Analyses of Native English Speakers' Performative Data to Produce Instructional Materials for Communication Strategies

Chiaki IWAI

1 Introduction

The present study is one of my preliminary studies on communication strategies (CS), whose central focus is placed on the teachability of CS, i.e., whether CS-based instruction helps second language (L2) learners enhance their communicative competence as a result of the development in their strategic competence to make up for their linguistic deficits. Despite CS researchers' endeavors to obtain affirmative evidence for the teachability of CS, past empirical studies have some problems as discussed further below. One of them is concerned with the teaching materials used in these studies. On the basis of descriptive data collected from 454 native speakers (NS) of English, the present study mainly reports findings obtained from analyses of the collected data, which is followed, in the last section, by a brief discussion regarding the requisites to settle the pedagogical issue.

2 The teachability issue of CS and its problems

One of the important missions of applied linguistics is to produce teaching materials for L2 learners. Such production of L2 materials should reflect not only L2 practitioners' intuitions or teaching experiences but also empirical evidence from L2 studies that justify the appropriateness of the adopted method or introduced items.

This orthodox production process appears not to be fully taken into account in creating CS teaching materials because available CS-based textbooks (e.g., Dörnyei & Thurrell 1992, Kenny & Woo 2000) have become public before CS studies succeeded in affirming teaching effects of CS. One may claim that benefits of CS instruction have been proved by some researchers (e.g., Dörnyei 1995) and, therefore, the teachability of CS is a settled issue. Against such an optimistic view, I pointed out, in my previous studies (Iwai 2000a, 2001), three methodological and theoretical problems of the past empirical CS studies dealing with this issue. I also argued, citing some negative

perspectives on CS training (e.g., Bialistok 1990 and Kellerman 1991) and the output hypothesis by Swain (1996), that it is necessary to show how CS instruction develops L2 learners' linguistic competence including well-formedness in their linguistic productions before concluding that CS training brings desirable effects.

One more problem I would like to add in this study is that the teaching materials used in the past empirical studies on CS teachability solely consisted of L2 learning tasks which the researchers of these studies assumed to enhance L2 learners' strategic use of the target language. However, since these studies do not clarify the relation between linguistic items taught and items learned, we cannot judge whether the materials used were appropriate and to what extent they contributed to the development of L2 learners' linguistic competence in addition to their strategic competence.

To compensate for the shortcomings of the past empirical studies on CS instruction, Konishi's studies (1994, 2001) are unique and, thus, worth referring to. In these studies, Konishi attempted to find syntactic, semantic, and lexical patterns in paraphrased expressions, from which he expects that we can generalize pedagogical norms to introduce CS-based instruction into L2 classes. The findings of his studies are based on the fundamental data that were obtained from the definitions of 2,000 words in Longman Active Study Dictionary of English (Konishi 1994) and from oral interviews given to 30 American NS regarding 17 lexical items (Konishi 2001). The analyses of his studies are exhaustive and conducted appropriately; however, it is not clear to what extent the dictionary data reflect the actual language use. In addition, the oral data from 30 NS appears not to be large enough to generalize the findings.

Modeled on Konishi's CS studies, the present study was planned to advance his studies by examining a larger amount of NS performative data that could eventually be used in producing teaching materials for future studies on CS instructional effects.

3 Data collection method

One of the most unavoidable obstacles to collecting a sizable amount of English NS data in Japan, where English is taught as a foreign language (EFL), is the impracticality involved in finding an adequate number of NS informants. The advent of the Internet, however, has brought us a methodological revolution to overcome this EFL restriction. Compared with authentic data elicitation, it still has some limitations; however, it has a great potential to facilitate our empirical data collection.

Thus, it was decided to make use of this modern invention in collecting data for

this study. Prior to the actual survey, four sets of a data collection web site were prepared in an ordinary personal computer with the Windows operating system. Each set had three pages that were linked to each other. The first page was a greetings page, which was followed by a page consisting of questions regarding respondents' background information (e.g., first language background, L2 learning experiences, age, and gender) and by a main page, where a total of ten words (some were displayed by a photo image) were listed vertically with two horizontal open spaces for each word in which to type responses. Thus, the total number of words investigated in this study was 40 (10 words x 4 sets).¹

These words were selected from the CS studies by Chen (1990), Iwai (2000b), and Konishi (2001), and they were classified into the following five categories: persons, materials, living creatures, tools, and abstract nouns (2 words each for one set).² The main task on the prepared web sites was to describe each target item in comprehensible English words for non-native English speakers at a lower level.

