A Study of Simplification Strategies at the Discourse Level by Native and Non-Native Speakers of English:
Their Use of Discourse Markers

Seiji FUKAZAWA
(Accepted November 24, 1994)

Abstract. In his previous article, the present writer analyzed the use of discourse markers when a native speaker of English paraphrased a passage in English and pointed out the need to carry out research into simplification efforts at the discourse level. The present study used larger sample passages to compare the original and simplified versions than in the previous study in order to arrive at a clearer picture of a native speaker's simplification strategies. Furthermore, it analyzed a non-native English teacher's speech in the classroom and also examined the strategies used at the discourse level for making input comprehensible.

1. Introduction

The techniques and approximations that learners with a limited command of language use are known as communication strategies. Numerous attempts have been made by second language acquisition researchers to show the process and mechanism of speech modification by non-native speakers in their communicative efforts in native/non-native interactions. However, relatively little attention seems to have been given to native speakers' communication strategies. Furthermore, most research into communication strategies has focused on the intrasentential level; how paraphrasing strategies such as approximation, word coinage, and circumlocution are used to make a sentence comprehensible. To help second language learners to understand the logical relationships between sentences and ideas, native speakers use not only simpler grammar and/or vocabulary, but some semantic/discoursal devices, for example, linking words (connectives) which act as discourse markers. The strategy used at the intersentential level, or discourse level, is a neglected aspect of the study of communication strategies.

Concerning the effect of discourse markers in listening comprehension, there is empirical evidence that discourse markers signalling major transitions and emphases help learners in comprehending lectures (Chaudron and Richards 1986). In their study, micro−and macro discourse markers were deliberately added or deleted.

What seems to be lacking is an understanding of native speakers' simplification strategies in their spontaneous speech. As an attempt to analyze native speakers' spontaneous simplification strategies, Fukazawa (1994) conducted a protocol analysis of a simplified talk for Japanese learners and compared it with its original version to identify some simplification strategies used by a native speaker of English. The simplified text was examined in terms of the average number of words per T−unit and sentence, readability, and frequency of appearance of micro/macro discourse markers. In consequence, the following results were obtained. First, the simplified version was not found to be necessarily simpler than the original text in the quantitative analysis, that is, in terms of length, the mean number of

words per sentence/T-unit. In fact, repetition and restatement, which are common features of foreigner talk, eventually expanded the original text. Secondly, the readability analysis of the original and simplified texts showed a higher reading difficulty in the paraphrased version. This seems to suggest that native speakers' simplification does not necessarily lead to simplified speech in linguistic terms. Thirdly, as a way of explaining the difference between the two text versions, the study pointed out a sharp increase in the use of micro/macro discourse markers. A further investigation of the difference between the original written text and the simplified spoken text concerning the use of discourse markers demonstrated that the simplified and spoken paraphrase contained more discourse markers. These discourse markers, especially macro markers, seem to enhance comprehension by guiding the learners to what is to be heard or read. However, it needs to be said that the data examined was extremely limited. We, therefore, need to increase the size of the data sampled for analysis if we are going to generalize from the above findings.

The purpose of the present paper is once again to seek simplification strategies for making input comprehensible, particularly in terms of the use of discourse markers. In addition, I will try to identify some features of simplification strategies used by a Japanese teacher of English in paraphrasing a text for students in the classroom. Understanding the similarities and differences between the strategies employed by native/non-native speakers will provide Japanese teachers of English with sources for self-reflection and also increased confidence in their use of English in the classroom.

2. Use of Discourse Markers as a Means of Simplification

(1) Review of Taxonomies of Communication Strategies

Following on from Tarone's (1977) classification of communication strategies, one of the earliest organized taxonomies, researchers into the identification of communication strategies seem to have reached a general agreement about the types of communication behaviors used by second language learners when they face communication breakdowns (Varadi 1980; Bialystok 1983; Faerch and Kasper 1983). (For an excellent summary and evaluation of taxonomies of communication strategies, see Bialystok 1990).

