ARGUMENT GAPPING IN COORDINATE CONJUNCTION CONSTRUCTIONS IN JAPANESE

YOSHITERU ASANO

When two clauses are conjoined by a coordinate conjunction (e.g. and), an argument of a verb in the second clause which corresponds to an argument of the verb in the first clause can be deleted. Traditionally, the condition for this phenomenon (ARGUMENT GAPPING) is recoverability of the deleted argument from the first clause. However, in Japanese, recoverability is not the sole condition affecting the gapping in coordinately conjoined clauses. Based on a data analysis including sentences with verbs of various patterns, it was found that verbs keep their marked (undeletable) arguments even when they are recoverable from the context.*

THE PROBLEM

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1.1. GAPPING ON VERBS. A sentence does not always have what we might always expect it to have. It often omits redundant information, or information that is available or salient in the contest of speech. Hankamer states (1979:1):

'Every natural language has in its grammar devices which allow the reduction of redundancy in surface structure: that is, which allow surface structure to contain far fewer redundant constituents than their underlying deep structures.'

As is apparent from the above statement, Hankamer assumes that there are two levels of structures: surface and deep structures. The deep structure contains all information, however redundant, approximating surface structure only through the use of some rules which optionally DELETE the redundant information existed in constituents to generate the surface structure.¹

This type of rule is known as a GAPPING rule because it creates a syntactic gap in the clause. (In fact, the notation used to represent a gap Ø assumes a missing constituent(s).) An example of an English sentence with a gap is as follows.

- (1) a. John ate fish and Mary ate steak.
 - b. John ate fish and Mary Ø steak.

In this case, ate in the second clause (Mary ate steak) of 1a was deleted in 1b. A coordinate conjunction and or or has to be used to conjoin two clauses. This is an example of FORWARD GAPPING. Forward gapping is said to occur when a constituent is deleted from the second clause when there is a corresponding constituent in the first clause, under the assumption that such a constituent is RECOVERABLE from the context (the first clause in this case). In theoretical terms (Transformational Grammar), the CONJUNCTION REDUCTION rule (Goodall 1992:311) is applied to delete the second ate.

However, some languages do not allow forward gapping. For example, Japanese does not allow forward gapping of verbs (Shibatani 1990:259; the order of sentences is changed):²

(2) Taroo tabe. Hanako ringo sosite ga Hanako apple eat and **AGT** Taroo **AGT** PAT mikan tabeta. 0 PAT orange ate

'Taro ate an apple, and Hanako ate an orange.'

^{*} I would like to thank Linda Nicita and Taimi Metzler for their editorial/grammatical comments as well as some points I overlooked. The original version of this paper was written in December 1993 for the course 'Topics in comparative linguistics' taught by Dr. Zygmunt Frajzyngier. —Throughout the paper, I use KUNREI-SIKI romanization for examples of Japanese words and sentences; however, for authors' names I use Hepbum romanization.

I Frajzyngier (p.c.) suggests that the word DELETE (and its nominal form DELETION) implies that something exists in a structure and that something disappears as a result of a certain operation on the structure, while the word OMIT (and its nominal form OMISSION) does not imply such an operation of making something disappear. Throughout this study, I assume DELETION because I posit a structure with all overt constituents to be basic and that some principles apply to make a final, surface structure which lacks some of those overt constituents.

² Shibatani uses NOM for a SUBJECT of both intransitive and transitive sentences, and ACC for a (direct) OBJECT of a transitive sentence, but I use SUB for a subject of an intransitive sentence, AGT for a subject of a transitive sentence, and PAT for a (direct) object of an intransitive sentence. Also, I use DAT for an (indirect) object or a recipient.

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(lit.) 'Taro ate an apple, and Hanako an orange.'

(lit.) 'Taro an apple, and Hanako atc an orange'

There must always be a verb in its clause-final position in Japanese. Since a verb should always be final, only BACKWARD GAPPING is possible as in 2c. In right-branching languages such as Japanese and Turkish, backward gapping is possible; however, in German, which is left-branching on the surface but is supposed to have DEEP SOV order, has also been observed to evoke backward gapping (Maling 1972).

The difference between forward and backward gapping is represented in the following diagram (Shibatani et al. 1992:299).

