A Multi-Dimensional Analysis of Japanese Benefactives: The Case of the Yaru-Construction *

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Abstract. This paper discusses the semantic and pragmatic properties of Japanese benefactives with the main focus on the yaru-construction. The benefactive sentence is judged to be acceptable if the transitive verb complement falls into a certain semantic class in which the meaning of transfer of possession is expressed. Hence, the distribution of the recipient role rather than the beneficiary role is crucial for determining the acceptability of the construction. To capture such a multi-dimensional linguistic information, HPSG account will be given.

Keywords: yaru-construction, beneficiary, recipient, transfer of possession, multi-dimensional architecture of HPSG

1 Introduction

In English, verbs such as bake are used ditransitively (Green, 1974; Oehrle, 1976; Levin, 1993):

- a. Anna baked a cake (for Ken).
 - b. Anna baked Ken a cake.

(1b) can only mean that Anna baked a cake with the intention of giving it to Ken, and this construction contributes semantics not attributable to the lexical items involved (Goldberg, 1995).

In Japanese, transitive verbs such as yaku 'bake' cannot be used ditransitively:

(2)	a.	Anna-wa	(Ken-no-tame-ni)	keeki-o	yai-ta.
		Anna-TOP	Ken-GEN-benefit-DAT	cake-ACC	bake-PAST
'Anna baked a cake (for Ken's benefit).'					
					_

b.?*Anna-wa	Ken-ni	keeki-o	yai-ta.
Anna-TOP	Ken-DAT	cake-ACC	bake-PAST

However, verbs of giving such as ageru in (3) allow the verb yaku to be associated with the constructional meaning of (1b), which is exemplified in (4).

(3)	Anna-wa Anna-TOP	Ken-ni Ken-DAT	keeki-o cake-ACC	age-ta. give-PAST	
	'Anna gave K	en a book.'			
(4)	Anna-wa	Ken-ni	keeki-o	yaite	age-ta.
	Anna-TOP	Ken-DAT	cake-ACC	bake	give-PAS

'Anna baked Ken a cake. (Lit.) Anna gave to Ken the benefit of baking a cake for him.' In (4), the main verb ageru takes the infinitive yaite which occurs adjacent to it. Literally, this construction means something like 'X (the subject of ageru) gives to Y (the dative object of ageru) the benefit of (X's) doing something for Y', and is called the benefactive construction.

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In Japanese traditional grammar and in grammars for language learning, the unacceptability of (5) below is explained in terms of the mismatch between the benefactive interpretation construed by the construction and the concerned situation described by the object gomi 'garbage' (and the infinitive yaite 'bake'):

*Anna-wa Ken-ni (5)gomi-o vaite age-ta. Anna-TOP Ken--DAT garbage-ACC incinerate give-PAST

'Intended: Anna gave to Ken the benefit of incinerating garbage for him.'

That is, (Anna's) baking a cake rather than incinerating garbage provides the benefit for Ken. In this case, to describe the situation in which Ken gets a benefit of incinerating garbage, a complex postpositional phrase *X-no-tame-ni* 'for X' benefit' is used:

(6)Anna-wa Ken-no-tame-ni yaite age-ta. Anna-TOP Ken-GEN-benefit-DAT garbage-ACC incinerate give-PAST '(Lit.) Anna gave to Ken the benefit of incinerating garbage for him.'

This explanation, however, does not hold for the following sentences in which the given contexts conspire to give to Ken the benefit of Anna's action described by the different transitive verbs, sagasu 'hunt' and yameru 'quit' with the same accusative-marked object shigoto 'job':

a. Context: Ken is not even trying to get a job and is just loafing around the house.

Ken-ni Anna-wa *shigoto-*o sagashite age-ta. Anna-TOP Ken--DAT job-ACC hunt give-PAST

'(Lit.) Anna gave to Ken the benefit of hunting a job for him.'

b. Context: Ken wants Anna to become a stay-at-home wife.

