# Lexical Meanings of Ditransitive Verbs in Japanese

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#### Abstract

This paper aims to demonstrate that the lexical meanings of major ditransitive verbs (okur-'send,' atae- 'give,' and ur- 'sell') in Japanese are the same as those of their English counterparts. Specifically, we will argue that *send*-type verbs encode both caused motion and caused possession whereas give-type and sell-type verbs encode only caused possession, contra Kishimoto's (2001) classification of Japanese ditransitive verbs, in which send-type verbs carry only a caused motion meaning whereas sell-type verbs carry both caused motion and caused possession meanings. Based on examples of sluicing, we will also show that sendtype verbs have the two argument structures <agent, goal, theme> and <agent, possessor, theme>. Moreover, we will argue that these two argument structures of send-type verbs are in complementary distribution: they cannot be realized syntactically at one time.

# 1 Introduction

This paper examines the ditransitive construction in Japanese, exemplified in (1).

 Taro-ga Hanako-ni nimotu-o okutta. Taro-NOM Hanako-DAT package-ACC sent 'Taro sent Hanako a package. / Taro sent a package to Hanako.'

Kishimoto (2001) classifies major ditransitive verbs in Japanese into three types, summarized as (2).

(2) Kishimoto's (2001) classification			
Verb type	Examples	Meaning(s)	
Send-type	okur-		
verbs	'send'	change of location	
(verbs of	hakob-	change of location	
transfer)	'carry'		
<i>Give</i> -type verbs (verbs of change of possession)	atae- 'give' teikyosu- 'offer'	change of possession	
Sell-type verbs (verbs of transaction)	<i>ur-</i> 'sell' <i>kas-</i> 'rent'	change of location or change of possession	

# (2) Kishimoto's (2001) classification

In this paper, we will argue against Kishimoto's classification, and show that the lexical meanings of *okur-* 'send,' *atae-* 'give,' and *ur-* 'sell' are the same as those of their English counterparts. Rappaport Hovav and Levin (RH&L) (2008) examine the English construction(s) corresponding to (1), which can appear in the double object construction and/or in the *to*-dative construction, as in (3). They claim that *send* encodes both caused motion and caused possession, whereas *give* and *sell*, which are classified in the same type, encode only caused possession, as in (4).

(3)a. Taro sent Hanako a package.b. Taro sent a package to Hanako.

Verb type	Examples	Meaning(s)	
<i>Send</i> -type verbs	send mail forward	caused motion or caused possession	
<i>Give</i> -type verbs	give sell rent	caused possession	

(4) RH & L's (2008) classification

We will demonstrate that there is no difference between these verbs in Japanese and their English counterparts with respect to their lexical meanings. We classify Japanese ditransitive verbs as in (5), where *send*-type verbs carry both caused motion and caused possession meanings, whereas *give*-type verbs and *sell*-type verbs carry only a caused possession meaning.

(5) Our classification of Japanese ditransitive verbs

Verb type	Examples	Meaning(s)
<i>Send</i> - type verbs	okur- 'send' hakob- 'carry'	caused motion or caused possession
<i>Give</i> - type verbs	atae- 'give' teikyosu- 'offer' ur- 'sell' kas- 'rent'	caused possession

With the semantic classification of ditransitive verbs in (5), we will also claim that a caused motion meaning is linked with the argument structure <agent, goal, theme>, whereas a caused possession meaning is linked with the argument structure <agent, possessor, theme>. Based on examples of sluicing, we will demonstrate that *send*-type verbs in Japanese have two argument structures <argent, goal, theme> and <agent, possessor, theme>. As for the English verb *send*, RH & L (2008) argue that these two argument structures are not in complementary distribution, partly because *send* allows two goals, a possessor goal and a locative goal, to appear in a single sentence, as shown in (6). We dub this type of sentence the 'two-goal construction.'

