

Effects of Attrition on Japanese L1 English L2 Use of Demonstratives

Introduction

The purpose of our research is to study the effects of language attrition on Japanese L1, English L2 speakers' usage of the demonstratives *a-*, *so-*, and *ko-*. These speakers' results will then be compared to those of two control groups, simultaneous Japanese-English bilinguals and Japanese monolinguals. Our hypothesis is that all three groups of speakers will show different usage patterns. Japanese L1, English L2 speakers will show the effects of attrition, and simultaneous Japanese-English bilinguals will show the effects of transfer.

Background Literature

First of all, we will give an overview of the three Japanese demonstratives, *a-*, *so-*, and *ko-*. There are many different theories about the use of both these Japanese demonstratives and their English counterparts, 'this,' 'that,' and sometimes 'it.' In an English L1, Japanese L2 classroom setting, the controversial status of the *a-*, *so-*, *ko-* demonstratives tends to be ignored (Masataka 2010). Instead of teaching more nuanced hypotheses about the demonstratives, instructors often teach that they only denote spatial relations, and are "the direct equivalents to 'this' and 'that'" (Niimura 1994). This idea is sometimes called the Territory Model, and the usage of demonstratives to refer to a physical location or object is known as the deictic use of demonstratives. This model assumes that the speaker and listener are standing opposite from one another, facing each other (Hasegawa 2012). Through this spatio-temporal framework, *ko-* is seen as equivalent to the English demonstrative 'this,' in that both are used to refer to an object in

close proximity to the speaker. *So-* and *a-* are seen as two variants of ‘that.’ Both refer to objects physically distant from the speaker, but *so-* refers to objects that are specifically close to the listener in the conversation, while *a-* refers to that which is far away from both the listener and the speaker (Niimura 1994).

In order to account for situations where the speaker and listener are standing side by side, and not facing one another, another categorization called the Distance Model was developed. The Distance Model still only covers deictic demonstrative usage. In comparison to English demonstratives, the Distance Model is identical to the Territory Model, with *ko-* mapping on to ‘this’ and *so-* and *a-* to ‘that.’ However, in this model, *ko-* is used to refer to objects which are physically close to both people, *so-* is used for objects considered by the speaker to be far away, and *a-* is used for those considered to be extremely distant (Hasegawa 2012).

Other linguists have theorized that there is another way that Japanese speakers determine which demonstrative to use, which has nothing to do with physical proximity. This idea is called the Territories of Information Theory (not to be confused with the Territory Model above), and deals with the anaphoric, or non-spatially based, usage of demonstratives (Hasegawa 2012). Anaphoric usage is also called discourse reference by some theorists (Niimura 1994). According to this theory, speakers sort information into three categories and choose which demonstrative to use accordingly. The first category is information that is either known exclusively to the hearer or shared between the hearer and the listener - for instance, discussion of a class which both are enrolled in. This category would be represented by the demonstrative *ko-*. The second category is information known exclusively to the listener, which maps to the demonstrative *so-*. An example of this category of information could be a question posed to the listener about one of their family

members. The third category is information that is not exclusive knowledge of either the speaker or the listener, and is represented by *a-*. An example of this would be information taken from a news report, or generally information that is shared by either both or neither conversational participants. This theory has been widely criticized as an oversimplification, but the idea of psychological proximity playing a part in demonstrative choice is still important to keep in mind (Ono 1994).

In one such criticism, written by Kiyoharu Ono, it is suggested that there may only be two underlying forms of Japanese demonstratives, the *a-* and *ko-* forms, with *so-* only appearing as a surface form of *a-*. Ono puts forth two pieces of evidence for this. The first evidence he gives is that there are several set phrases contrasting *a-* and *ko-* forms (such as *are kore*, meaning ‘this and that’), and others contrasting *so-* and *ko-* forms (such as *soko koko*, ‘here and there’), but none that contrast the *so-* and *a-* forms. The second evidence given is that several young children have been observed to use only *a-* and *ko-* forms, but not *so-*. Ono states that this is significant because young children are able to use underlying forms before they can use surface forms (Ono 1994).

Traditionally, the English demonstrative system has been represented as consisting only of ‘that’ and ‘this,’ with ‘that’ referring to objects far away and ‘this’ referring to objects close by. One alternative categorization for English demonstratives is a concept called the focus framework (Niimura 1994). This framework proposes that ‘it’ could be considered a third demonstrative in English. In this system, demonstratives are chosen based on the amount of attentional focus the speaker gives to the referent being spoken about. This includes the degree to which the speaker believes the listener to be familiar with the referent, and the degree of

importance that the speaker personally places on it. Items of high attentional focus are mapped to the demonstrative ‘this,’ those with medium focus are mapped to ‘that,’ and those with low focus take the demonstrative ‘it’ (Niimura 1994).

