論　文

Qualitative Analysis of Interactive Communication Strategies

Chiaki IWAI

I. Introduction

Studies on communication strategies (CS) were initiated to reveal the least investigated component of communicative competence, *viz* strategic competence, in the late 1970s, and they were in full bloom in the 1980s. By the late 1980s, these traditional CS studies had branched out into two different types of studies: product-oriented CS studies and process-oriented CS studies.

I indicated some shortcomings of the traditional CS studies and proposed a theoretical model for further CS studies (Iwai 1998), referring to Bachman's model of Communicative Language Ability (1992). In this study, I also reviewed recent studies on CS which have expanded the notion of CS and extended it to wider areas of L2 use than the traditionally studied area which focused mainly on lexical strategies used by an individual speaker. Such renewed CS studies have investigated CS used for problems of speech acts (Cohen and Olshtain 1993), CS for sociolinguistic problems (Rampton 1997 and Wagner and Firth 1997), the relation between CS and discourse (Abdesslem 1996, Clennell 1994a, 1994b, 1995), Grammatical CS (Takatsuka 1997, 1998), and CS used for interactive purposes (Williams et al. 1997).

Despite the efforts of these recent studies, we still know very little about how strategic competence is activated to enhance actual communication by L2 learners. In this study, I will discuss interactive CS observed in the oral data, which was collected during my stay at the University of Minnesota from January to March, 1998.

II. Data Collection

The data for the present study was collected from 18 dyads (thus, 36 speakers) of university students. These dyads consisted of six pairs of native speakers (NS), six pairs of native and non-native speakers (NNS), and six pairs of non-native speakers. All the non-native speakers were international students of academic college programs.

(None of them was a student of English as a second language.) Their first language backgrounds were various: Chinese (1), Dutch (2), Finnish (1), French (3), German (2), Indonesian (1), Japanese (3), Norwegian (1), Spanish (3), and Vietnamese (1). All of the native speakers were American college students.

Oral data from these dyads were collected on separate occasions, using referential communication tasks of geometric figures (see Appendix). One member of the dyad played the part of a director (describing two similar figures displayed on a computer monitor screen), and the other played the part of a matcher (identifying the same figure out of 12 figures illustrated on a piece of paper). The director described five sets of figures, and then the director and the matcher switched the roles.

A computer program named Speech Recording and Analysis Program (SRAP) was used to collect the data and analyze it. (See Iwai in press for the details about this program.) Using this program, all the collected data was transcribed later with utterance codes and time records.

III. Quantitative Analyses of the Data

The collected data was first analyzed quantitatively regarding temporal and frequency features of the interaction among the three groups, and the results will be reported in my upcoming paper (Iwai: in press). The important findings of this quantitative analysis are:

1) NNS are handicapped far more frequently than NS in referential communication, and this fact does not support the process-oriented CS researchers' claim that there is no difference between NNS and NS in their use of CS even if the involved processes of CS use are similar (see, e.g., Poulisse 1990, Bialystok 1990, and Kellerman 1991).

2) The highest frequency of turns and the longest time for each task were observed in the NNS-NNS pairs, followed by the NS-NNS/NNS-NS pairs and by the NS-NS pairs in this order, and their differences were statistically significant. These differences derived mainly from the use of clarification requests and back channel cues in negotiating meanings to complete the task.

3) Even though NS used the names of the geometric figures directly far more frequently than NNS, whether they used them directly or not did not affect the frequency and temporal features of the interaction as a result of in-group comparisons. This fact indicates that their lexical knowledge of the geometric figures was not a crucial factor for the frequency of turns and the needed time in their interaction.

IV. Qualitative Analysis of the Data

The quantitative analysis was conducted by simply counting the occurrences of encoded utterance features (e.g., the director's description, confirmation check, and

clarification request) and by measuring the length of time necessary for each task (e.g., the time that the director started describing figures after a task image was displayed on the screen, the time length of his/her description, and the overall time from the beginning to the end of each task). These analyses revealed the interactive features summarized above; however, they do not account very much for the interactive CS which are different from lexical CS in traditional CS studies. In the rest of this study, four interactive CS that were observed in the data will be discussed, showing some examples from the transcribed data. These four strategies are: appeal for assistance, consideration strategies, strategies from a context clue, and cover strategies.