In the actual survey, it was intended to gather responses from at least 100 NS for each set. Participants were randomly recruited first by looking for e-mail addresses on the Internet and then by sending a request e-mail message for cooperation with this study individually until the intended goal was achieved. As a result, the message was sent to approximately 3,500 people in the world, most of them living in English speaking countries such as the U.S., the U.K., Canada, and Australia, and responses were returned by 504 people including 454 NS (approximately 100 for each set) and 50 non-native English speakers. Since its purpose was to collect NS performative data, this study examines only the NS responses. Table 1 summarizes the lexical items investigated and the total number of respondents to each set and to each item.³

Table 1: Summary of task words and the numbers of responses

| I able | ı. Sum | IIIAI Y UI LASK W | ui us a | nu the numbe | 13 01 10 | - SPORISCO | | | |
|----------|---------------------|-------------------|---------|--------------|----------|------------|------|------------------|------|
| Set | N | Persons | N | Materials | N | Creatures | N | Tools | N |
| <u> </u> | 100 | accountant | 102 | linen | 101 | rhinoceros | 101 | barber pole | 89 |
| Set 1 | 102 | caretaker | 102 | oak | 100 | cicada | 95 | bubble wrap | 47 |
| C . 0 | 00 | MC | 97 | mercury | 87 | ostrich | 97 | bookmark | 57 |
| Set 2 | 99 | go-between | 97 | dough | 96 | ladybug | 96 | latch | 42 |
| 0 . 2 | 126 | dermatologist | 135 | cardboard | 133 | centipede | 132 | coffee filter | 90 |
| Set 3 | 136 | smuggler | 133 | velvet | 132 | lizard | 131 | connection cable | 54 |
| 0 . 4 | 110 | realtor | 111 | plaster | 111 | mantis | 112 | multiple socket | 107 |
| Set 4 | 117 | usher | 115 | brass | 111 | weasel | 110 | bag clip | 65 |
| | Total R | esponses | 892 | | 871 | | 874 | | 551 |
| | Valid responses (%) | | | | 95.9 | | 96.3 | | 60.7 |

N.B.: N next to the set number shows the number of respondents from whom answers were returned. N next to each task word represents the number of valid respondents (i.e., the answer space was filled).

4 Analyses and results

The analyses in this section were carried out in reference to Konishi's studies

cited above. Although his recent study (2001) shows the results of semantic analysis in terms of functions and attributes of the target items, the present study does not demonstrate the results of this type of analysis due to space restrictions. Instead, the focus of analysis is placed on syntactic and lexical features of the responses. Furthermore, it should be noticed that the investigation of the responses was limited to the first one or two sentences of the whole response in each descriptive task.⁴ This was due to a practical reason that some generous participants wrote extremely long responses, some of which consisted of more than 200 words in over 10 sentences.

4.1 Syntactic structures

From both the dictionary-based study (1994) and the NS performative study (2001), Konishi showed that the majority of the definitions or descriptions of the investigated lexical items contained superordinate terms (head nouns in this study), which were commonly preceded by premodifying (PrM) components and followed by postmodifying (PoM) components, e.g., (A rhinoceros is) a big animal with a horn on its nose (Konishi 2001, p. 6, parentheses and underlines mine). Using his analysis frameworks, the syntactic structures of the entire responses (3,188 in total) were examined, and the results are shown in Table 2.