*Anna-wa Ken-ni shigoto-o yamete age-ta. Anna-TOP Ken--DAT job-ACC quit give-PAST

'Intended: Anna gave to Ken the benefit of quitting her job for him.'

To show the intended meaning in (7b), the complex postpositional phrase as in (6) is present.

(8)Anna-wa Ken-no-tame-ni shigoto-o vamete age-ta. Anna-TOP Ken-GEN-benefit-DAT job-ACC quit give-PAST '(Lit.) Anna gave to Ken the benefit of quitting her job for him.'

These observations immediately raises the question of what licenses the occurrence of the dative argument and what is the crucial factor determining the acceptability of these constructions.

In this paper, we suggest that there is a semantic restriction on the basis of which we can predict the distribution of the dative argument. More specifically, we suggest that if transitive verbs fall into the class VERB OF CREATION or VERB OF OBTAINING where the meaning of transfer of possession is expressed, the benefactive sentence is judged to be acceptable.

The paper is organized as follows. Section 2 shows some basic facts about Japanese benefactives. Section 3 presents the verb classification. Section 4 and 5 provides a formalization and a summary of the analysis presented in this paper.

The Distribution of the Beneficiary

2.1 Three Types of Japanese Benefactives

(4) is not the only form of the benefactive construction in Japanese. See other examples below:

(9)a. Watashi-wa imooto-ni keeki-o yaite yat-ta. I-TOP cake-ACC bake younger.sister-DAT give-PAST 'I baked my younger sister a cake.'

b. Imooto-wa watashi-ni keeki-o yaite kure-ta. younger.sister-TOP I-DAT cake-ACC bake give-PAST

'My younger sister baked me a cake.'

c.	Watashi-wa	imooto-ni	keeki-o	yaite	morat-ta.
	I-TOP	younger.sister-DAT	cake-ACC	bake	receive-PAST

'I had my younger sister bake a cake.'

These constructions are formed using different verbs meaning 'to give' as in (9a) and (9b), or 'to receive' as in (9c). There are such seven verbs, as shown in Table 1.

Type	I: 'give'	II: 'give'	III: 'receive'			
basic	yaru	kureru	morau			
polite	ageru	_	_			
honorific	sashiageru	kudasaru	itadaku			

Table 1: Benefactive Verbs

The benefactive verbs can be classified into three types cutting across different politeness levels. The polite verb ageru (type I) is used when talking politely to addressee. The honorific verbs indicate something about the speaker's relationship with one of the verb's arguments. For instance, kudasaru (type II) brings along the honorific contribution that the speaker regards a referent of the subject as socially superior to him. This meaning is independent of the constructional meaning of the benefactive sentence and thus we deal with only the basic verbs.

Benefactive constructions conceptually include two human entities, the one who performs an act for someone's benefit (BENEFACTOR) and the one who receives the benefit (BENEFICIARY). In the sentences above, the BENEFACTOR is watashi 'I' in (9a) and imooto 'younger sister' in (9b) and (9c). The BENEFICIARY is *imooto* in (9a) and *watashi* in (9b) and (9c).

There are two types of (basic) verbs of giving, yaru (type I) and kureru (type II). Yaru 'give' is used when the situation is described from the subject (giver)'s point of view, whereas kureru 'give' is used when the situation is described from the indirect object (receiver)'s point of view.

2.2 Restriction on the Beneficiary

A human participant represented as the indirect object of a ditransitive verb is naturally taken as the BENEFICIARY noun phrase when such a verb is used with a benefactive verb. In the following, Ken in (10a) and watashi 'I' in (10b) are easily construed as such.

(10)	a.	Anna-wa	Ken-ni	hon-o	kashite	yat-ta.	
		Anna-TOP	younger.sister-DAT	book-ACC	lend	give-PAST	
		'Anna lent Ken a book.'					
	b.	Imooto-wa younger.sister-TOP	watashi-ni I-DAT	kagi-o key-ACC	watashite hand	<i>kure-ta.</i> <i>give-</i> PAST	
		'My younger sister handed me a key.'					

