# Internally Headed Relative clauses -The complexities of a sentence within a sentence

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### Abstract

This paper focuses on the use of relative clauses, specifically internally headed relative clauses in Japanese. Previous research on different types of relative clauses occurring in Japanese is also presented. The main purpose of the thesis is to give an up to date analysis of the understanding of relative clauses. A survey was carried out to further research at what point sentences with relative clauses get too complex. The survey gathered 40 valid responses from all Japanese native speakers. The result of this survey is analyzed and compared with previous research, especially research done by S.-Y. Kuroda. The result of the survey is that there is not a very clear line to be found. The respondents seemed to be able to understand even the more complex sentences, with different types of internally headed relative clauses presented to them. The respondents however agreed that the sentences sound unnatural and too complicated.

Keywords: Japanese, Japanese Linguistics, Internally Headed Relative clauses, Syntax, Relative Clauses, Pragmatics

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# Abbreviations

Accusative marker
Conditional
Dative marker
Genitive marker
Gerund
Honorific marker
Instrumental marker
Loactive marker
Negative marker
Nominalizer
Nominative marker
Object
Question particle
Sentence-final particle
Topical marker
Verb

# Conventions

Unless otherwise noted the sentences used as examples are my own.

### Romanization

Throughout this paper the modified Hepburn system of Romanization is used to transcribe Japanese vocabulary. Place names and words that are considered to be part of the English vocabulary follow their English spelling unless they are used within the Japanese sentences. Romanized Japanese from other sources has been altered for the sake of consistency.

## **1. Introduction**

### 1.1 The topic

Sentences with a relative clause in Japanese generally consist of a clause which describes a following (noun phrase) head. This clause can be a verb phrase which in turn with the head, in most cases could be considered a sentence. The internally headed relative clauses has its noun phrase contained within the relative clause, instead of after, as is the usual case with relative clauses.

### **1.2 Objectives**

The purpose of this thesis is to research the perception of relative clauses and specifically internally headed relative clauses. For non-linguists and native Japanese speakers the way that some of the relative clauses are formed can easily get too complex and would be considered non-grammatical and/or too difficult to understand. The main purpose of this thesis is therefore to identify where this limit of complexity is, if there is one. Finding such a limit would provide help as a guideline to know in which cases usage of these type of sentences should be avoided. It would also be of value for Japanese foreign language students, to avoid using such phrases as there are clear differences between relative clauses in Japanese and in for example English. The research in this thesis is partially done by analyzing the result of a conducted survey, which is trying to outline where the limit to when a relative clause gets too complex to be understood. How this survey was constructed and conducted is described in the methodology and main body of this thesis.

#### **1.3 Relative clauses**

While not unique to Japanese, relative clauses differ compared to other languages. As Tsujimura (2013) writes in her chapter on Syntax, there are many other different ways to modify nouns in Japanese, and relative clauses are but one way of doing it. She points out that albeit this is the case, regarding the relative clauses, there is still "a number of interesting types and characteristics that are internal to Japanese" (2013, page 285). One of these noted distinctions that Tsujimura (2013) brings up is between English and Japanese relative clauses. In English there is a word connecting the head noun and relative clause, a so called relative

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pronoun. Examples of said relative pronoun could be "which" or "that" etc. depending on the type of relative clause, whereas in Japanese such a word does not exist:

Taroo-ga hahaoya-ga tukutta susi-o tabeta.
 Taro-Nom Mother-Nom made sushi-Acc ate
 "Taro ate the sushi that his mother made." (Tsujimura, 2013 page 285)

In the example above after the relative clause "hahaoya ga tukutta" (his mother made), there is no relative pronoun in other words such word as "that" and the relative clause is thereby connected directly to the head noun. (Hasegawa, 2014)

Another clear distinction is the syntactical order, which is the reverse of that in English. In Japanese the relative clause precedes the head and in English it is the head that precedes the relative clause. Tsujimura (2013) explains that this is naturally because of the syntactical word order. Japanese is a so called SOV-language where the verb is in the end of sentence, while English is a SVO-language. This is also the nature of other SOV-languages and not at all unique to Japanese.

However, this thesis focus is on "Internally headed relative clauses". This is a type of relative clause that does not exist in English, and is only found in very few languages which also need to have a similar syntactical order as Japanese. Examples of this would be Korean, and Lakhota (an indigenous language spoken in North America), both of these languages are so called SOV-languages. Tsujimura (2013) defines internally headed relative clauses as a clause where the head of the noun phrase is contained within the relative clause. Using the following as an example:

 Taroo-wa [ringo-ga sara-no ue-ni atta]-no-o totte, poketto ni ireta.
 Taro-Top apple-Nom plate-Gen top-at was-one-Acc took pocket-to put in "Taro picked up an apple which was on a plate and put it in a pocket"

(Tsujimura 2013 p. 292)

In this sentence "apple" (ringo) can be considered the head of the relative clause. There is also no set position for the noun phrase and the semantic interpretation can therefore vary as sentences containing several nouns get more complex.

### 2. Previous research

#### **2.1 Introduction**

The previous research within the field of relative clauses in Japanese have had much focus on dividing them into different groups and defining the differences. With relative clauses there is already much difference compared to relative clauses in other languages.

One of these distinctions is the existence of internally headed relative clauses, which is found in very few languages outside of Japanese. Within these sentences the head noun is modified by the relative clause which is contained within it. Especially Tsujimura (2013) and Kuroda (1992) have worked on defining these. Even though Kuroda uses the term "Pivot independent relative clauses" it is clear that they refer to the same thing. Another big researcher within this field is Matsumoto (1997) who worked a lot with discussing especially relative clauses without gaps and the phenomenon of ga/no conversion within relative clauses. Teramura (1969) also presented the concept of an inner (uchi) type and outer (soto) type of relationship within relative clauses. Where the inner one means that it is possible to paraphrase the noun head, into the relative clause, making it a complete sentence. With the outer type this is not possible. So by this distinction the inner relationship is syntactically defined while the outer is semantically defined. This concept is argued against by among others Baldwin (1998) and Matsumoto (1997), as Matsumoto present so called truncated noun heads, which are, depending on the pragmatic context, possible to classify as both inner and outer.

#### 2.2 Relative clauses without gaps

Tsujimura (2013) defines one type of sentence with a relative clause as one without "gaps". In these the modification of the head noun is not in a syntactical way, but a pragmatic and/or semantic one. A requirement for these relative clauses however is that they have to be complete sentences, the subject, marked by a "ga" is also inside the relative clause, making it gapless. Matsumoto (1997) argues that a way to distinguish these gapless relative clauses is that with other relative clauses it is possible to convert them to a non-relative paraphrase. An example could be:

3a. [[hannin ga kane o nusunda] ginkoo] wa doko desu ka

Criminal NOM money ACC stole bank TOP where is QP

'Where is the bank (which) the criminal stole money (from)?

(Matsumoto 1997)

3b. Hannin ga ginkoo kara kane o nusunda.

Criminal NOM bank ABL (from) money ACC stole

'The criminal stole money from the bank.' (Matsumoto 1997)

The sentence above is as shown possible to turn into a non-relative sentence. A relative clause without gaps however is affected by pragmatic or semantic context, making a paraphrase much more difficult:

4. [[genki ga deru] kuruma]

energy NOM rise.up car

'the car (by driving which) () energy rises' (Matsumoto 1997)

Matsumoto argues that in this sentence it would not be easy to just choose an appropriate particle, attach it to the head noun and put it in the noun phrase, as was possible in the example above. With another sentence Matsumoto tries to make it a non-relative sentence resulting in the need to paraphrase the sentence quite a bit:

5a. [[atama ga yoku-naru] hon]

Head NOM good-become book

'the book (by reading which () head gets better'

5b. Kono hon o yomeba atama ga yoku-naru.