Table 2: Summary of syntactic structures by category

| | | | | | | Material | S | (| Creature | S | | Tools | | |
|-------|---|--|--|---|---|--|---|--|---|---|--|--|---|--|
| struc | tures | Freq. | % | Total | Freq. | % | Total | Freq. | % | Total | Freq. | % | Total | |
| HN | PoM | 770 | 86.3 | | 282 | 32.4 | | 250 | 28.6 | | 236 | 42.8 | | |
| HN | PoM | 11 | 1.2 | 88.2 | 213 | 24.5 | 70.8 | 394 | 45.1 | 707 | 57 | 10.3 | 55.5 | |
| HN | PoM | 1 | 0.1 | 00.2 | 33 | 3.8 | /0.8 | 9 | 1.0 | /6./ | 3 | 0.5 | 55.5 | |
| HN | PoM | 5 | 0.6 | | 89 | 10.2 | | 35 | 4.0 | | 10 | 1.8 | | |
| HN | CL | 8 | 0.9 | | 16 | 1.8 | | 16 | 1.8 | | 97 | 17.6 | | |
| HN | CL | 1 | 0.1 | 12 | 17 | 2.0 | 75 | 26 | 3.0 | 57 | 5 | 0.9 | 10.1 | |
| HN | CL | 0 | 0.0 | 1.2 | 8 | 0.9 | 1.5 | 3 | 0.3 | 3.7 | 1 | 0.2 | 19.1 | |
| HN | CL | 2 | 0.2 | | 24 | 2.8 | | 5 | 0.6 | | 2 | 0.4 | | |
| HN | | 22 | 2.5 | | 35 | 4.0 | | 41 | 4.7 | | 39 | 7.1 | | |
| HN | | 29 | 3.3 | 5.0 | 73 | 8.4 | 17.2 | 69 | 7.9 | 150 | -5 | 0.9 | 0.0 | |
| HN | | 0 | 0.0 | 3.6 | -13 | 1.5 | 17.2 | 3 | 0.3 | 15.0 | 0 | 0.0 | 8.0 | |
| HN | | 1 | 0.1 | | 29 | 3.3 | | 18 | 2.1 | | 0 | 0.0 | | |
| | | 42 | 4.7 | 4.7 | 39 | 4.5 | 4.5 | 5 | 0.6 | 0.6 | 96 | 17.4 | 17.4 | |
| T | otal | 892 | 100.0 | 100.0 | 871 | 100.0 | 100.0 | 874 | 100.0 | 100.0 | 551 | 100.0 | 100.0 | |
| | gories struc HN HN HN HN HN HN HN HN HN | STUDE STUD | gories structures Freq. HN PoM 770 HN PoM 11 HN PoM 5 HN CL 8 HN CL 1 HN CL 0 HN CL 2 HN CL 2 HN CL 2 HN 129 HN 0 HN 1 | gories Persons structures Freq. % HN PoM 770 86.3 HN PoM 11 1.2 HN PoM 1 0.1 HN PoM 5 0.6 HN CL 8 0.9 HN CL 1 0.1 HN CL 0 0.0 HN CL 2 0.2 HN 22 2.5 HN 29 3.3 HN 0 0.0 HN 1 0.1 HN 42 4.7 | gories Persons structures Freq. % Total HN PoM 770 86.3 88.2 HN PoM 11 1.2 88.2 HN PoM 5 0.6 9 HN CL 8 0.9 1.2 HN CL 1 0.1 1.2 HN CL 0 0.0 1.2 HN CL 2 0.2 1.2 HN 22 2.5 1.2 HN 0 0.0 0.0 HN 0 0.0 0.0 HN 1 0.1 HN 42 4.7 4.7 | gories Persons I structures Freq. % Total Freq. HN PoM 770 86.3 282 282 HN PoM 11 1.2 88.2 213 HN PoM 5 0.6 89 16 HN CL 8 0.9 16 17 HN CL 1 0.1 17 16 HN CL 2 0.2 8 24 HN 22 2.5 35 73 HN 0 0.0 5.8 73 HN 1 0.1 29 3.3 73 HN 1 0.1 29 3.3 73 HN 1 0.1 29 3.3 73 HN 42 4.7 4.7 39 | Structures Freq. % Total Freq. % HN PoM 770 86.3 282 32.4 HN PoM 11 1.2 88.2 213 24.5 HN PoM 1 0.1 88.2 33 3.8 HN PoM 5 0.6 89 10.2 HN CL 8 0.9 16 1.8 HN CL 1 0.1 8 0.9 HN CL 2 0.2 24 2.8 HN 22 2.5 35 4.0 HN 29 3.3 5.8 73 8.4 HN 0 0.0 5.8 73 8.4 HN 1 0.1 29 3.3 HN 29 3.3 29 3.3 HN 42 4.7 4.7 4.7 39 4.5 | gories Persons Materials structures Freq. % Total Freq. % Total HN PoM 770 86.3 88.2 282 32.4 70.8 HN PoM 1 0.1 88.2 213 24.5 70.8 HN PoM 5 0.6 89 10.2 HN CL 8 0.9 16 1.8 17 2.0 7.5 HN CL 1 0.1 8 0.9 7.5 8 0.9 7.5 HN CL 2 0.2 24 2.8 7.5 8 1.2 7.5 HN 22 2.5 3.3 3.4 1.7.2 <t< td=""><td>gories Persons Materials Comparison structures Freq. % Total Freq. % 250 394 394 9 394 394 9 394 9 394 9 394 9 394 9 35 16 1.8 16 1.8 16 1.8 17 26 35 35 40 3</td><td>gories Persons Materials Creature structures Freq. % Total Freq. % Total Freq. % HN PoM 770 86.3 86.3 282 32.4 70.8 394 45.1 HN PoM 1 0.1 88.2 213 24.5 70.8 394 45.1 HN PoM 5 0.6 89 10.2 35 4.0 HN CL 1 0.1 1.2 16 1.8 16 1.8 HN CL 0 0.0 8 0.9 7.5 26 3.0 HN CL 2 0.2 24 2.8 7.5 5 0.6 HN 22 2.5 3.3 3.4 4.0 4.7 4.7 4.0 4.5 4.5 5 0.6</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>gories Persons Materials Creatures Tools structures Freq. % Total Freq. % Total Freq. % Total Freq. % HN PoM 770 86.3 88.2 282 32.4 70.8 394 45.1 78.7 57 10.3 0.5 HN PoM 1 0.1 88.2 213 24.5 70.8 394 45.1 78.7 57 10.3 HN PoM 5 0.6 89 10.2 35 4.0 10 1.8 HN CL 1 0.1 1.2 80.9 7.5 26 3.0 5.7 5 0.9 HN CL 2 0.2 24 2.8 7.5 5 0.6 2 0.4 HN 22 2.5 3.3 3.4 17.2 69 7.9 15.0 5 0.9 HN 29</td></t<> | gories Persons Materials Comparison structures Freq. % Total Freq. % 250 394 394 9 394 394 9 394 9 394 9 394 9 394 9 35 16 1.8 16 1.8 16 1.8 17 26 35 35 40 3 | gories Persons Materials Creature structures Freq. % Total Freq. % Total Freq. % HN PoM 770 86.3 86.3 282 32.4 70.8 394 45.1 HN PoM 1 0.1 88.2 213 24.5 70.8 394 45.1 HN PoM 5 0.6 89 10.2 35 4.0 HN CL 1 0.1 1.2 16 1.8 16 1.8 HN CL 0 0.0 8 0.9 7.5 26 3.0 HN CL 2 0.2 24 2.8 7.5 5 0.6 HN 22 2.5 3.3 3.4 4.0 4.7 4.7 4.0 4.5 4.5 5 0.6 | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | gories Persons Materials Creatures Tools structures Freq. % Total Freq. % Total Freq. % Total Freq. % HN PoM 770 86.3 88.2 282 32.4 70.8 394 45.1 78.7 57 10.3 0.5 HN PoM 1 0.1 88.2 213 24.5 70.8 394 45.1 78.7 57 10.3 HN PoM 5 0.6 89 10.2 35 4.0 10 1.8 HN CL 1 0.1 1.2 80.9 7.5 26 3.0 5.7 5 0.9 HN CL 2 0.2 24 2.8 7.5 5 0.6 2 0.4 HN 22 2.5 3.3 3.4 17.2 69 7.9 15.0 5 0.9 HN 29 | |