In the examples mentioned thus far, the BENEFICIARY has always been represented as the dative-marked indirect object. The direct object, which is marked by accusative o in (11a) and dative ni in (11b) below are also interpreted as the BENEFICIARY:

(11)	a.	Anna-wa		Ken-o	aishite	yat-ta.
		I-TOP		Ken-ACC	love	give-PAST
		'(Lit.) Anna ga	ve to Ken the benefit of lov	ing him.'		
	b.	Anna-wa	watashi-ni		atte	kure-ta.
		Anna-TOP	I-DAT		meet	give-PAST
		'Anna took the	trouble to meet me.'			

In the following sentences, the BENEFICIARY can be the direct object, the indirect object as in (12a), or an adjunct as in (12b).²

¹ When the speaker is not involved, someone related to him holds the point of view. The 'point of view' of the constructions remains without any explanation but does not affect the analysis in the paper.

² Space is lacking for a full exemplification, and therefore we focus on the *yaru* (type I) construction in the following.

'I introduced Ken to Anna for Ken's benefit.'

'I introduced Ken to Anna for Anna's benefit.'

'I introduced Ken to Anna for Ken and Anna's benefit.'

b. Watashi-wa Naomi-no-tame-ni Ken-o Anna-ni syookaishite yat-ta.
I-TOP Naomi-for Ken-ACC Anna-DAT introduce give-PAST

'I introduced Ken to Anna for Naomi's benefit.'

This shows that the syntactic configuration of the participant carrying the BENEFICIARY role is quite unrestricted. The only restriction is that it cannot be the matrix subject (Uda, 1994).

Note that same the benefactive verb may express a 'malefactive meaning,' i.e. some action performed in order to negatively affect someone. See below.

(13)	a.	Anna-wa	Ken-o	naguritsukete	yat-ta.
		Anna-TOP	Ken-ACC	beat	give-PAST
		'Anna beat Ken.'			
	b.	Anna-wa	Ken-o	kenashite	yat-ta.
		Anna-TOP	Ken-ACC	condemn	give-PAST
		'Anna condemned Ken.'			

(13a), for example, may be interpreted as malefactive if *Ken* is a victim of *Anna's beating*.³ However, the malefactive sentence is only a slightly special case of the benefactive sentence with the BENEFICIARY coinciding with the subject (i.e. Anna satisfied her own desire by beating Ken). As shown above, a wider range of interpretations becomes possible when the infinitive is more or less of a negative nature.

To summarize, the benefactive meaning is expressed via the benefactive verb with an infinitive but no clear syntactic configuration is available to code the BENEFICIARY. In fact, sometimes the semantic coding of the BENEFICIARY is not possible. The BENEFICIARY must be pragmatically construed, In all benefactive sentences.

3 The Recipient and the Transferable Object

3.1 Verb Classes and the Dative Noun

In the examples in Section 2.2, in particular those with a ditransitive verb, the inclusion of the benefactive verb does not affect the argument structure of the infinitive. When certain transitive verbs appear with the benefactive verb, however, the BENEFICIARY always occurs:

(14)	a. Anna-wa	Ken-nı	keek1-o	yaite	yat-ta.			
	Anna-TOP	Ken-DAT	cake-ACC	bake	give-PAST			
	'Anna baked Ken a cake.'							
	b. *Anna-wa	Ken-ni	gomi-o	yaite	yat-ta.			
	Anna-TOP	KenDAT	garbage-ACC	incinerate	give-PAST			
'Intended: Anna incinerated garbage for Ken.'								

With regard to the semantic class of such verbs, Miyake (1996) has noted that the verbs which allow the occurrence of a dative noun are *verbs of creation* in the benefactive constructions. The following kaku 'paint' in (15a) and amu 'knit' in (15b), whose process creates an e 'picture' and a kaadegan 'cardigan' respectively, are able to introduce a dative noun.