(3) Forward
$$A ... A \rightarrow A ... \emptyset$$

Backward $A ... A \rightarrow \emptyset ... A$
(where A is a constituent)

In fact, forward gapping is natural [sic] with respect to communicative function (Shibatani et al. 1992) because of the recoverability of the deleted constituent(s), and it is observed in Japanese also.

1.2. ARGUMENT GAPPING refers to a phenomenon in which one or more arguments (constituents) are deleted when two conjoined clauses have such arguments in common. In Japanese, the backward gapping observed for verbs cannot be applied to argument gapping:³

Exx. 4a-4b are considered ungrammatical because those sentences evoke questions asking for the missing arguments (for 4a, 'What did Taroo eat?' and for 4b, 'Who ate the apple?'). This is because the missing arguments (PAT in 4a and AGT in 4b) are unrecoverable from the context at the time the first clause is being processed. In these cases, only forward gapping is possible:

Moreover, Japanese is known to allow a subjectless sentence but such subjectlessness may depend on the construction (cf. exx. 4b and 5).

However, not all arguments can be deleted in this way. Consider this sentence:

Although the PAT in the second clause is recoverable from the context (supposedly ringo o 'apple PAT'), Ex. 6 is regarded as ungrammatical. Therefore, recoverability from the context cannot be the only condition for argument gapping.

A HYPOTHESIS

2.1. SOME EXPLANATIONS OF ARGUMENT GAPPING. Shibatani et al. 1992 give two conditions under which arguments may be deleted (not restricted to a coordinate conjunction construction): (a) when co-referential elements are involved; that is, the element(s) deleted can be recovered from the corresponding elements of the other part of the construction, as seen above; and (b) when a specific lexical item [sic] is deleted; for example, in the case of

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imperatives in English, a subject you is almost always deleted in the surface structure.⁴ In both conditions, the recoverability of the deleted argument(s) is assumed: construction-internal recoverability for (a) and construction-external one for (b).

However, as mentioned in the previous section, recoverability does not always explain the phenomenon of argument gapping, at least not in Japanese. For example, the evidence offered in 5 and 6 above suggests the hypothesis that gapping may be possible only for AGT, but not for PAT, in the second clause. However, this hypothesis would have to be modified to reflect the fact that AGT is not only the argument that is deleted in argument gapping. Consider these sentences:⁵

	_							
(7)	a.	A	ga AGT	В	o PAT	С	<i>ni</i> DAT	syookaisi-te, introduce-CONJ
			D	ga AGT	E	o PAT	F	ni syookaisi-ta. DAT introduce-PAST
		4,	A introduc	ed B to 0	C, and D	introduce	ed E to F.	•
	b.	A	ga AGT	В	o PAT	С	<i>ni</i> DAT	syookaisi-te, introduce-CONJ
			Ø	E	o PAT	F	<i>ni</i> DAT	syookaisi-ta. introduce-PAST
		٠,	A introduc	ed B to C	C, and \underline{A}	introduce	d E to F.	
	c.	A	ga AGT	В	o PAT	С	ni DAT	syookaisi-te, introduce-CONJ
			D	ga AGT	E	o PAT	Ø	syookaisi-ta. introduce-PAST
		'	A introduc	ed B to C	C, and D	introduce	d E to <u>C</u> .	•
	ď	?A	ga AGT	В	o PAT	С	ni DAT	syookaisi-te, introduce-CONJ
			D	ga AGT	Ø	F	<i>ni</i> DAT	syookaisi-ta. introduce-PAST
		_						

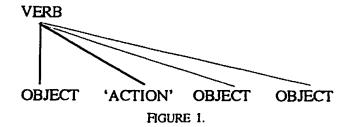
(for 'A introduced B to C, and D introduced B to F.')

Here AGT and DAT are possible candidates for argument gapping. Therefore it is not the case that the argument in a specific grammatical relation (such as AGT or PAT) should undergo gapping. What, then, is a plausible constraint for argument gapping?