N.B.: Ap=formulaic expressions for approximation (see Section 4.2.2 for details), PrM=premodifying components, HN=head nouns, PoM=postmodifying components, CL=independent clauses adding information on head nouns.

These results are comparable with the results in Konishi's studies. In his studies, the dominant syntactic structure PrM + HN + PoM was used in 93.30% of the dictionary definitions (Konishi 1994, p. 70) and 57.74% of the NS responses (Konishi 2001, p. 8). The results in this study fell between these two extremes, ranging from 88.2% (persons) to 55.5% (tools), about a 70% average as a whole. The difference between his studies and the present study could be attributable to the difference of the

data elicitation methods. That is, the dictionary method is the most formal and, thus, resulted in dominant occurrences of a relatively fixed structure; while the written responses in this study, whose formality level falls between those of the two methods in his studies, led to fewer occurrences of this structure than the dictionary study but more than the study of oral performance.

The structures of PrM components are simple. Most of them are composed of adjectives or adjectival phrases with or without an intensifier (e.g., very, really) and a formulaic expression to approximate the target item (e.g., a kind of, a sort of). Since these are lexical features rather than syntactic ones, PrM components will be discussed in Section 4.2.

Table 3: Summary of postmodification structures by category

| | Category | Per | sons | Mat | erials | Crea | tures | To | ools |
|-----------------|-----------------------|-------|-------|-------|--------|-------|-------|-------|-------|
| Main structures | PoM structures | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| Prepositional | preposition | 36 | 4.0 | 103 | 11.8 | 292 | 33.4 | 56 | 10.2 |
| | -ing | 9 | 1.0 | 0 | 0.0 | 4 | 0.5 | 2 | 0.4 |
| Participial | pp | 3 | 0.3 | 191 | 21.9 | 47 | 5.4 | 86 | 15.6 |
| - | infinitive | 1 | 0.1 | 5 | 0.6 | 1 | 0.1 | 30 | 5.4 |
| | that | 31 | 3.5 | 176 | 20.2 | 241 | 27.5 | 62 | 11.3 |
| | who | 678 | 76.0 | 0 | 0.0 | 6 | 0.7 | 0 | 0.0 |
| | which | 0 | 0.0 | 43 | 4.9 | 41 | 4.7 | 15 | 2.7 |
| Dulation alama | prep + which | 0 | 0.0 | 3 | 0.3 | 0_ | 0.0 | 3 | 0.5 |
| Relative clause | whose | 14 | 1.6 | 2 | 0.2 | 6 | 0.7 | 0 | 0.0 |
| | where | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.9 |
| | no relative pronoun | 1 | 0.1 | 20 | 2.3 | 8 | 0.9 | 14 | 2.5 |
| | what | 0 | 0.0 | 27 | 3.1 | 0 | 0.0 | 2 | 0.4 |
| Annaitianal | appositional adj | 5 | 0.6 | 23 | 2.6 | 26 | 3.0 | 0 | 0.0 |
| Appositional | appositional NP | 0 | 0.0 | 0 | 0.0 | 2 | 0.2 | 0 | 0.0 |
| phrase | restatement | 9 | 1.0 | 19 | 2.2 | 15 | 1.7 | 29 | 5.3 |
| | additional clause | 11 | 1.2 | 66 | 7.6 | 50 | 5.7 | 105 | 19.1 |
| | approximation | 52 | 5.8 | 149 | 17.1 | 130 | 14.9 | 45 | 8.2 |
| 0.1 | no head noun | 22 | 2.5 | 6 | 0.7 | 3 | 0.3 | 67 | 12.2 |
| Others | giving an example | 15 | 1.7 | 23 | 2.6 | 2 | 0.2 | 18 | 3.3 |
| | omission of head noun | 5 | 0.6 | 10 | 1.1 | 1 | 0.1 | 11 | 2.0 |
| | none of above | 0 | 0.0 | 5 | 0.6 | 0 | 0.0 | 1 | 0.2 |
| | Total | 892 | 100.0 | 871 | 100.0 | 875 | 100.0 | 551 | 100.0 |