(6) Anne is curious as to why her father sent her a telegram to America to return home at once ... (RH&L, 2008)

We will examine the Japanese two-goal construction, and show that the two argument structures of *send*-type verbs are necessarily in complementary distribution (cf. Goldberg, 1995; Harley, 2002). Specifically, we will argue that both of the goals in the two-goal construction are not selected by the verb at one time.

# 2 Kishimoto's (2001) Classification

Kishimoto (2001) classifies ditransitive verbs in Japanese into three types, as in (2), repeated as (7).

(7) KISHIHOLO S (2001) Classification			
Verb type	Examples	Meaning(s)	
Send-type	okur-		
verbs	'send'	change of location	
(verbs of	hakob-	change of location	
transfer)	'carry'		
<i>Give</i> -type verbs (verbs of change of possession)	atae- 'give' teikyosu- 'offer'	change of possession	
Sell-type verbs (verbs of transaction)	<i>ur-</i> 'sell' <i>kas-</i> 'rent'	change of location or change of possession	

(7) Kishimoto's (2001) classification

Kishimoto claims that *send*-type verbs encode change of location, whereas *give*-type verbs do not. This claim is supported by the fact that the former is compatible with a spatial postposition such as *made* 'to,' while the latter is not, as in (8).

(8)a. John-wa Mary-no uti-made nimotu-o John-TOP Mary-GEN home-to package-ACC okutta. sent 'John sent a package to Mary's home.'
b. \*John-wa Mary-no uti-made nimotu-o John-TOP Mary-GEN home-to package-ACC teikyoosita. offered

'John offered a package to Mary's home.' (Kishimoto, 2001)

Moreover, he argues that *send*-type verbs do not encode change of possession, whereas *give*-type verbs encode change of possession, mainly for the following two reasons. First, *give-type* verbs, but not *send*-type verbs, have an implication of successful transfer. *Send*-type verbs are generally neutral with respect to whether or not the theme reaches the goal, unlike *give*-type verbs. For instance, (9a) does not sound contradictory, because the dative goal *Mary-ni* 'to Mary' of *okur-* 'send' is interpreted as a locative goal, but not as a recipient. In contrast, (9b) sounds contradictory, because *give*-type verbs require a recipient of the theme.

- (9)a. John-wa Mary-ni tegami-o okutta-ga, John-TOP Mary-DAT letter-ACC sent-but Mary-wa mada uketot-te i-nai. Mary-TOP yet receive be-NEG
  'John sent a letter 'to Mary, but Mary has not received it yet.
  - b. #John-wa Mary-ni hon-o ataeta-ga, John-TOP Mary-DAT book-ACC gave-but Mary-wa mada morat-te i-nai.
    Mary-TOP yet get be-NEG
    'John gave Mary a book, but Mary has not gotten it yet.' (Kishimoto, 2001)

Second, *give-type verbs*, but not *send*-type verbs, are subject to the animacy restriction. *Send*-type verbs allow an inanimate goal, which cannot be interpreted as a recipient, as shown in (10a). In contrast, *give*-type verbs require an animate goal as a recipient, as shown in (10b).

- (10) a. John-wa Mary-ni/zitaku-ni tegami-o John-TOP Mary-DAT/home-DAT letter-ACC okutta. sent 'John sent a letter to Mary/his home.'
  b. John-wa Mary-ni/\*zitaku-ni
  - John-<sub>TOP</sub> Mary-<sub>DAT</sub>/home-<sub>DAT</sub> zyoohoo-o ataeta. information-<sub>ACC</sub> gave 'John gave Mary/his home information.' (Kishimoto, 2001)

Based on these examples, Kishimoto concludes that *send*-type verbs encode only change of location whereas *give*-type verbs encode only change of possession.

As for *sell*-type verbs, Kishimoto claims that they encode both change of location and change of possession. He demonstrates that *sell*-type verbs are subject to the animacy restriction, as shown in (11). He claims that this is because *sell*-type verbs encode change of possession.