Participants

For this study, we have chosen to use Japanese L1 English L2 successive bilinguals as our subjects. We are looking for subjects who are potential attriters, and we will choose our participants based on the following criteria. First, the subject must have started learning English before puberty and have a high proficiency in English. Also, we will be looking for participants who have lived in U.S. for at least 10 years and use English daily in a workplace environment. Ideally, we will choose subjects who use Japanese very rarely or never. We would like to use 30 subjects in our study. The age range of our subjects will be 25 to 60 years old. In order to observe attrition effects, we want to set the minimum age at 25. Subjects significantly under the age of 25 may not have had enough time elapse since acquisition. We have set the maximum age at 60 years old, since we do not want effects of aging to interfere with our results.

We will be using two control groups. The age range of the control groups will also be 25 to 60 years old. The first control group will be comprised of 15 Japanese L1 speakers. Many Japanese speakers have studied English in school. To avoid possible English influence, we will ensure that the Japanese speakers in the control group have very limited proficiency in English. To do this, we will first screen them using the TOEFL English proficiency test. In addition to the Japanese L1 control group, we have chosen to use another control group of 15 Japanese/English simultaneous bilinguals. We will use the Japanese and English proficiency tests, JLPT and TOEFL, to screen for bilinguals who are fluent in both English and Japanese.

Design

We have chosen to use a series of cloze tests to test the participants' usage of demonstratives. A cloze test entails providing the participant with some kind of text with a word or a few words removed. A cloze test prompts the participant to fill in the blanks or select the correct answer. The removed words in this study's cloze test are the Japanese demonstratives *a-*, *so-* and *ko-*. We will use two formats of cloze tests, a dialogue cloze test and a comic cloze test. Both tests will be given to the participants on paper. The participants will be expected to complete the tests individually without help from outside sources, such as cell phones. Our control groups will also complete the same cloze test questions.

The dialogue cloze test contains a number of short dialogues. The participants will read the printed dialogue and circle the demonstrative that is most appropriate. This test will focus on the use of discourse demonstratives. Here is an example of a short dialogue, which has been taken from Nonami Masataka and Liu Jia's paper (Masataka 2010).

A : 花子さんには、二年前、東京で会いました。

Hanako-san ni wa, ni nen mae, toukyou de aimashita.
Hanako-san with-TOP two year before Tokyo at/in meet+PST
'I met Hanako-san two years ago in Tokyo.'

B : (この・その・あの) 時は花さんは一人でしたか。

(kono・sono・ano) toki wa hanako san wa hitori deshita ka.
(*This・that・that*) time-TOP Hanako-san-TOP alone COP-PST PRT
'(That) time, was Hanako-san alone?'

Given the context, the correct answer would be *sono* because "that time" refers to a time that A was talking about. This dialogue tests the use of the demonstrative *sono* in a discourse context.

The comic cloze test uses excerpts from Japanese comics. Like the dialogue test, all of the demonstratives in the comic are erased and covered with a number. Given the visual and textual context, the participant will fill the blank with the demonstrative that seems the most appropriate. Here is an example test question. This comic excerpt shows several different uses of demonstratives. The participants will provide their answers to each number, choosing from the three demonstratives, *a-*, *so-* and *ko-*. Unlike the dialogue cloze test, the comic test can test knowledge of spatial demonstratives as well as discourse demonstratives.



Manga excerpt is from *Yotsuba&!* by Kiyohiko Azuma.

1. *ko-* In this example, the man is referring to himself, so it is appropriate for him to use *ko-*. *Ko-* is used with the suffix *-chira* (direction).

2. *so-* The girl is referring to an object held by the man. *So-* is the most natural choice
when referring to an object which is in your conversational partner's space.
3. *aso-* (*a-* becomes *aso-* before *-ko*)
4. *aso-* In 3 and 4, the girl is talking about an area that is far from both the speaker and the listener. The *a-* demonstrative is most appropriate for this situation.

Demonstrative forms

In our cloze tests, we would like to test for the use of demonstratives in a wide range of environments. Here is a list of demonstrative forms that we plan to include in our study.

Demonstrative suffix	Gloss
-re	Objects (noun) [this is...]
-no	Objects (before a noun) [this book...]
-ko	Location [here, there]
-chira	Direction [over here]
-nna	A kind of [this kind of thing]
-u	A way [in this way...]

Analysis and Interpretation

The purpose of having two control groups (both a monolingual group and a simultaneous bilingual group) available for comparison is to separate language transfer from English and attrition effects. The simultaneous bilingual speakers are expected to have native level Japanese structures with no attrition effects since they would be using the language daily. However, some

differences could arise because of their knowledge of English. The simultaneous bilinguals will be compared to Japanese monolinguals to find those differences that occur from transfer; we will attempt to use this data to separate the effects of transfer versus attrition in our test group.