In contrast to PrM structures, PoM components consist of a variety of syntactic structures; however, frequently used structures are restricted to a few patterns as shown in Table 3, in which the cells with more than 5% occurrences are shaded. Although the category of persons presents somewhat different patterns from the other three categories, three of the most common PoM structures are prepositional phrases, past participial phrases (pp), infinitive phrases, and relative clauses. Below are typical examples of the most frequently occurring PoM structures.

- 1) (An accountant is) a person who deals with money for a company. (Person, relative clause)
- 2) (Velvet is) a material for dresses and other things. (Material, prepositional phrase)
- 3) (Brass is) a shiny material <u>used for trumpets and trays</u>. (Material, participial phrase)
- 4) (It is) a panel to place plugs so you can get electricity. (Tool, infinitive phrase)
- 5) (Ladybug is) a small insect. It is red with black spots. (Creature, additional clause)

4.2 Lexical Features

Lexical information is crucial in producing L2 materials. Its importance could be shown through the analogy of building a house: a house would be unsubstantial unless the quality of pillar and wall materials is good, no matter how firm the structure of the house is. In the same manner, utmost attention needs to be paid to the lexical entries in producing L2 materials since these materials would be of little help for L2 learners if the means of expression, i.e., lexical items, are far beyond their competence.

For this reason, the features of lexical items used in the responses were examined in detail. As a result of this analysis, several features were revealed, which will be discussed in the following order: (1) head nouns, (2) formulaic PrM expressions for approximation, and (3) adjectives used for PrM.⁵

4.2.1 Head nouns

Table 4 summarizes the frequencies of head nouns that appeared in more than 5% of the overall responses for each task item. The analysis results indicate not only that most items can be described with just a few kinds of head nouns (e.g., person, material, animal) but also that they consist of mostly basic English words, which seem to be easily learned by L2 learners.

4.2.2. Formulaic PrM expressions for approximation

One strategic solution to overcome a lexical deficit is to replace an unknown word with a familiar superordinate term that covers the attributes of the unknown word, e.g., Velvet is a kind of cloth. A substitutive means of this type has traditionally been called an approximation strategy (e.g., Tarone 1977) or a holistic strategy (e.g., Poulisse 1990) in CS studies. When this strategy is used, it often accompanies a formulaic PrM expression. The frequencies of occurrence of such expressions were examined, and the results are summarized in Table 5.

| Table | 4: Freque | ncy (| f head no | uns (| HN) | | Per | rsons | i | | | | | | | |
|-------|-----------|-------|-----------|-------|---------|------|---------|-------|----------|-------|---------|------|---------|------|---------|----------|
| Word | account | ant | caretak | er | MC | | go-betw | een | dermatol | ogist | smugg | ler | realto | r | usher | <u> </u> |
| N | N 102 | | 102 | 102 | | 97 | | 97 | | 135 | | | 111 | | 111 | |
| | person | 66 | person | 61 | person | 63 | person | 46 | doctor | 109 | person | 54 | person | 65 | person | 74 |
| HN | someone | 20 | someone | 29 | leader | 16 | someone | 24 | person | 12 | someone | 53 | someone | 30 | someone | 32 |
| | - | | - | | someone | 6 | - | | someone | 7 | thief | 11 | - | | - | |
| Total | | 86 | | 90 | | 85 | | 70 | | 128 | | 118 | | 95 | | 106 |
| 0% | | 88.2 | | 88.2 | | 87.6 | | 72.2 | | 94.8 | | 88.7 | | 85.6 | | 95.5 |

| | | | | | | | Ma | teria | ls | | | | | | | |
|-------|----------|------|------|------|----------|------|---------|-------|----------|------|----------|------|-----------|------|-------|------|
| Word | liner | 1 | oak | | mercui | y | doug | h | cardbo | ard | velve | t | plaste | r | brass | i |
| N | 101 | | 100 | 100 | | 87 | | 96 | | 133 | | 132 | | | 111 | |
| | cloth | 35 | tree | 77 | metal | 36 | what | 18 | paper | 83 | material | 49 | material | 40 | metal | 96 |
| | material | 16 | wood | 13 | element | 17 | mixture | 13 | material | 16 | fabric | 38 | substance | 12 | | |
| HN | fabric | 12 | - | | material | 9 | bread | 8 | - | | cloth | 33 | stuff | 7 | | |
| | - | | - | | chemical | 5 | stuff | 6 | - | | - | | paste | 6 | - | |
| | - | | - | | - | | - | | - | | - | | something | 6 | - | |
| Total | | 63 | | 90 | | 67 | | 45 | | 99 | | 120 | | 71 | | 96 |
| % | | 62.4 | | 90.0 | | 77.0 | | 46.9 | | 74.4 | | 90.9 | | 64.0 | | 86.5 |