(11) \*John-wa zitaku-ni kuruma-o utta. John-<sub>TOP</sub> home-<sub>DAT</sub> car-<sub>ACC</sub> sold 'John sold a car to his home.' (Kishimoto, 2001)

Moreover, he shows that *sell*-type verbs also encode change of location, because they pattern with *send*-type verbs, which encode change of location, in two respects. First, these two types of verbs can combine with a directional movement verb such as *kom*- 'get into' and *das*- 'get out.' For instance, *hakob*- 'carry,' a *send*-type verb, and *ur*- 'sell' can combine with *kom*- 'get into,' forming *hakobi-kom* 'carry into' and *uri-kom* 'promote,' respectively. In contrast, *atae*- 'give' cannot combine with a directional movement verb like *kom*- 'get into,' and hence Japanese has no compounds like *atae-kom*-'give-get.into.'

- (12) a. hakob + kom → hakobi-kom 'carry into'
  b. ur + kom → uri-kom 'promote'
  - c. atae + kom  $\rightarrow$ \*atae-kom 'give-get.into'

Second, he observes that the meaning(s) of *sell*type verbs can be retained even when they are replaced by a directional movement verb such as *de*-'go out' and *ire*- 'get into,' just like *send*-type verbs, as in (13a) and (13b). In contrast, the meaning(s) of *give*-type verbs cannot be retained when they are replaced by a directional movement verb, as in (13c).

- (13) a. Korerano-sinamono-wa subete ure-te/de-te these-goods-TOP all sell/go.out simatta.
  finished
  'These goods were all sold out.'
  h. John wa kozutumi o sokutetu da
  - b. John-wa kozutumi-o sokutatu-de John-TOP parcel-ACC express.mail-by okutta/dasita. sent/got.out
    'John sent a parcel by express mail.'
  - c. John-wa Mary-ni purezento-o ateta/\*ireta. John-TOP Mary-DAT gift-ACC gave/got.in 'John gave Mary a gift.'

(Kishimoto, 2001)

From these observations, Kishimoto concludes that (i) *send*-type verbs encode only change of location (caused motion), (ii) *give*-type verbs encode only change of possession (caused possession), and (iii) *sell*-type verbs encode both change of location (caused motion) and change of possession (caused possession).

In contrast with his classification, we will argue in the next section that *send*-type verbs encode both change of location (caused motion) and change of possession (caused possession), whereas *sell*-type verbs encode only change of possession (caused possession).

### 3 Arguing against Kishimoto (2001)

We will argue that ditransitive verbs in Japanese are lexically classified just as their English counterparts. RH&L (2008) examine lexical meanings of English ditransitive verbs and claim that *send*-type verbs carry the meanings of caused motion and caused possession, whereas *give*-type verbs and *sell*-type verbs carry only the meaning of caused possession, as in (14). According to RH&L, *sell*-type verbs are classified as a sub-class of *give*-type verbs. In what follows, we adopt their terminology 'caused motion' and 'caused possession' rather than Kishimoto's terms 'change of location' and 'change of possession.'

(14) RH & L's ( $2$	2008) classification
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Verb type	Examples	Meaning(s)
Send-type	send	caused motion
verbs	mail	or
	forward	caused possession
<i>Give</i> -type verbs	give	
	sell	caused possession
	rent	

We first demonstrate that *sell*-type verbs in Japanese do not encode caused motion, just like their English counterparts. Kishimoto (2001) claims that *sell*-type verbs encode caused motion. However, his argument cannot be maintained for the following four reasons. First, *sell*-type verbs do not form compounds with a directional movement verb in the same way as *send*-type verbs. For instance, the directional movement meaning of the verb *kom*- 'into' can be maintained when it is attached to a *send*-type verb (e.g. *hakobi-kom* 'carry into'). But when it forms a compound with a *sell*-type verb, its directional movement meaning is lost (e.g. *uri-kom* 'promote').