The results from the cloze tests will be measured in percentages, with the monolingual group being the point of reference in correctness of response. Both the test group and the simultaneous bilingual group's responses will be measured in comparison to the monolinguals' responses. We will also take into account the differences between the simultaneous bilinguals' and the test group's responses. The chart below is an example of a possible result to one of the questions from the cloze tests. As an easy reference for data collection purposes, we will call the monolingual Japanese group "M," the simultaneous bilingual group "SB," and the group consisting of Japanese L1 English L2 speakers "T." Each percentage represents the number of people who responded with each demonstrative choice; in the chart below, "95%" would be interpreted as "95% of the monolingual group chose the demonstrative a- for Cloze Test Question 1."

1) Cloze Test Question 1

	ko-	so-	a-
M:	0%	5%	95%
SB:	0%	12%	88%
T:	4%	26%	70%

We will observe and compare the usage of the demonstratives between the three groups from each item of the cloze test. Overarching data will also be considered, an example being total usage of each demonstrative within the three groups. The data that we gather will hopefully

help to determine whether language attrition occurs for the speakers specific to the test group with a focus on demonstrative usage.

In Kiyoharu Ono's paper "Territories of Information and Japanese Demonstratives," a theory of importance to this study suggests that the demonstratives *ko-* and *a-* are the two underlying forms of demonstratives in a native Japanese speaker's grammar, and *so-* is a surface form of *a-* (Kiyoharu 1994). The test group may use *ko-* and *a-* more frequently than *so-* in comparison to the monolinguals and simultaneous bilinguals. This result could support the theory mentioned in Ono's paper of a surface form *so-* with the underlying form *a-* (Kiyoharu 1994). If attrition is occurring – for example, one of the forms of demonstratives is used less – the other demonstratives may be more accessible because they are the base (underlying) forms and are therefore less susceptible to attrition.

The test group may be subjected to more attrition than predicted in the scenario above, in that they could sporadically use *so-* and *a-* in comparison to the two control groups. This would show that their perception of the demonstrative pair has attrited altogether since they will have lost the ability to distinguish the underlying and surface forms. Another possibility is that attrition does not affect the test groups' use of demonstratives, the result being that the test group uses demonstratives at the same frequencies as the two other groups.

Gathering data from the two control groups will be helpful in the analysis of the test groups' results when considering effects of transfer versus attrition. If both the test group and the simultaneous bilingual results differ equally from the monolinguals, then the difference may well be from language transfer rather than attrition. But if there is no difference between the simultaneous bilinguals and the monolinguals, the notion of transfer may not affect the usage of

demonstratives. In this case, any difference in the test group from the two control groups could point to attrition. Another possibility is that the simultaneous bilinguals will differ from the monolinguals (this will be noted as a transfer effect), and the test group may deviate even further from the simultaneous bilinguals' results. This outcome could be interpreted ambiguously; both transfer and attrition may be affecting the test group.

If transfer effects do occur within the concept of demonstrative usage, a specific transfer effect could be that the test group or the simultaneous bilinguals may use *ko-* and *so-* more frequently than C1. Because English only has two demonstratives, 'this' and 'that,' the speakers may map this concept onto the two closest Japanese equivalents, *ko-* and *so-*. This would not support the theory of an underlying and surface form of the demonstrative *a-*.

When English speakers choose demonstratives in discourse, their choice is based on attention-based or focus or level of mental engagement of the speaker. This corresponds each demonstrative being labeled as 'this' having high focus, 'that' having mid focus, and 'it' having low focus. There is no research that shows that Japanese speakers use this concept in choosing which demonstrative to use. However, we will test to see if the test group or the simultaneous bilinguals uses a focus concept in choosing demonstratives occurring in discourse.

Results from cloze test questions that fit the criteria for focus analysis will be compared between the three groups of participants. If the test group and the simultaneous bilinguals differ in these specific test items, it could be a sign that the English demonstrative selection concept of focus has transferred onto these speakers. If the test group alone differs in their use of Japanese demonstratives because of the application of a focus concept, this could point to attrition of the Japanese standard in choosing demonstratives. No difference between the results of the three

groups is also a possibility, showing that focus is not a factor when any of the subjects choose demonstratives in Japanese.

The study we have been planning will analyze the possible effects of attrition regarding a unique test group of native Japanese speakers isolated from their home language. By including a simultaneous Japanese-English bilingual group along with a monolingual Japanese group in this study, the comparisons between the three groups of participants may uncover new information regarding the topic of transfer versus attrition. The notion of transfer itself has many opposing viewpoints; there is also the question of what is considered an effect of transfer and what is an effect of attrition. More data than what can be gathered by our study will be needed to delve deeper into this topic. However, the data gathered in our study will hopefully shed new light on this topic.

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