As shown in Table 1, Tarone's classification, like many others, is a description of second language learners' communication strategies. Of these, the majority of communicative attempts are categorized under the domain of paraphrase, most commonly circumlocution, according to her studies on the distributions of utterances (Bialystok 1983, 1990). However, there is no classification system for discourse markers.

Table 1: Tarone's (1977) taxonomies of communication strategies

1	Avoidance	
	a	Topic avoidance
	b	Message abandonment
2	Paraphrase	
	a	Approximation
	b	Word coinage
	c	Circumlocution
3	Conscious transfer	
	a	Literal translation
	b	Language switch
4	Appeal for assistance	
5	Mime	

(2) Functions of Discourse Markers

An important subcategory of communicative competence is discourse competence. This is the ability to understand contextual relationships at units larger than sentences and it is an essential part of comprehension. Connectives between sentences/paragraphs function as indicators of topic transitions. According to Chaudron and Richards (1986), some conjunctions, adverbs or adverbial phrases act as temporal links (*and, then*), contrastive relationships (*but, actually*), relative emphasis (*you see, of course*), framing and segmentation (*O.K., well*), and so on. Similarly, Ball (1986) classifies a variety of link words into the following 24 categories and allocates them to the following logical concepts.

Table 2: A List of Logical Concepts

adverbials	naturally, obviously, certainly, surely, really
amplification	moreover, what is more, furthermore, besides, I mean
apposition	so to speak, for instance, that is, namely, in other words
clarification	you know what I mean? I mean, if you see/know what I mean
concession	after all, at the same time, however, anyway, even so, in any case
confidentiality	you know, you see
consequences	accordingly, as a result, for that reason, in consequence
continuation	anyway, now
contradiction	actually, in fact, on the contrary
contrast	on the one/other hand, instead
corroboration	as a matter of fact, of course, for that matter
digression	by the way, incidentally
disagreement	so what?
enumeration	firstly, last
hypothesis	suppose, as if
inference	in other words, otherwise, in that case
limitation	at least, at any rate
modification	more or less, by and large, on the whole, somehow
precaution	in case, just in case
reference	with regard to, as for, talking of/about
suggestion	suppose, say, let us say
summing up	to sum up, in short, in brief, summing up
suppression	needless to say, not to mention, and so on and so forth
transition	now, well, well now

If it is accepted that discourse markers have a positive influence on second language learners' comprehension, we should pay due attention to the teaching of those discourse signals in the teaching of listening and reading. Unfortunately, however, it has to be admitted that in most cases these discourse markers are simply translated and treated as parts of speech like adverbs or conjunctions; students seldom receive adequate explanation as to the functions of discourse markers. In the following section, we would like to analyze some paraphrased spoken texts and see what kinds of discourse markers are used in those texts.

3. Analysis of Use of Discourse Markers in Simplified Talk
(1) Simplification Strategies by a Native Speaker of English
  (a) Materials:

As in the previous study, two types of texts were analyzed: the original and simplified. In this study, three pairs of recordings were used. The original is a written text and the simplified is a paraphrased spoken text. The written texts were paraphrased and broadcasted on the radio by a native speaker of English for the Japanese listeners of an NHK radio English conversation program from February through May in 1991. Part of the transcriptions of the original/paraphrased texts are shown below (February issue, February 16, 1991).

Table 3: A List of Topics of Materials

Title:	Date of Broadcast:
Computer Strain	February 16, 1991
Handicapped Children	April 13, 1991
The Men's Movement	May 11, 1991

[Original text]

Recently I purchased a Macintosh computer. I use it daily and enjoy the various tasks I accomplish on it, whether it be writing letters, balancing my budget or playing games. I have noticed tension in my neck and being more prone to headaches since I began working on it. After I spoke with others and read various articles, I found this is to be normal. *In fact*, according to a report by the National Academy of Science, more than half of all video display terminal users responding to various surveys complained of muscle–skeletal disorders, vision problems, chronic headaches and other ailments.