Second, Kishimoto's claim that *sell*-type verbs can be replaced by a directional movement verb is not always true. For instance, the meanings of *kas*-'lend' in (15a) and *ur*- 'sell' in (15b) cannot be retained when they are replaced by a directional movement verb such as *das*- 'get out' and *de*- 'go out.' Kishimoto claims that the meaning of *ur*- 'sell' in (13a), repeated as (16), is retained when the verb is replaced by *de*- 'go out.' However, (15b) shows that the replacement of *ur*- 'sell' by *de*- 'go out' is impossible when an overt locative goal appears.

- (15) a. Taro-wa Hanako-ni hon-o Taro-TOP Hanako-DAT book-ACC kasita/\*dasita. lent/got.out 'Taro lent Hanako a book.'
  - b. Sinamono-wa subete zyoorenkyaku-ni goods-TOP all regular.customer-DAT ure-te/\*de-te simatta. sell/go.out finished
    'Goods were all sold out to the regular customers.'
- (16) Korerano-sinamono-wa subete these-goods-TOP all ure-te/de-te simatta. sell/go.out finished 'These goods were all sold out.' (Kishimoto, 2001)

Third, *sell*-type verbs do not pattern with the compounds consisting of them and a directional movement verb in that the former cannot take a locative (inanimate) goal, as shown in (17a), whereas the latter can, as shown in (17b).

- (17) a. Taro-ga {Hanako-ni/\*(?)sizyoo-ni} Taro-<sub>NOM</sub> {Hanako-<sub>DAT</sub>/market-<sub>DAT</sub>} zibun-no sakuhin-o utta. self-<sub>GEN</sub> art-work-<sub>ACC</sub> sold 'Taro sold his work to {Hanako/the market}.'
  - b. Taro-ga {Hanako-ni/sizyoo-ni} Taro-<sub>NOM</sub> Hanako-<sub>DAT</sub>/market-<sub>DAT</sub> zibun-no sakuhin-o uri-dasita. self-<sub>GEN</sub> art-work-<sub>ACC</sub> sell-put.on 'Taro put his work on sale to {Hanako/the market}.'

Some speakers may allow *sizyoo-ni* 'to the market" in (17a). For them, *sizyoo-ni* might be interpreted as a possessor goal "the person in the market" rather than a locative goal. Thus, the examples in (17) indicate that *sell*-type verbs do not encode caused motion, unlike the compounds derived from them.

Fourth, there is a further piece of evidence from sluicing that *sell*-type verbs do not encode a caused motion meaning. Many linguists argue that sluicing involves a clausal structure (Ross, 1969; Chung et al., 1995; Merchant, 2001). Under this view, the example of sluicing (18) is analyzed as (19), where the unpronounced parts are indicated in the angle brackets. In (19) the *wh*-remnant *what* is interpreted as the object of the elided (unpronounced) verb *ate*.

(18) John ate something, but I don't know what. (19) ... but I don't know what<sub>i</sub> <he ate  $t_i$  >.

A well-known identity restriction on sluicing is that the argument structure of the elided part must be identical to that of the corresponding verb in the antecedent clause (Chung et al., 1995; Chung, 2013). To see this restriction, notice first that some verbs allow their argument(s) to be omitted. For instance, *serve* has two different argument structures given in (20), and the second internal argument can be omitted as shown in (21).

(21) a. I served leek soup (to my guests).b. I served my guests (leek soup).(Chung et al., 1995)

With this in mind, Chung et al. (1995) explain the (un)grammaticality of (22) in terms of the identity requirement.

- (22) a. She served the soup, but I don't know to whom<sub>i</sub> <she served the soup  $t_i$ >.
  - b. She served the students, but I don't know what<sub>i</sub> <she served the students  $t_i$ >.
  - c.\*She served the soup, but I don't know who  $\langle$ she served  $t_i$  the soup $\rangle$ .