This book ACC read.COND head NOM good-become

'If () read this book, () head gets better.'

In this example the verb read in conditional form had to be added. Matsumoto (1997) therefore further argues that the syntax is of little importance as the verb 'read' could be in other conditional forms (yomuto, yondara) without it making any significant difference as the importance lies with the readers understanding of the sentence. Tsujimura (2013), referring to this research by Matsumoto, says that this is proof that "[...] there is always a semantic and/or pragmatic connection between the relative clauses and their heads in sentences with this type of relative clauses." (page. 290)

#### 2.3 No/Ga conversion

Tsujimura (2013) defines another type of relative clause where the phenomenon "no/ga conversation" is possible. She explains that if there is a relative clause where the noun phrase is marked by the particle "ga" it can be replaced by the particle "no" without any difference in meaning. Tsujimura further uses this sentence as an example:

6a. Taroo-ga [Hanako-<u>ga kaita</u>] e-o hometa.

Taro-Nom Hanako-Nom painted painting-Acc praised

"Taro praised the painting that Hanako drew."

6b. Taroo-ga [Hanako-<u>no</u> kaita] e-o hometa.

She also brings up that this applies to verbs that otherwise usually mark their direct objects with the particle "ga". Using this as an example:

7. Sono hito-ga eigo-ga wakaru.

That person-Nom English-Nom understand

"That person understands English."

8a. [Eigo-ga wakaru] hito-ni kiite kudasai.

English-Nom understand person-to ask please

"Please ask the person who understands English."

8b. [Eigo-no wakaru] hito-ni kite kudasai.

In the example above there is no real difference in meaning between b. and c. indicating that when the clause is a relative clause the particle "ga" can be switched to "no" without changing the meaning of the sentence.

While the no/ga conversation in Japanese is a field that have been researched before outside of the realm of relative clauses as Harada (1971) points out, they exist only in clausal embedded sentences, which relative clause is an example of.

#### 2.4 Internally headed relative clauses

Internally headed relative clauses refers to sentences where the head noun is modified by the relative clause which it is contained within. An observation that Tsujimura (2013) makes is that the position where the head noun is usually placed, which is after the relative clause, is in the case of an internally headed relative clause, replaced by a "no" (one). This is making it similar to the gapless relative clauses, but with the addition that where the noun phrase is usually found, there is now a "no", right after the relative clause.

Kuroda (1992, page 196) suggests the following form in Japanese syntax to define internally headed relative clauses:

#### $((\dots V-u)_S-no)_{NP}$

"In which V is a predicate (i.e. verb, adjective etc.), *u* is a mark for the ending of a predicate traditionally called the *rentai* (adnominal) form and *no* is a nominalizing complementizer." This form does not apply to all types of relative clauses, as the *no*-particle, Tsujimura (2013) points out, is not always necessary, but it seems to be vital for the internally headed relative clauses. As can be seen in the example from Tsujimura mentioned in chapter 1.3, where there is no nominalizing complementizer to be found. An explanation for this could be that it replaces the head noun in a regular sentence with a relative clause. Kuroda's type of relative clauses is by Tsujimura (2013) referred to as internally headed relative clauses and by Kuroda as pivot-independent relative clauses. Using a sentence from Kuroda (1992) as an example:

9. Sono omawari wa gakusei ga CIA no supai o kumihuseta no o uti-korosita

The copstudentsspyhold-downshoot and kill'The cop shot and killed the

{'Students who held down the CIA spy'

'CIA spy who the students held down'} (Kuroda 1992)

With this sentence which Tsujimura (2013) also refers to, it is necessary to interpret the sentence pragmatically. As shown by the translation it can be either the students or the spy that gets killed. This is because both "CIA spy" and "students" can be interpreted as the head, as they are both contained within the relative clause. This sentence can therefore be paraphrased into:

10. Sono omawari-wa [CIA no supai-o kumihuseta] gakuseitati-no-o
That cop-Top CIA-Gen spy-Acc hold down students-Gen-Acc
utikorosita.
shot and killed
"The cop shot and killed the students who held down the CIA spy."
"The cop shot and killed the CIA spy who the students held down."
(Tsujimura 2013)

Tsujimura (2013) means that this is proof that there is no specific place where the head noun has to be, making these two noun phrases possible. Referring to Kuroda's (1992) view that either the subject or the object of this sentence can therefore be the head noun. Or as Kuroda (1992) refers to it the "pivot" or "semantic head".

#### 2.5 Internally headed relative clauses in past tense

Kuroda (1992) points out that one condition for an internally headed relative clause to be accepted is for it to be able to be interpreted in a pragmatic sense so that it is relevant to the matrix clause's pragmatic content. With regards to sentences with only the relative clauses in past tense and the rest of the sentence in present tense, this causes the informants to have problems accepting and/or understanding the sentences. Kuroda (1992) uses the example:

11. Taroo wa Hanako ga kinoo ringo o katta no o totte, ...

Taro-Nom Hanako-Nom yesterday apple-Acc had bought and...

This sentence is supposed to mean that Hanako bought the apple yesterday, while the time when Taro takes the apple is in present time. Kuroda argues that this would be unacceptable because of the past tense in the relative clause. At the same time, he claims that this sentence could be acceptable:

12. Taroo wa ringo ga sara no ue ni atta o totte, poketo ni ireta

Taro-Nom apple-Nom plate-Gen above-Loc-Acc pick up, pocket-Loc put it

Taro picked up an apple which was on a plate and put it in a pocket

Despite the past tense, Kuroda (1992) points out that from a pragmatic perspective the context and plausibility that Taro picks up an apple that has been put on a plate makes it easier to accept. If the sentence contains a time adverb such as "yesterday", like it did in the first sentence, it is no longer accepted:

13. Taroo wa ringo ga kinoo sara no ue ni atta o totte, poketo ni ireta

Taro-Nom apple-Nom yesterday plate-Gen above-Loc-Acc pick up, pocket-Loc put it

Kuroda (1992) explains this by pointing out that the implication is that apples that were placed there yesterday have to be assumed to stay there until today, which cannot be assumed. This makes the pragmatic aspect of internally headed relative clauses an important one.

#### 2.6 Unnatural internally headed relative clauses

A common problem with the relative clauses is to which extent they are accepted by native speakers. Kuroda (1992) admits that many of his examples could potentially sound unnatural or that they could be too complicated to be understood. With a long sentence such as the following, the content can feel unclear:

14. Zyunsa ga doroboo o kawa no hoo e oitumete itta no ga

Policeman-Nom thief-Acc river-Gen toward-Goal track-down-Gen-Acc went

ikioi amatte hutaritomo kawa no naka e tobikonda

power exceed both-two river-Acc in-Goal jumped

"A policeman was tracking down a thief toward the river, who both, losing control, jumped into the river." (Kuroda 1992 page 155)

While it can be understandable to native speakers the length and content might sound unnecessary and as if it contains too much information at once. To identify the subject and interpret the sentence without a context can therefore be a difficulty. This is also a problem that Hammar (2015) was faced with, who in her survey on no/ga alternation among relative clauses, received similar comments on the internally headed relative clauses. Comments such as "it contains too much information" (Hammar 2015, page 27) was frequent and the

respondents seemed to have problems understanding the content of the sentence. Almost half of her respondents also answered that they considered the sentence with the internally headed relative clause to be unnatural.