1. Appeal for Assistance

The CS term *appeal for assistance* was originally coined by Tarone (1977), and different terms were preferred by other product-oriented CS researchers (e.g., *cooperative strategies* by Færch and Kasper 1983). No matter what their terms are, how this strategy is used in actual communication has not been investigated to a full extent in CS studies up to date. Tarone (1983), for example, listed some obvious examples of appeal for assassinate ("What is this?" and "What called?") in her taxonomy; however, this strategy seems to have more complex nature in actual interaction than it was originally supposed.

In the data of this study, a direct appeal for assistance was observed in very limited occasions. The following is such a rare example[1]:

Example 1: 14 NNSM(F)-NNSM (V); Task Image A-4

D: Two pictures in front of me (1.0) u:h (1.9) it's~a big ekzagonal [his pronunciation] (.6) I hope it's a right word for (.9) 1, 2, 3, 4, 5, six angles [laugh] shape. On the A~picture~they's~the same shape inside~a black shape, ekzagonal shape and it's right in the middle and in picture B instead of the ekzagonal shape inside I have a circle right in the middle.

M: So number A, two exo uh,~how do you say that word again?

D: Egzagonal.

The matcher did not know the word the director used for his description of the hexagon figure. Even though the word 'ekzagonal' (hexagonal) was coined by the non-native director, the matcher was unfamiliar with the name of this figure and appealed for help directly, saying "how do you say that word again?"

On most occasions, however, the use of this strategy is less direct than this example shows. Look at the following examples:

Example 2: 9 NNSM(D)-NSM; Task Image B-1

D: U:m (2.0) now I'm gonna get~problem with my English, uh my, my English language. It's a pyramid (BK) but it's not a pyramid 'cause it's round on the outside, but I don't know the English word for it. It think~it's~I know the Dutch word for it.

M: Cone.

D: A cone. OK, it's a cone. Thank you.

Example 3: 4 NSM-NSM

D: OK u:m~in A and B u:m (1.0) how do you say these like hexagons or something like that. I can't remember.

M: Yep, hexagons. It is.

The director of the first example is a non-native speaker, and he declared clearly to his interlocutor that his lexical knowledge was not adequate enough to describe the figure. He did not, however, utter any request for help in an explicit manner. The matcher responded by the right word 'cone', reading the director's implication appropriately.

This type of utterance is also observed often in the interaction by native speakers as in example 3. The director of this example was unsure whether 'hexagon' was a correct word or not, so he chose to say "hexagons or something like that. I can't remember." The matcher confirmed the director's use of the word, and the conversation was continued.

As these three examples show, appeal for assistance is used directly (example 1) or indirectly (examples 2 and 3), and its use by NNS was far more frequent by NS obviously due to their lexical deficits.

The indirect appeal for assistance seems to have a formulaic pattern; that is, to declare the speaker's linguistic problem first and then to continue to talk, using various conventional CS until his/her partner understands his/her intention or until his/her partner returns proper assistance for the problem. A typical example of this pattern can be observed in the next interaction:

Example 4: 10 NNSF(S)-NSF: Task Image A-3

D: OK now we have two::~I don't know how you say this in English. [M's laughter] Rombos [with Spanish pronunciation], kind of the squares when they are stretched.

M: U::m? [incomprehension]

D: One inside of /M/ /the other one./ Yeah, a rhombus.

M: /Oh, rhombus./

In this example, the director of a native Spanish speaker announced her lexical problem first, and then she used a Spanish cognate and transferred her first language knowledge to her utterance. The native matcher could not comprehend the word first, but the director kept on talking. During the director's further description, the matcher could identify the word. The lexical problem to complete the task was eliminated by the director's confirmation with a strong intonation "Yeah, a rhombus."