(Chung et al., 1995)

In (22a), both the antecedent clause and the sluiced clause involve the argument structure (20a), and hence the identity requirement is satisfied. (22b) also satisfies the identity requirement; the argument structure (20b) licenses both the antecedent clause and the sluiced clause. In contrast, (22c) is ungrammatical due to the mismatch of the argument structure(s); the antecedent clause is licensed by the argument structure (20a) whereas the sluiced clause is licensed by (20b).

Given that the identity requirement reviewed above also holds for Japanese, (23) indicates that the verb ur- 'sell' encodes only caused possession, but not caused motion.

(23) A: Taro-ga e okiniiri-no kaban-o utta. Taro-NOM favorite bag-ACC sold 'Taro sold his favorite bag.'
B: Dare-ni? B': \*/?\*Doko-ni? whom-to? where-to '(To) whom?' '(To) where?'
B'': \*Dono basyo-ni? which place-to '(To) which place?'

Some Japanese speakers might allow *doko-ni?* '(to) where?' in (23B'). However, even for them, (23B') cannot be replied by phrases like *Tokyo-ni* 'to To-kyo,' which are interpreted just as a location. It must be answered by phrases like *kobutu-syoo-ni* 'to a second-hand store,' which has a possessor interpretation. Then, the impossibility of the locative phrase(s) as the *wh*-remnant in the sluiced clause in (23B') and (23B'') indicates that the implicit (unpronounced) dative phrase in the antecedent cannot be a locative goal. This is not consistent with Kishimoto's claim that *sell*-type verbs encode caused motion (change of location). Moreover, the possibility of *dare-ni?* 'to whom?' (23B) indicates that *sell*-types verbs encode caused possession.

For the reasons above, we argue that *sell*-type verbs encode only caused possession, but not caused motion.

Moreover, the sluicing diagnostic test shows that *send*-type verbs encode both caused motion and caused possession, contra Kishimoto's claim. It also demonstrates that *give*-type verbs encode only caused possession. The relevant examples are given in (24) and (25).

(24) A:	Taro-ga	nimotu-o	okutta.
	Taro- <sub>NOM</sub>	package-ACC	sent
	'Taro sent a p		

B: Dare-ni? B': Doko-ni? whom-to? where-to '(To) whom?' '(To) where?' B'': Dono basyo-ni?

which place-to '(To) which place?'

- (25) A: Taro-ga sono hon-o ataeta. Taro-<sub>NOM</sub> that book-<sub>ACC</sub> gave 'Taro gave that book.'
  - B: Dare-ni? B': \*/?\*Doko-ni? whom-to? where-to '(To) whom?' '(To) where?' B'': \*Dono basyo-ni? which place-to

'(To) which place?'

In (24), the antecedent clause with the verb okur-'send' can be responded either by *dare-ni?* '(to) whom?,' which is interpreted as a possessor, or by doko-ni? '(to) where?'/dono basyo-ni? '(to) which place?,' which are interpreted as a locative goal. Based on this, we argue that *send*-type verbs allow two argument structures, <agent, possessor, theme> and <agent, goal, theme>. In the case of dare-ni 'to whom?' (24B), the verb send has the argument structure <agent, possessor, theme>. In the cases of doko-ni '(to) where?' (24B') and dono basyo-ni '(to) which place?' (24B''), it has the argument structure <agent, goal, theme>. As in (25), in contrast, the antecedent clause with the verb atae- 'give' can be followed by dare-ni? '(to) whom?,' which is interpreted as a possessor, but not by doko-ni? '(to) where?'/dono basyo-ni? '(to) which place?,' which are interpreted as a locative goal. Again, doko-ni? '(to) where?' (25B') and dono basyo-ni? '(to) which place?' (25B'') are possible only when they have a caused possession reading. Under this reading, they can be replied by phrases like tosyokan-ni '(to) the library,' which can be interpreted as a possessor, but not by locative phrases like Tokyo-ni '(to) Tokyo'. For this reason, we claim that give-type verbs have only the argument structure <agent, possessor, theme>.

