the morpheme *saru* in (2) and (8) is neither transitive nor unaccusative.

Next, let us examine the combination pattern in (3):

- (9) unergative verbs + *saru*
- a. Taro ga koko-kara tachi-sar-u  
 Taro-Nom here-from leave-saru-Pre  
 ‘Taro leaves here.’
- b. Taro-ga hashiri-sar-u  
 Taro-ga run-saru-Pre  
 ‘Taro runs away.’

If we take the V1s from the sentences in (9), the sentences in (9') are still grammatical:

- (9') a. Taro ga koko-kara sar-u (compare with *tachi-saru* 'leave')  
 Taro-Nom here-from saru-Pre  
 'Taro leaves from here.'
- b. Taro-ga sar-u (compare with *hashiri-saru* 'run away')  
 Taro-ga saru-Pre  
 'Taro leaves.'

These results show that *saru* in (3) or (9) could be an unergative verb or possibly a transitive verb because the sentences in (10) are still well-formed if we add accusative noun phrases to the sentences in (9'):

- (10) a. Taro ga shokuba-o sar-u (compare with *tachi-saru*  
 Taro-Nom work.place-Acc saru-Pre 'leave')  
 'Taro leaves his work place.'
- b. Taro-ga Nihon-o sar-u (compare with *hashiri-saru*  
 Taro-ga Japan-ACC saru-Pre 'run away')  
 'Taro leaves Japan.'

Thus, in addition to the unaccusative *saru*, we might have the unergative or transitive *saru* as an independent verb. If *saru* can be an unergative verb, the amalgamation between two unergative verbs is perfectly fine with respect to the Transitivity Harmony Principle. In addition, if *saru* can be a transitive verb, the amalgamation between an unergative verb and a transitive verb is also perfectly fine with respect to the Transitivity Harmony Principle.

However, we should consider why the morpheme *saru* can be unaccusative in (4), possibly unergative in (2), and unergative or transitive in (3). One possible assumption is that *saru* might have identical forms which have different types of unaccusativity or transitivity in its lexical compounds; *saru* can be an independent unaccusative, unergative or transitive verb. Another possible assumption is the morpheme *saru* might be undergoing its grammaticalization and the morpheme shifts its unaccusativity or transitivity freely in its lexical compounds depending on the types of V1s

in its compounds.

This paper argues that *saru* is losing its power to show its unaccusativity or transitivity in its compounds. That is why the morpheme *saru* can attach to all of unaccusative, unergative and transitive verbs. If this assumption is correct, it is possible to state that the morpheme *saru* is undergoing grammaticalization from a verbal free morpheme to a bound morpheme. That is, *saru* itself cannot control the transitivity or unaccusativity of the whole sentences; the morpheme *saru* does not have its own transitivity or unaccusativity in its compounds. It does not have its *argument structure*, either. Thus, it is reasonable to state that *saru* in (2), (3), and (4) behaves like a suffix in a certain sense and we can call the morpheme *saru* “a bound verb.”

### 3. Semantic properties of *saru*-compounds

In this section, we discuss the aspectual properties of the verbal morpheme *saru*. First, we attempt to choose some data of *saru*-compounds in (2), (3), and (4) and apply Toratani’s (1998) aspectual diagnostic test to them determining aspectual verb classes of them:

**Table 1 Diagnostic tests for determining verb classes of *saru* compounds**

	Criterion [( ) shows aspectual classes of verbs.]	1. <i>for</i> -test (occurs with <i>san-jikan</i> 'for three hours')	2. <i>in</i> -test (occurs with <i>san-jikan</i> <i>de</i> 'in three hours')	3. <i>owar</i> - test (forms a com-pound with <i>owar</i> - 'finish')	4. occurs with <i>yukkari</i> 'slowly'	5. occurs with <i>jyo-jyo-ni</i> 'gradually'	6. <i>te-iru</i> - test (compati- ble with <i>te-iru</i> 'TE-exist')
(2)	transitive <i>motsu</i> 'have' (activity)	Yes	No	No	No	No	Yes
	transitive <i>mochi-saru</i> 'forget' (accomplishment)	No	Yes	N/A	No	Yes	Yes
	transitive <i>nuku</i> 'remove' (accomplishment)	No	Yes	Yes	Yes	Yes	Yes
	transitive <i>nuki-saru</i> 'remove' (accomplishment)	No	Yes	N/A	Yes	Yes	Yes