It is by no means clear whether or not this indirect interactive strategy is used by a speaker expecting his/her interlocutor's direct help, but it appears that a certain psychological process different from the direct appeal for assistance is underlying this. The interlocutor's help is accidental in case of an indirect appeal for assistance; in other

words, he/she may or may not offer his/her help to a speaker. In case of a direct appeal for assistance, on the other hand, a speaker uses this strategy expecting direct feedback from an interlocutor. For this reason, it may be necessary to distinguish the indirect appeal for assistance from the direct one and to set a different category such as *Declaration of Linguistic Deficit.*

2. Consideration Strategies

This is a strategy term created in this study; thus, no CS studies in the past have considered such strategies. Consideration strategies are used when a speaker tacitly understands from communicative interaction that the interlocutor's linguistic knowledge in certain area is limited or not adequate, and the speaker simplifies his/her utterance by being considerate of his/her partner to promote the partner's understanding. Strategies in this category are similar to what traditionally called *foreigner talk*; however, the use of these strategies is not limited to a conversation in which non-native speakers are involved. Let's take a look at the following example:

Example 5: 11 NSF-NNSM(N): Task Image B-5

D: OK, this shape has 1, 2, 3, four sides, (1.3) and they're all different lengths. (.9) And in A, the short side's on top,~but in B the short side's on bottom. (3.0) And the~um~it's like the short side's~on top in A, an' the long side's on the bottom. An' in B the long side is on the top and the short side is on the bottom,~but there's

M: So at left, the long side is on~

In this example, the native director did not use the geometric term 'trapezoid'; instead, she referred to the figure as "four sides, and they're all different lengths." In her psychological state, she probably assumed from the preceding tasks that her non-native interlocutor would face a difficulty to understand the geometric term and that the simplified utterance was more effective to smooth the mutual understanding. In fact, the non-native matcher first played the part of the director in this pair (task images A-1 to A-5), and he exposed his difficulty in expressing some names of geometric figures. Thus, the native speaker probably decided not to use the geometric name.

Example 5 is an example where a non-native speaker was involved, but the use of consideration strategies was also identified in native interaction. The next example is such a case:

Example 6: NSM-NSF: Task Image A-1

D: OK they're~two (1.1) pictures. Each one has a~shaded circle~with an ellipse~in~side of it. In picture A, the ellipse is oriented to the right~of the larger circle, in B, the ellipse is~almost in the center~of the circle.

M: OK J [name of the director], could I ask the geometry expression?

D: The ellipse is an oval.

In this example, the matcher was not familiar with the geometric term 'ellipse', so she asked to clarify the term. Then, the director used a more ordinary term 'oval' to help

her understand his description. From this interaction, the director came to know that the matcher's geometric knowledge was limited. His consideration to his interlocutor can be also seen in the next utterance for the task image A-5:

Example 7

D: OK both are~triangles. A~triangle all sides are the same. (.8) And B (.7) is kin'of I think it is an isosceles triangle, where two of the sides are the same, which of the two~the two top~lines are the same, bu'~uh~the bottom, the base~is smaller than the sides in B. So A~is a triangle with all sides the same, all angles the same. (BK) And B uhm (1.1) two sides the same and the base smaller.

The director knew the geometric term 'isosceles', so he must have known the term 'equilateral', too. He might have preferred to use both of these terms; however, he described the feature of the equilateral triangle first and defined the isosceles triangle immediately after he mentioned the term. It seems quite reasonable to consider that he avoided mentioning only their geometric names because he had already understood the matcher's weakness of geometry from the preceding task (example 6).

Theoretically, *conversational maxim* by Grice (1975) and *principle of mutual responsibility* by Clark and Wilkes-Gibbs (1986) seem applicable to account for the use of consideration strategies. The director of the above examples could get rid of verbosity by mentioning the geometric terms directly, which can be explained by Grice's *maxim of manner* (i.e., speak things clearly and briefly). However, he did not do so because he came to know that his interlocutor's geometric knowledge was not enough to understand the less verbose expressions from the preceding interaction. As an alternative, he followed the *maxim of quantity* (i.e., give as much information as is needed).