To conclude, contra Kishimoto's (2001) classification, we argue that the lexical meanings of the ditransitive verbs *okur*- 'send', *atae*- 'give' and *ur*-'sell' in Japanese is exactly the same as those of their English counterparts: according to RH&L (2008), the verb *send* may encode caused motion and caused possession whereas the verbs *sell* and *give* carry only the meaning of caused possession.

	Japanese	Japanese	English
	Kishimoto	our proposal	RH&L
	(2001)		(2008)
		caused	caused
Send-	caused	motion	motion
type	motion	or	or
verbs	s	caused	caused
		possession	possession
Give-	caused	caused	caused
type	possession	possession	possession
verbs	possession	possession	possession
	caused		
Sell-	motion	caused	caused
type	or		possession
verbs	caused	possession	possession
	possession		

(26) Lexical meanings of ditransitive verbs

Before leaving this section, we will revisit Kishimoto's examples supporting his claim that *send*type verbs in Japanese encode only caused motion. We will demonstrate that his examples do not exclude the possibility that *send*-type verbs encode caused possession.

Kishimoto observes that (9a), repeated as (27a), does not sound contradictory, whereas (9b), repeated as in (27b), does. He explains this contrast in terms of the presence/absence of the implication of successful transfer: *give*-type verbs entail that the theme object is transferred to the goal object, while *send*-type verbs do not have such an entailment. Kishimoto concludes that *send*-type verbs do not encode caused possession, unlike *give*-type verbs.

- (27) a. John-wa Mary-ni tegami-o okutta-ga, John-TOP Mary-DAT letter-ACC sent-but Mary-wa mada uketot-te i-nai. Mary-TOP yet receive be-NEG
  'John sent a letter to Mary, but Mary has not received it yet.'
  - b.#John-wa Mary-ni hon-o ataeta-ga, John-TOP Mary-DAT book-ACC gave-but Mary-wa mada morat-te i-nai.
    Mary-TOP yet get be-NEG
    'John gave Mary a book, but Mary has not gotten it yet.' (Kishimoto, 2001)

However, the example in (27a) does not necessarily indicate that *send*-type verbs do not have a caused possession meaning. Under our classification, sendtype verbs may have two argument structures <agent, goal, theme> and <agent, possessor, theme>, which correspond to a caused motion meaning and a caused possession meaning, respectively. We claim that in (27a), the verb okur- 'send' has the argument structure <agent, goal, theme>, and that since Mary-ni 'to Mary' is interpreted as a locative goal rather than a possessor goal, the contradiction does not occur. In contrast, the verb atae- 'give' has only the argument structure <agent, possessor, theme>, and hence, Mary-ni 'to Mary' in (27b) must be interpreted as a recipient. For this reason, (27b) sounds contradictory.

Moreover, Kishimoto's example in (10a), repeated as (28), does not necessarily indicate that *send*-type verbs do not encode caused possession, either.

 John-wa Mary-ni/zitaku-ni tegami-o John-TOP Mary-DAT/home-DAT letter-ACC okutta. sent
 'John sent a letter to Mary/his home.' (Kishimoto, 2001)

As shown in (28), the dative object of *send*-type verbs is free from the animacy restriction, and Kishimoto argues that these verbs do not encode caused possession. However, the lack of the effect of the animacy restriction in (28) does not necessarily mean that *send*-type verbs do not encode caused possession. *Send*-type verbs can have either of the two argument structures <agent, goal, theme> and <agent, possessor, theme>. We claim that *Mary-ni* in (28) is a realization of the possessor of the argument structure <agent, possessor, theme>, while *zitaku-ni* 'to his home' in (28) corresponds to a (locative) goal of the argument structure <agent, goal, theme>.

To sum up, Kishimoto's examples in (27a) and (28) do not pose a problem for our claim that *send*-type verbs encode caused possession, as well as caused motion.