| | | | | | | | Cre | eatur | es | | | | | | | |
|-------|---------|------|--------|------|--------|------|--------|-------|----------|------|---------|------|--------|------|--------|----------|
| Word | rhinoce | ros | cicad | a | ostric | h | ladybı | ug | centipe | ede | lizard | | mantis | | wease | el |
| N | 101 | | 95 | | 97 | | 96 | | 132 | | 131 | | 112 | | 110 | |
| | animal | 86 | insect | 71 | bird | 91 | insect | 50 | insect | 75 | animal | 57 | insect | 88 | animal | 70 |
| | mammal | 10 | bug | 10 | - | | bug | 22 | bug | 20 | reptile | 47 | bug | 17 | mammal | 25 |
| HN | - | | - | | - | | beetle | 12 | creature | 11 | - | | - | | rodent | 8 |
| | | | - | | - | | | | animal | 10 | - | | - | | - | <u> </u> |
| | - | | - | | - | | - | | worm | 7 | - | | - | | - | <u> </u> |
| Total | | 96 | | 81 | | 91 | | 84 | | 123 | | 104 | | 105 | | 103 |
| % | | 95.0 | | 85.3 | | 93.8 | | 87.5 | | 93.2 | | 79.4 | | 93.8 | | 93.6 |

| | | | | | | | T | ools | | | | | | | | |
|-------|-------------------------------------|------|----------------|------|----------------|------|--------------------|-------|------------------|---------------|-----------------------|-------|--------------------|------|-------|------|
| Word | barber p | ole | bubble v | vrap | bookma | ırk | latch | latch | | coffee filter | | cable | multiple so | cket | bag c | lip |
| N | 89 | | 47 | | 57 | | 42 | | 90 | | 54 | | 107 | | 65 | |
| HN | (barber('s)/ba rbershop) pole | 36 | bubble wrap | 20 | bookmark | 32 | (window) handle | 19 | coffee filter | 34 | (electrical) cable | 17 | power strip | 14 | clip | 12 |
| | sign | 10 | material | 9 | string | 8 | (window) latch | 10 | container | 11 | wires | 10 | surge protector | 7 | this | 4. |
| | symbol | 9 | plastic | 7 | bookmar ker | 4 | door handle | 3 | - | | (electrical) cord | 8 | device | 6 | tie | 4 |
| | pole | 8 | - | | ribbon | 4 | thing | 3 | - | | | | outlet | 6 | - | |
| Total | | 63 | | 36 | | 48 | | 35 | | 45 | | 35 | | 33 | | 20_ |
| % | | 70.8 | | 76.6 | | 84.2 | | 83.3 | | 50.0 | | 64.8 | | 30.8 | | 30.8 |

| Table 5: Sumr | nary of fo | rmulaic p | remodifyi | ng express | sions for a | pproxima | tion | |
|---------------|------------|-----------|-----------|------------|-------------|----------|------|------|
| Category | Per | sons | Mat | erials | Crea | atures | T | ools |
| N of PrM | 50 | % 499 | | % | 562 | % | 83 | % |
| kind of | 6 | 12.0 | 83 | 16.6 | 23 | 4.1 | 6 | 7.2 |
| type of | 4 | 8.0 | 96 | 19.2 | 46 | 8.2 | 3 | 3.6 |
| sort of | 0 | 0.0 | 5 | 1.0 | 0 | 0.0 | 0 | 0.0 |
| piece of | 0 | 0.0 | 7 | 1.4 | 0 | 0.0 | 4 | 4.8 |
| form of | 0 | 0.0 | 4 | 0.8 | 0 | 0.0 | 0 | 0.0 |
| group of | 0 | 0.0 | 1 | 0.2 | 0 | 0.0 | 0 | 0.0 |
| member of | 0 | 0.0 | 0 | 0.0 | 2 | 0.4 | 0 | 0.0 |
| family of | 0 | 0.0 | 1 | 0.2 | 0 | 0.0 | 0 | 0.0 |
| set of | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 2.4 |
| any others | 0 | 0.0 | 2 | 0.4 | 0 | 0.0 | 2 | 2.4 |
| Subtotal | 10 | 20.0 | 199 | 39.9 | 71 | 12.6 | 17 | 20.5 |
| Overall | 892 | 1.1 | 871 | 22.8 | 874 | 8.1 | 551 | 3.1 |

4.2.3 Adjectives for PrM

Adjectives modifying head nouns were isolated and their total occurrences were counted for each target item.⁶ Table 6 shows the ratios of adjective use in the responses and the specific adjectives that were used in more than 5% of the entire responses.