- 2.2. HYPOTHESIS. The hypothesis examined in the present study is as follows: each verb in the study has its own MARKED (obligatory) argument(s) and when that argument(s) is deleted, the clause will become ungrammatical even when it is (or they are) recoverable from the context. For instance, in the case of 5, 6 and 7 above, PAT is the marked argument, which cannot be deleted from the second clause. This hypothesis is to look at the phenomenon of argument gapping from the opposite side of recoverability. That is, while recoverability explains which argument(s) CAN be deleted, this hypothesis should explain which argument(s) CANNOT be deleted.
- 2.3. BACKGROUND. This hypothesis finds support in the concept of lexical categories (especially, nouns, adjectives, and verbs) as discussed in Frajzyngier 1985. By using coordinate conjunction construction, Frajzyngier showed (1985:118) that '[T]he distinction between the categories consists in their ability to describe relationships between objects and the states or qualities that the objects have' His diagram for verbs used to describe the relationships (propositional properties) which are maintained between verbs and their arguments (implied in the non-linguistic reality), is shown in Figure 1 (taken from Diagram 2 of Frajzyngier 1985:116). This diagram illustrates a construct in which the category VERB describes one 'action' (or 'state') and one obligatory object (connected by dark lines) and optional objects (connected by light lines).

⁴ That is, deletion of a specific argument is STRUCTURALLY CONDITIONED in this case.

⁵ In these examples, A, B, C, ... are all persons. They can be replaced by proper names such as *Taroo* and *John*.



In a similar vein, Kudo et al. 1993 argue that we as speakers know the kind of noun phrase(s) a verb requires to realize the motion or the state which the verb represents, and the kind of semantic features that the noun phrase(s) may have. That is, a verb determines its argument structures and the speakers can understand the semantic roles of the argument(s) even when not all of them are present in a construction.

PROCEDURE

3. To test the hypothesis that each verb has its own marked argument(s), I used the coordinate conjunction construction exemplified in 7,6 with different verbs. The construction has the following template:

(8) Arg1 Arg2 Arg3
$$V_i$$
-te, Arg4 Arg5 Arg6 V_i -ta.

-CONJ -PAS1

where: Arg1 and Arg4, Arg2 and Arg5, and Arg3 and Arg6 have the same grammatical relation (i.e. AGT, PAT, DAT, LOC etc.) shown by a corresponding postposition, and V_i is a verb which takes those preceding Arg's.

For example, ex. 7 (repeated below as 9) fits the template as follows:

From this construction, Arg4 was deleted to check if the whole construction was grammatical with the remaining five arguments; then, Arg4 was put back into the sentence and Arg5 was deleted and checked for grammaticality. The procedure was repeated for Arg6.

The grammaticality judgment was based on my native intuition as to whether the resulting construction would evoke a further question asking for the missing argument. If the resulting construction evoked such a question, the construction was judged to be ungrammatical. However, if the results of such a test were borderline, i.e. if they were unclear, then the construction was marked with a '?'.

The verbs and their subcategorization frames used in the present study were as follows:

(10)	a.	ageru	'to give (something[PAT] to someone[DAT])'
	b.	okuru	'to send (something[PAT] to someone[DAT])'
	C.	tugeru	'to tell (something[PAT] to someone[DAT])'
	d.	kakeru	
		— denwa o kakeru	'to call (someone) on the phone'
			(lit. 'to "put" a phone[PAT] to someone[DAT]')
		- koe o kakeru 'to i	address (someone)
			(lit. 'to "put" a voice[PAT] to someone[DAT]')
	e.	tataku	'to tap (something[PAT] with something [INSTRumental])'
	f.	oku	'to put, to place (something[PAT] in somewhere [LOCative])'

⁶ The function of coordinate conjunction is not simple. As Schachter states: 'If two constituents are coordinately conjoined, there must be some pragmatic motivation for the conjunction—some situation to which the conjunction is appropriate" (1977:91). In the case of the present study, the function (or meaning) of the conjunction is limited to SIMPLE conjunction of two different 'actions' or events without a temporal sequence or simultaneous action (see fn. 3).

⁷ I specifically avoided use of the topicalizing postposition wa because of its confounding multi-functional capacity which allows it to replace postpositions such as ga (SUB or AGT) and o (PAT), to attach to other postpositions to topicalize them; see the following example.

Huyu-yasumi	ni- <u>wa</u>	watasi	<u>wa</u>	tookyoo	e- <u>wa</u>	kaera-nai.			
winter-break	in-TOP	I	TOP	Tokyo	to-TOP	retum-NEG			
'During the winter break, I won't return to Tokyo.'									