[Paraphrased text]

In talking about this, she listed a whole lot of things that people who use computers constantly, looking at screen's surface. *First of all*, she mentioned some of the things that she likes to do on her computer, writing letters and balancing her budget. I never know that she balanced her budget. Maybe the computer helps. *And of course* probably playing games. *And, but* since she began using the computer, she has had the pain in her neck and headaches. *And* once she checked into her, she found that this is very normal. *In fact*, people have not only, *you know*, neck and headache problems, but also muscle–skeletal disorders, which means that I guess they are feeling aches in their bones and their muscles, and vision problem, *in other words*, problems with their eyes and chronic headaches, and so on.

<div align="right">(Underlined are discourse markers)</div>

  (b) Procedure

The programs, the original and the simplified, were recorded, transcribed, and compared in terms of the total number of words, the Flesch reading ease score, the Flesch–Kincaid grade level, and frequency of micro/macro markers. Discourse markers were counted each time they occurred. Since the sample data was small, no statistical analysis was conducted.

And as the primary concern of this study was the use of discourse markers, other simplification strategies at the syntactic and lexical level were not examined.

(c) Results and Discussion
   Table 4 shows the results of the comparative analysis.

Table 4: Comparison of Original and Simplified Versions

	Text 1		Text 2		Text 3	
	A	B	A	B	A	B
Total number of words	471	661	368	796	412	870
Words per sentence	18.8	17.3	16.7	22.1	20.6	31.0
Flesch reading ease score	56.9	70.5	59.0	58.4	55.3	54.0
Grade level required	10	7	10	10	11	11
Flesch–Kincaid grade level	9.9	7.7	9.1	10.5	10.6	13.4
Micro discourse markers	1	25	0	24	0	25
Macro discourse markers	0	5	1	4	0	1

Text 1: Computer Strain A (original); B (simplified)
Text 2: Handicapped Children A (original); B (simplified)
Text 3: The Men's Movement A (original); B (simplified)

There are several noticeable features. First, in terms of the number of total words, all the paraphrased versions contain more words than the original texts. However, if we look at the mean number of words per sentence, we see that sentences in the simplified versions are longer, except for Text 1. Next, the reading ease score, which is assessed on the basis of the number of words per sentence and the average number of syllables per word, shows that there is a slight improvement in readability in Text 1, but the other two paraphrased texts seem to be slightly more difficult than their original ones as far as the readability scores are concerned. Thirdly, we can see that all the simplified versions contain a lot more discourse markers. However, as the author indicated in his previous study, most of the discourse markers used in the paraphrased texts are micro discourse markers, which function as temporal links or relative emphasis. Those most commonly used by the native speaker of English in these three texts are: *and* (at the sentence-initial position), *and then, of course, you know, in other words*, and so on. Usually spoken discourse contains more link words than written discourse, but these words or phrases do not have much semantic value in facilitating readers' comprehension. In fact, they are sometimes used just as intersentential signals or pause fillers and may have an unfavorable effect on listeners or readers by distracting their attention.

   There seem to be at least two reasons for the overuse of micro discourse markers in the texts analyzed in this study. First, the speeches transcribed were genuinely spontaneous. In preparing a lecture, for example, the speaker can process the important parts of the entire lecture and plan to place appropriate macro discourse markers beforehand. Thus, carefully planned use of macro discourse markers will enhance learners' comprehension. On the other

hand, a spontaneous speech usually does not allow speakers to think carefully about logical topic transition and to use appropriate macro discourse markers, especially when time is limited as in a radio program. Secondly, this may have to do with the relative difficulty of the topic itself in the original text. Among the topics of the texts in the present study, for example, Text 1 deals with a rather simple topic, purchase of a computer by the sister of a native speaker while the other texts cover rather complex social issues, such as "Handicapped people" and "Men's movement in the U.S." The chance of simplification somehow seems to be dependent on the difficulty of the original texts. Without doing a lot of content reduction, it would be very difficult to simplify the original text to a certain level of readability. There was little content reduction in the simplified texts analyzed in the present study; therefore, for additional explanations, a lot of micro discourse markers, such as *in other words,* were used and consequently this seems to have increased the number of micro markers.

(2) Simplification Strategies by a Japanese Teacher of English

In the English classroom in Japan, there are a number of situations in which teachers have to simplify passages of English when, for example, they introduce new reading material in English. What kinds of simplification strategies do Japanese teachers of English use in the classroom?