Table 6: Summary of PrM adjectives

| Persons | | | | | | | | | | | | | | | |
|-------------|-------|-------------|------|---------------------------------------|-------|-----------|-------|---------------|------|---------------------|------|---------------------|------|------------------|-------|
| accountant | 102 | caretaker | 102 | MC | 97 | go-betwee | n 97 | dermatologist | 135 | smuggler | 133 | realtor | 111 | usher | 115 |
| - | | | | - | | - | 0 | skin | 25 | - | | - | | | |
| | 2 | | 1 | | 1 | | 0 | | 31 | | 4 | | 2 | | 1 |
| | 2.0 | | 1.0 | | 1.0 | | 0.0 | | 23.0 | | 3.0 | | 1.8 | | 0.9 |
| Materials | | | | | | | | | | | | | | • | |
| linen | 101 | oak | 100 | | 87 | dough | 96 | cardboard | 133 | velvet | 132 | plaster | 111 | brass | 111 |
| | | large | 11 | silver (coloured) /silvery | 15 | uncooked | i 5 | thick | 41 | soft | 63 | white | 20 | shiny | 25 |
| | | | | liquid | 14 | | | hard | 17 | smooth | 12 | thick | 6 | gold(-colored | 16 |
| | | | | chemical | 6 | | | stiff | 17 | thick | 9 | | | yellow/yellowish | ´ 9 |
| | | | | | | | | brown | 9 | | | | | | |
| | | | | | | | | heavy | 8 | | | | | | |
| | 15 | | 34 | | 50 | | 18 | | 110 | | 115 | | 55 | | 67 |
| | 14.9 | | 34.0 | | 57.5 | | 18.8 | | 82.7 | | 87.1 | | 49.5 | | 60.4 |
| Creatures | | | | · · · · · · · · · · · · · · · · · · · | | | | | | | | | | | |
| rhinoceros | 101 | cicada | 95 | | 97 | ladybug | 96 | centipede | 132 | lizard | 131 | mantis | 112 | weasel | 110 |
| large | | flying | | large | | small | 51 | small | 19 | small | 37 | large | 12 | small | 48 |
| African | | noisy | | big | 17 | red | 13 | long | 17 | | | green | 6 | furry | 18 |
| big | 9 | large | 6 | flightless | | little | 11 | worm-like | 6 | | | | | wild | 6 |
| | | | | African/Australian | 7 | orange | 5 | | | | | | | | |
| | 115 | | 42 | | 104 | | 106 | | 66 | | 69 | | 48 | | 119 |
| Tools | 113.9 | | 44.2 | | 107.2 | | 110.4 | | 50.0 | | 52.7 | | 42.9 | | 108.2 |
| barber pole | 89 | bubble wrap | | bookmark | 57 | latch | 42 | coffee filter | 90 | connection cable | 54 | multiple socket | 107 | bag clip | 65 |
| | | plastic | 6 | | 1 | | | | | | | electric/electrical | 11 | plastic | 26 |
| | | packing | 4 | | | | | | | | | | | small | 4 |
| | 5 | | 15 | | 1 | | 0 | | 3 | | 3 | | 24 | | 39 |
| | 5.6 | | 31.9 | | 1.8 | | 0.0 | | 3.3 | | 5.6 | | 22.4 | | 60.0 |
| | | | | | | | | | | | | | | | |

Similar to the analysis of head nouns, we can notice that the frequently used adjectives are not numerous and that they are mostly basic adjectives which are used to describe the following features of the target items: a size or shape (e.g., large, long), a color (e.g., brown, white), a material (chemical, plastic), material nature (soft, hard,), an origin (African/Australian), or general descriptions (e.g., uncooked, worm-like, flying). Furthermore, premodifying adjectives were extremely uncommon for the items in the cpersons category. This was also the case in the <tools</pre> category; however, it is not clear whether this was caused by the selected words or the different methods of displaying the tasks (see note 3).

5 Final remarks

As was emphasized in Section 2 of this study, the issue of CS teachability is still unsolved, and further studies are required to claim that this teaching method is superior to other conventional methods for communicative language teaching. One theoretical problem of the past CS studies is that they mainly examined how CS-oriented instruction could promote L2 learners' ability to deliver a message. Since the main function of languages is considered to be the delivery of messages, it is understandable why CS researchers were interested in this aspect of language use.