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g.	suru	'to do' — (something[PAT] at somewhere)
h.	(ditto)	- (something[PAT] with someone [ASSociative])
i.	(ditto)	- (something[PAT] at certain time [TeMPoral])
j.	iku	'to go (somewhere[LOC] with someone[ASS])'
k.	neru	'to sleep (somewhere[LOC] at certain time[TMP])'

In terms of template 8, these verbs were inserted into the following argument structures:

(11)	a.	(11a-d)	AGTI	DATI	PATI	Vi-te.	AGTi	DATÍ	PATi	Vi-ta.
` '	b.	(11e)	AGTi	INSTRI	PATI	Vi-te,	AGT	INSTRj	PATÍ	Vi-ta.
	C.	(111)	AGTi	LOC(in)i	PATI	Vi-te,	AGTj	LOC(in)j	PATj	Vi-ta.
	ď	(11g)	AGTI	LOC(at)i	PATi	Vi-te,	AGT	LOC(at)j	PATj	Vi-ta.
	e.	(11h)	AGTI	ASSi	PATI	Vi <i>-te</i> ,	AGT	ASSj	PATj	Vi-ta.
	f.	(11i)	AGTI	TMPi	PATI	Vi-te,	AGT	TMPj	PATj	Vi-ta.
	g.	(11j)	SUBi	ASSi	LOC(to)i	Vi-te,	SUBj	ASSj	LOO(to)j	Vi-ta.
	h.	(11k)	SUBi	TMPi	LOC(in)i	Vi <i>-te</i> ,	SUBj	TMPj	LOC(in)j	Vi-ta.
		(suboro	indi	ndianta tha	lifferent levi	and itame	Λ	_	,	

(where i and j indicate the different lexical items)

See the Appendix for a list of actual test sentences used in the present study.

RESULTS AND DISCUSSION

4. The results of the grammaticality judgments for the test sentences showed the following overall patterns in terms of which argument is MARKED (cannot be deleted).

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(12) — for 11a-11i (AGT X PAT): <u>PAT</u>

(except 11e, which does not have a marked argument; i.e., all arguments can be deleted)

— for 11j and 11k (SUB X LOC): <u>LOC</u>

(where X denotes any type of argument)
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Thus we see that PAT is marked for those sentences with PAT (i.e. with a transitive verb), and LOC is marked for those intransitive construction with LOC.

In all cases, AGT or SUB is the argument which can always be deleted. After all, SUB/AGT (or in a traditional term, SUBJECT) in Japanese is not necessary even in non-coordinate sentences. Noda 1992 states that it is wasteful to say the subject all the time if some other devices can specify it. Indeed, in Japanese, it is possible to know what the subject is with the help of other devices. Noda (1992: 182-3) points out that correspondence of subjects between main and subordinate clauses can be one of the factors for identification of a referent by a subject.⁸

As Kac (1985:6) says, about non-overt subjects,

"... to assure that for every predication in a sentence, a subject slot will be reserved for the predicate and filled in some rule-sanctioned way. How this is done in cases where the Subject is non-overt varies depending on the nature of the construction involved."

Hence non-overt subject is not a phenomenon specific to Japanese.

The pattern which emerged from the grammaticality test and was reported in 13, suggests that those arguments which are PHYSICALLY CLOSE TO THE VERB cannot be deleted. However, it seems that so strong a suggestion would need further verification. Therefore, I reexamined the sentence in 10a (with ageru 'give'; AGT DAT PAT order), scrambling the order of the arguments (e.g. DAT PAT AGT, PAT AGT DAT etc.) As Japanese does not observe rigid constituent order, scrambling does not generate ungrammatical sentences as long as the arguments maintain proper postpositions. Then, I performed the same test of grammatical judgment as described in §3. The results showed a different pattern of deletable arguments. The results are as follows:

(13)	Clause-initial argument	Marked (undeletable) argument				
	AGT	PAT	(as in 12)			
	DAT	PAT	(and AGT to some extent)			
	PAT	DAT	,			

This pattern suggests that PAT can be deleted when PAT is in the initial position of the first clause of the coordinate conjunction construction. This may be because the clause-initial PAT becomes a topic of the first clause and its status as a topic is carried on to the second clause. Thus, even PAT is marked in the second clause, it can be recoverable from the context (the topic).

⁸ Other factors include: type of a sentence (question, volition, command); expression of speaker's feeling or speaker's perception of the outside world, such as want for speaker's feeling; expression with directionality; honorific expression; and correspondence of subjects for two sentences adjacent to each other.

