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Zero particle and particle drop in Japanese

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Abstract

Japanese is an agglutinative language, with particles that are function words showing the cases or grammatical and semantical relationships of the nouns. However, in colloquial speech it is quite usual that there is absence of these particles. Some researchers claim that absence of particles is simply particle drop, while others claim that there is not only particle drop but also another function. In some cases no particle can be placed the vacant place, which in this thesis is called Zero Particle. Previous research on the absence of particle has primarily focused on a pragmatic point of view, so this is an area which has seen little syntactical research, which is the purpose of this thesis.

In order to examine whether the absence of particle represents particle drop or zero particle a survey was created and given to 17 native Japanese speakers and analyzed, resulting in the identification of two conditions for particle drop: Animacy and word order.

To find examples of zero particles occurring in natural conversations, we also examined the CALLHOME Japanese Transcripts. In total, 464 sentences were selected and analyzed in detail. We identified 30 occurrences of zero particle, of which two are of a new type. A characteristic of these two occurrences is that a native Japanese speaker would not place any particle where there is absence of particle. Interestingly, the absence of particle follows the pronoun "watashi" (I).

In conclusion, in this thesis we find that there are three types of absence of particle: particle drop, and two types of Zero Particle.

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Chapter 1 Introduction

Japanese is an agglutinative language, with particles that are function words showing the cases or grammatical and semantical relationships of the nouns, for example Agent, Patient etc. However, in colloquial speech it is quite usual that there is absence of particles.

Some researchers claim that absence of particles is simply particle drop, while others claim that there is not only particle drop but also another function. This is because if the absence of particles is only a particle drop, it should be possible to place a particle in the vacant place and the meaning of the sentence should remain the same. However in some cases no particle can be placed the vacant place, which these researchers call is "Mujoshikaku"(non particle case). "Kaku"(case) implies that the absence of particles functions as a case marker, but the absence of particles does not provide other case functions than ordinary particles, so the name "Mujoshikaku" (non particle case) does not really fit. A new term is introduced here, being Zero Particle.

In colloquial speech, the absence of particle occurs often, causing new learners of the Japanese language to wonder, because, based on the Authors experience with teaching Japanese at the University of Oslo and other places, textbooks of the Japanese language do not explain the absence of particle. Previous research on absence of particle have primarily focused on a pragmatic point of view, however it seems that there are also other points of view that should be studied. It is difficult for learners to understand the absence of particle only from a pragmatic point of view, so it should also be studied from a syntactical view, and that is the purpose of this thesis. As we observed in the Chapter on related work, this is also an area that has seen little syntactical research so far. The contributions of this thesis is an analysis of this problem from a syntactical point of view, based on a survey undertaken by 17 native Japanese speakers, and an analysis of absence of particle occurrences in the CALLHOME Japanese Transcripts, to give a greater understanding of the function of zero particle.

This thesis is structured as follows. Chapter 1 has this introduction, while in Chapter 2, we first describe the function of particles. Previous research on particle drop is presented in Chapter 3, and data on colloquial Japanese collected from our survey, is described with results and analysis in chapter 4. Conditions of particle drop are covered in chapter 5, Previous research on zero particle are listed in chapter 6, then conversational data from the CALLHOME Japanese Transcripts is analysed in chapter 7. Functions and conditions of occurrences of zero particle is covered in Chapter 8, and finally our conclusions are presented in chapter 9.

Chapter 2 Description of particles' function.

In this Chapter, the functions of some particles will be covered. Below is a description of the function of the particles "wa", "ga", "wo" and "ni". These particles can drop or be replaced by a zero particle(ZP) in colloquial speech. By showing their functions this chapter aims to make it easy to determine whether absences are drops or ZPs.

2.1 The particle "wa"

The particle "wa" shows the topic of a sentence. (1)a means 'Speaking of Taro, he is a student.'

(1)a. Taroo wa gakusei desu.
Taro student is
'Taro is a student.'

"Wa" has the other function such as showing contrastive meaning. (Kuno 38), (Masuoka and Takubo 153), (Noda 7).

(1) b. Ame wa hutte imasu ga, yuki wa hutte imasen.
rain falling is but, snow falling is not
'It is raining, but it is not snowing.'

(Kuno 38)

Matsumura (1969) claims that the particle "wa" has characteristic in distinguishing the noun from other thing. (Matsumura 591)

2.2 The particle "ga"

The particle "ga" has three functions according to Kuno(1973). The first function is exhaustive listing. For example in (1) c., of all the people under discussion, only John is a student, and it means "It is John who is a student."(Kuno 38)

(2)a. John ga gakusei desu.John student is'John is a student.'

(Kuno 38)

The second function is for natural descriptions of actions or temporary states. (Kuno 38) Below is an example.

(2)b. Ame **ga** hutte imasu. rain falling is 'It is raining.'

(Kuno 38)

The third function is object marking.

(3) Boku wa Mary ga suki desu.
I Mary fond of am 'I like Mary.'

(Kuno 38)

2.3 The particle "wo"

The particle "wo"'s function is object marking.

(4) John ga asoko de hon wo yonde imasu.John that place book reading is'John is reading a book there.'

(Kuno 79)

2.4 The particle "ni"

The particle "ni" has two functions. One of them is object marking.

(5) John ga Mary ni atta.John Mary met'John met Mary.'

(Kuno 102)

The other function is to show the goal of the motion designated by the verb (Kuno 97) or location.

(6) Jeep de yama ni nobotta.
Jeep mountain climbed
'I climbed the mountain by jeep.'

(Kuno 99)

Chapter 3

Previous research on particle drop

3.1 Tsutsui (1984)

Tsutsui provides a definition of the ellipsis of case particles. There are three conditions for case particle ellipsis. (Tsutsui 1984:9)

- (A) There is an NP
- (B) The NP assumes a grammatical or semantic relation which is supposedly indicated by a case particle
- (C) The case particle is absent

According to this definition a sentence like (1)a is also case particle ellipsis.

Tsutsui also provides three rules for particle "wa" ellipsis in conversations. (Tsutsui 1984:52-53)

3.1.1 "wa" ellipsis rule 1

The ellipsis of "wa" in the sentence "(Z) X-wa Y" is highly unnatural if one of the following conditions is met:

- (D) X-wa is a contrastive element.
- (E) Y is unstated but implied.
- (F) Y is a contrastive element. (Tsutsui 52)

In the above rules, X is an element marked by "wa", Y is the following portion containing the predicate, and Z is the optional portion.(Tsutsui 53)

3.1.1.1 (D) X-wa is a contrastive element.

According to Kuno(1973) the particle "wa" has two functions, thematic function and contrastive. (D) in the above rules says if the particle "wa" has a contrastive function, the "wa" will not be dropped as in the following sentence.

(7) Boku wa/*ø oyogimashita ga Bill wa/*ø oyogimasendeshitayo.
I swam but Bill didn't swim.'

(Tsutsui 54)

3.1.1.2 (E) Y is unstated but implied.

Tsutsui points out there are two cases which meet (E) in the "wa" ellipsis rule 1. The first one is when Y can be understood from the linguistic context.

(8) Watashi wa suteeki ni shimasu. Anata wa/*ø?
I steak decide You

'I'll have steak. How about you?'

(Tsutsui 59)

In (8) after "Anata wa" (You) can be considered as "nani ni shimasuka?" (what decide), and the second sentence of (8) is considered as follows.

(9) Anata wa nani ni shimasuka?

You what decide

'What will you have?'

(Tsutsui 59)

In this case the particle "wa" in (8) cannot be dropped.

The second case which meets (E) in the "wa" ellipsis rule 1 is when Y can be understood from the extralinguistic context.

(10) Okaasan wa/*ø ?
Mother
'Where is mother?'

(Tsutsui 60)

If a boy utters (10) to his sister when he comes home, then after "Okaasan wa?" is considered to be as follows based on the situation.

(11) Okaasan wa doko ?

Mother where 'Where is mother?'

(Tsutsui 60)

In this case the particle "wa" in (10) cannot be dropped.

3.1.1.3 (F) Y is a contrastive element.

Tsutsui provides two cases which meet condition (F) in "wa" ellipsis rule 1. The first one is when Y is syntactically contrasted. Tsutsui points out that with the sentence structure "NP1-wa NP2 Copula", which is used to contrast Y, it is the case that Y is syntactically contrasted.

- (12) A; Koko ni Yamada-san tte hito wa imasenka? Here in Yamada called person not exist 'Is there a person called Mr.Yamada here?'
 B; Yamada wa/*o boku desu.
 - Yamada I am 'I am Yamada'

(Tsutsui 62)

In the sentence which is B's response to A's question in (12), "boku desu" (I am) is contrastive. So the particle "wa" in (12) cannot be dropped.

The second case which meets (F) in "wa" ellipsis rule 1 is when Y is contrasted using phonological stress.

3.1.2"wa" ellipsis rule 2

The ellipsis of "wa" in the sentence "(Z) X-wa Y" is natural if the degree of the speaker's presupposition about X is high at the moment of speech. (Tsutsui 52)

Tsutsui describes "the degree of the speaker's presupposition about X is high at the moment of speech" this way: when the speaker utters the sentence he/she assumes that his/her presupposition about X is obvious to the hearer. Tsutsui uses the term "contact" to explain this, and defines "Degree of the Speaker's Presupposition Hypothesis" as follows.

"The degree of the speaker's presupposition about X is high if the speaker and the hearer maintain close contact with the referent of X." (Tsutsui 68)

In this hypothesis "close contact" does not necessarily mean that one is close to what is perceived. Rather, "close contact" is meant to be such contact that causes a clear sensation in one's mind. (Tsutsui 68)

For example in (13) the speaker is the referent of X. The X here is physically in "close contact". In (14) the speaker is also the referent of X, but is not in "close contact". "Ore" (I) in (14) is not physically in "close contact" because it refers to "T" in the past. To distinguish the past (I) and present (I), the speaker uses the particle "wa", and maintains distance.

(13) Watakushi wa/o Yamada to mooshimasu.

Yamada that say

'I am Yamada.'

Ι

(Tsutsui 69)

(14) Ore **wa/*o** itsumo no yooni ekimae de kyakumachi wo shiteitanda.

I usual like in front of the station waiting customers was doing

'I was waiting for customers in front of the station as usual.'

(Tsutsui 71)

When the speaker and the hearer maintain "close perceptive contact", for example visually, aurally, in time and space, sensing or feeling something, with the referent of X at the moment of speech, the ellipsis of "wa" is natural. In this case demonstrative pronouns are used as in (15).

(15) Kono waado purosessaa wa/o totemo benri desuyo.
this word processor very convenient is
'This word processor is very convenient.'