One of the few studies conducted in Japan by Yoneyama (1987) refers to repetition as the most commonly used strategy by Japanese teachers of English. In this section, the present author conducts a protocol analysis of an English lesson at a junior high school and ascertains some features of simplification strategies used by a Japanese teacher of English.

(a) Material

A 50-minute English lesson taught by a Japanese English teacher was observed and recorded for transcription. The teacher had more than ten years of teaching experience and used English most of the time as the language of instruction on the day when the recording was done. The original passage was from a textbook currently used in Japanese junior high schools, *The New Horizon English Course, Book 2,* and it was paraphrased by her when she introduced it at the beginning of the lesson. The original passage and the excerpt from the transcription of her lesson are as follows:

〔Original〕

It was very cold, and it rained a lot that night. Susan came home about ten o'clock. She was cold and very tired. She opened the door and went into her room. The windows were open!

Slowly the door to the next room opened. A dark figure came in. It came up to her with a knife in its hand. And ...

(from *New Horizon English Course, Book 2*, Lesson 3, "Who Did It?")

〔Paraphrased〕

Today we are going to read a story. A story, some mysterious story. So, there is a picture and listen to me very carefully.

That night, it rained a lot and it was very cold. (x2) What's her name?... Her name is Susan. O.K. Susan came home at what time? Can you see? Ten o'clock, yes, very good. Just ten? (x2) About, very good, O.K. About ten o'clock. Susan came home about ten o'clock. Yes, she was very lonely. Because she was in the rain. So, she was very cold and she was very tired. She was very tired. She opened the door, and went into her room, went into her room. This is her house. O.K.? She has one room, maybe. O.K.? She opened the door and went into her room, O.K.? But, why the door or windows were open? She wondered why. (x4) Just then, slowly (x2), the door opened. (x2) And a dark figure (x2) came into, came up to her. And what it has? Good, knife. It had a knife.

[(x2) indicates that the phrase or sentence immediately before was spoken twice.]

(b) Analysis

As in the previous section, the original and paraphrased passage were compared in terms of total number of words, the number of words per sentence, the Flesch reading ease score, the Flesch–Kincaid grade level, and frequency of micro/macro discourse markers. The obtained data are as follows:

Table 5: Comparison of Original and Paraphrased versions

	original	paraphrased
Total number of words	60	199
Words per sentence	7.5	5.8
Flesch reading ease score	97.7	92.9
Grade level required	5	5
Flesch–Kincaid grade level	1.4	1.7
Micro markers	1	6
Macro markers	0	0

In the paraphrased text, we can first notice a remarkable reduction in respect of the average number of words per sentence, from 7.5 words to 5.8 words. However, a comparison in terms of readability does not show much simplification. Another noticeable change is in the use of discourse markers, all of which are micro discourse markers such as *and*, *and then*, *but*, and so on. Again there are more micro discourse markers in the paraphrased text than in the original text, but surprisingly there are no macro markers. This is perhaps because second year students have a quite limited exposure to the linguistic resources, namely, more complex vocabulary or phrases, which serve as macro markers.

Another important feature in this paraphrased text is the interactive nature of the student–teacher classroom talk. Unlike the radio broadcast, the merit of classroom talk is in the interaction between the teacher and students. In the excerpt above, we can notice some questions asked by the teacher to help students to understand the flow of the story. Below are the questions that this teacher asked to encourage and assist students' responses and comprehension.

Questions:	Answers:
What's her name?	Her name is Susan.
Susan came home at what time?	Ten o'clock.
Just ten?	About ten o'clock
Why the door or windows were open?	(no answer)
What it has?	It had a knife.

Before listening to the story, the students are provided with a brief introduction to it as a pre-listening activity: "Today we are going to read ...." This will greatly help the students to grasp what the story is all about. By listening to these questions and answers by the teacher, the students will be able to understand the story better. Simplification is a cooperative effort by both teacher and students in the classroom. This process of simplification has been considered mostly in terms of the product through a quantitative analysis of, for example, native speaker and non-native speaker conversations. However, we need to pay more attention to the process of simplification, and what classroom activities might help students successfully comprehend classroom input.