(3)	unaccusative <i>sugiru</i> 'pass' (accomplishment)	No	Yes	No	Yes	Yes	Yes?
	unaccusative <i>sugi-saru</i> 'pass' (accomplishment)	No	Yes	N/A	Yes	Yes	Yes
	unaccusative <i>kieru</i> 'disappear' (accomplishment)	No	Yes	No	Yes	Yes	Yes
	unaccusative <i>kie-saru</i> 'disappear' (accomplishment)	No	Yes	N/A	Yes	Yes	Yes
(4)	unergative <i>hashiru</i> 'run' (activity)	Yes	No	Yes	Yes	No	Yes
	unergative <i>hashiri-saru</i> 'run off' (accomplishment)	No	Yes	N/A	Yes	Yes?	Yes
	unergative <i>nigeru</i> 'escape' (activity)	Yes	No?	Yes	Yes	No	Yes
	unergative <i>nige-saru</i> 'escape' (accomplish.)	No	Yes	N/A	Yes	Yes	Yes?

OK = The sentence is grammatical and semantically normal.  
 bad = The sentence is ungrammatical and semantically anomalous.  
 d.n.a. = The test does not apply to verbs of this class.

The data above shows that *saru* triggers a [+telic] interpretation for all activity verbs; when activity verbs, such as *motsu* 'have,' *hashiru* 'run,' and *nigeru* 'escape,' amalgamate with *saru*, the *saru* compounds become an accomplishment (compound) verb. Thus, the result shows that *saru* can add [+telic] features to the VIs. The result of the aspectual test is shown below:

**Table 2 Aspectual relations between *saru*-compounds and their VIs**

V1 in <i>saru</i> -compounds	<i>saru</i> -compounds along with the interpretation 'leave/go away'
activity	accomplishment
accomplishment	accomplishment

#### 4. Directionality with *komu*, *dasu*, and *saru*

Finally, we consider the relationship between directionality and the three verbal morphemes *komu*, *dasu*, and *saru*. These three morphemes are

carrying a certain type of directionality and they are associated with some postpositional phrases which can imply directionality; *komu* triggers *ni* ‘to’ phrases, and *saru* triggers *kara* ‘from’ phrases, and *dasu* triggers both. For instance, the following V1s occur with any of them and become lexical compounds:

- (11) with a transitive verb
- |               |               |               |
|---------------|---------------|---------------|
| mochi-kom-u   | mochi-das-u   | mochi-sar-u   |
| have-komu-Pre | have-dasu-Pre | have-saru-Pre |
| ‘bring in’    | ‘take out’    | ‘take away’   |
- (12) with a transitive verb
- |               |               |               |
|---------------|---------------|---------------|
| hiki-kom-u    | hiki-das-u    | hiki-sar-u    |
| pull-komu-Pre | pull-dasu-Pre | pull-saru-Pre |
| ‘draw into’   | ‘draw out’    | ‘take away’   |
- (13) with an unaccusative/unergative verb
- |              |              |              |
|--------------|--------------|--------------|
| tobi-kom-u   | tobi-das-u   | tobi-sar-u   |
| fly-komu-Pre | fly-dasu-Pre | fly-saru-Pre |
| ‘enter’      | ‘rush out’   | ‘fly away’   |
- (14) with an unergative verb
- |                 |                 |                 |
|-----------------|-----------------|-----------------|
| nige-kom-u      | nige-das-u      | nige-sar-u      |
| escape-komu-Pre | escape-dasu-Pre | escape-saru-Pre |
| ‘run into’      | ‘run away’      | ‘run away’      |

One of the differences between *komu* and *dasu/saru* is that *komu* is connected to an inward or incoming event whereas *dasu* and *saru* are connected to an outward or outgoing event. In all cases, it seems that these morphemes inherently possess the meanings of directionality. In addition, this directionality can be extended by the event that the first verbal morpheme describes, especially when the V1s are motion verbs.