Matsumoto (1997) argues that Japanese compared to languages such as English is more demanding when constructing sentence with relative clauses. An explanation for this is the lack of a marker specifying that the clause is a relative one and its relation with the main clause. As mentioned before Japanese does not have a syntax marker like "which" or "that" which would help identify and make the hearer aware of the relation between the clauses. The following sentence which could be interpreted as "where is the stone which bought a book?" would therefore in most cases seem wrong and even grammatically unacceptable:

15. Hon o katta isi wa doko desu ka

Book-Acc bought stone-Top where is Qp

Matsumoto (1997) therefore stresses that the pragmatics and semantics in the sentence becomes much more important in Japanese, for making a sentence sound natural and grammatically correct.

### 3. Internally headed relative clauses

#### **3.1 Introduction**

In this part the result of my own research, is presented. The method used is presented in chapter 3.2 and information about possible error sources is presented in chapter 3.3. The results of the research are discussed in 3.4 and further throughout chapter 3 and in chapter 4 the result is analyzed and summarized.

#### **3.2 Methodology**

The main focus of this thesis is the result of a conducted survey (Appendix 1) answered by native Japanese speakers. The example sentences were foremost taken from Tsujimura (2013) and Kuroda (1992). This is to see if Kuroda's assumptions about which type of relative clauses are accepted, and which are not. As the material he gathered is now almost 25 years old, this is also a good reason to see if the language has changed in any way, and if native speakers would be more inclined to accept certain types of internally headed relative clauses or not. One aspect of this is to research if time aspects, for example using adverbials like "yesterday", and if that would make it more difficult to accept or not. This to try and see where the limit is when the sentence is too complex to accept. One of the questions was written with a lacking nominalizing complementizer in a sentence containing an internally headed relative clause. This would make it grammatically incorrect and it is there to see if there are any differences between the grammatically correct ones and whether it is acceptable or not. There are also questions included where the informant has to define which one is the head noun, by explaining what happens in that sentence. These sentences contain a relative clause with two potential head nouns. This is to see how the pragmatic aspect (that one of the ways to interpret the sentence should be more reasonable than the other) affects it, or if both ways are equally accepted.

The survey was created in google forms and linked to the respondents. It was launched on the 18<sup>th</sup> of April and open for 24 hours. Most of the respondents were contacted through social media, and by contacts with the other respondents. Altogether the survey was completed by

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41 informants. One of the responses was omitted as one of the respondents seemed to have submitted the form twice.

The ages of the respondents vary from 18 to 53. The median is however only 21 years old as there is one outliner respondent with the age 53, the second oldest is 24 years old. 8 of the respondent's identity as male and 32 as female.

In the beginning of the survey there was a short text explaining the purpose of the survey and conventions defining the word "natural", which was used many times in the questions. For example, a question could be if they consider the following sentence to be "natural". The word was defined as while they themselves might not use it, it could be used and understood.

#### **3.3 Error sources**

When creating the survey, the idea was to have the respondents choose from a list of all the Japanese prefectures. In the end this list was not included and the word  $\exists \exists j$  (origin) was used. While most of the respondents did specify which prefecture or even what city they are from, some only wrote "Japan". This does make it more difficult to know if there could be any error sources such as dialectal differences or if relative clauses are used more/less in different parts of Japan. Another potential error source is the fact that the survey received many more respondents from Kyushu than expected. As this area in Japan does have a dialect that differs quite a bit from "standard Japanese" this is something necessary to take into account. While I have found no research suggesting that there would be a difference in how relative clauses and internally headed relative clauses is perceived from the two dialects, the fact that there potentially could be, should still be taken into account.

Another potential error source to take into account is the age of the respondents. As mentioned in the methodology part, most of respondents are around 21 years old. With only one respondent that is in another age category than most of the respondents, this person's answers cannot be regarded as representative for the population of that age as a whole. It is however observable that the respondent's answers do not differ much from most of the other respondents, so would there be a more even age span it is not certain that it would make a huge difference in the answers anyway.

The gender imbalance is also something that is worth taking into account as only 20% of the respondents are male. While there does not seem to be any notable difference is answers between the genders, there could still be a difference if there was a greater gender balance.

As mentioned in the methodology the survey gathered 40 respondents. Given that there was a time limit to write this thesis, this number was settled for. When interpreting the results presented in this thesis, it is important to remember that it only relies on the intuition of these 40 respondents.

#### **3.4 Relative clauses**

In question number 1 the respondents had a sentence with a relative clause and had to answer if they thought that it sounded natural and if they understood it. The sentence can be considered a pretty basic sentence with a relative clause as there is nothing unusual about it. This was rather to see if there would be any respondents that considered the syntax unnatural. Since they would in that case certainly consider the following questions with more complex sentence construction such as internally headed relative clauses, unnatural as well. This was therefore to in that case potentially screen any respondents that would write that they did not understand the sentence.

The example used for Question 1 was taken from Tsujimura (2013) as an example of a relative clause:

16. Satoo-sensei ga gakusei-ga kaita ronbun-o yondeiru

Sato-teacher-Nom student-Nom wrote-Acc is reading

Professor Sato is reading the article that the student wrote

Almost all of the respondents answered that they understood the sentence and that it sounded natural. Some did say that it was a bit difficult to understand at first but that they could understand it. Others wrote that they could understand it but that it sounded a bit weird. Some did specify that it sounded natural but that it would sound better without the particle "ga" which could be switch to "wa". One of the respondent specified that especially in spoken Japanese this sentence would seem natural.

In the second question the respondents had to answer if they perceived another sentence as natural and if they understood it. This sentence does not contain a relative clause but its

syntax is very similar to the first one. The reason for this is that it contains the complementizer "to" (that).

The sentence was taken from Tsujimura (2013)

17. Taroo ga Hanako ga sono gakusei ni atta to ittaTaro-Nom Hanako-Nom that student-Dat met-that saidTaro said that Hanako met the student

With this sentence more of the respondents answered that they thought that it sounded complicated and not natural. Several of them wrote that this was because of the two nominative markers. Plenty of the respondents did write that they understood it but that it sounded unnatural. Some wrote that it was also difficult to understand and that they were not certain of the meaning.

#### 3.5 Internally headed relative clauses

Internally headed relative clauses are found in very few languages outside of Japanese. The head is contained within the relative clause and is similar to the gapless relative clauses. Another aspect sentences that contain an internally headed relative clause has to have is the genitive marker "no", where there is usually the head of the relative clause.

In question number 3 the respondents were presented with an internally headed relative clause. This sentence was lacking the genitive marker, or nominalizing complementizer as Kuroda (1992) refers to it, making the sentence ungrammatical. They were to write if they understood it and if it sounded natural or not. This was also to make sure to screen respondents who would respond that this sounded natural, in case they would answer that all other questions also sounded natural.

18. Taroo wa ringo ga sara no ue ni atta o totte, poketo ni ireta

Taro-Nom apple-Nom plate-Gen above-Loc-Acc pick up, pocket-Loc put it

All of the respondents wrote that it sounded unnatural. Some added that they could understand it but that it sounded strange. Some even pointed out that it would have been easy to understand the sentence if it had the missing genitive marker. One of the respondents wrote that the relative clause was easy to understand but not the part after that.