(15)	a.	Watashi-wa	imooto-ni	e-o	kaite	yat-ta.
		I-TOP	y.sister-DAT	picture-ACC	paint	give-PAST
		'I painted my younger sister a picture.'				

³ Alternatively, (13a) may be a benefactive sentence if the BENEFICIARY is someone unexpressed in the sentence (i.e. a revenge on behalf of someone) or if it is *Ken* who enjoys *Anna's* beating him (i.e. a masochistic interpretation).

b. Anna-wa Ken-ni kaadegan-o ande yat-ta. cardigan-ACC Ken-DAT give-PAST Anna-TOP knit

'Anna knitted Ken his cardigan.'

Notice that the difference between (14a) and (14b) is that (keeki-o) yaku 'bake (a cake)' in the former is typically a VERB OF CREATION, like examples above, while in the latter (gomi-o) yaku 'incinerate (garbage)', whose process does not create anything, is a VERB OF CHANGE-OF-STATE.⁴ Thus, (14b) contrasts with (14a) in which the same dative noun results in an grammatical sentence.

There are some other verbs which allow the occurrence of a dative noun. For example, (keekio) kau 'buy (a cake)' and (sakana-o) tsukamaeru 'catch (a fish)' do not describe the creation of products, but the following sentences which include these verbs are grammatical:

(16)a. Watashi-wa imooto-ni keeki-o katte yat-ta. І-тор y.sister-DAT cake-ACC buy give-PAST 'I bought my younger sister a cake.'

b. Ken-wa Anna-ni sakana-o tsukamaete yat-ta. Ken-TOP Anna-DAT fish-ACC give-PAST catch

'Ken caught Anna a fish.'

Aside from the classification of verbs, benefactive verbs bring out the RECIPIENT role implicit in the verb, and also assign the BENEFICIARY role to the argument, making it a part of the benefactive construction. In (16a), for example, the RECIPIENT role is not part of the argument structure for the verb kau 'buy.' Rather the argument imooto 'young sister' is implicitly included and can be made manifest with the help of the benefactive verb.

Transfer of Possession and Transferable Object

The contrast between (17a) and (17b) below shows the contribution of the benefactive verbs.

(17)a. *Ken-wa Anna-ni sakana-o hanashite vat-ta. Ken-TOP Anna-DAT fish-ACC release give-PAST 'Intended: Ken released a fish for Anna's benefit.'

b. Ken-wa Anna-ni sakana-o hanashite morat-ta. Ken-TOP fish-ACC release Anna-DAT receive-PAST

'Intended: Ken had Anna release a fish.'

The sentences (16b) and (17a) are minimally distinct in the infinitive, but (16b) is judged to be acceptable, while (17a) is not. The unacceptability of (17a) is explained in terms of the mismatch of transfer of possession between the benefactive verb and the infinitive.

The benefactive verb describes an abstract transfer of ownership, which is coded as the verb semantics. The verb yaru 'give' implies such transfer from the subject to the ni-marked argument, so the *ni*-marked argument is construed as a GOAL/RECIPIENT. The verb *morau* 'receive', on the other hand, implies a reverse transfer, so the ni-marked argument is taken as a SOURCE, and the subject a GOAL/RECIPIENT. The infinitive hanashite 'release' also describes a reverse transfer of the possession of the o-marked argument, so the ni-marked argument is construed as a SOURCE. In (17a) and (17b), both ni-marked arguments are made manifest with the identical SOURCE role by the verb *hanasu*, even though they are the participants of events representing different orientations of transfer. This is why (17b) is acceptable, while (17a) is not.⁵

In the examples given so far, the sense of a concrete object being transferred is very strong. With other type of transitive verbs in the following, a more abstract kind of transfer is implied.

⁴ Miyake's (1996) Japanese verb classification does not correspond exactly with Levin's (1993) English verb classification. The names of verb classes employed here are a translation from Miyake (1996) written in Japanese.