# 4 Structure of Ditransitive Verbs

In this section, we will consider how the argument structures of ditransitive verbs are mapped to syntactic structures. In Section 3, we have demonstrated that the lexical meanings of Japanese ditransitive verbs (*send*-type verbs, *give*-type verbs and *sell*-type verbs) are the same as those of their English counterparts as shown in (29): according to RH&L (2008), *send*-type verbs encode both caused motion and caused possession, whereas *give*-type verbs (including *sell*-type verbs) encode only caused possession.

(	U		
	Japanese	Japanese	English
	Kishimoto	our proposal	RH&L
	(2001)		(2008)
		caused	caused
Send-	caused	motion	motion
type	motion	or	or
verbs		caused	caused
		possession	possession
Give-	caused	caused	caused
type	possession	possession	possession
verbs	x	possession	pessession
	caused		
Sell-	motion	caused	caused
type	or	possession	possession
verbs	caused		possession
	possession		

(29) Lexical meanings of ditransitive verbs

Assuming that the caused motion meaning is linked with the argument structure <agent, goal, theme>, whereas the caused possession meaning is linked with the argument structure <agent, possessor, theme>, we argue that each type of ditransitive verbs has the following argument structure(s).

- (30) Argument structures of ditransitive verbs in Japanese
  - a. *send*-type verbs <agent, possessor, theme> or <agent, goal, theme>
  - b. *give*-type & *sell*-type verbs <a href="mailto:segsor"><a href="mailto:segsor"><a href="mailto:segsor">segsor</a>, theme>

With these argument structures, now we will demonstrate that the two argument structures of *send*-type verbs in (30a) are in complementary distribution: it will never happen that the two argument

structures are realized simultaneously. Our claim differs from RH&L's (2008) view regarding English ditransitive verbs that the caused motion and caused possession event schemata (<agent, goal, theme> and <agent, possessor, theme> in our theory) are not in complementary distribution. RH&L claim that the verb *sent* in the two-goal construction (31) takes both the possessor goal *her* and the locative goal *to America* at the same time, and that (31) is a syntactic realization caused by combining the two schemata.

(31) Anne is curious as to why her father sent **her** a telegram **to America** to return home at once ... (RH&L, 2008)

The verb *okur*- 'send' in Japanese also allows the two-goal construction, as pointed out by Miyagawa and Tsujioka (2004).

(32) Taro-ga Hanako-ni nimotu-o Taro-NOM Hanako-DAT package-ACC
Tokyo-ni okutta. Tokyo-DAT sent
'Taro sent Hanako a package to Tokyo.' (Miyagawa and Tsujioka, 2004)

We argue that the two-goal construction like (32) is not derived by combining the two argument structures <agent, possessor, theme> and <agent, goal, theme>. Rather, we argue that the two argument structures are in complementary distribution (see Goldberg (1995) and Harley (2002) regarding similar suggestions for English ditransitive verbs).

Before examining the *send*-type verbs in Japanese, let us first consider the example in (33), which has two dative phrases, *katiku-ni* 'livestock' and *buta-ni* 'pigs.'

(33) Taro-ga katiku-ni buta-ni esa-o Taro-<sub>NOM</sub> livestock-<sub>DAT</sub> pig-<sub>DAT</sub> food-<sub>ACC</sub> ataeta. gave 'Taro fed the livestock, pigs.'

(33) can never be a realization of the combination of two argument structures. The verb *atae-* 'give' has only the argument structure <agent, possessor, theme>. Notice that (33) is unacceptable without a pause between the two dative phrases. The necessity of pause indicates that the second dative phrase *buta-ni* 'pigs' is a kind of after-thought information to specify the content of the first dative phrase *katiku-ni* 'livestock.' For this reason, we argue that the first dative phrase *katiku-ni* 'livestock' is an argument selected by the verb, whereas the second one is an unselected adjunct. Thus, the presence of two dative phrases in a single sentence does not always indicate that a single verb selects them as arguments, simultaneously.