(Tsutsui 78)

3.1.3"wa" ellipsis rule 3

If both the condition in "wa" ellipsis rule 1 and the condition in "wa" ellipsis rule 2 are met at the same time, rule 1 takes precedence over rule 2. (Tsutsui 53)

(16) has "kore" (this) and "kore" satisfies wa" ellipsis rule 2. So (16) meets both the condition in "wa" ellipsis rule 1 and the condition in "wa" ellipsis rule 2. However according to "wa" ellipsis rule 3, "wa" ellipsis rule 1 precedes over "wa" ellipsis rule 2, so the particle "wa" in (16) cannot be dropped.

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(16) Kore wa/*ø?
```

this

'What is this?'

(Tsutsui 83)

On the other hand (17) does not meet "wa" ellipsis rule 1, so the particle "wa" in (17) can be dropped.

(17) Kore wa/ø nani? this what

'What is this?'

(Tsutsui 83)

Tsutsui provides four general rules of case particle ellipsis as follows; (Tsutsui 1984:90-98)

3.1.4 case particle ellipsis rule 1

The lower the formality level is, the more natural the ellipsis of case particles is.

When the conversation is less formal, the ellipsis of case particles is natural. On the other hand, when the conversation is formal, the ellipsis of case particles is not natural. The examples are shown below.

(18) Watakushi wa sakana ga/*o daisuki degozaimasu.
I (very formal) fish very fond of am (very formal)
'I love fish.' (very formal)

(Tsutsui 90)

(19) Atashi wa sakana ga/o daisuki.
I (female, informal) fish very fond of (very informal)
'I love fish.' (female, very informal)

(Tsutsui 91)

3.1.5 case particle ellipsis rule 2

The ellipsis of the case particle (CP) of an NP-CP is unnatural if the NP-CP conveys the idea of exclusivity.

Tsutsui means exclusivity here "not others but X" or "X and only X". (2)a carries the meaning "John(and only John) is a student.", so the ellipsis of case particles is not natural.

(2)a. John ga/*ø gakusei desu.
John student is
'John(and only John) is a student.'

(Kuno 38)

3.1.6 case particle ellipsis rule 3

The ellipsis of a case particle is unnatural if it is in a generic sentence.

Tsutsui means generic sentence here a sentence which contains a generic NP as the subject. (Tsutsui 97) The subject in (20) "kodomo" (children) is a generic NP, so the case particle "ga" cannot be dropped, while the case particle "ga" can be dropped because the subject is not a generic NP.

(20) Kodomo wa mizuasobi ga/*ø daisuki da.
children water play very fond of are
'Children love playing with water.'

(Tsutsui 97)

(21) Uchi no kodomo wa mizuasobi ga/o daisuki da.
 my child water play very fond of are
 'My children loves playing with water.'

(Tsutsui 98)

3.1.7 case particle ellipsis rule 4

The ellipsis of the case particle marking a monosyllabic NP is less natural than that of the case particle marking a multisyllabic NP.

(22) John wa me ga/?ø ii naa.
John eye good
'John has good eyes'

(23) John wa atama ga/o ii naa.
John head good
'John is smart.'

(Tsutsui 99)

According to Tsutsui, the ellipsis of the case particle "ga" is less natural in (22) than in (23). Because the NP which precedes the case particle "ga" in (22) is monosyllabic, while the NP which precedes the case particle "ga" in (23) is multisyllabic.

Finally Tsutsui provides two rules for the particle "ga" ellipsis in conversations. (Tsutsui 1984:108-118)

3.1.8 "ga" ellipsis rule 1

The ellipsis of the "ga" of an NP-ga in a sentence is natural in informal speech if the NP-ga is preceded by the subject of the sentence and immediately followed by the predicate.

Tsutsui provides two cases in which an NP-ga in a sentence can be preceded by the subject of the sentence and immediately followed by the predicate. The first one is when the particle "ga" functions as object marking, and the second one is in multiple-subject constructions. (Tsutsui 108)

(24) John wa sakana ga suki da. John fish D.O fond of is 'John likes fish.'

(Tsutsui 108)

(25) Boku wa onaka ga suita.

I stomach has gotten empty 'I'm hungry.'

(Tsutsui 109)

(24) is an example of the case in which the particle "ga" functions as object marking. (25) is an example of multiple-subject constructions. In (25) both "boku" (I) and "onaka" (stomach) are the subject. Both sentences above satisfy "ga" ellipsis rule 1.

Even in informal speech, if another element is placed between the NP-ga and the predicate, the ellipsis of "ga" is not natural. (26)a and (26)b have the same meaning and words, however the word order is different. According to Tsutsui the ellipsis of "ga" is natural in (26)a, but not in (26)b because (26)b is not immediately followed by the predicate.

(26)a. Boku wa Hanako yori eigo ga/o umaiyo.I (male) Hanako than English good at 'I'm better at English than Hanako.'

(Tsutsui 110)

(26)b. Boku wa eigo ga/??ø Hanako yori umaiyo.I (male) English Hanako than good at 'I'm better at English than Hanako.'

(Tsutsui 110)

(27)a has the subject "John" and the NP-ga is preceded by the subject "John". However the NP-ga in (27)b is not preceded by the subject. According to Tsutsui the ellipsis of "ga" is natural in (27)a, but not in (27)b because (27)b is not preceded by the subject. (27)a. John ga ano inu ga/o kowai nante shinjirarenai.John that dog afraid that cannot believe'I cannot believe that John is afraid of that dog.'

(Tsutsui 112)

(27)b. Ano inu ga/??o kowai nante shinjirarenai.that dog frightening that cannot believe'I cannot believe that that dog is frightening.'

(Tsutsui 112)

3.1.9 "ga" ellipsis rule 2

The ellipsis of "ga" in a sentence is natural if the sentence satisfies one of the following conditions;

(G) the speaker believes the sentence carries expected information.

(H) the speaker believes the sentence carries shared information.

(I) the speaker expects the hearer to take some action in response to the sentence.

3.1.9.1 (G) the speaker believes the sentence carries expected information.

Expected information here is information that expresses a proposition which the hearer is expecting to hear. (Tsutsui 119) For example, the speaker and the hearer are waiting for a bus and the speaker utters (28) when he/she sees the bus coming.

(28) A, basu **ga/ø** kita.

Oh, bus has come

'Oh, here comes the bus.'

(Tsutsui 120)

15

3.1.9.2 (H) the speaker believes the sentence carries shared information.

Shared information here is information shared personally by the speaker and the hearer. (Tsutsui 123) In (29) the speaker and the hearer both share the personal information that a thief broke into the hearer's house.

(29) Otaku ni doroboo ga/o haitta soodesune.
your house to thief entered I heard
'I heard that a thief broke into your house, right?.'
(Tsutsui 124)

3.1.9.3 (I) the speaker expects the hearer to take some action in response to the sentence.

This condition can be explained by a situation, for example, the speaker sees some dirt on the hearer's face and utters (30). The speaker expects the hearer to wipe his/her face in response to the speaker's utterance. (Tsutsui 128)

(30) Kao ni tsuchi ga/ø tsuitemasuyo.
face on dirt attach
'There is some dirt on your face.'

(Tsutsui 128)

3.2 Niwa (1989)

Niwa divides absence of particles into two types. The first one for particles that show the topic of a sentence, and the second one for all others. To determine whether an absence of particle is showing the topic of a sentence or not depends on word order and whether the information which the noun carries is old or new for the speaker and hearer. When a noun followed by an absence of particle carries old information for both the speaker and hearer, or is placed in the beginning of a sentence (or closer to the beginning of a sentence), then the possibility that the absence of particle shows the topic of the sentence is higher.

(31)a. *Taroo wa dou?* Taro how 'How about Taro?'

(31)b. Dame dayo. Aitsu o mada gakusei dayo.No good is He still student is'It is not good. He is still a student'

(Niwa 44)

"Aitsu" in (31)b is anaphora for "Taro" in (31)a. This is typical case where ø shows the topic of a sentence.

(32) Ima dare ø kiteruno?now who visiting'Who is visiting now?'

(Niwa 44)

When \emptyset comes after an interrogative pronoun like in (32), then \emptyset doesn't show the topic of the sentence. This is only ellipsis of the particle.

3.3 Hasegawa (1993)

Hasegawa also divides absence of particles into two types. One of them is ellipsis of case particles, and the other is the case when ø has a function.

Hasegawa says if there is any element which indicates the case of a noun, there is not a problem that the particles are omitted. For example when a predicate and a noun phrase are placed closer, and the meaning is obviously related like in (33) to `(35) below.

- (33) Saki chan ø (ga) inakunarimashita.
 Saki ø disappeared
 'Saki has disappeared.'
- (34) *Iino, takushii ø (wo) hiroukara.*ok taxi take
 'It's ok, I take taxi.'
- (35) Heya ø (ni/he) itterasshai.
 room go
 'Go to your room.'

(Hasegawa 161)

On the other hand, when the case of noun phrases are not clear or easily misunderstood, ϕ is not natural like in (36).

(36) Tomodachi ni (o*) kareshi wo (o) shuokai shite morattanda.
friend by boyfriend ACC introduce was
'My boyfriend was introduced by my friend.'

(Hasegawa 161)

3.4 Maruyama (1996)

Maruyama divides absence of particles into two types as well. The first one is ellipsis of case particles, and the second one is an element which is topicalized. For example when ø is placed right in front of the verb and strongly related to the verb, it is ellipsis of case particles. Two examples are shown below.

(37) Ame *o* futta toki nirain fell when in'When it rained.'

(38) Soto o aruiteiru hito ga outside walking person NOM
'A person who is walking outside,'

(Maruyama 75)

When ϕ is placed in the beginning of a sentences and related to the verb which is not placed right after the ϕ , it is topicalized, for example in (39).

(39) Kono tebukuro, ø dare ga kattekuretano?These gloves who NOM bought(for you)'Who bought these gloves for you?'

(Maruyama 74)

Chapter 4 Analysis of questionnaire

Particle drop only occurs under certain conditions, that vary between dialects and generations. In general, the Kansai dialect (Western Japan's dialect) allows more particle drop than the Kanto dialect (Eastern Japan's dialect). In this paper, the differences between dialects or generations will not be discussed, because this is a big and distinct problem area that would require a significant amount of research and resources in order to determine differences between different dialects and generations. This chapter will focus on word order and the syntactical function of particle drop. In addition, other causes of particle drop will be examined. To investigate the conditions of particle drop, the following experiment was undertaken.