However, we should not forget that successful message delivery is an ultimate goal of L2 learning. What is missing in their studies is discussion regarding how much CS-based instruction contributes to the acquisition of linguistic competence, which motivates critics of this teaching method to reject it. To persuade these critics, we have to show evidence that L2 learners' grammatical accuracy and lexical richness, in addition to performative skills for successful message delivery, are strengthened by CS-oriented instruction,

The outcomes of this study are by no means conclusive because the purpose of this study was to seek referential NS norms to produce teaching materials for future CS studies. The responses and revealed expression patterns were so numerous that this study could not cover all of them. However, the findings from this study are being made use of in my ongoing production of CS-based materials. Based on this preliminary study, I am currently planning a primary study to investigate the pedagogical issue, which will be completed within two years from now. It is hoped that the results of this study will be helpful for students and researchers interested in CS studies and that the results of the planned empirical study will be reported in the near future.

Notes

- * This study was supported by a 2000 Hiroshima City University Grant for Special Academic Research: Research Code 0054. I would like to thank my colleague Carol Rinnert, who helped me improve the quality and discussions of this paper. I also have to thank two of my students Masako Kawamura and Nami Miyako, without whose assistance the data collection of this study would not be completed within the expected time. Last but not least, I want to thank each one of the participants to this study who kindly responded to a stranger's abrupt request.
- 1 Strategic solutions are applied not only to lexical problems but also to several other kinds of problems including pronunciation, discourse, and pragmatics. This study, however, concerns only lexical problems since its main purpose is to produce teaching materials targeted at EFL learners who have lexical and grammatical difficulties expressing intended concepts.
- 2 Abstract nouns are excluded from this study since their response patterns are numerous and, therefore, they do not fit into the space of this paper. They will be discussed in a future study.
- 3 The obtained responses in the category of <tools> are far fewer than the other categories. This was due to a mechanical problem that occurred unexpectedly. Each one of these items in this category was displayed visually by a photo, which was programmed to become large once it was clicked. While the survey was ongoing, however, it was noticed that this function was more machine sensitive than it was expected even though it was tested repeatedly in advance. For this reason, some respondents had difficulty identifying the displayed objects.

- 4 A majority of investigated sentences were, in fact, the first sentence of the responses. The second sentence was also included in the analyses only if it was a further description of a head noun in the first sentence. Furthermore, the respondents who filled out the second response space (see Section 3 about the response spaces) were not numerous (less than 10% in each one of the target item), so the secondary responses were discarded in this study.
- 5 The features of postmodifying components (including verb, prepositional, participial, and infinitive phrases) were also analyzed. Their features are, however, omitted in this study also due to space limitations.
- 6 Some adjectives were coordinated as in "heavy, smooth, luxurious cloth". In such a case, all the adjectives were counted separately. For this reason, the total number of adjectives of some items (e.g., rhinoceros) in Table 6 exceeds the total number of responses.

References

- Bialystok, E. (1990). Communication strategies: A psychological analysis of second-language use. Oxford: Basil Blackwell.
- Chen, S. (1990). A study of communication strategies in interlanguage production by Chinese EFL learners. *Language Learning*, 40(2), 155-187.
- Dörnyei, Z. (1995). On the teachability of communication strategies. *TESOL Quarterly*, 29(1), 55-85.
- Dörnyei, Z., and Thurrell, S. (1992). *Conversation and dialogues in action*. New York: Prentice Hall.
- Iwai, C. (2000a). Daini gengo shiyoo ni okeru communication horyaku [Communication strategies in the use of second languages]. Hiroshima: Keisuisya.
- Iwai, C. (2000b). Information processing in communication strategies. *Proceedings of the 12th World Congress of Applied Linguistics* (CD-ROM).
- Iwai, C. (2001). Analysis of high school English textbooks from the perspective of communicative competence. Annual Review of English Language Education in Japan, 12, 31-40.
- Kellerman, E. (1991). Compensatory strategies in second language research: A critique, a revision, and some (non-)implications for the classroom. In R. Phillipson, E. Kellerman, L. Selinker, M. Sharwood Smith, & M. Swain (Eds.), Foreign/second language pedagogy research (pp. 142-161). Clevedon, UK: Multilingual Matters.
- Kenny, T., & Woo, L. (2000). Nice talking with you. Tokyo: MacMillian Languagehouse.
- Konishi, K. (1994). The systematic principles and their pedagogical implications underlying the use of paraphrase as a communication strategies based on an analysis of Longman Active Study Dictionary of English in terms of its word definitions. CASELE Research Bulletin (Chugoku Academic Society of English Language Education), 24, 67-73.
- Konishi, K. (2001). Native English speakers' use of communication strategies as EFL teaching norms. Studies in Language and Literature, 20(2), 1-28.
- Poulisse, N. (1990). The use of compensatory strategies by Dutch learners of English. Dordrent, Holland: Foris Publications.
- Swain, M. (1996). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics* (pp. 125-144). Oxford: Oxford University Press.
- Tarone, E. (1977). Conscious communication strategies in interlanguage: A progress report. In H. Brown, C. Yorio, & R. Crymes (Eds.), On TESOL 77, teaching and learning English as a second language (pp. 194-203). Washington D.C.: TESOL.