⁵ In the series of the cognitive analysis (Shibatani, 1994; Shibatani, 1996), Shibatani has proposed that the crucial factor determining the acceptability of benefactive constructions is the resulting possessive control of an entity on the part of the GOAL/BENEFICIARY. Here we do not go into detail about his analysis, but we may reconcile a part of his idea with our proposal in Section 4.2. Admitting the plausibility of his approach, we leave the issue open.

(18)a. Ken-wa Anna-ni hotte yat-ta. ana-o Ken-TOP give-PAST Anna--DAT hole-ACC dig '(Lit.) Ken gave to Anna the benefit of digging a hole for her.' b. Watashi-wa imooto-ni uta-o utatte yat-ta. I-TOP y.sister--DAT song-ACC sing give-PAST

'(Lit.) I gave to my young sister the benefit of singing a song for her.'

In (18a) and (18b), what is transferred to the RECIPIENT is the possession of a hole and the content of a song respectively. The abstract transfer of ownership also can account for the contrast between (19a) and (19b).

(19)a. Anna-wa Ken-ni shigoto-o sagashite yat-ta. Anna-TOP Ken--DAT job-ACC hunt give-PAST '(Lit.) Anna gave to Ken the benefit of hunting a job for him.'

b. *Anna-wa Ken-ni shigoto-o yamete yat-ta. Anna-TOP Ken--DAT job-ACC quit give-PAST

'Intended: Anna gave to Ken the benefit of quitting her job for him.'

In (19a), the dative noun, i.e. the RECIPIENT of the verb sagasu 'hunt' occurs, so an abstract object shigoto 'job' is able to be transferred to it. In (19b), on the other hand, such a role is not included in the verb *yameru* 'quit' and it can neither be made manifest with the help of the benefactive verb.

When neither concrete nor abstract transfers to a RECIPIENT are construable, the benefactive sentence is judged to be unacceptable.

4 Nature of the Predicative Complement

Morphological Status of the Predicative Complement

The benefactive constructions have attracted much less attention than passive and causative constructions in Japanese linguistics (Kuno, 1973; Nakau, 1973; Inoue, 1976; Shibatani, 1978; Mc-Cawley and Momoi, 1986; Gunji, 1987; Fukushima, 1990; Terada, 1990; Uda, 1994; Matsumoto, 1996). Passive and causative predicates are formed by a stem verb followed by a bound morpheme. Benefactive predicates, on the other hand, are seemingly composed of an infinitive (V1) followed by te which is arguably a marker, and an auxiliary verb (V2). However, the syntax of the infinitive complementation, where the V1 in the sentence final verb cluster is semantically a complement of V2, has long been a issue in Japanese generative grammar. This construction falls between the sentential complementation and lexical complex predicates.

For phenomena such as (i) adverb placement, (ii) scrambling and (iii) right-node raising, it lines up with typical complex predicates in that the V1 and the V2 form a tight lexical unit. On the other hand, with respect to another set of phenomena such as (iv) embedded VP coordination, (v) focus particle insertion and (vi) reduplication, the construction lines up with typical sentential complementation in that the V1 and V2 do not behave like a lexical unit.

Intentionality and Possessive Control

Regarding to the transfer of possession discussed in Section 3.2, (20a) and (20b) show a contrast.

- a. I baked a cake for Max, but now that you're here, you may as well take it.
 - b. *I baked Max a cake, but now that you're here, you may as well take it. (Oehrle, 1976)

Since only (20b) means the intention of giving it to Max, it results in an ungrammatical sentence. (21) also shows the same point.

(21)Watashi-wa imooto-ni kaite yat-ta. younger.sister-DAT picture-ACC paint give-PAST 'I painted my younger sister a picture.'

Watashi 'I' must be understood as intending to give the picture to my sister. It cannot be the case that I painted the picture for someone else and later happened to give it to my sister. This shows that the volitionality must extend so that not only is the action described by the infinitive performed agentively, but also with the relevant transfer of possession implied by the benefactive verb.