An important principle of mutual responsibility by Clark and Wilkes-Gibbs is to minimize collaborative effort. Since both the director and the matcher wanted to reach an agreement as soon as possible, the direct use of geometric terms must have been the most efficient and economical choice for the director to deliver his intention if the matcher had known them. He unconsciously knew, however, that linguistic efficiency and economy did not guarantee her immediate understanding. Sacrificing the efficiency and economy, he chose the most verbose alternative because he judged that this would be most effective to help her understand his intention and, thus, would be able to minimize their interactive effort.

3. Strategies from a Context Clue

The term for this third category is also coined in this study. In natural interaction, we sometimes establish a mutually understandable linguistic rule from the interactive context, which does not require the conventional names of referents. Strategies from a context clue are used when this kind of a mutual agreement is built up between a

speaker and a listener tacitly. The following example illustrates the use of such a strategy:

Example 8: 15 NNSF(J)-NNSF(S); Task Image B-2

D: 1, 2, 3, 4, 5, 6, 7, 8, eight lines are connected. In A, each line is~same length. (BK) And in B, two of them are longer than~the other 1, 2, 3, 4, five lines.

M: Uh-ha. Where're those two?

D: Two of them~the longer one~is~in the left side, (BK) (1.4) an' it's longer.~

In this example, the non-native director described the octagon by stating the number of connecting lines. It was found from a brief geometric test given after all the interactive tasks that her lexical knowledge on geometric terms was very limited. The reason why she referred to this figure in this way was very much likely to be due to her limited linguistic resources. In the rest of the tasks to describe polygons, she relied on the same strategy and mentioned "five lines are connected" for the pentagon in B-4 and "four lines are connected " for the trapezoid in B-5.

In order to understand more accurately the reason why she kept on using this strategy, it is necessary to examine the context of her interaction with her partner carefully. In this non-native dyad, the matcher of the above example played the role of the director first and described the task images from A-1 to A-5. When they tried the task image A-3 (the diamond figure), they needed 204.6 seconds to reach an agreement, which is far above the average length of time (38.82 seconds) necessary for each task by NNS-NNS pairs. During this long lasting task and the following tasks, they coincidentally found a clue to solve their linguistic problems. A sign to establish this mutual rule can be found at the beginning of this A-3 task:

Example 9

D: OK~we have uh~I don't know how [laugh] this is called. U:m (1.4) they are uh ou how a, (.7) um romboids? /No?/

M: /How/ many lines are connected?

D: OK it's four lines, it's not a square, (BK) but it's uh~(BK) longer.

Mutual understanding for the use of this tacit rule was further strengthened by the next task A-4:

Example 10

D: OK, now we have six (.7) uh six sides, (BK) in the figure.

M: Six lines connected?

M: Six lines connected. (BK) A:nd~they are (.9) two: figures that uh, that have six lines connected. (BK) A:nd~and then, one, it's darker /BK/ /one, I mean/ one is completely dark, /BK/ /one/ is black. (BK) And the other one, it's transparent.

Once this rule had been established, they could successfully complete the remaining tasks within very short time (e.g., 22.2 seconds for B-4 and 24.1 seconds for B-5, which are far below the average length of time mentioned above.) Here in this dyad, we can also find a trait to minimize collaborative effort. Instead of searching for insufficient

linguistic knowledge, which could have resulted in hopeless efforts, they decided to count on an accidentally obtained rule from the interactive context because this rule was applicable to most of the task figures and, thus, guaranteed the fastest agreement for them with the least effort.

4. Cover Strategies

Cover strategies are passive strategies that are used by a listener who pretends to know what the speaker says. This term was originally introduced by Cohen (1998). Look at the following example:

Example 11: 7 NSF-NNSM(F): Task Image A-3

D: U:m~OK I have diamonds here,~ (BK) an' uh (1.3) one of them (.8) it there's [laugh] OK, diamond in the middle, an' then [laugh]

M: It's black in the middle? (1.6) Do they /if you know/ it's black?

D: /No./ [Wait until M finishes] No. Well yeah, I mean, it's /black and white./

M: /Yeah./ [He thought he found the figure.] No, not it.

D: I mean there's one that's crooked an' there's one that's straight.~I mean there's a~there's what? There's a diamond.

(The negotiation between D and M for about 50 seconds after this utterance is omitted.)