4.1 Materials

All sentences are taken from colloquial speech and contain a style that native speakers should easily be able to identify as colloquial speech. The sentences have been made as simple as possible in order to find the relationship between particle drop and word order. In this questionnaire relations between context and grammar wil not be examined.

The example sentences consist of 13 groups (40) to (52). Each group has eight sentences, which we mark with the letters a to h, except (41) and (42). Group (41) does not have an object, and (42) does not have a subject. So the word order cannot be changed.

Abbreviations and signs in the examples are: ACC: accusative; DAT: dative; NOM: nominative; TOP: topic; ø: absence of particle.

(41)a. Kyoo otoosan ga kuruyo. today (my)father NOM will come.
b. Kyoo otoosan ø kuruyo. today (my)father ø will come.
'Today my father will come.

(42)a. *Kinoo kanojo wo* mitayo.
Yesterday her ACC saw
b. *Kinoo kanojo ø mitayo*.

Yesterday her ø saw

'I saw her yesterday.'

Sentences that are in the same group basically have the same meaning. To easily determine the relationship between particle drop and word order, sentences which have basically the same meaning were used in the questionnaire. In order to have the meaning of each sentence as close as possible, the same nouns, verbs, adverbs and particles are used in the same sentence groups. The nouns in some sentences are followed by particles, while the others are not. All the sentences have different word order. Word ordering can create slight differences in meaning, but all sentences should basically have the same meaning. In short, if we translate the sentences into another language, the translated sentences would look the same in most of the cases, and it would be necessary to explain any subtle differences in meaning in the original language. In this paper we consider the a-sentences as the standard sentences of each sentence group, which means that the a-sentences have the standard word order of Japanese, SOV. In order to make the informants understand the standard meaning, the standard "a-sentences" are shown first on purpose. Each sentence marked with the letters a to h have the same word order in all the groups. For example, all a-sentences have the same word order; subject, object and verb.

(40)a. Watashi wa kyoo daigaku ni ittayo.

I TOP today university to went

- (41)a. *Kyoo otoosan* **ga** *kuruyo*. today (my)father NOM will come.
- (42)a. *Kinoo kanojo* **wo** mitayo.

Yesterday her ACC saw

(43)a. Sato-san ga atodeSugimotonimeerudasuyo.SatoNOM laterSugimotoDAT will send mail

(44)a. Boku ga kachoo ni denwasuruyo.

- I NOM s.m. DAT will telephone. @ s.m.= section manager
- (45)a. Yamada-kun **ga** kinoo anoko **ni** denwashitayo.

Yamada NOM yesterday that girl DAT telephoned

(46)a. Ito-san ga watashi ni renrakukureruyo.

Ito NOM I DAT will contact(to me)

- (47)a. Boku ga kaisha ni renrakushitayo. I NOM company DAT contacted
- (48)a. Tonba ga kono sukiijoo de yoku subetteruyo.Tomba NOM this ski slope on often skis
- (49)a. *Taroo* **ga** *puuru* **de** *oboretandayo*. Taro NOM pool in nearly drowned
- (50)a. Sensee **ga** kodomotachi **to** isshoni soojishiterunda. teacher NOM children with together cleaning
- (51)a. Omawarisan **ga** maigo **wo** mitsuketayo. policeman NOM missing child ACC found
- (52)a. Otoosan **ga** sushi wo tabeniittayo. (my)father NOM sushi ACC went to eat

In the a-sentences the subject (nominative) or the noun followed by the topic marker wa are placed in the front, and objects and nouns followed by the particles which are not the object marker, are placed in the middle of the sentences.

- (40)b. Daigaku ni kyoo watashi wa ittayo. university to today I TOP went
- (41)b. *Kyoo otoosan ø kuruyo*. today (my)father ø will come.
- (42)b. *Kinoo kanojo ø mitayo*. Yesterday her ø saw

I

(43)b. Sugimoto **ni** atode Sato-san **ga** meerudasuyo. Sugimoto DAT later Sato NOM will send mail

(44)b. Kachoo ni Boku ga denwasuruyo.

s.m. DAT I NOM will telephone.

- (45)b. Anoko **ni** kinou Yamada-kun **ga** denwashitayo. that girl DAT yesterday Yamada NOM telephoned
- (46)b. Watashi ni Ito-san ga renrakukureruyo.

DAT Ito NOM will contact(to me)

- (47)b. *Kaisha ni Boku ga renrakushitayo*. company DAT I NOM contacted
- (48)b. Kono sukiijoo **de** Tonba **ga** yoku subetteruyo. this ski slope on Tomba NOM often skis
- (49)b. *Puuru de Taroo ga oboretandayo.* pool in Taro NOM nearly drowned
- (50)b. Kodomotachi to isshoni sensee ga soojishiterunda. children with together teacher NOM cleaning
- (51)b. *Maigo* wo omawarisan ga mitsuketayo. missing child ACC policeman NOM found
- (52)b. Sushi wo otoosan ga tabeniittayo. sushi ACC (my)father NOM went to eat

In the b-sentences, on the other hand, the objects and nouns followed by the particles which are not the object marker, are placed in the front, and the subject and the noun followed by the topic marker "wa", are placed in the middle of the sentences.

In the c-sentences, the word order is same as the a-sentences, but the nominative marker "ga" or the topic marker "wa" are dropped. While in the d-sentences, the word order is same as the b-sentences, but the object marker "wo", the object marker "ni", and other particles, "de" (indicates place) and to (with), are dropped. In short, the particles following the nouns in the front are dropped in both sentences c- and d-sentences.

(40)a. Watashi wa kyoo daigaku ni ittayo.

I TOP today university to went

c. Watashi ø kyoo daigaku ni ittayo.

I ø today university to went

(40)b. Daigaku ni kyoo watashi wa ittayo.
university to today I TOP went
d. Daigaku o kyoo watashi wa ittayo.
university o today I TOP went

In the e-sentences, the word order is same as the a-sentences, but the object marker "wo", the object marker "ni", and other particles, "de" (indicates place) and to (with), are dropped. While in the f-sentences, the word order is same as the b-sentences, but the nominative marker "ga" or the topic marker "wa" are dropped. In short, the particles following the nouns in the middle of the sentences are dropped in both sentences e- and f-sentences.

(40)a. Watashi wa kyoo daigaku ni ittayo.

I TOP today university to went

e. Watashi wa kyoo daigaku ø ittayo.

I TOP today university ø went

(40)b. Daigaku ni kyoo watashi wa ittayo. university to today I TOP went f. Daigaku **ni** kyoo watashi **o** ittayo. university to today I o went

In the g-sentences, the word order is same as the a-sentences, and the word order is same as the b-sentences in the h-sentences. However the particles in both sentences are dropped.

(40)a. Watashi wa kyoo daigaku ni ittayo.

I TOP today university to went

- g. Watashi o kyoo daigaku o ittayo. I o today university o went
- b. Daigaku **ni** kyoo watashi **wa** ittayo. university to today I TOP went
- h. Daigaku o kyoo watashi o ittayo.
 university o today I o went

None of the sentences have a comma. There are two reasons for why they do not have any comma. One of them is that a comma can show the pause where particles often drop in the colloquial speech. The other is to distinguish particle drop from address terms. For example, if we put a comma in (43)c, the meaning can be different from (43)c. See below.

(43)c. Sato-san *o* atode Sugimoto *ni* meerudasuyo.
Sato *o* later Sugimoto DAT will send mail *Sato will send Sugimoto a mail later.*

(53) Sato-san,atodeSugimotonimeerudasuyo.SatolaterSugimotoDAT will send mail

' Sato, I will send Sugimoto a mail later.'

4.2 Informant

Seventeen informants took the experiment. They were all native Japanese speakers, raised in Japan and educated in the Japanese school system until at least high school. They are from several areas in Japan. Their ages span from twenties until to sixties. The information on the informants is shown below in Table 1.1.

informant	sex	age	where they are from
1	male	40's	Yamaguchi
2	female	30's	Fukushima
3	female	60's	Oita
4	female	40's	Tokyo
5	female	20's	Kyoto
6	female	50's	Нуодо
7	female	30's	Tokyo
8	female	20's	Tokyo
9	male	60's	Niigata
10	female	40's	Aichi
11	female	30's	Kanagawa
12	female	20's	Токуо
13	female	30's	Kyoto
14	female	30's	Tokyo
15	female	30's	Tokyo
16	female	60's	Tokyo
17	female	30's	Tokyo

Table 1.1 Information on informants

4.3 Procedure

The experiment has two stages. The experiment was conducted via paper and email. The informants were given papers or sent an e-mail containing the various sentences and a set of instructions. The sentences were identical in both the paper and e-mail cases. The informants were to answer whether they as native speakers would consider the sentences correct Japanese or not. There are some rules in the instruction, as follows: #1 Read each sentence aloud.

This is because that is much easier for informants to find the differences between sentences when they read sentences aloud.

#2 Answer as quickly as possible without thinking too much.

#3 Do not take a long time to answer each question.

This experiment depends on informants intuition as native Japanese speakers. If they use a long time to determine the answers, they will not be using their intuition. That's why they are asked not to use a long time to answer.

Answer only correct or not correct (Do not answer "can be both of them").# You don't have to write the reason why you chose it (You can write it if you want).

Do not ask others.

Do not say it is correct if you think it is not, but you understand the meaning.

Depend on your intuition as a native Japanese speaker.

In the first stage, when informants choose correct sentences among experiment sentences, it is allowed to make the choice based on whether they use the sentences or not.

In the second stage the informants were asked whether it is possible that the sentences which they choose as incorrect sentences can be correct. It means that they can choose sentences even if they wouldn't normally use the sentences. They should then place a comma where they feel it should be.

4.4 Results and analysis

This section first shows the example sentences, and explains the sentence structure. The results of the experiment documented in Tables 1.2.1-1.2.9 are presented and analyzed based on sentence types, for the a- to h-sentences.

4.4.1 Sentence group

Here the example sentences will be shown for each sentence group and their structure will be explained.

4.4.1.1 sentence group (40)

(40)a. Watashi wa kyoo daigaku ni ittayo.

I TOP today university to went

- b. Daigaku ni kyoo watashi wa ittayo. university to today I TOP went
- c. Watashi o kyoo daigaku ni ittayo.
 I o today university to went
- d. Daigaku ø kyoo watashi wa ittayo.
 university ø today I TOP went
- e. *Watashi wa kyoo daigaku o ittayo*. I TOP today university o went