With respect to my original hypothesis, i.e. the verbs mark some arguments as more central to conveying their meaning than others, it was not strongly supported. The emergence of pattern independent of individual verb subcategorization frames but dependent on argument placement undermines the original hypothesis. However, there is evidence that some verbs may behave differently from others. In the present study, ex. 10e (with tataku 'to tap') allowed all of the arguments to be deleted individually. This may be because of idiosyncrasy of the verb; although the argument which the agent taps is expressed by the postposition o (PAT), it may not be perceived as TRUE PAT. It is the LOCATION of the tapping that the argument shows. Therefore, this kind of study may need finer distinctions in grammatical relations in terms of semantic aspects of use of language.

DELETION OF TWO ARGUMENTS

- 5.1. GENERAL DESCRIPTION. So far, the present study has dealt with deletion of only one argument. However, it is plausible that two (or more) arguments can be deleted from the second clause. Compare the following examples from English and Japanese (taken from Shibatani et al. 1992:303-4; partly modified). Notice that argument gapping is accompanied by the backward gapping of a verb.
 - (14) a. *John lent Ø Ø, and Bill gave Mary a bicycle.
 - Ъ. Taroo wa Amerika ni Ø Ø, Hanako Huransu ni **AGT** America to AGT France kaado okut-ta. 0 card send-PAST PAT

'Taro sent a card to America, and Hanako to France.'

Amerika C. Taroo wa Ø Ø Ø. Hanako wa America ACT AGT Huransu ni kookuu-bin okut-ta. kaada 0 France send-PAST airmail card **PAT** to by

'Taro sent a card to America by airmail, and Hanako to France.'

- 5.2. RESULT IN CASES OF TWO-ARGUMENT DELETION. I examined the test sentences (see the appendix) for which arguments can optionally be deleted and for which arguments cannot be deleted. Although most of the test sentences became borderline when two arguments were deleted, generally the pattern of argument deletion is as stated in 12; that is, for transitive verbs 10a through 10i, PAT must remain in a sentence, and for intransitive verbs 10j and 10k, LOC must. This supports the contention that PAT and LOC are marked. Moreover, when PAT was deleted together with another argument (either SUB, AGT, or DAT), the resulting sentences evoked a question asking for the PAT argument. This also supports the fact that PAT is necessary in the second clause.
- 5.3. CASES IN WHICH TWO ARGUMENTS CAN BE DELETED. In the previous section, I asserted that it is impossible to delete PAT from those sentences I examined. However, I found two cases (or devices) in which it is indeed possible to delete ANY two arguments (including PAT) from the sentences, and still leave the sentences grammatical.
- **5.3.1.** NEGATION/TOPICALIZATION. The first device is a combination of negation of the second clause of the coordinate conjunction construction with topicalization of the entire construction. Consider the following examples:
 - (15)?Taroo ga Hanako ni tvoko o age-te, **AGT** DAT chocolate PAT give-CONJ Ziroo ga kyandee age-nakat-ta. Masako ni 0 AGT DAT candy PAT give-NEG-PAST (for 'Taro gave chocolate to Hanako, but Jiro did not give candy to Masako.') b. Taroo Hanako ni tvoko age-te, ga DAT **AGT** chocolate PAT give-CONJ

kyandee Ziroo Masako ni 0 age-nakat-ta 90 AGT DAT candy PAT give-NEG-PAST hen da. no WZ COMP TOP strange COP

'It is strange that Taro gave chocolate to Hanako, but Jiro did not give candy to Masako.'

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c ₁ .	Taroo	ga AGT	Hanako	ni DAT	<i>tyoko</i> chocolate	o PAT	<i>age-te</i> , give-CONJ
		Ziroo ga AG		Ø	Ø		e-nakat-ta e-NEG-PAST
		no COMP	WAZ TOP	<i>hen</i> strange	<i>da.</i>		

'It is strange that Taro gave chocolate to Hanako, but Jiro did not give (chocolate) (to Hanako).'

Taroo Hanako c2. ga ni tyoko age-te, AGT chocolate PAT give-CONJ age-nakat-ta Ø Masako ni DAT give-NEG-PAST no Wa hen da. COMP TOP COP strange

'It is strange that Taro gave chocolate to Hanako, but (Taro) did not give (chocolate) to Masako.'

Taroo Hanako с3. ga ni tyoko age-le, ACT DAT chocolate PAT give-CONJ Ø Ø kvandee n age-nakat-ta candy PAT give-NEG-PAST hen da. no WZ COMP TOP strange COP

'It is strange that Taro gave chocolate to Hanako, but (Taro) did not give candy (to Hanako).'