D: Yeah, but then A has the exact same~tri, uh the same diamond in the same shape. Bu' B, it's kind of crooked. You see?

M: Crooked?

D: 'Crooked' means like uh, it's not,~you know how the diamond in,~you know the outside diamond? (BK) Like it's just the exact same diamond, bu' smaller. Bu' in B, /BK/ the /diamond/ is the exact same diamond bu' just turned.

This is an example of where the negotiation between the director and matcher was not very successful. One major problem was that the matcher did not make a clarification request at the early stage of the interaction when the director first uttered the word 'crooked'. There are two reasons considered here. One is that he pretended that he knew the word; thus, he used a cover strategy. The other possible reason is that he simply did not catch the word. The latter case is simply a matter of his carelessness, and it may be necessary to distinguish from the former case.

Cover strategies are not productive strategies, and, therefore, it is ideal that L2 learners do not use them. There seems to be, however, some psychological mechanisms involved in the use of such strategies, and further investigations are necessary.

V. Conclusion

In this study, four interactive CS that were observed in the referential communication tasks have been discussed. Undoubtedly, these strategies are not comprehensive, and there should be other interactive CS which cannot be explained by traditional CS taxonomies. There are, in fact, some other plausible interactive CS that I wanted to take up in this study, but only major ones have been discussed due to the limited space of

this paper.

The discussion in this paper has been based on the qualitative analysis, so inevitably it has become product-oriented in nature. The psychological accounts for the use of the interactive strategies are merely assumptions of my own, and empirical evidence needs to be given to ascertain the plausibility of these assumptions.

As mentioned in the introduction of this paper, the effort to extend the notion of CS has just been started to be made for the last few years. Despite inadequate discussion of the present study, I strongly believe that this study will contribute to promoting understanding into the area of CS studies that none of the traditional CS researchers has attempted to look into.

Acknowledgments

The data collection for this study was conducted during my stay at the University of Minnesota, which was financially supported by the Japanese Ministry of Education and Hiroshima City University. The development of the computer program (SRAP) was also supported by a research grant by the Ministry of Education (Grant-in-Aid for Scientific Research (C), Research Code 09680285). I would like to express my sincere gratitude to those who provided me with these invaluable opportunities. I also want to thank David Shimizu and Kathleen Shimizu for their valuable suggestions to revise this paper. Needless to say, every one of the shortcomings of this study is my own responsibility.

Note

1 In each example, the following abbreviations and transcription sings are used. NS or NNS stands for whether the director and/or the matcher is a native speaker or a non-native speaker. The number in front of these abbreviations is the pair identification number. M and F attached to these abbreviations show the sex of a speaker, and the letter in parentheses next to NNS represents his/her first language: F-French; V-Vietnamese; D-Dutch, S-Spanish; N-Norwegian; J-Japanese; and F-Finnish.

The number inside parentheses in the transcription shows a pause length in second, and any pause shorter than a second is marked by '~'. The overlapping utterances are put in //. To save space, back channel cues such as "uh-ha" and "OK" from an interlocutor are shown in parentheses.

Bibliography

Abdesslem, H. 1996. "Communication Strategies or Discourse Strategies in Foreign Language Performance?" *IRAL* 34(1): 49-61.

Bachman, L. 1990. *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.

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

Clark, H. H., and Wilkes-Gibbs, D. 1986. "Referring as a Collaborative Process." *Cognition*, 22, 1-39.

Clennell, C. 1994a. "An Interlanguage Discourse Perspective on the Communication Strategies Used by Adult Second Language Learners of English When Performing Pedagogic Tasks." *ESLTA Journal*: 33-40.

Clennell, C. 1994b. "Investigating the Use of Communication Strategies in Adult Second Language Learners. A Case for Trusting Your Own Judgement in SL Classroom Research." *TESOL Journal* 4(1): 32-5.

Clennell, C. 1995. "Communication Strategies of Adult ESL Learners: A Discourse Perspective." *Prospect* 10(3): 4-20.

Cohen, A. 1998. *Strategies in Learning and Using a Second Language*. Longman.