- f. Daigaku **ni** kyoo watashi **o** ittayo. university to today I o went
- g. Watashi ø kyoo daigaku ø ittayo.
 I ø today university ø went
- h. Daigaku ø kyoo watashi ø ittayo.
 university ø today I ø went
 'I went to the university today.'

In sentence group (40), the subject is "*watashi*" (I) and followed by the topic marking particle "wa". The noun "*daigaku*"(university) is followed by the particle "ni" which shows the goal of the motion.

4.4.1.2 sentence group (41)

(41)a. Kyoo otoosan ga kuruyo. today (my)father NOM will come.
b. Kyoo otoosan ø kuruyo. today (my)father ø will come.
'Today my father will come.

In sentence group (41), the subject is "*otoosan*" (my father) and followed by the subject(nominative) marking particle "ga".

4.4.1.3 sentence group (42)

(42)a. *Kinoo kanojo wo* mitayo. Yesterday her ACC saw
b. *Kinoo kanojo ø mitayo*. Yesterday her ø saw
'I saw her yesterday.'

In sentence group (42), the noun "*kanojo*" (her) is followed by the object marking particle "wo", The subject is not shown in Japanese.

4.4.1.4 sentence group (43)

(43)a.	Sato-san	ga	atode	Sugimoto	ni	meerudasuyo.
	Sato	NOM	later	Sugimoto	DAT	will send mail
b.	Sugimoto	o ni	atode	Sato-s	an ga	meerudasuyo.
	Sugimot	o DA	T later	Sato	NON	M will send mail
c.	Sato-san	ø	itode	Sugimoto	ni n	neerudasuyo.
	Sato	ø la	ater S	Sugimoto	DAT w	vill send mail
d.	Sugimoto) Ø (atode S	Sato-san g	a me	erudasuyo.
	Sugimot	οø	later	Sato NC	DM wi	ill send mail

- e. Sato-san ga atode Sugimoto o meerudasuyo.
 Sato NOM later Sugimoto o will send mail
- f. Sugimoto ni atode Sato-san o meerudasuyo.
 Sugimoto DAT later Sato o will send mail
- g. Sato-san ø atode Sugimoto ø meerudasuyo.
 Sato ø later Sugimoto ø will send mail
- h. Sugimoto *o* atode Sato-san *o* meerudasuyo.
 Sugimoto ø later Sato ø will send mail
 ' Sato will send Sugimoto a mail later.'

In sentence group (43), the subject is a Japanese family name "*Sato-san*"(Sato) and followed by the subject(nominative) marking particle "ga". The noun "*Sugimoto*" is also a Japanese family name and followed by the indirect object marking particle "ni".

4.4.1.5 sentence group (44)

(44)a. Boku ga kachoo ni denwasuruyo.
I NOM s.m. DAT will telephone. @ s.m.= section manager
b. Kachoo ni boku ga denwasuruyo.
s.m. DAT I NOM will telephone.
c. Boku ø kachoo ni denwasuruyo.
I ø s.m. DAT will telephone.
d. Kachoo ø boku ga denwasuruyo.
s.m. ø I NOM will telephone.
e. Boku ga kachoo ø denwasuruyo.
I NOM s.m. ø will telephone.
f. Kachoo ni boku ø denwasuruyo.
s.m. DAT I ø will telephone.
g. Boku ø kachoo ø denwasuruyo.

I ø s.m. ø will telephone.

h. Kachoo o boku o denwasuruyo.
s.m. o I o will telephone.
' I will telephone the section manager.'

In sentence group (44), the subject is *"boku"*(I) and followed by the subject(nominative) marking particle "ga". The noun *"kachoo"*(section manager) is followed by the indirect object marking particle "ni".

4.4.1.6 sentence group (45)

- (45)a. Yamada-kun ga kinoo anoko ni denwashitayo.Yamada NOM yesterday that girl DAT telephoned
 - b. *Anoko* **ni** kinou Yamada-kun **ga** denwashitayo. that girl DAT yesterday Yamada NOM telephoned
 - c. Yamada-kun ø kinoo anoko ni denwashitayo.
 Yamada ø yesterday that girl DAT telephoned
 - d. *Anoko ø kinou Yamada-kun ga denwashitayo*. that girl ø yesterday Yamada NOM telephoned
 - e. Yamada-kun ga kinoo anoko o denwashitayo.Yamada NOM yesterday that girl o telephoned
 - f. *Anoko* **ni** kinou Yamada-kun **o** denwashitayo. that girl DAT yesterday Yamada o telephoned
 - g. Yamada-kun ø kinoo anoko ø denwashitayo.
 Yamada ø yesterday that girl ø telephoned
 - h. Anoko ø kinou Yamada-kun ø denwashitayo.
 that girl ø yesterday Yamada ø telephoned

'Yamada telephoned that girl yesterday.'

In sentence group (45), the subject is a Japanese family name "*Yamada-kun*"(Yamada) and followed by the subject(nominative) marking particle "ga". The noun "*anoko*" is followed by the indirect object marking particle "ni".

4.4.1.7 sentence group (46)

(46)a. Ito-san ga watashi ni renrakukureruyo. Ito DAT will contact(to me) NOM Ι b. Watashi ni Ito-san ga renrakukureruyo. I DAT Ito NOM will contact(to me) c. Ito-san ø watashi ni renrakukureruyo. Ito ø I DAT will contact(to me) d. Watashi ø Ito-san ga renrakukureruyo. I NOM will contact(to me) ø Ito e. Ito-san ga watashi ø renrakukureruyo. Ito NOM Ι ø will contact(to me) f. Watashi ni Ito-san ø renrakukureruyo. I ø will contact(to me) DAT Ito g. Ito-san ø watashi ø renrakukureruyo. Ito ø Ι ø will contact(to me) h. Watashi ø Ito-san ø renrakukureruyo. I Ito ø will contact(to me) ø

' Ito will contact me.'

In sentence group (46), the subject is a Japanese family name "*Ito-san*"(Ito) and followed by the subject(nominative) marking particle "ga". The noun "*watashi*"(I) is followed by the indirect object marking particle "ni".

4.4.1.8 sentence group (47)

(47)a. Boku ga kaisha ni renrakushitayo.I NOM company DAT contacted

- b. *Kaisha* **ni** boku **ga** renrakushitayo. company DAT I NOM contacted
- c. Boku ø kaisha ni renrakushitayo.
 I ø company DAT contacted

d. Kaisha ø boku ga renrakushitayo.
 company ø I NOM contacted

e. Boku **ga** kaisha **ø** renrakushitayo. I NOM company ø contacted

f. Kaisha ni boku o renrakushitayo.
company DAT I o contacted
g. Boku o kaisha o renrakushitayo.

I ø company ø contacted

h. Kaisha o boku o renrakushitayo.

company ø I ø contacted

' I contacted the company.'

In sentence group (47), the subject is "*boku*"(I) and followed by the subject(nominative) marking particle "ga". The noun "*kaisha*"(company) is followed by the indirect object marking particle "ni".

4.4.1.9 sentence group (48)

(48)a. Tonba ga kono sukiijoo de yoku subetteruyo.Tomba NOM this ski slope on often skis

- b. *Kono sukiijoo de Tonba ga yoku subetteruyo*. this ski slope on Tomba NOM often skis
- c. Tonba ø kono sukiijoo de yoku subetteruyo.
 Tomba ø this ski slope on often skis
- d. Kono sukiijoo ø Tonba ga yoku subetteruyo.
 this ski slope ø Tomba NOM often skis
- e. Tonba ga kono sukiijoo ø yoku subetteruyo.
 Tomba NOM this ski slope ø often skis
- f. Kono sukiijoo de Tonba ø yoku subetteruyo.
 this ski slope on Tomba ø often skis
- g. Tonba ø kono sukiijoo ø yoku subetteruyo.
 Tomba ø this ski slope ø often skis

h. Kono sukiijoo ø Tonba ø yoku subetteruyo.
this ski slope ø Tomba ø often skis
' Tomba often skis on this ski slope.'

In sentence group (48), the subject is a person's name "*Tonba*"(Tomba) and followed by the subject(nominative) marking particle "ga". The noun "*sukiijoo*"(ski slope) is followed by the particle "de" which shows the location where action is identified by the verb. The demonstrative pronomen "*kono*"(this) is followed by the noun "*sukiijoo*".

4.4.1.10 sentence group (49)

- (49)a. *Taroo* **ga** *puuru* **de** *oboretandayo*. Taro NOM pool in nearly drowned
 - b. *Puuru de Taroo ga oboretandayo.*pool in Taro NOM nearly drowned
 - *c. Taroo ø puuru de oboretandayo*.Taro *ø* pool in nearly drowned
 - d. *Puuru ø Taroo ga oboretandayo*.
 pool ø Taro NOM nearly drowned
 - e. *Taroo* **ga** *puuru* **ø** *oboretandayo*. Taro NOM pool ø nearly drowned
 - f. *Puuru de Taroo ø oboretandayo.* pool in Taro ø nearly drowned
 - g. Taroo o puuru o oboretandayo.

Taro ø pool ø nearly drowned

h. Puuru ø Taroo ø oboretandayo.

pool ø Taro ø nearly drowned

'Taro nearly drowned in the pool.'

In sentence group (49), the subject is a Japanese name "Taroo" (Taro) and followed by the subject (nominative) marking particle "ga". The noun

"puuru"(pool) is followed by the particle "de" which shows the location of the action identified by the verb.

4.4.1.11 sentence group (50)

- (50)a. Sensee **ga** kodomotachi **to** isshoni soojishiterunda. teacher NOM children with together cleaning
 - b. *Kodomotachi to isshoni sensee* **ga** *soojishiterunda*. children with together teacher NOM cleaning
 - c. Sensee ø kodomotachi to isshoni soojishiterunda. teacher ø children with together cleaning
 - d. Kodomotachi ø isshoni sensee ga soojishiterunda.
 children ø together teacher NOM cleaning
 - e. Sensee **ga** kodomotachi **ø** isshoni soojishiterunda. teacher NOM children ø together cleaning
 - f. Kodomotachi to isshoni sensee o soojishiterunda.
 children with together teacher o cleaning
 - g. Sensee ø kodomotachi ø isshoni soojishiterunda.
 teacher ø children ø together cleaning
 - h. Kodomotachi ø isshoni sensee ø soojishiterunda.
 children ø together teacher ø cleaning

'The teacher is cleaning together with the children.'

In sentence group (50), the subject is *"sensee"*(teacher) and followed by the subject(nominative) marking particle "ga". The noun *"kodomotachi"*(children) is followed by the particle "to" which means "with".

4.4.1.12 sentence group (51)

(51)a. Omawarisan	ga	maigo	wo	mitsuketayo.
policeman	NOM	missing child	ACC	found
b. Maigo	wo	omawarisan	ga	mitsuketayo.
missing child	ACC	policeman	NON	A found

c. Omawarisan ø m	aigo wo	mitsuketayo.
policeman ø n	nissing child AC	CC found
d. Maigo ø	omawarisan g	a mitsuketayo.
missing child ø	policeman NC	OM found
e. Omawarisan ga	maigo	ø mitsuketayo.
policeman NOM	missing child	ø found
f. Maigo wo	omawarisan	ø mitsuketayo.
missing child ACC	policeman	ø found
g. Omawarisan ø	maigo ø	mitsuketayo.
policeman ø	missing child ø	found
h. Maigo 🛛 ø	omawarisan ø	mitsuketayo.
missing child ø	policeman ø	found

'A policeman found the missing child.'

In sentence group (51), the subject is "*omawarisan*"(policeman) and followed by the subject(nominative) marking particle "ga". The noun "*maigo*"(missing child) is followed by the object marking particle "wo".

4.4.1.13 sentence group (52)

(52)a. Otoosan	ga	sushi	wo	tabeniittayo.
(my)father N	IOM	sushi	ACC	went to eat
b. <i>Sushi</i> wo	otod	osan	ga	tabeniittayo.
sushi ACC	(my)	father	NOM	went to eat
c. Otoosan	ø sus	hi wa	o tab	oeniittayo.
(my)father	ø sus	hi AC	C we	nt to eat
d. Sushi ø o	toosar	n ga	tał	veniittayo.
sushi ø (m	ıy)fatl	ner NC	OM w	ent to eat
e. Otoosan	ga	sushi	ø to	abeniittayo.
(my)father N	IOM	sushi	øw	ent to eat
f. Sushi wo	oto	osan	ø ta	beniittayo.
sushi ACC	(my)	father	øw	ent to eat

g. Otoosan ø sushi ø tabeniittayo.
(my)father ø sushi ø went to eat
h. Sushi ø otoosan ø tabeniittayo.
sushi ø (my)father ø went to eat

' My father went to eat sushi.'

In sentence group (52), the subject is "*otoosan*"(my father) and followed by the subject(nominative) marking particle "ga". The noun "*sushi*" is followed by the object marking particle "wo".

4.4.2 Sentence a to h

There the results of the experiment will be shown with tables and analyzed.

4.4.2.1 a-sentences

In the first stage, when informants choose correct sentences among the experiment sentences, they are allowed to make the choice based on whether they would use the sentences themselves or not. In spite of dialect and age differences among the informants, more than 99% of the a-sentences are chosen as correct. See Table 1.2.1 below.