Now, let us return to the two-goal construction in (32), where a possessor goal and a locative goal appear in a single sentence. Under our analysis, the verb *okur*- 'send' allows the two argument structures <agent, possessor, theme> and <agent, goal, theme>. The sluicing diagnostic test shows that the two-goal construction with this verb is not derived by combining the two argument structures.

nt
re?'

In (34), the wh-remnant corresponds to the implicit (unpronounced) dative argument of the verb okutta 'sent' in the antecedent clause. (34B) and (34B') show that okur- 'send' takes either a possessor goal or a locative goal. The examples of multiple sluicing with both a possessor goal and a locative goal (34B") and (34B") are unacceptable without the context where Taro sent someone a package to somewhere.' Without such a special context, (34A) cannot be replied by (34B'') nor by (34B'''). This would be surprising if the verb okutta 'sent' could select both a possessor goal and a locative goal at one time. We claim that the verb *okutta* 'sent' takes only one implicit (unpronounced) goal in the antecedent (34A), and that (34B") and (34B") are impossible due to the identity requirement, which requires the unpronounced verb okutta 'sent' in the elided clause to take only one goal.

Some Japanese speakers might judge (34B'') and (34B''') are acceptable with a specific intonation or pause. We argue that such native speakers might analyze (34B'') and (34B''') as in (35).

- (35) a. [CP [[vP1 Taro-ga; dare-ni nimotu-o;  $t_k$ ] & [vP2 proi doko-ni proi  $t_k$ ] okutta<sub>k</sub>]]
  - b.  $[_{CP} [[_{vP1} Taro ga; doko-ni nimotu o_j t_k] & [_{vP2} pro_i dare-ni pro_j t_k] okutta_{k}]$

In (35), there are two occurrences of *okur-* 'send,' and each occurrence selects *dare-ni* 'to whom' and *doko-ni* 'to where,' separately.

This analysis leads a possibility that the English two-goal construction in (31) is analyzed in the same manner as (35): *her* and *to America* in (31) are selected by each occurrence of *send*, separately. If so, the two argument structures <a gent, possessor, theme> and <a gent, goal, theme> are in complementary distribution both in Japanese and in English.

### 5 Conclusion

In this paper, we showed that the lexical meanings of major ditransitive verbs in Japanese are the same as those of their English counterparts. Specifically, we argued that Kishimoto's (2001) classification of send-type verbs and sell-type verbs is not correct. Under his classification, send-type verbs encode only caused motion (change of location in his term). However, we demonstrated that Kishimoto's examples regarding the implication of successful transfer and the animacy restriction do not eliminate the possibility that *send*-type verbs encode caused possession (as well as caused motion). We also showed that the identity requirement on sluicing presents a supportive argument for the view that send-type verbs encode both caused motion and caused possession. Furthermore, contra Kishimoto's claim that sell-type verbs encode both caused motion and caused possession, we argued that this type of verb encodes only caused possession. We demonstrated that Kishimoto's observation that *sell*-type verbs pattern with send-type verbs, which encode only caused motion, is not always correct: e.g. sell-type verbs as ditransitive verbs cannot retain their meanings when they are replaced by a directional movement verb, unlike send-type verbs. We also showed based on a sluicing test that *sell*-type verbs do not take a locative goal.

Finally, we argued that *send*-type verbs have two argument structures <agent, goal, theme> and <agent, possessor, theme>, and that these two argument structures are in complementary distribution, contra RH&L's (2008) view. They argue that the two-goal construction is syntactically realized by combining the two argument structures. In contrast, we claimed that the two-goal construction involves two occurrences of a ditransitive verb, each of which has a different argument structure <agent, goal, theme> or <agent, possessor, theme>. If so, it is not the case that a single verb in the two-goal construction selects two dative phrases simultaneously. We conclude that the two argument structures of *send*-type verbs are in complementary distribution.

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