4. Implications for Classroom Research and Teacher Education

Both the previous and the present study by the author tried to identify some of the simplification strategies used by native and non-native speakers of English with special reference to the use of discourse markers. The findings can be summarized as follows:

First, all the simplified texts analyzed in these studies showed a remarkable increase in the use of discourse markers, which is especially true in spoken discourse. Some of those link words are indispensable to the logical coherence of the discourse and together with simplification of grammar and vocabulary, help learners with listening and reading comprehension. To enhance students' understanding, teachers of English should expand their focus from the intrasentential level to the intersentential/interdiscoursal level. Second, it needs to be said that most of the discourse markers used in the simplification process were found to be micro discourse markers. Some of these, what Ball (1986) calls 'dummies', seem to serve very little purpose except to reassure the speaker and preserve his self-confidence (Ball 1986: v). They add nothing to the meaning of the entire passage and, as is often the case, their use can become addictive. These include: *you know, you see, I mean, sort (kind) of, well, anyway/anyhow, actually, of course, however, know what I mean?* and so on.

From these findings, what kinds of suggestions can be made for teaching? First of all, it should be emphasized that English teachers should widen their horizons and teach at the discourse level. The research into speech simplification at the level of discourse is still in its infancy; most discussion has focused on such areas as slower speech rate, longer pause, shorter utterances, lower syntactic complexity, avoidance of low frequency vocabulary, idiomatic expressions and so on. Teachers should consider the functions of link words, or discourse markers, in simplifying texts.

Secondly, we should reconsider the type of discourse markers we use in the simplification process. Use of discourse markers still remains generally at the micro level; that is, most of the discourse markers that we use are micro markers, which usually function only as

temporal links. In order to help learners follow the logical composition of a text, teachers should prepare in advance those macro-level markers, which enable the learners to follow the text more easily.

Thirdly, and most importantly, we should reconsider the process of simplification. So far, the main focus of simplification has been on teacher input and much attention has been paid to how to simplify the text in terms of vocabulary, syntax and discourse. However, the analysis of classroom discourse indicates that there is another aspect to consider in order to help learners to understand in the classroom: namely, student-and-teacher interaction. The teachers' explanations are a pre-learning and while-learning act of simplification. In other words, the simplification of texts should not only be carried out by the teacher, but by both teacher and students by asking learners the right questions to get them to guess what they will listen to. Teachers do not simply repeat the same utterance over and over again as a strategy of making input comprehensible. In addition to the simplification of input, we need to describe the characteristic features of interaction as a simplification strategy. Further research is required to clarify the effects of this interaction in the classroom.

References

Ball, W. 1986. *Dictionary of Link Words in English Discourse*. Macmillan Language House.

Bialystok, E. 1983. Some factors in the selection and implementation of communication strategies. In C. Faerch and G. Kasper (eds.), 100–118.

Bialystok, E. 1990. *Communication Strategies: A Psychological Analysis of Second-Language Use*. Basil Blackwell.

Chaudron, C. and J. Richards. 1986. The effect of discourse markers on the comprehension of lectures, *Applied Linguistics*, 7, 2, 113–127.

Faerch, C. and G. Kasper. eds. 1983. *Strategies in Interlanguage Communication*. Longman.

Fukazawa, S. 1994. A study of simplification strategies by native speakers of English: use of discourse markers. *Bulletin of Research Center for Educational Study and Practice*, 6, 39–48.

Tarone, E. 1977. Conscious communication strategies in interlanguage. In H.D. Brown, C.A. Yorio, and R.C. Crymes (eds.) *On TESOL '77*. TESOL.

Tarone, E. 1980. Communication strategies, foreigner talk, and repair in interlanguage. *Language Learning*, 30, 417–431.

Varadi, T. 1980. Strategies of target language learner communication: message adjustment. *International Review of Applied Linguistics*, 18, 59–71.

Yoneyama, A. 1987. Strategies for making input comprehensible in non-native English teacher talk. *Memoirs of the Faculty of Education, Niigata University*, 29, 1, 103–109.