sentence	1st.	%	2nd.	%
40a	17	100%	17	100%
41a	17	100%	17	100%
42a	17	100%	17	100%
43a	16	94%	17	100%
44a	17	100%	17	100%
45a	17	100%	17	100%
46a	17	100%	17	100%
47a	17	100%	17	100%
48a	17	100%	17	100%
49a	17	100%	17	100%
50a	17	100%	17	100%
51a	17	100%	17	100%
52a	17	100%	17	100%
a average	16.92	99.5%	17.00	100%

Table 1.2.1 Result of the experiment(a-sentences, 1st. and 2nd. stage)

In the second stage, the percentage is even higher, all of the informants chose all of the a-sentences as correct answers. This is understandable because the asentences have the basic structure of Japanese, i.e. SOV structure.

In the first stage, informant 6 did not choose (43)a as a correct answer. The reason the informant gave for this was strange. The informant stated that *Sugimoto* is not followed by "*san*" polite form, which is usually attached after a person's name, while *Sato* has, "*san*", and the verb "*meerudasuyo*" is *Sato's* action, but the form of the verb is not a polite form, while *Sato-san* is a polite form. Then new questions were asked to all other informants. The question was what they thought the (43)a situation was like, and describe it. All of them answer that it occurs in an office or a club in a college, and most of them(15 of 17) say that *Sato* is a woman or not really close to the speaker, while *Sugimoto* is a man or closer than *Sato* to the speaker.

All of the informants, except informant 6, say that it is natural that a non-polite form is used even when the polite form " san" is attached to the Agent. Many of

informants say that men in the office often use " san" to women when they call women, while they don't use it when addressing other men. Informant 6 has never worked in an office. So the reason why (43)a is not chosen by informant 6 is irrelevant here, and in the second stage informant 6 chose (43)a as correct. See Table 1.2.1 below.

(43) a. Sato-san ga atodeSugimotonimeerudasuyo.SatoNOM laterSugimotoDAT will send mail

' Sato will send Sugimoto a mail later.'

4.4.2.2 b-sentences

In the first stage, 94% of the b-sentences are chosen as correct. It is the second highest rate in this questionnaire after a-sentences. The reason is that in the b-sentences the placement of the subject and the object are switched, but the particles are not dropped.

sentence	1st.	%	2nd.	%
40b	12	71%	17	100%
41b	17	100%	17	100%
42b	16	94%	17	100%
43b	14	82%	17	100%
44b	17	100%	17	100%
45b	16	94%	17	100%
46b	16	94%	17	100%
47b	17	100%	17	100%
48b	17	100%	17	100%
49b	17	100%	17	100%
50b	17	100%	17	100%
51b	17	100%	17	100%
52b	15	88%	16	94%
b average	16.00	94%	16.92	99.5%

Table 1.2.2 Result of the experiment(b-sentences, 1st. and 2nd. stage)

In the second stage, the percentage is also high. Only informant 16 did not choose (52)b as a correct answer (see Table 1.2.4 below). Informant 16 gave the explanation that she thought that sentence (52)b was better without the particle "ga".

(52) b. Sushi wo otoosan ga tabeniittayo.
sushi ACC (my)father NOM went to eat
'My father went to eat sushi.'

4.4.2.3 c-sentences

The c-sentences have the third highest rate in both the first and second stage in the questionnaire(89% in the 1st, 98% in the 2nd.). The difference between the a- and b-sentences is that the nouns in initial position are not followed by particles, which means that in the c-sentences the subjects are not followed by particles. This makes the rate lower than for the a- and b-sentences. In addition, a noun in the initial position of the sentence can be recognized as an address term, as shown in (53).

(53) Sato-san, atode Sugimoto ni meerudasuyo.Sato later Sugimoto DAT will send mail

' Sato, I will send Sugimoto a mail later.'

sentence	1st.	%	2nd.	%
40c	17	100%	17	100%
43c	15	88%	15	88%
44c	15	88%	17	100%
45c	17	100%	17	100%
46c	14	82%	15	88%
47c	15	88%	17	100%
48c	16	94%	17	100%
49c	15	88%	17	100%
50c	14	82%	17	100%
51c	13	76%	17	100%
52c	16	94%	17	100%
c average	15.18	89%	16.64	98%

Table 1.2.3 Result of the experiment(c-sentences, 1st. and 2nd. stage)

4.4.2.4 d-sentences

The difference between the d-sentences and the a- and/or b-sentences is whether the nouns in the initial position are followed by particles or not. The difference between the d-sentences and the c-sentences is that the nouns in the initial position are not the subject of the sentences. Even the c-sentences and the d-sentences have similar particle drop, with the rate for the d-sentences being much lower than that of the c-sentences (31% in the 1st, 57% in the 2nd). It can be assumed that native Japanese speakers tend to recognize a noun in the initial position of the sentence as the subject, if it is not followed by a particle.

sentence	1st.	%	2nd.	%
40d	2	12%	13	76%
43d	4	24%	11	65%
44d	6	35%	10	59%
45d	7	41%	12	71%
46d	0	0%	0	0%
47d	9	53%	11	65%
48d	16	94%	17	100%
49d	0	0%	2	12%
50d	1	6%	2	12%
51d	7	41%	14	82%
52d	6	35%	14	82%
d average	5.27	31%	9.64	57%

Table 1.2.4 Result of the experiment(d-sentences, 1st. and 2nd. stage)

In the a-, b- and c-sentences, the percentage of correct sentences are not really different between sentence groups, however, the rates for d-sentences are quite different between, for example, (46)d, (48)d, (49)d and (50)d. No informant chose (46)d as a correct sentence, even in the second stage.

(46)d. Watashi ø Ito-san ga renrakukureruyo.
I ø Ito NOM will contact(to me)
' Ito will contact me.'

This sentence can be analyzed as follows: If a noun is placed in the initial position of the sentence without being followed by a particle, the noun could be recognized as an address term or the subject of the sentence. In (46)d, the noun which is in the initial position without followed by particle is *"watashi*"(I). In (46)d, the speaker is of course *"watashi*"(I), so it is not likely that *"watashi*"(I) will be recognized as an address term. Since *"watashi*"(I) is placed in the initial position of the sentence, *"watashi*"(I) could be recognized as the subject of the sentence. But there is also the nominative marker "ga" which follows the noun *"Ito-san*"(Ito). The particle "ga" can be an object marker, and it depends on the verb. In (46)d, the verb

"renrakukureruyo"(will contact(to me)) doesn't take the particle "ga" as an object marker. So *"watashi*"(I) is obviously not the subject of the sentence here, while *"Ito-san"*(Ito) is the subject. The verb *"renrakukureruyo"*(will contact(to me)) in (46)d takes the particle "ni" as the object marker, however the noun *"watashi"*(I) is not followed by the particle "ni". The noun *"watashi"*(I) is placed in the initial position of the sentence, however it is not followed by the particle "ni" which is demanded by the verb in the sentence. This is likely the reason for why all the informants didn't choose (46)d as a correct sentence.

(43)d, (44)d and (45)d have the particles "ni" as the object marker and have a relatively low rate in the first stage (24%, 35%, 41%), and a higher rate in the second stage(65%, 59%, 71%). A possible reason for why only a few informants chose these sentences as correct answers is related to nouns which are in the initial positions and verbs. In (43)d the noun in the initial position is *Sugimoto*, a Japanese family name and the third person function. This noun can be recognized as an address term, and the nouns in the initial position of these sentences, *Sugimoto*, *kachoo*(section manager) and *anoko*(that girl) can be recognized as the sentence topics because they are in the initial position of the sentence without being followed by a particle. For these reasons the rate in the second stage of (43)d, (44)d and (45)d are higher, while nobody chose (46)d as a correct sentence.

The verb in (46)d "kureru" in "*renrakukureruyo*" means "give" in English, however the verb has a unique feature which involves the concept of deixis(Tsujimura 1996:334) (Shibatani 381). This might be the reason why (43)d is not a correct sentence in Japanese. Verbs like like "kureru', "yaru", "morau" etc.are not examined further here since the questionnaire does not contain a sufficient number of verbs of this verb type to allow a proper examination to be done. Doing more extensive research on this is left as future work.

(48)d has a high rate (94% in the 1st, 100% in the 2nd). However (49)d has the same structure as (48)d, but the rate is really low (0% in the 1st, 2% in the 2nd.)

(48)d. Kono sukiijoo ø Tonba ga yoku subetteruyo.
this ski slope ø Tomba NOM often skis
' Tomba often skis on this ski slope.'

(49)d. Puuru ø Taroo ga oboretandayo.
pool ø Taro NOM nearly drowned
'Taro nearly drowned in the pool.'

The difference between these sentences is whether the noun in the initial position of the sentence is preceded by the demonstrative pronoun "kono"(this) or not. The reason for the high rate in (48)d is assumed to be because of the demonstrative pronoun "kono"(this) which precedes the noun "sukiijoo"(ski slope) in the initial position of the sentence,

Then a new question was asked of all the informants. The sentence groups (54) and (55) were shown, and the informants were asked to answer whether they consider the sentences correct Japanese or not, as with the sentence groups (40) to (52). The sentence groups (54) and (55) are mostly the same as the sentence groups (48) and (49). The difference is that the (54) sentences do not have the demonstrative pronoun "kono"(this) in front of the noun "sukiijoo"(ski slope), while the (55) sentences have the demonstrative pronoun "kono"(this) in front of the noun "puuru"(pool).

(54)a. Tonba ga sukiijoo de yoku subetteruyo.Tomba NOM ski slope on often skis

- b. *Sukiijoo de Tonba ga yoku subetteruyo.* ski slope on Tomba NOM often skis
- c. Tonba ø sukiijoo de yoku subetteruyo.
 Tomba ø ski slope on often skis

- d. Sukiijoo o Tonba ga yoku subetteruyo.
 ski slope o Tomba NOM often skis
- e. Tonba ga sukiijoo ø yoku subetteruyo.Tomba NOM ski slope ø often skis
- f. Sukiijoo de Tonba ø yoku subetteruyo.
 ski slope on Tomba ø often skis
- g. Tonba ø sukiijoo ø yoku subetteruyo.Tomba ø ski slope ø often skis
- h. Sukiijoo ø Tonba ø yoku subetteruyo.
 ski slope ø Tomba ø often skis
- ' Tomba often skis on ski slope.'
- (55)a. *Taroo* **ga** kono puuru **de** oboretandayo. Taro NOM this pool in nearly drowned
 - b. *Kono puuru de Taroo ga oboretandayo.* this pool in Taro NOM nearly drowned
 - *c. Taroo ø* kono puuru *de* oboretandayo.Taro *ø* this pool in nearly drowned
 - d. Kono puuru ø Taroo ga oboretandayo.
 this pool ø Taro NOM nearly drowned
 - e. *Taroo* **ga** kono puuru **ø** oboretandayo. Taro NOM this pool ø nearly drowned