In question number 4 the respondents had to choose from two sentences and pick which one they thought sounded most natural. In these sentences there is a genitive marker which should make it grammatically correct.

> 19. Taroo wa ringo ga sara no ue ni atta no o totte, poketo ni ireta Taro-Nom apple-Nom plate-Gen above-Loc-Acc pick up, pocket-Loc put it Taro picked up an apple which was on a plate and put it in a pocket

20. Taroo wa Hanako ga ringo wo katta no wo totte, poketto ni ireta.

Taro-Nom Hanako-Nom apple-Nom bought-Gen pick up, pocket-Loc put it

Taro picked up an apple which Hanako bought and put it in a pocket

20% of the respondents chose the second alternative and 80% chose the first alternative. A reason for this could be that in sentence 20. Hanako could potentially be the subject instead of Taro. In sentence 19. there is no such possibility as the apple has to be the object. While both sentences should be equally grammatically correct and therefore natural, the first sentence could be seen as easier to understand and less confusing. Making it more natural sounding.

#### 3.6 Internally headed relative clauses in past tense containing a time adverb

The internally headed relative clauses in past tense with a time adverb such as "yesterday" is according to Kuroda (1992) a sentence native Japanese speakers would not find acceptable. The reason for this is that the readers would have a problem understanding the sentences. This seems to be from a pragmatic perspective as the connection between a past tense in the internally headed relative clause and the rest of the sentence might not naturally seem very likely. Which would make it seem like the relative clause is out of place as it does not have a clear connection with the main clause.

Question 5a had the respondents read the following sentences and write if they interpret the meaning of the sentences differently, and if they considered them sounding natural.

20. Taroo wa Hanako ga kinoo ringo wo katta no wo totte, poketto ni ireta.

Taro-Nom Hanako-Nom yesterday apple-Nom bought-Gen pick up, pocket-Loc put it Taro picked up an apple which Hanako bought yesterday and put it in a pocket

21. Taroo wa kesa Hanako ga kinoo ringo wo katta no o totte, poketto ni ireta.

Taro-Nom this morning Hanako-Nom yesterday apple-Nom bought-Gen pick up, pocket-Loc put it

This morning Taro picked up an apple which Hanako bought yesterday and put it in a pocket

22. Taroo wa Hanako ga kinoo ringo wo katte oita no o totte, poketto ni ireta.

Taro-Nom Hanako-Nom yesterday apple-Nom bought-later use in mind-Gen pick up, pocket-Loc put it

Taro picked up an apple which Hanako bought yesterday with some later use of it in mind, and put it in a pocket

Many of the respondent answered that they understood the sentences but that they sounded a bit unnatural. Others wrote that the first sentence or the third sentence sounded the most natural. This is possibly because there is only one time adverb in them.

Question 5b had the respondents read the same sentences, write who was the one who put the apple in (their) pocket, if they thought all sentences sounded natural and if there were any differences between them. Question 6 made the respondents choose from the following sentences which one they thought sounded most natural.

On the question of which one of the sentences that sounded the most natural, two of the respondents choose the first sentence. They both replied that all three sentences had the same meaning, and another one that they all sounded equally unnatural. Two of the respondents

choose the second alternative. Neither of them gave any comments as to why they thought so. 34 of the respondents (85%) choose the third option. One respondent did not choose any of the options.

The one who did not choose any of the options wrote in the past question that they all generally sounded a bit unnatural. Similar comments were made from the respondents that chose the third sentence. Some specified that they did understand the time adverb and that the use of it meant that it had a different meaning, but that they could generally understand the meaning of the sentence. One specified that the second sentence was the only one where you could get an understanding of when Taro put the apple in his pocket.

There were different comments regarding the content in the sentence. Some thought that it sounded natural but that they had problems completely understanding the content. Most of the respondent however thought that they could understand the content but that it sounded unnatural.

All who commented on who it was that put the apple in (their) pocket, agreed that it was Taro in all sentences.

#### 3.7 Internally headed relative clauses containing -teoku

Just as the result in question 5b and 6 shows, the alternative with "oku" (alternative number three) in it is perceived as the most natural sounding alternative. This is something that Kuroda (1992) also claimed could be the case. The meaning of "oku", an auxiliary verb, is that the verb it is attached to, is done as a preparation of some sort. An explanation as to why this sentence would be more accepted is that it implies that the apple that Hanako bought was as some sort of preparation or with some sort of purpose. While Taro taking that apple might not have been the purpose it could still paint the picture that this apple was purchased yesterday for some sort of use today. When referring to the same sentence Kuroda (1992) argues that the "oku" thereby implies that there would not be any pragmatic problems for the apple to remain in its position to the moment when Taro comes and takes it. One of the respondents did write that they perceived the first and third sentence as having the same meaning. They did however choose the third option as the most natural sounding one.

In question number seven the respondents were asked to compare another sentence containing "oku" with the above sentence. This sentence was still in past tense but it did not have a time adverb.

24. Taroo ga Hanako ga ringo wo katte oita no o tabeteshimatta

Taro-Nom Hanako-Nom apple-Gen bought-later use in mind-Gen-Acc ate regrettably

Taroo regrettably ate the apple that Hanako bought with some purpose in mind.

Most of the respondents answered that this sentence sounded unnatural and was difficult to understand. Around 20% responded that this sentence was easier to understand than the previous one. Some of them however commented that it still sounded as unnatural. Many were also confused by the use of the particle "ga" after the word "Taro" and suggested that it would be easier to understand if this was replaced by another particle such as "wa". One commented that while what Taro does to the apple differs in this sentence the part about Hanako and buying an apple still has the same meaning.

#### 3.8 Internally headed relative clauses with split pivot

Sentences with an internally headed relative clause is not limited to only having one pivot. This as Kuroda (1992) explains it is due to the fact that there is no set position in the sentence that the head nouns have to have. In sentences with several nouns that could be the head noun and as such modified by the internally headed relative clause, the interpretation of which one of them is most likely to be affected by the relative clause is up to the reader to interpret.

In questions 8 the respondents were asked to explain what happens in a sentence with two potential head nouns. This would mean that the sentence should be able to be interpreted in two ways. Purely pragmatically. They were also asked to specify who gets shot and killed. The sentences below in a) and b) are identic in Japanese, but since the head noun can be either "spy" or "the students" it can be translated into two different ways in English. The question was therefore asked as such to find out what the respondents considered to be the head noun.

25. Sono omawari-wa gakuseitati-ga CIA-no supai-o kumihuseta-no-o

That cop-Top students-Nom CIA-Gen spy-Acc hold down Gen-Acc

utikorosita.

Shot and killed

- a. "The cop shot and killed the students who held down the CIA spy."
- b. "The cop shot and killed the CIA spy who the students held down." (Tsujimura 2013)

Among the respondents the majority seemed to interpret it as version a) the spy being shot. Almost as many thought that it was the students being shot. Four of the respondents interpreted the sentence as the police being shot. This last option is not considered by either Tsujimura (2013) or Kuroda (1992) and as no one of the four respondents explained why they chose that option it is unclear why. It is however possible to see a pattern with these respondents writing very short responses on the other questions and these answers should perhaps therefore not be taken too much in to account. Another factor could be that the sentences has been getting much more complex being an internally headed relative clause, which might make it too complicated to easily understand. One of the other respondents wrote that this sentence could be interpreted in two ways so they were uncertain of if it was the spy or students that got shot. This is very much strengthening Kuroda's (1992) theory about it only depending on the pragmatic interpretation and that both cases should be equally possible.