4.3 VP-Embedding Control Structure under HPSG

To provide a syntactic and semantic generalization concerning Japanese verbs which seem to induce obligatory control on their complement predicates, Fukushima (1990) extends the VP-embedding approach (Gunji, 1987) and offers a simple and more plausible characterization of obligatory control phenomena based on the control theory of HPSG (Pollard and Sag, 1994).

The following (22) represents the partial information of the sentence in (21). It is different from the standard HPSG's feature structure, which has been modified based on the studies of Fukushima (1990) and Uda (1994), and also simplified for explanation purposes.

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(22)
  PHON
   HEAD verb [VFORM past]
                                     SUBCAT \left\langle \right. PP [nom]: 1 _{\boxed{5}} , PP [dat]: 2, VP
  ADJACENT 4 / [-]
         RELATION
                       commitment [GIVE]
         EXT-ARG
                       1
  CONT
         COMMITTOR
                       1
         COMMITTEE
                       3 [EXT-ARG refl[INDEX 5]]
         SOA-ARG
          RELATION
                          affect / benefit
  MODAL
           BENEFICIARY
                          \neg [1]
           SOA-ARG
                         3
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The HPSG control theory is based on coindexing between the unexpressed subject argument of the complement and the controller. The controller selection is based the semantic class of the verb, which is given below (with Fukushima' (1991) verb classification):

- (23) a. influence-type [object]: morau 'receive', saseru 'make', settokusuru 'persuade', ...
 - b. commitment-type [subject]: ageru 'give', kureru 'give', yakusokusuru 'promise', ...
 - c. orientation-type [subject]: tai 'want', yuchoosuru 'insist', kimeru 'decide', ...

The semantic CONTENT value of all the verbs in class (23a) consists of a relation of *influence* type and three semantic roles, which are referred to as *influence* (the agentive influencer), *influenced* (the recipient of the influence, typically animate), and *soa-arg* (the action for the influenced participant to perform). Similarly, the *commitment*-type verbs in (23b) all involve a participant playing the *committor* role, an optional participant for the *commissee* role, and a *soa-arg*.

The semantic generalizations underlying the controller assignment are stated as in (24).

(24) HPSG control theory

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Given a soa: \begin{bmatrix} RELATION & R \\ SOA-ARG & [EXT-ARG & refl[INDEX 1]] \end{bmatrix} if R is of sort influence, commitment, or orientation,
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then the value of the *influenced*, *committor*, or *experiencer* role respectively is [INDEX \square]. HPSG's control theory offers an account of not only the optionality and animacy requirement of the GOAL (RECIPIENT) argument but also the intentionality shown in 4.2.

Regarding the newly introduced ADJACENT and MODAL features, the former deals with the word order phenomena, which we set aside in Section 4.1, and the latter captures the distribution of BENEFICIARY examined in Section 2.2. The refinement of the verb classification in Section 3.1 and 3.2 contributes to eliminate the redundancy between argument structure and lexical semantics.

Thus, HPSG's multi-dimensional constraint-based architecture is well-suited for representing linguistic information which ineracts with syntax, semantics and pragmatics in principled ways.

Concluding Remarks

In this paper, we have examined benefactive constructions, particularly yaru constructions. We have presented that no clear syntactic configuration is available to code the BENEFICIARY. We also have shown that the benefactive sentence is judged to be unacceptable, when neither concrete nor abstract transfers to a RECIPIENT are construable. In addition, we have attempted to describe those pragmatic and semantic features under HPSG which is well-suited for representing such a multi-dimensional linguistic information.

Our central claims are (1) that the distribution of the RECIPIENT role rather than the BENEFI-CIARY role is crucial for determining the acceptability of benefactive constructions, and (2) that these constructions are judged to be acceptable if the verb complement of yaru falls into a certain semantic class in which the meaning of transfer of possession to the RECIPIENT is coded.

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