 - f. Kono puuru de Taroo ø oboretandayo.this pool in Taro ø nearly drowned
 - g. *Taroo* ø kono puuru ø oboretandayo.Taro ø this pool ø nearly drowned
 - h. Kono puuru ø Taroo ø oboretandayo.

this pool ø Taro ø nearly drowned 'Taro nearly drowned in this pool.'

sentence		%		%	
54a	17	100%	55a	17	100%
b	17	100%	b	17	100%
С	14	82%	С	17	100%
d	8	47%	d	17	100%
е	8	47%	е	6	35%
f	15	88%	f	17	100%
g	5	29%	g	5	29%
h	8	47%	h	13	76%
54 average	11.5	68%	55 average	13.63	80%

Table 1.2.5 Result of the experiment(group 54 and 55)

Sentence (55)d has a high rate (100%), while (54)d has a lower rate(47%). From this result it is possible to say that the demonstrative pronoun affects the correctness of the sentence.

4.4.2.5 e-sentences

The results from the e-sentences are quite interesting, having rates significantly different from each other. The rates are not dramatically different in either stage.

sentence	1st.	%	2nd.	%
40e	13	76%	17	100%
43e	1	6%	1	6%
44e	4	24%	4	24%
45e	2	12%	3	18%
46e	0	0%	0	0%
47e	9	53%	10	59%
48e	11	65%	14	82%
49e	3	18%	5	29%
50e	1	6%	1	6%
51e	17	100%	17	100%
52e	16	94%	17	100%
e average	7.00	41%	8.09	48%

Table 1.2.6 Result of the experiment(e-sentences, 1st. and 2nd. stage)

In the (40)e, (43)e, (44)e, (45)e, (46)e, and (47)e sentences, the "ni" particles are supposed to follow the noun in the middle of the sentences, but are dropped instead. However the particle "ni" in (40) has the function of showing the goal of the motion designated by the verb, while the others are object marking.

It looks like it is not a problem that the particle "ni" is dropped from the middle of the sentences when it shows the goal of motion (in (40)e 76% in the 1st, 100% in the 2nd), while the object marking "ni" cannot be dropped easily in the middle of the sentences (in (43)e, (44)e, (45)e, (46)e, and (47)e, 6%, 24%, 12%, 0% in the 1st, 6%, 24%, 18%, 0% in the 2nd.). However (47)e doesn't show as low rates as sentences (43)e, (44)e, (45)e, and (46)e (53% in the 1st, 59% in the 2nd.) The difference between (47)e and the others ((43)e, (44)e, (45)e, and (46)e) is that the nouns that are supposed to be followed by the particle "ni" are human beings or things. When the nouns in the middle of the sentences are things or for example organizations, like company("kaisha") in (47)e, particle drop can be more acceptable. This shows that particle drop can be related to the animacy.

The object marking particle "*ni*" can drop in the initial position of sentences more easily than in the middle of the sentences. This could be related to the noun position in the sentence and topicalization.

Both (48)e and (49)e are lacking the particle "de", which indicates location. However the rate for (48)e is much higher than that of (49)e. The reason is assumed to be the same as that for the difference between (48)d and (49)d, being whether the sentence has a demonstrative pronoun or not.

Both (51)e and (52)e are lacking the object marker particle "*wo*". Both (51)e and (52)e have high rates in both stages (94% and 100% in the 1st, 100% and 100% in the 2nd.). It seems that it is no problem to drop the particle "*wo*" in the middle of a sentence.

4.4.2.6 f-sentences

The average rate of f-sentences is relatively high in both stages (79% in the 1st, 97% in the 2nd.)

sentence	1st.	%	2nd.	%
40f	13	76%	17	100%
43f	11	65%	14	82%
44f	15	88%	17	100%
45f	15	88%	17	100%
46f	13	76%	16	94%
47f	15	88%	17	100%
48f	14	82%	17	100%
49f	14	82%	17	100%
50f	14	82%	17	100%
51f	12	71%	16	94%
52f	11	65%	16	94%
f average	13.36	79%	16.45	97%

Table 1.2.7 Result of the experiment(f-sentences, 1st. and 2nd. stage)

In the f-sentences the subject is placed in the middle of the sentences, and a noun which is followed by a particle is placed in the initial position. These particles which follow nouns in the initial position are not showing that the noun is the subject of the sentence. The particle "ga" is not used in the initial position of the f-sentences. So it appears that it is obvious s to informants that the nouns in the initial position of f-sentences are not the subject. This fact makes it easy for the informants to recognize that the noun in the middle of the sentence is the subject. This allows the particles in the middle of the sentence of f-sentences to drop easily.

4.4.2.7 g-sentences

An interesting result is shown in the g-sentence rates. The average rates are 40% in the 1st, 51% in the 2nd. However the rate of (40)g, (51)g and (52)g are quite high in both stages (71%, 82% and 94% in the 1st, 100% in the 2nd.).

sentence	1st.	%	2nd.	%
40g	12	71%	17	100%
43g	4	24%	4	24%
44g	3	18%	3	18%
45g	5	29%	8	47%
46g	2	12%	2	12%
47g	10	59%	11	65%
48g	6	35%	11	65%
49g	0	0%	1	6%
50g	2	12%	4	24%
51g	14	82%	17	100%
52g	16	94%	17	100%
g average	6.73	40%	8.64	51%

Table 1.2.8 Result of the experiment(g-sentences, 1st. and 2nd. stage)

In the g-sentences both of the nouns in the initial position and the middle of the sentence are not followed by any particle. It can be difficult to find the subject and object, however the rate of (40)g, (51)g and (52)g are high. This makes it natural to wonder why this is the case.

The subject of sentence group (40) can be followed by the topic marking particle "wa", and the noun in the middle of the sentence can be followed by the particle "ni". The subject of sentence groups (51) and (52) can be followed by the subject marking particle "ga", and the noun in the middle of the sentences can be followed by the object marking particle "wo". The subject of the other sentence groups can be followed by the subject marking particle "ga", and the particle "ga", and the noun in the middle of the other sentence groups can be followed by the subject marking particle "ga", and the noun in the middle of the noun in the middle of the sentences can be followed by the subject marking particle "ga", and the noun in the middle of the noun in the middle of the sentences can be followed by the subject marking particle "ga", and the noun in the middle of the noun in the middle of the sentences can be followed by the subject marking particle "ga", and the noun in the middle of the noun in the middle of the sentences can be followed by the subject marking particle "ga", and the noun in the middle of the noun in the middle of the sentences can be followed by the particles "ni", "de" and "to".

The particle "ni" in sentence group (40) and the other sentence groups are different. The particle "ni" in sentence group (40) shows the goal of the motion or location, while the other particle "ni" is object marking.

The result indicates that the object marking particle "wo" and the particle "ni" which functions to show the goal of the motion or location, can drop easily when the subject in the initial position is not followed by a particle.

However there would seem to be a problem. Sentences (47)g and (48)g don't have as high rates as (40)g, (51)g and (52)g, nor as low rate as the other sentences. What causes this?

The nouns, the subject and the other noun, in the sentences which have low rates, except (49)g, are human beings. When two nouns which are not followed by any particles are human beings, it is difficult to determine which is the subject of the sentence. While, when two nouns that are not followed by any particles are human beings and a thing, it is rather easy to determine which is the subject of the sentence.

For example, in (52)g, the noun "*otoosan*" (father) is a human being, and the noun "*sushi*" is a thing. In a case like this it is easy to find which one is the subject, because the verb of the sentence is "*tabeniittayo*" (went to eat), and one would not expect sushi to go out to eat something, or to eat "father". This is about animacy, and Fillmore explains it as followes.

The case notions comprise a set of universal, presumably innate, concepts which identify certain types of judgments human beings are capable of making about the events that are going on around them, judgments about such matters as who did it, who it happened to, and what got changed. The cases that appear to be needed include: *Agentive (A), the case of the typically animate perceived instigator of the action identified by the verb.*

Instrumental (I), the case of the inanimate force or object causally involved in the action or state identified by the verb.

Dative (D), in the case of the animate being affected by the state or action identified by the verb.

Factitive (F), the case of the object or being resulting from the action or state identified by the verb, or understood as a part of the meaning of the verb.

Locative (*L*), the case which identifies the location or spatial orientation of the state or action identified by the verb.

Objective (O), the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb. The term is not to be confused with the notion of direct object, nor with the name of the surface case synonymous with accusative.

(*Fillmore 24-25*)

The semantic descriptions of certain verbs may refer to the animateness of the associated noun, independently of whether the 'source' of the animateness is A or D. That is, the semantic representation of certain verbs may specify a relationship or a process associated with the necessarily animate participant in the state or activity identified by the verb.

(*Fillmore 30-31*)

According to Fillmore, in (52)g, the verb "*tabeniittayo*" (went to eat) identifies "*otoosan*"(father) as Agentive (A) and "*sushi*" as Objective (O), and specifies the

relationship between father and sushi (Fillmore 30-31). Usually something animate eats a thing, however in fairy tale "sushi" can also eat father.

In (51)g, the verb "*mitsuketayo*" (found) identifies "*omawarisan*" (policeman) as (A) and "*maigo*"(missing child) as (D), and specifies the relationship between policeman and missing child. The work of a policeman is not to be found, but usually to find something or someone. So policeman is suitable to be (A) under the verb "*mitsuketayo*".

In (47)g, one of the nouns is animate "boku"(I) and one is inanimate "kaisha"(company). The verb "renrakushitayo" (contacted) specifies the relationship between them. An animate noun "boku" is identified as (A), and an inanimate noun "kaisha" is identified as (O) by the verb "renrakushitayo"(contacted). However as a group, an inanimate noun "kaisha" can behave as an animate noun, so it is possible to identify "kaisha" as (A), and "boku" as (D). That's why the rate of (47)g is a little bit more than half in both stages (59% in the 1st, 65% in the 2nd.).