In question number 9 the respondents were asked to do the same thing with another sentence with a split pivot. They were to explain what happened and who was the one hiring someone.

26. Taroo-wa binbona gakuseitachi-ga kireina onnanoko o shokaishitekita-no o yatoireta

Taro-Top poor students-Nom beautiful girl-Acc introduce-Gen-Acc hired

"Taro hired the beautiful girl introduced by the poor students.

Kuroda (1992) described a possible pragmatic interpretation as "In a sexist, capitalist society little imagination is required to come up with a situation in which [the sentence] is understood with a 'poor student' as the pivot, and another in which 'pretty girl' is taken as the pivot." (Page 155) This example is by Kuroda used in contrast with this sentence:

27. Taroo-wa binbona gakuseitachi o shokaishitekita Hanako o yatoireta

Taro-Top poor students-Acc introduce Hanako-Acc hired

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"Taro hired Hanako who had sent a poor student over to him with her recommendation." (Page 154)

In the above sentence Kuroda (1992) explains that there does not have to be a connection between the action of introducing Taro to the poor students and for Hanako to be hired by him.

A majority of the respondents answered that it was Taro that hired someone. The second most popular option was the beautiful girl. One respondent specifically answered the poor students. The six respondents who specified who it was that Taro hired all wrote the beautiful girl.

The intent for this question was to ask who was hired, which would make more sense as it would reveal who the respondents considered the pivot. This would also strengthen Kuroda's thesis about the pragmatic impact on how internally headed relative clauses is interpreted. Unfortunately, there was a typo and the question was therefore "who was hiring?" Some of the respondents did however specify who they thought was hiring who, which did provide some information to be interpreted anyway. Since all six of them did write that it was the beautiful girl that Taro hired, this would also strengthen Kuroda's (1992) explanation about how pragmatism affects the interpretation as while it could be either, the version where it is the beautiful girl that gets hired after introducing the poor students, sounds more likely.

### 4. Analysis

The first two sentences in Question 1 and 2, one with a relative clause and the second one with a complement clause (which has similar syntax to a sentence with a relative clause), were perceived in different ways. While most respondents seemed to consider the first one grammatically correct and natural the other one was not perceived as such. The second sentence is according to Tsujimura a regular sentence and despite it being a bit long, it should be perceived as grammatically correct. One potential explanation that it was not is because of the nominative particles which without a context would not usually be "ga" two times in a row. This therefore leaves much to the imagination of the respondent. If they could not think of a situation where a sentences like this could be constructed like that, they would consider it ungrammatical. While the first question also had a sentence with two of the same nominalizers in a row, it was clearly considered by a majority that it was natural and grammatically correct. However, since several respondents did point out that it would have sounded better with the first nominalizer being changed, it should not be ruled out as a potential reason for people to consider the second question's example sentence to be incorrect.

Question 3 and 4 brings up the internally headed relative clauses for the first time in the survey. The sentence in Question 3 lacked the nominalizing complementizer "no" which would make the sentence ungrammatical. This was reflected in the responses as well as all of the respondents wrote that it sounded unnatural. Many answered that they could despite it sounding unnatural, still understand it. This result meant that there were at least not any respondents that just wrote that everything sounded natural or acceptable, which would otherwise possibly undermine the result. In Question 4 where the respondents had to choose between two sentences with an internally headed relative clause, most choose the first option. These sentences both contained the "no" which was missing in the sentence from Question 3. In a later Question they were to comment on this choice but a more interesting Question could have been to make them choose between the sentence from Question 3 and a sentence with an internally headed clause that did contain the nominalizing complementizer.

In Question 5a and 5b the respondents discuss three different sentences. While most answered that they understood it, very few considered them natural-sounding. Some of the respondents did claim that they felt that there was a difference between the sentences but that they could

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not identify what this difference was. In Question 6, 85% choose the third sentence to be the most natural sounding one. As some respondents wrote that they felt that the first and third option had the same meaning most of the respondents chose the third option anyway. This would mean that the axillary verb "oku" affects the time adverb so that the connection in the sentence is a much clearer one. The second sentence was the one that the fewest choices as the most natural sounding one. A reason behind this could be that there are two time adverbs, one specifying the time when Taro picks up the apple and another one specifying the time when Hanako bought the apple. The time adverb describing Taro's action does specify that his action was also in the past, which could help to understand Taro's role in the sentence. In this case as many did specify that the second sentence was the least natural sounding one, it might instead have caused more confusion. It could also be that the sentence with two time adverbs in its internally headed relative clause is the one with too much information. Since all of the respondents who answered wrote that it was Taro who put the apple in his pocket, the sentence itself does not seem to be too complex to understand.

In Question 7 the respondents had to compare the sentences in 5a and compare them with a sentence that also contained the auxiliary verb "oku". This sentence did not have a time adverb but was also in past tense. Most of the responses did however consider this sentence to be more unnatural sounding than the past ones. Many of the comments regarding this mentioned the nominative marker "ga" which appears in two places. Much like the sentence in Question 1 and 2, this could have an effect on why the sentence is considered so unnatural. Around 20% considered this sentence to be easier to understand than the previous ones and as not much differs from the lacking time adverb, this could be the reason.

In Question 9 the question was formulated in another way than intended. Unfortunately, this was discovered after the survey was conducted and the intention was to ask what the respondents considered the pivot to be. Fortunately, some of the respondents did respond with what they considered to be the pivot as well, which made the question more unusable. Since the question before also discussed internally headed relative clauses the answers for that sentence made up for the lost ones in the question afterwards. The answers from Question 8, strengthen the theory that the pragmatic aspect has a big impact on the sentences. To this question about half of the respondents choose the spy and the other half chose the students. Therefore, the syntax and the placement of the head in the internally headed relative clause does not seem to impact what is considered the head. Since the questions asked was not only "what happens in this sentence?" but also "who gets shot?", to some extent this steers the

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answer. Many of the respondents only specified who they think got shot, which might as well have been a pure guess amongst three potential subjects. This could be the reason why some of the respondents wrote that it was the police that gets shot, while this is not an option considered by neither Kuroda (1992) nor Tsujimura (2013). Unfortunately, none of the respondents who wrote that it was the police that got shot specified who they got shot by.

Because of some errors made while creating the survey, without them it could have shown a much clearer and better result: With use of other example sentences with a more updated language, such as using the more modern word for police: "警察" (keisatsu) instead of "お巡  $\vartheta$ " (omawari). With sentences that did not have a lot of extra grammatical forms that could potentially distract and create confusion for the respondents, like not using the same type of nominalizer several times in the same sentence, as this is only in special pragmatic situation where it usually is used.

Also the fact that the question that tried to pin-point any type of dialectic error sources was not conducted properly and that the word used was 出身 (origin), without any option, made the answers where respondents only wrote "Japan" much more difficult to adjust to. Since there were no differences found from the respondents, there is nothing suggesting that there would be such a dialectal difference. However, this could none the less be good to have in mind.