In each of exx. 15c₁-15c₃, any two arguments could have been deleted with the sentences remained grammatical. I examined all of the test sentences used in the present study to see if this phenomenon extends to all verbs examined and found that the phenomenon held.

Merely negating the second clause of the conjoined construction does not make the resulting sentence completely grammatical (as in 15a). Therefore, this may be because of interaction of negation and topicalization.

5.3.2. THE POSTPOSITION MO 'TOO'. The same phenomenon, i.e. deletion of two arguments, can be observed when a postposition mo 'too' is used in the coordinate conjunction construction:⁹

(16)	a.	Taroo	ga AGT	Hanako	<i>ni</i> DAT	<i>tyoko</i> chocolate	o PAT	<i>age-te</i> give-(•
			Ziroo	ga AGT	Masako	ni DAT	<i>kyandee</i> candy	o PAT	<i>age-ta.</i> give-PAST
		470				4 **			

'Taro gave chocolate to Hanako, and Jiro gave candy to Masako.'

b. Taroo tyoko ga Hanako ni age-te, AGT DAT chocolate PAT give-CONJ Ziroo Ø Ø <u>mo</u> age-ta. **AGT** give-CONJ

'Taro gave chocolate to Hanako, and Jiro did, too.'

Again I examined all types of arguments in the test sentences used in the present study and found that sentences with the postposition mo are grammatical with any two arguments deleted from the second clause.

CONCLUSION

6. The present study examines the phenomenon of ARGUMENT GAPPING in the light of the coordinate conjunction construction in Japanese. In the traditional account of deleting arguments in the second clause of such a construction, recoverability from the context (the first clause) was emphasized. However, the present study found that issues other than recoverability contribute to this phenomenon. The hypothesis that each verb has its own marked

⁹ The postposition mo in 17b replaces the postpositions ga (SUB or AGT) and o (PAT), but it is attached only after other postpositions (e.g. Hanako ni-mo 'to Hanako, too').

(undeletable) argument was not strongly supported, but loosely so. In the sentences examined, most transitive verbs must have a PAT argument (which roughly corresponds to the traditional DIRECT OBJECT) and intransitive verbs should have a LOC (locative) argument. The present study also showed that there are some cases in which only one argument (out of three, in the case of the test sentences here) is obligatory in certain constructions (i.e. combination of negative and topicalization in §5.3.1, and use of the postposition mo in §5.3.2).

The present study needs some refinement in terms of the variety of arguments and verbs. Further studies may include finer distinctions in arguments based on differences in cognitive aspects (as mentioned in §4 with respect to the verb *tataku* 'to tap'). Nonetheless, I hope that the present study can serve as a preliminary to the understanding of ARGUMENT GAPPING in Japanese.

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APPENDIX: LIST OF TEST SENTENCES

				APPEN	DIX: LIST	OF TES	1 2EMI	ENCES
10a.	ageru	'to give	•					
	Taroo	ga AGT	Hanako	<i>ni</i> DAT	<i>tyoko</i> chocola	o ate PAT	<i>age-</i> 1 give	le, -CONJ
		Ziroo	ga AGT	Masako	ni DAT	kyandee candy		<i>age-ta</i> . give-PAST
	'T a	aro gave c	hocolate	to Hanak	o, and Jiro	gave can	dy to Ma	sako."
10b.	okuru	'to send	•					
	Taroo	ga AGT	Hanako	<i>ni</i> DAT	<i>tegami</i> lette r	o PAT	okut- send-	•
		Ziroo	ga AGT	Masako	<i>ni</i> Dat	<i>kaado</i> card	o PAT	okut-ta. send-PAST
	'Ta	aro sent a	letter to I	lanako, a	and Jiro sen	t a card to	o Masako	o. '
10c.	tugeru	'to tell'						
	Taroo	ga AGT	Hanako		<i>ai o</i> love PAT		e-1e, -CONJ	
		Ziroo	ga AGT	Masako	ni toki DAT time	o PAT		e-Ia. -PAST
	'Ta	aro told hi	is love to	Hanako,	and Jiro to	ld the tin	ne to Mas	sako.'
10d.		'to "put"		·				
	Taroo	ga AGT	Hanako	<i>ni</i> DAT	<i>denwa</i> telephon	o e PAT	<i>kake-te</i> 'put'-C	• 7
		Ziroo	ga AGT	Masako		k <i>oe</i> voice	o PAT	<i>kake-ta.</i> 'put'-PAST
	"Ta	tro called	Hanako o	ver the p	hone, and Ji	ro addres	sed Masa	ako.'