In the sentences with low rates, (43)g, (44)g, (45)g, (46)g, and (50)g, the two nouns are both animate, and they don't have a special feature like "omawarisan" (policeman), so it is difficult to identify which is (A) and which is (D) without case marking particles. Moreover, the verbs in those sentences, "meerudasuyo" (will send mail), "denwasuruyo" (will telephone), "renrakukureruyo" (will contact) and "soojishiterunda" (is cleaning), do not specify the relationship between the two nouns. That is likely why the rates are low in those sentences.

From the results of the experiment of group 54 and 55, we could also see a low rate as in (49)g. This can indicate that the particle "de" does not drop easily in the middle of the sentence. However (48)g has higher rates than (49)g, (54)g and

(55)g. This could be caused by the semantical notion of spacial meaning, but more extensive research on this is needed and is left as future work.

sentence	1st.	%	2nd.	%
40h	4	24%	8	47%
43h	3	18%	5	29%
44h	4	24%	9	53%
45h	3	18%	4	24%
46h	1	6%	2	12%
47h	7	41%	9	53%
48h	10	59%	16	94%
49h	2	12%	2	12%
50h	0	0%	0	0%
51h	4	24%	9	53%
52h	7	41%	13	76%
h average	4.09	24%	7	41%

4.4.2.8 h-sentences

Table 1.2.9 Result of the experiment(h-sentences, 1st. and 2nd. stage)

Like the g-sentences, in the h-sentences both of the nouns in the initial position and the middle of the sentence are not followed by any particle. The difference between the g-sentences and h-sentences is the word order. The subjects of the sentences are placed in the middle of the sentences, and the other nouns are placed in the initial position of the sentences.

The rates of the h-sentences is quite different from that of the g-sentences, with the rates of the h-sentences being lower than those of the g-sentences. This can be caused by word order. Since there is no particle, the keys to determine the subject are word order and animacy. As mentioned in 4.4.1.7, in (43)g, (44)g, (45)g, and (46)g, both of the nouns are animate, so it is difficult to determine which is the subject when no particles follow the nouns. When the verb of the sentence specifies the relationship, it is easier.

However, the rate of (51)h is much lower than that of (51)g, and even the verb "*mitsuketayo*" (found) specifies the relationship between policeman and missing child. This result might indicate that word order strongly affects the correctness of the sentence.

Also of note is that the rate of (48)h is relatively high. This could again be caused by the semantical notion of spacial meaning, as mentioned in 4.4.1.7.

Chapter 5 Conditions of particle drop in Japanese

In the previous chapter we have seen the results and analysis of the questionnaire. In this chapter the analysis is summarized, and conditions of particle drop are given.

5.1 Word order

Since the Japanese language is an agglutinative language and particles indicate cases of nouns in sentences, it is possible to assume that word order is not so important. Actuary it is possible to switch the positions of the subject and the object n, while in languages like English this it not usually accepted. However, when particle drop occurs when the particle drop occurs, the word order is one of the key point related to whether particle drop is allowed or not. Here we will see the results related to the noun's position in the sentence.

5.1.1 Initial position

Here the results related to the initial position that were examined in Chapter 4 will be shown.

- Native Japanese speakers tend to recognize a noun in the initial position of the sentence as the subject, if it is not followed by a particle.
- If a noun is placed in the initial position of the sentence without being followed by a particle, it is also possible that the noun will be recognized as an address term.
- If a noun is not followed by any particle but is placed in the initial position of the sentence, it is possible that the noun will be recognized as the topic of the sentence.
- The object marking particle "*ni*" can drop in the initial position of sentences more easily than in the middle of sentences.

• However, when the noun is followed by a particle, it is not recognized as the topic of the sentence, even if it is preceded by a demonstrative pronoun and placed in the initial position of the sentence.

5.1.2 In the middle of sentence

- The particle "*ni*" is dropped from the middle of sentences when it shows the goal of motion.
- The object marking "ni" cannot be dropped easily in the middle of sentences.
- When the noun in the middle of sentences are human beings, the particle drop doesn't occur easily.
- When the nouns in the middle of sentences are things, or for example organizations, like a company, particle drop can be more acceptable.
- It is not a problem to drop the particle "wo" in the middle of a sentence.
- When a noun in the initial position is followed by particles which are not showing that the noun is the subject of the sentence, then the noun in the middle of the sentence, if it is the subject of the sentence, can drop easily.
- The object marking particle "wo" can drop easily when the subject in the initial position is not followed by a particle.
- The particle "ni" which has the function of showing the goal of the motion or location, can drop easily when the subject in the initial position is not followed by a particle.
- The particle "de" doesn't drop easily in the middle of the sentence.

5.2 Animacy

- When the nouns in the middle of sentences are human beings, the particle drop doesn't occur easily,
- When the nouns in the middle of sentences are things or for example organizations, like a company, particle drop can be more acceptable.
- When both of the nouns are animate and without paricles, it becomes difficult to determine which is the subject when no particles follow the nouns. When the verb of the sentence specify the relationship, it is easier.

5.3 Demonstrative pronoun

• When the noun is preceded by a demonstrative pronoun, particle drop occurs more easily than when it is not being preceded by a demonstrative pronoun.

Similar things happe to zero particle as well. Usually, the sentences in which the speaker immediately utters what he or she sees, the particle "ga" is used. (Nihongo kijutsu bunpoo kenkyuukai 228)

(56) A, tsubame ga tonderu.
swallow NOM flying
"Oh! A swallow is flying."
(Nihongo kijutsu bunpoo kenkyuukai 228)

However when the demonstrative pronoun is attached to the noun, the particle "ga" does not follow the noun, and ϕ is used.

(57) A, kono tokee ø tomatteru.
this clock ø stopped
"Oh! this clock is stopped."
(Nihongo kijutsu bunpoo kenkyuukai 228)

So we could say that with the demonstrative pronoun, absence of particle can occur easily.

5.4 Other possible reasons

It is possible to think that some verbs require a particle, so they do not allow particle to drop will occur, for example in (46)d the verb "kureru" in "*renrakukureruyo*". However, additional research would be needed to determine if this is the case.

In addition, the semantical notion of spacial meaning can allow particle drop, but this would also require more research.

5.5 Summary

As this chapter shows, there are several conditions that can cause particle drop. Syntactical conditions are frequent. Word order and Animacy are the two most significant causes, however the demonstrative pronoun also seem important.

Chapter 6

Previous research on zero particle

6.1 Onoe (1987)

Once discusses zero particles especially those that follow the subject of a sentence. He provides three types of sentences which require zero particles as follows.

(G) Declarative sentences by which the speaker wants to tell the hearer a certain information or what the speaker feels about something.

(58) Kore oishiiyo.this delicious'This is delicious.'

With (58) the speaker wants to tell the hearer what the speaker thinks about "this". When the speaker wants to talk about his/her feelings, or something he/she thinks is interesting, (G) type sentences are used.

(H) Question sentence which asks the existence of something.

(59) Naifu aru?

Knife exist 'Do you have a knife?'

(60) Fujisan mieru?Mt. Fuji can see'Can you see Mt. Fuji?'

In (59) the speaker asks the hearer about the existence of a knife, and in (60) the speaker asks about the existence of Mt. Fuji in the hearer's sight. It is a fact that

Mt. Fuji exists, however, (H) type sentence can dealswith the existence of something in a certain way.

(I) Question sentence which asks about ability.

(61) Roshiago yomeru?Russian can read'Can you read Russian?'

In (58) the speaker asks about the hearer's ability to read Russian. In (I) type sentences the speaker asks about the hearer's ability.

6.2 Hasegawa (1993)

Hasegawa calls the function of the zero particle "Extraction (Toridashi)". Extraction (Toridashi) is divided into two categories, which are Signalization (Shingoosei) and Softening (Yawarage).

6.2.1 Extraction (Toridashi)

The sentences from (62) to (65) have something in common in a sense. The \emptyset is placed right after the things which are in both speaker's and hearer's sight, or words which are related to both speaker and hearer. In these cases the speaker extracts the base of what he/she want to tell, and indicates it to the hearer. At first the speaker indicates "X", and talk about "Y", "X \emptyset Y". However, according to Hasegawa what the speaker wants to tell is Y.

(62) (When asingk someone whether a seat is occupied or not) *Koko ø yoroshiidesuka?* here empty?
'Is this seat (here) empty?' (63) (When in a trouble)

Watashi ø doushiyou.

I what should do 'What should I do?'

- (64) (Giving some sweets to a guest) *Kore o doozo.*this please(take)
 'Please take this one.'
- (65) Ima osshatta koto o yoku wakaranaindesukedo.now (you) said thing well do not understand'I don't really understand what you said now.'

(Hasegawa 161)

Hasegawa divides Extraction (Toridashi) into two categories; Signalization (Shingoosei) and Softening (Yawarage), and they are descried below.

6.2.1.1 Signalization (Shingoosei)

In conversation the speaker sends a signal to the hearer in order to get attention from the hearer, and the signal is realized by extracting a word. This function is called Signalization (Shingoosei).

(66) Denki ø abunai kara...
electricity dangerous because
'Because the electricity is dangerous ...'
(Hasegawa 163)

In (61) "Denki ø" is uttered in order to get the hearer's attention, and what the speaker wants to tell is then told.

The function Signalization (Shingoosei) looks like an attempt to address someone in the following cases.

(67) Niisan o ima kaettano?
brother now came
'Did you, brother, come home now?'
(68) Neechan o chotto tsukareten janai?

sister ittele tired not

'Are you, sister, tired, aren't you?'

(Hasegawa 164)

"Niisan" (brother) and "Neesan" (sister) in (67) and (68) look like an address to brother and sister, however these words are also agents of the sentences, so they are not used to address brother and sister, When address terms are used only to address someone, the address term is not the sentence's constituent.