### 5. Concluding remarks

This thesis was written as an attempt to find a limit for where the complexity of sentences with relative clauses becomes too complex to understand and stop being able to interpret. Previous research on the subject was introduced, which were used as a base of the survey and research conducted. Most of the sentenced used in the survey came directly from these sources to test the theories about them being correct or not. In the main part the results of the survey were introduced. In the chapter afterwards the results were analyzed. The vast majority of the respondents understood and considered the sentences with regular relative clauses to be natural. The main focus of the survey was the internally headed relative clauses. While most of the respondents' answers suggested that they understood them and when asked the respondents perceived that they understood the sentences themselves, a clear majority did not consider them to be natural sounding. However even the most complex sentences with a split pivot seemed to be understood by most. Therefore, a conclusion is that sentences with internally headed relative clauses are regarded as unnatural sounding, but in most cases understood by native speakers. Deeming them as unusable is therefore not correct. However, they should be used carefully. Especially with the split pivot type as these are very much up for the imagination of the reader to interpret and can be done so correctly in different ways.

As there were only 40 respondents taking the survey this has to be taken in to account. The research in this thesis is based on their answers. The median age of these respondents is also considerable low and would the age of them be higher, this would most likely affect the outcome of the responses. Kuroda's (1992) example sentences that was used for some of the questions could have been updated and expressed in a more modern way, which potentially distracted the respondents from the sentences or made them more difficult to understand. As one of the questions was formulated in an incorrect way the result from that question differed from what was intended, that made it more difficult to interpret. The results made in this thesis could therefore have been much clearer, as some of the questions' example sentences became more difficult than intended to interpret. Doing the suggested changes, future research can definitely be made on similar topics regarding the relative clauses and internally headed relative clauses.

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### References

Baldwin, T. (1998), *The Analysis of Japanese Relative Clauses*, Master thesis, Tokyo Institute of Technology. [Internet] Available from:

http://people.eng.unimelb.edu.au/tbaldwin/pubs/mthesis.pdf Cited: 2016-02-10

Erlewine, Michael Yoshitaka and Isaac Gould. 2014. *Interpreting Japanese Head-Internal Relative Clauses*. In Proceedings of the 31st West Coast Conference on Formal Linguistics, ed. Robert E. Santana-LaBarge, 160-169. Somerville, MA: Cascadilla Proceedings Project.

Harada S. I. (1971) *Ga-No Conversation and idiolectical Variations in Japanese* Gengo Kenkyu, vol. 1971 No. 60 [Internet] Available from:

https://www.jstage.jst.go.jp/article/gengo1939/1971/60/1971\_60\_25/\_pdf Cited: 2016-03-15

Hasegawa, Yoko. (2014) *Japanese: A Linguistic Introduction*. Cambridge University Press, Cambridge

Hammar, Ida (2015) *The Nominative/Genitive Alternation and Subordination in the Japanese Language* BA Thesis, Lund University

Kato, Shigehiro (1999) *Nihon no kankeibushi no seiritsuyouken (1) senkoukenkyu no seiri to sono mondaiten (*Analysis of Noun-Modifying Structures in Japanese I : Syntactic and Pragmatic Problems). University of Toyama, [Internet] Available from <a href="http://hdl.handle.net/10110/12893">http://hdl.handle.net/10110/12893</a> Cited: 2016-03-16

Kuroda, S. -Y (1992) Japanese syntax and semantics Kluwer Academic Publishers, Dordrech

Matsumoto Y. (1997) Noun-Modifying Constructions in Japanese A frame-semantic approach SLCS Amsterdam

Tsujimura, N. (2013) *An introduction to Japanese Linguistics*, 3rd edition. Wiley Blackwell. Chichester

### **Appendix 1)** The survey

The survey conducted was created in google forms. The survey was launched on the 18<sup>th</sup> of April and was open for 24 hours. In total the survey received 41 responses.

### 文の中の文

日本語言語学の卒業論文を書くために関係節についての調査を行っています。ご協力いただけたら嬉しく思います。どうぞよろしくお願いします。

出身

性別

女 男 その他

#### 年齢

・自然の意味はこの調査で自分が使わなくても、使えると思う。

1. 以下の例文が分かりますか。自然な言い方だと思いますか。

佐藤先生が学生が書いた論文を読んでいる。

2. 以下の例文が分かりますか。自然な言い方だと思いますか。

太郎が花子がその学生にあったと言った。

3. 以下の例文が分かりますか。自然な言い方だと思いますか

太郎はリンゴが皿の上にあったをとって、ポケットに入れた。

#### 4. 以下の例文が分かりますか。どちらが一番自然な言い方だと思いますか。

1. 太郎はリンゴが皿の上にあったのをとって、ポケットに入れた。

2. 太郎は花子がリンゴを買ったのをとって、ポケットに入れた。

5a. 以下の文の内容が何か違いがありますか。全部が自然な言い方だと思いますか。

1. 太郎は花子が昨日リンゴを買ったのをとって、ポケットに入れた。

2. 太郎は今朝花子が昨日リンゴを買ったのをとって、ポケットに入れた。

3. 太郎は花子が昨日リンゴを買っておいたのをとって、ポケットに入れた。

5b. 以下の文の内容が何か違いがありますか。誰がリンゴをポケットにいれました? 全部が自然な言い方と思いますか。

23. 太郎は花子が昨日リンゴを買ったのをとって、ポケットに入れた。

24. 太郎は今朝花子が昨日リンゴを買ったのをとって、ポケットに入れた。

25. 太郎は花子が昨日リンゴを買っておいたのをとって、ポケットに入れた。

#### 6. 以上の例文の中にどちらが一番自然な言い方と思いますか。

#### 7. 以上の例文が以下の例文を比べるとどうと思いますか。

太郎が花子がリンゴを買っておいたのを食べてしまった。

#### 8. 以下の例文に何がありました?誰が撃ち殺された?

そのお巡りは学生たちが CIA のスパイを組み伏せたのを撃ち殺した。

#### 9. 以下の例文に何がありました?誰が雇い入れたか。

太郎は貧乏な学生が綺麗な女の子を紹介してきたのを雇い入れた。

ご協力ありがとうございます!

Appendix 2) The answers In no particular order, these are the answers the survey received.

21 5		自だ思う。	自だ思う。	「郎皿上あたンをってポッにれた」ほが然太はのにっリゴと 、ケト入 。のう自。	2.郎花がンをっのとてポッにれた太は子リゴ買たをっ、ケト入。	3も然1は郎いとたかいこがさてるか示れいいのい「郎花が日っりごとてポッにれた」「が自。と太がつっのとうと示れい 、さてなか違。太は子昨買たんをっ、ケト入 。や太最	13もケト入たは郎~とポッにれの太。	3	上例は郎行た動表動がずあり下例は郎行をす詞つる意がうの文太がっ行をす詞つつ 、の文太の動示動があ。味違。	スパイが撃れた。	
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							っリゴ今とてポッにれた」ほがかやいたンを朝っ、ケト入 。のうわりす。				
20	女	日本	はい	いいえ	いいえ	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、、ケト入。	1が番然内はま変らいう感る一自。容ありわなよにじ。	ども郎ポッにンをれいる全不然はいれ太がケトリゴ入て 。部自でな。	1	こ例からリゴ取べき食るきはいとわったの文(、ンをる)、べべでなこがか)。	学生たちが撃た。
20	女	福岡	わるど然はい会のかはこで問かけ自でな。話なでそま疑に	わるど然はい。	自でなとう「」おしい然はい思。をがか	2. 郎花がンをっのとてポッに太は子リゴ買たをっ、ケト入	1,花子が昨 日ンでたり インマンででです。 たちについた。 にたり インマントン にたった に の たった の たった の たり で たり で たり で たった の たり で の た の を と 自 ご の た い の た の を た の を た の で の た の を た の で の た で の を が の た の た の た の た の た の た の た の た の た の		3	さき文りわるがやり「」使方。っのよはか 、は がのいが	スピケンション・スパークション・スパークション・スパークション・スパークション・ション・ション・ション・ション・ション・ション・ション・ション・ション・