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```
10e.
         tataku 'to tap'
         Taroo
                                    de
                                                 tukue
                 201
                          te.
                                                                      tatai-te,
                 AGT
                                    INSTR
                          hand
                                                 desk
                                                             PAT
                                                                      tap-CONJ
                 Ziroo
                                    ashi
                                              de
                          20
                                                             vuka
                                                                                tatai-ta.
                                                                       0
                          AGT
                                    foot
                                             INSTR
                                                             floor
                                                                                tap-PAST
                                                                       PAT
             'Taro tapped a desk by hand, and Jiro tapped the floor with his foot.'
10f.
         oku 'to put (in a place)'
         Taroo
                 Qα
                          daidokoro
                                        ni
                                                     kabin
                                                                 0
                                                                          oi-te.
                 AGT
                          kitchen
                                        LOC
                                                     vase
                                                                PAT
                                                                          put-CONJ
                 Ziroo
                          ga
                                   sinsitu
                                                 ni
                                                              terebi
                                                                                      oi-ta.
                                   bedroom
                          AGT
                                                 LOC
                                                              TV
                                                                         PAT
                                                                                      put-PAST
             'Taro put a vase in the kitchen, and Jiro put a TV set in the bedroom.'
10g.
        suru 'to do' with LOC
                          gakkoo
        Taroo
                 92
                                      de
                                                  sakkaa
                                                                      si-te,
                 AGT
                          school
                                     LOC
                                                  soccer
                                                             PAT
                                                                      do-CON
                 Ziroo
                          90
                                   zinzya
                                                æ
                                                           yakyuu
                                                                                  si-ta.
                                                                       0
                          AGT
                                   shrine
                                               LOC
                                                           baseball
                                                                       PAT
                                                                                  do-PAST
             'Taro played soccer in school, and Jiro played baseball at the shrine.'
10h.
        suru 'to do' with ASSOC
        Taroo
                 ρa
                          Hanako to
                                                  sukii
                                                                       si-te,
                 AGT
                                   ASSOC
                                                  ski
                                                             PAT
                                                                       do-CONJ
                 Ziroo
                                   Masako
                                                           sukeeto
                                                                            si-ta.
                          90
                                              lo
                                                                     0
                          AGT
                                              ASSOC
                                                           skate
                                                                     PAT
                                                                           do-PAST
             'Taro skied with Hanako, and Jiro skated with Masako.'
10i.
        suru 'to do' with TMP
        Taroo
                 ga
                          kinoo
                                         sukii
                                                            si-te,
                                                   0
                 AGT
                          yesterday
                                         ski
                                                   PAT
                                                            do-CONI
                 Ziroo
                                   ototoi
                                                              sukeeto
                                                                                  si-la.
                          ga
                                                                         o
                          AGT
                                   day.before.yesterday
                                                              skate
                                                                         PAT
                                                                                  do-PAST
             'Taro skied yesterday, and Jiro skated the day before yesterday.'
10i.
        iku 'to go'
        Taroo
                 20
                          Hanako
                                      to
                                                     gakkoo
                                                                             il-le.
                 SUB
                                      ASSOC
                                                     school
                                                                 LCC
                                                                             go-CONJ
                 Ziroo
                                                                              it-ta.
                                   Masako
                                               to
                                                              zinzya
                          SUB
                                               ASSOC
                                                              shrine
                                                                       LOC
                                                                             go-PAST
             'Taro went to school with Hanako, and Jiro went to a shrine with Masako.'
10k.
        neru 'to sleep'
        Taroo
                          kinoo
                                              beddo
                                                        æ
                 ga
                                                                   ne-le,
                 SUB
                                              bed
                          vesterday
                                                        LCC
                                                                   sleep-CONJ
                 Ziroo
                          ga
                                   ototoi
                                                                  sofaa
                                                                           de
                                                                                   ne-ta.
                          SUB
                                   day.before.yesterday
                                                                  sofa
                                                                           LCC
                                                                                   sleep-PAST
             'Taro slept on a bed yesterday, and Jiro slept on a sofa the day before yesterday.'
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