6.2.1.2 Softening (Yawarage)

The other function of Extraction (Toridashi) is Yawarage (softening).

(69) (asking for coins in order to make telephone call) *Komakaino ø aru?*small one there is
'Do you have small change?'

(Hasegawa 164)

If the particle "ga" is used in (69), the expression will be only asking whether he/ she has coins. If the particle "wa" is used in the same sentence, the meaning will be different. It means "Do you have coins? not bills." Both the particle "ga" and "wa" have exclusive meanings. In order to avoid to express those meanings, the function Softening (Yawarage) is used.

6.3 Maruyama (1996)

Maruyama explains that absence of particle which does not belong to ellipsis of case particles, is a topicalized element. The particle "wa" is a topic marker, and

an element which is followed by the particle "wa" is topicalized. However Maruyama points out that the topicalization of the particle "wa" and absence of particle are different. The particle "wa" also has an exclusive meaning, on the other hand \emptyset does not have an exclusive meaning. So to avoid to express exclusiveness, \emptyset is used. Maruyama agrees to Hasegawa's Extraction (Toridashi) and Softening (Yawarage) in this point. The particle "ga" is not used when the speaker wants to avoid expressing exclusiveness, in which case \emptyset is used because for the same reason.

Chapter 7 Analysis of CALLHOME Japanese Transcripts

In Chapter 6, we looked at previous research on Zero Particle. This chapter looks at what kinds of absence of particles can be found in natural conversations, and analyzes a set of sentences with absence of particles. We identify Zero Particles in the CALLHOME Japanese Transcripts and analyze a chosen set of these Zero Particles. Possible explanations for the conditions in which Zero Particles occur are presented in Chapter 8.

7.1 Materials

Description of CALLHOME Japanese Transcripts is as follows;

The transcripts cover a contiguous five or ten-minute segment taken from 120 unscripted telephone conversations between native speakers of Japanese. The transcripts are timestamped by speaker turn for alignment with the speech signal and are provided in standard orthography.

In addition to transcript files, this corpus contains full documentation on the transcription conventions and format. Auditing and demographic information on the speakers represented in the transcripts (including gender, channel quality and so on) are also included.¹

¹ <u>http://www.ldc.upenn.edu/Catalog/CatalogEntry.jsp?catalogId=LDC96T18</u>

Fry (2003) explains as follows;

CallHome refers to a family of speech corpora that were assembled by the LDCbeginning in 1995.

(Fry 27)

The 1996 release consists of 120 spontaneous, unscripted telephone conversations between native speakers of Japanese. The conversations were recorded between June 17, 1995 and November 15, 1995. The CHJ corpus includes transcripts of each conversation as well as digitized speech data. Each transcript covers a contiguous five- or ten-minute segment taken from a record conversation lasting up to 30 minutes. The transcriptions were performed by Texas Instruments and

the LDC.

(Fry 28)

All the transcripts begin in the middle of conversation. The reason is as follows;

The five- or ten-minute speech segments selected for transcription generally begin around the 120-second mark of the conversation. This two-minute delay in beginning the transcription was implemented in order to give the speakers time to grow accustomed to being recorded and hence to speak more naturally.

(Fry 31)

7.2 Informant

All the informants are native japanese speakers. The caller is tagged as A, calling from North America, and the recipient, tagged as B, is receiving the call in Japan.

7.3 Procedure

In this thesis, 15 conversations are used from the CALLHOME Japanese Transcripts, and from these we selected 464 sentences with absence of particle. The places where absence of particle occurs are tagged with " σ ", sentences with " σ " are analyzed, and the places where particles can be placed, are aslo tagged.

The meaning of the sentences will be slightly changed if we put a certain particle in the vacant place, but the choice is up to the speaker, which is why several particles were tagged when it was possible.

Written text like that found in a novel, movie or play manuscript cannot be expected to contain natural conversations. These types of text are typically formed by the author's intention, so they can be said to be similar to taks-oriented dialogue. Natural conversation is spontaneous, so these types of manuscripts are not well suited for the linguistic study of spoken conversations.

7.4 Resulta and analysis

In total, 464 sentences with absence of particle were selected from 15 conversations in the CALLHOME Japanese Transcripts. There were only 30 sentences where \emptyset can be recognized as a constituent of the sentence. In these sentences the \emptyset is not particle drop, but ZP. The results is shown in Table 1.3.1 and 1.3.2.

	number of sentences
de	2
ga	177
ni	59
no	2
to	1
wa	181
wo	174
Ø	30

Table 1.3.1

	number of
	sentences
ga, wa	102
ga, wa, wo	4
ga, wo	7
ga, wa, ø	9
ga, wa, wo, ø	1
ni, wa	5
niwa, wa, ø	1
no, wa	1
wa, wo	29
wa, wo, ø	1
wa, ø	17
WO, Ø	6
ø (zero)	2

Table 1.3.2

Of the 30 sentences, there were 28 sentences with ZP occurrences that can be explained by previous research, for example Extraction (Toridashi), Signalization (Shingoosei) and Softening (Yawarage) by Hasegawa(1993). The particle "ga" or "wa" can be placed in \emptyset in those ZP sentences, even if the meaning of the sentences will become slightly (and sometimes greatly) different. However, the two ZP which were shown in Chapter 7 cannot be explained by that research, in these two sentences native Japanese speakers would not place any particle. Here

we will call the 28 ZP "ZP 1", and the two ZP "ZP 2". These two sentences are shown below.

319.82 323.63 B: Dakara "Iwai san" ni sa, sukoshi omikan ø motteitte.so Iwai to a few orange ø bring"So bring some oranges to Iwai".

322.30 322.61 A: Un.

ok.

322.99 326.80 A: A! soo!

Oh!

<u>Watashi</u> "Iwai san" no koto Ø, kikitakattandakedo.
<u>I</u> Ø Iwai GEN thing Ø wanted to ask
"Oh! I wanted to ask you about Iwai".

326.76 327.09 B: Un.

458.03 462.47 B: Hontooni.

Really.

Konna watashi ga, na, konna iikagenna yatsu ga such I NOM such unserious fellow NOM natte iinkana toka omocchau. become is it all right think

462.14 468.04 A: Iya, watashi *ø* omottano, kono tegami ø uketotta toki ni.

well <u>I</u> *ø* thought this letter ø received time at "Well, I thought it, when I got this letter."
Aa, Mucchan nara ii sensee ni narunatte omottano.
Oh Mucchan as for good teacher become thought "I thought Mucchan will be a good teacher".

It is interesting that both of the ZP 2 from the CALLHOME Japanese Transcripts follow the pronoun "watashi" (I). In Japanese the pronoun "watashi" (I),

especially nominative case, which is subject, is often omitted. However, these two sentences have the pronoun "watashi" (I) not omitted. The speakers chose to use "watashi" (I), but didn't place any particle. ZP 2 might be related to the function of the pronoun "watashi" (I) in colloquial speech. However, determining whether this is the case or not is left as future work.

Chapter 8 Zero particle (ZP)

From the result of the analysis of the CALLHOME Japanese Transcripts in Chapter 7, we found two types of ZP; one which has been studied in previous research, and one which has not. In this chapter, the conditions of ZP will be discussed and the functions of ZP explained.

8.1 Conditions of zero particle in Japanese

We saw that there are two types of ZP in chapter 7: ZP 1 and ZP 2. The conditions of ZP 1 are the same as Hasegawa's Signalization (Shingoosei) and Softening (Yawarage) (1993). The sentences which can be recognized as Signalization (Shingoosei) are the same type of sentence as (65) and (66). The others are Softening (Yawarage).

ZP 2 was discovered during the examination of ZP 1. Additional research will be needed to properly examine the conditions under which ZP 2 occurs because the research plan of this thesis did not expect the existence of ZP 2.

Chapter 9 Conclusion

9.1 Conclusion

This thesis has examined the absence of particle; whether it represents particle drop or zero particle. Absence of particle occurs frequently in colloquial speech in Japanese, but has been studied mostly from a pragmatical viewpoint. Moreover, as the description of related work in this thesis shows, while there has been much research on particle drop, there has been much less on what we call zero particle.

To properly examine this topic we have created a survey undertaken by 17 native japanese speakers. The sentences in this survey were not taken from natural conversations but were created systematically to examine the syntactical intuition of japanese speakers. The survey was used to examine the conditions of particle drop in detail, and our analysis of this material can be found in Chapter 4. We identified the following conditions, Animacy, word order and demonstrative pronoun.

To find examples of zero particles occurring in natural conversations, we also examined the CALLHOME Japanese Transcripts. In total, we looked at the transcripts of 15 conversation, each spanning between five and 30 minutes. From these transcripts we selected 464 sentences with absence of particle and analyzed these sentence in detail. We identified 30 occurrences of zero particle. However, only 28 were of the type that has been described in previous research. The remaining two are of a new type. A characteristic of these two sentences is that a native Japanese speaker would not place any particle where there is absence of particle. Interestingly, the absence of particle follows the pronoun "watashi" (I). This pronoun is also the subject in both sentences.

In conclusion, in this thesis we find that there are three types of absence of particle: particle drop, ZP 1, and ZP 2. Particle drop is as shown in Chapter 4, and can be be exaplined syntactically and by Animacy. ZP 1 can be described via existing research. As for ZP 2, there might be a connection with the pronoun "watashi" (I).

9.2 Future work

In this thesis, only 15 conversations from the CALLHOME Japanese Transcripts were examined. To properly examine whether there is a connection between what we call ZP 2 and the pronoun "watashi" (I) a broader examination should be undertaken. This type of examination could look at a larger of natural conversations, in addition to collecting feedback from native Japanese speakers.

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