			はわい思が書てる不然思なとう、いみと自。			れた。	たりんご とって。 自然だ う。	が		おしい。	
21	男	島根	わか る。 自 然。	わる自でない。	わる自でない。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	2は朝話とかるすて然はい今のだわ。べ自でな。	とたは郎自でない。の太。然は	3	大差 な い。	学生たち
21	男	スェデンマメ	自然です	自然です	不 自 然 す	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	三は番然といす番一自だ思ま	三一自然太がんをケト入た番番 、郎りごポッにれ	3	このう自だ思まれほが然といす	お巡り
21	女	日本	自ないでない。	自ないでない。 ない。	自ないでない。 い。	2. 郎花がンを	こので す る む び が も ま 合 な	太郎	3	上の よ りわ りや	スパイ

						っのとてポッにれたたをっ、ケト入。	い 方。			すい。	
22	男	福岡	わる自だ思う。	わる自だ思う。	わる自だ思ない。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	3かやい「ったよも「っおたのう自にじるがりす。買 」り 買てい」ほが然感 。	3が わか す い。	3	3ま変らいが一理しすかもありわな、、番解やい。	おぷりがスパイでした。
20	女	静岡	理でるが自でない。	分か りに く い。	全然わらい。	2.郎花がンをっのとてポッにれた太は子リゴ買たをっ、ケト入。	2だけ詳 時間帯で 3は分れ やすい。	をい る。 いり	3	太がいとしとう。	学生
21	女	佐賀 県唐 津市	わか る	自然 でない とう	わか らな い	1. 太 郎 リン ゴ が 皿の	3のみ わか る	<b>1,2</b> は意がわらな	3	この 分だ ンゴ はい	スパイ

						上あたをってポッにれたにっのと、ケト入。		い。3文らっの太だわる。		つもなかかない	
21	女	佐県栖	分る少分りくがまま自だ思うか。しかにい、ああ然と。	分るが不然	分るが不然	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	1つ 目 つ は 百 本 自 然。	太郎。3日け然	3	分かにくい	お巡り
22	女	福県	分かる	太はのが然とう	自ないでな	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	1.が日っリゴをのが然朝花のに点あたがかやい花昨買たン、方自 2.と子間句がっ方分りす 3.1	太郎	3	分かしくい	学撃れにされる

							より は自 然				
21	女	福県	自ないだ思が分りくい佐先は生書た文読でる然言方とう、かに  。藤生学がい論をんい。	自ないだ思ない太は子そ学にっとった然言方とわ 。郎花がの生あた言 。	自ないだ思ない太はのにっりごとてポッにれた然言方とわ 。郎皿上あたんをっ、ケト入 。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	すて然言方はい太は子昨買たんをってポッにれた太は朝花が日っりごとてポッにれた太は子昨買たんべ自ないでな。朗花が日っりごと、、ケト入。。郎今、子昨買たんをっ、ケト入。郎花が日っりご1 3	すて然言方はいすてんをっの太郎べ自ないでな。べりごとたは	3	自ないでない太は子買ていリゴ食てまた然言方は  。郎花がっおたンをべしっ。	CIAのなたのはたみCIAのそそので、「「「「」」、「「」」、「」、「」、「」、「」、「」、「」、「」、「」、「」、

							をってポッにれた。				
53	女	佐 県	わりすが「」続の「藤生はが然といすかま、、ががくで佐先」自だ思ま	わりくといす言た葉は「でん方いし太は「子そ学にったとったとうに「」2続な方いですかにい思ま。っ言に(」囲だがい、郎(花がの生あ)」言(。い風)がが回かいがい)。	わりせん「郎皿上あたンをってポッにれた」わりすですかま 。太はのにっリゴと 、ケトス 。がかやい 。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	1はじ容考てい思がはケトいたが朝限さてる3のと自ないでないと同内とえいとう、ポッにれの今と定れい。つ文も然言方は	太がンをケト入た全自ないでない郎リゴポッにれ。部然言方は	3	上例は下例よわりくといすの文、の文りかにい思ま。	CIA のス パイが撃 ち殺され た。

22	女	福岡	学ののがい。	分りくです。	あたをのがかやいすっの、方分りすで。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと 、ケト入 。	同よな味といすじう意だ思ま。	太郎。	3	とたけはく食てるっだでな、べい。	スパイ
22	男	日本	思う	「郎がより「郎はのう自だ思太」、太」はが然とう	思わない	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	2ちっだおしとうがよとけかい思	太郎	3	不自然	学生
21	女	福岡県	分かる。わない。	分る思ない。	分かる。わない。	1.郎リゴ皿上あたをってポッにれた。太はンがのにっのと 、ケト入 。	違あり思ない。	違あり太郎思ない。	3	不自然。	お巡り。

21	女		思う	思わない	思わ ない	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと 、ケト入 。	違あり思ない、わい	違な太思ないし郎わい	3	意	わからない
21	女	福間県北州市	思う	思う	思わない	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	3	ある	3	違	スパイ
22	女	長県	思わない	思わない	思わない	1.郎リゴ皿上あたをってポッにれた。太はンがのにっのと 、ケト入 。	単の番違うつも然いかだ思ない語順が 。と自ないたとわ。	太郎	3	主がかにい	お巡り

24	女	日本	分か る。	分か る。	意味 は分	1.太 郎は	リン ゴを	太郎 がリ	3	主語 がは	お巡りさ んがスパ
			口語 とし	口語 とし	か る。	リン ゴが	買っ た	ンゴ をポ		っき りし	イを撃ち 殺した。
			て自 然。	て自 然。	不自 然。	皿の 上に	と、リン	ケットに		な い。	
						あっ たの をと	ゴを 買っ てお	入れ た。 日時			
						を C つ て、	いた の違	ロ 中 を 近 く に			
						ポケット	い。 <b>3</b> の文	並べ られ			
						に入れ	は、 1.2の	ると 混乱			
						た。	文に 比べ て花	する が、 文意			
							て12 子が リン	ス し し か			
							ゴを 買つ	る。			
							たっとい				
							う単 純行 為を				
							ぷっ 言っ てい				
							るの では				
							なく、				
							わざ わざ 買っ				
							貝つ たっ とい				
							う印 象を				
							受け る。				
							1.3の 文が				
21	- <del>  -</del>	行回	1+1 \		6161	1 +	自 然。	→ 白7	3	<b>士</b> 幸	学生
21	女	福岡 県	はい	え	え	1.太 郎は	わか りま	太郎	5	文章 がご	学生