Also, let us think about some cases in which V1s do not involve directionality. Some V1s in lexical compounds, such as *abareru* ‘storm into,’ *donaru* ‘shout,’ and *shaberu* ‘chat,’ show this case. However, the interpretations of directionality do occur with these V1s once these V1s are amalgamated with *komu*, *dasu*, and *saru*. We could assume that it is

because these three morphemes have inherent meanings of directionality.

The interpretation of directionality also affects the aspectual properties as we saw in the previous section. These three morphemes are inherently [+telic] (Takahashi 2009, 2001). Therefore, lexical compounds with these morphemes can belong to the accomplishment category.

Related to this, Kageyama (1993:135) points out that *saru* does not amalgamate with a verbal morpheme which denotes a simple action. On the other hand, it seems that *komu* and *dasu* do. It means that the interpretation of directionality is basically required for the V1s before they amalgamate with the morpheme *saru* in its compounds. Accordingly, it might be plausible to say that, compared to *saru*, *komu* and *dasu* are more productive in terms of their syntactic properties and freely attach to several kinds of verbs. However, again, *komu* consistently shows a movement from outside to inside. *Dasu* shows a movement from inside to outside. Although some could be more productive than others, we can at least state that these three morphemes definitely involve directionality.

## 5. Concluding remarks

This paper has demonstrated that *saru*-compounds do not always follow the Transitivity Harmony Principle. However, it concludes that the morpheme *saru* could be undergoing its grammaticalization and is changing from an independent verb to a bound verb. Thus, we could show the same syntactic characteristics of *saru*-compounds as those of *komu*-compounds and *dasu*-compounds (Takahashi 2009, 2011).

Regarding the aspectual properties of *saru*, we also have the same result as the morphemes *komu* and *dasu* show (Takahashi 2009, 2011). All of them trigger [+telic] interpretations. Finally, we discussed that these three morphemes involve directionality and add the interpretations of a certain

movement to their VIs.

In sum, all these three morphemes in their lexical compounds do not behave like single verbs. They have changed or are still changing from independent verbs to bound verbs that have lost their syntactic *argument structure*.

## Note

1. This is a simplified version of one chapter in Takahashi (2006). I am grateful to Dr. John Haig at the University of Hawaii at Manoa for giving me important feedback on this paper. Moreover, I thank Mr. Paul Crane at the Nagoya University of Foreign Studies for his editorial help. Needless to say, all the mistakes and shortcomings in this paper are mine.

## References

- Kageyama, Taro. 1993. Bunpoo to go-keisei [Grammar and word formation]. Tokyo: Hitsuji Shobo.
- Kageyama, Taro. 1996. Dooshi imiron [Verbal semantics]. Tokyo: Kurosio Publishers.
- Takahashi, Naoko. 2006. Syntactic and semantic complexity of lexical compounds: An analysis of *komu*, *dasu*, and *saru* compounds in Japanese. Doctoral dissertation. University of Hawaii at Manoa.
- Takahashi, Naoko. 2009. Syntactic complexity of *komu*-compounds. Working Papers [Kiyō] at Nagoya University of Foreign Studies 36:169-193.
- Takahashi, Naoko. 2011. Grammaticalization within *dasu*-compounds in Japanese. Working Papers [Kiyō] at Nagoya University of Foreign Studies 40:199-221.
- Toratani, Kiyoko. 1998. Lexical aspect and split intransitivity. CLS 34: 377-91.

## Source of Data

Daijirin [Japanese dictionary] 2nd edition. [Mastumusa, Akira (ed.)]. 2005. Tokyo: Sanseido.