						リゴ皿上あたをってポッにれたンがのにっのと 、ケト入 。	せん。			ちごゃてる	
23	女	福県 岡	はい質文つてすが以の文普の話使す際自な葉た意のわ言だ思ままかのがい思。問にいで、、下例は段会に用るに然言まは味伝る葉といすす?方いとい	いいえ。	いいえ。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	全部意がかまん、味わりせ。	太全部文がかいす。 いんちょう しんしつ しんしゅう しゅうしゅう しゅうひょう しゅうしゅう しゅう	3	主と語おしい質文つてすがはいえ答らる問しくさいそでけば答に択がしです語述がか 。問にいで 、いいでえれ質にてだ 。うなれ、え選肢欲い 。	CIA語がいま文がまおいはは使の察はわをたいま質す以文てていちたでのいま。とおでたのわせ巡う日あわで官、り使方とす問が下に回下。殺のす方とす主述かす、意かんり言本まな、まおさ用が思。文、のつ答さ撃さはかが思。主語し。例味り。と葉でりい警たまんしいい で 例いし れ誰?いい

			ます。								しかし、 例死うなうはいい に問な入方と いいま の の の の の の の の の の の の の の の の の の
21	女	Japan	意はかが然言方はい思うこ場合佐先のの作表てるで「藤生~下文に更たう良とう味わる自ないでなと 。の 、藤生今動をしいの、佐先は以同」変しほがい思。	意はかが然言方はい思うこ場は郎花をとの語し考るきあので「郎花がに更たう自ないにる味わる自ないでなと 。の合太と子ひつ主とてえべでる 、太と子」変しほが然言方なと	意はかが然言方はい思う主をべと自なで「郎皿上りごあた以同文に更る良とう味わる自ないでなと 。語並る不然の、太はのにんがっ~下 」変すとい思。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	ども語述がララ読にいにじるれ主と語ババでみく文感。	どもじ容はうれ同内と思。	1	こちほがかやい。つのうわりす。	CIA のス パイを撃 ち殺した

				思 う。							
22	男	日本 (長崎)	yes	no	no	2.郎花がンをっのとてポッにれた太は子リゴ買たをっ、ケト入。	「昨日」 置がお い		2	がはなの詞使分らてい、、ど助がいけれな	学生
20	女	日本	自然	ちっ不然	不自然	1.郎リゴ皿上あたをってポッにれた。太はンがのにっのと、ケト入。	3 は然あは自然リゴ買たをっが自然買たンをっのがつ自。と不善。ンをっの取て不善。っリゴとて方◎	太郎がして目	こ少		CIA がお まわりに よって殺 された
18	女	日本	思わない	思わない	思わない	2.郎花がンをっの	思わない	太 郎 わ な い	3	主語 が <b>2</b> つ ある	お巡り

						とてポッにれた。					
22	女	福県	思う	思わ ない	思わない	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと 、ケト入 。	思わない	思わい	3	自 然 思 う	学生
21	女	日本	分るし自ないだ思うか、然言方と。	分るが自ないだ思ない、、然言方とわ。	分るが自ないだ思ないか、然言方とわ。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	1はぼじ容とう全自だ思ない3ほ同内だ思。部然とわ。	13ほ同内容太がケト入た全自と思ないとはぼじ。。郎ポッにれ。部然はわ。	3	主がかにい。	学生たち が撃ち殺 された。
21	女	日本	思う	思う	思わ ない	の上に	」 『はリンコ あったの ポケット	ゴが皿 つをと	3	分か りに くい	CIA
21	女	日本 熊本 県	自然 だと	自然 だと	自然 だと	1. 太 郎は リン	違い はな く、	あま りか わら	3	分か りに くい	スパイ

			思わない	思わない	思わない	ゴ皿上あたをってポッにれたがのにっのと、ケト入。	自然 だと う	ない太郎自だ思			
21	女	JAPA N	思います。	よ分らい不然とうくかな。自だ思。	不然とう。	1.郎リゴ皿上あたをってポッにれた。太はンがのにっのと 、ケト入 。	<b>3</b> 以外 不然とう。	リゴポッにれの太郎全不然とうンをケト入たは 。部自だ思。	3	以の文意はかけが多てかにい外例は味分るど"がくわりく。	CIA のス パイ
21	男	日本 佐賀	分る違感覚るかが和をえ	わかりにくい	わからない	1.郎リゴ皿上あたをってポッにれた。太はンがのにっのと、ケト入。	昨買たんをってが切とわる日っりごと、、適だ思れ	太百然	3	○がの葉二続の間いはいが不然あそよない○、言が度くは違でな 、自でりのう言方	CIA のス パイ

										はきだ 避 る	
21	男	福岡	分りす自でなといすかま。然はい思ま。	分りす自でなです。かま。然はい。	分りせん。	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	1は郎とたの分らくてはンをっの分るう気しすと太がっもがかな 、リゴとたがかよながま。	全太がケト入た花が日っおたンとるが然気しす部郎ポッにれ。子昨買ていリゴすの自ながま。	3	こまとじ食たの何はき分りせんれで同でべもがかっりかま	スパイ
21	女	神奈川	自然	自然	分るど自然	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと 、ケト入 。	2番朝け味異、いは部自	ポッにれの全太	3	意はかけど上例とじ不然味わる、の文同く自	学生たちが撃ち殺された
21	男	佐賀 県	思い ま す。	思い ま す。	思い ませ ん。	2. よは子 リゴ	全文、 昨 買 て お	りご取たは太	3	ありわはいす。 ま変りなで。	学生たち を撃ち殺 した。

						っのとてポッにれたたをっ、ケト入。	たんをってな正なにりすりごと 」ら確文なま。	だ思まが全正にれ間いくわといすといす、文確すば違な伝る思ま。		この章は「子りご買てたとう為食てまたい意にりすこ文で、花がんをっい」い行をべしっとう味なま。	
21	女	佐賀県	分か る。 自 然。	分か る。 不 然。	分 か な 。 、	1.郎リゴ皿上あたをってポッにれた太はンがのにっのと、ケト入。	同 じ。 3。	太郎すて変。	3	わかりやすい。	スパイ
20	女	福岡県	分りすが自であまんかま、然はりせ	分りす自であまんかまが然はりせ	分りすが自であまんかま、然はりせ	。 1. 郎リゴ 皿上あたを	2番 大 が つ ケ ト 入 た か	2番だ がっケト入た	3	"い助がついいた違どう詞2続てるめ和	CIA のス パイ

						ってポッにれた	が断き違がりす全自であまん判でるいあま。て然はりせ。	か判でるいあます太がンをケト入また自であまん」が断き違がり。。郎リゴポッにれし。然はりせ。		感感ます。	
21	女	福岡	自 で な が じ る	自でながじる	不然意がかづい	ゴが皿 あった って、	3はリン 1の上に このをと ポケッ 、れた。	太がケト入た	3	主の 詞 お い	スパイが 殺された
21	女	日本	わる思う。	思 な い。	思わ な い。	2.郎花がンをっのとてポッにれた太は子リゴ買たをっ、ケト入。	2		2	分らい。	スパイ
22	女	三重	はい。 ただ、	大 大 だ 思 け	「太 郎 の 上 に	1. 太 郎 リン ゴが	意味は同 だとわれ ますが、	うり	3	自然 だと 思い	学生たち が撃ち殺 された

	「佐	ど、	あっ	III の	1番自然な気	ま	
	藤先	「花	たリ	上に	がします。	す。	
	生	子	ンゴ	あっ			
	は」	は」	をと	たの			
	でも	のほ	2	をと			
	大丈	うが	て」	2			
	夫だ	自然	のほ	て、			
	と思	な気	うが	ポケ			
	いま	がし	自然	ット			
	す。	ま	な気	に入			
		す。	がし	れ			
			ます	た。			