Cohen, A., and Olshtain, E. 1993. "The Production of Speech Acts by EFL Learners." *TESOL Quarterly* 27(1): 33-56.

Færch, C., and Kasper, G. 1983. "Plans and Strategies in Foreign Language Communication," in C. Færch and G. Kasper, eds., *Strategies in Interlanguage Communication*. London: Longman, 20-60.

Grice, H. P. 1975. "Logic and Conversation," in P. Cole and J. L. Morgan, eds., *Syntax and Semantics, Vol. 3, Speech Acts*. New York: Adamedim Press, 41-58.

Hymes, D. 1972. "On Communicative Competence," in J. Pride and J. Holmes, eds., *Sociolinguistics*. Harmondsworth: Penguin, 269-293.

Iwai, C. 1998. "Strategic Competence and Communication Strategies." *Hiroshima Journal of International Studies*, 4, 159-172.

Iwai, C. In press. 岩井千秋 「インターラクションとコミュニケーション方略」『中国地区英語教育学会研究紀要』29.

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, and M. Swain, eds., *Foreign/second language pedagogy research: A commemorative volume for Claus Færch*. Clevedon, England: Multilingual Matters, 142-161.

Poulisse, N. (in collaboration with T. Bongaerts and E. Kellerman.) 1990. *The Use of Compensatory Strategies by Dutch Learners of English*. Dordrent, Holland: Foris Publications.

Rampton, B. 1997. "A Sociolinguistic Perspective on L2 Communication Strategies," in G. Kasper and E. Kellerman, eds., *Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives*. Addison Wesley Longman, 279-303.

Takatsuka, N. 1997. 高塚成信 「コミュニケーション方略の指導—文法的問題の回避と解決—」『岡山大学教育学部研究集録』第106号, 119-131.

Takatsuka, N. 1998. (印刷中)「文生成における語彙的・文法的問題のglobal solutions」『岡山大学教育学部研究集録』第109号.

Tarone, E. 1977. "Conscious Communication Strategies in Interlanguage: A Progress Report," in H. Brown, C. Yorio and R. Crymes, eds., *On TESOL 77. Teaching and Learning English as a Second Language*. Washington, D.C.: TESOL, 194-203.

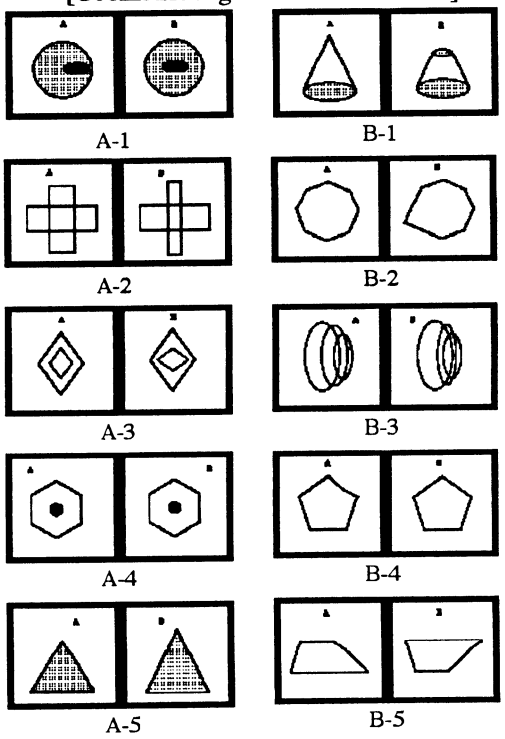
Tarone, E. 1983. "Some Thoughts on the Notion of 'Communication Strategy'," in C. Færch and G. Kasper, eds., *Strategies in Interlanguage Communication*. London: Longman, 61-74.

Wagner, J., and Firth, A. 1997. "Communication Strategies at Work," in G. Kasper and E. Kellerman, eds., *Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives*. Addison Wesley Longman, 323-344.

Williams, J., Inscoe, R., and Tasker, T. 1997. "Communication Strategies in Interactional Context: The Mutual Achievement of Comprehension," in G. Kasper and E. Kellerman, eds., *Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives*. Addison Wesley Longman, 304-322.

[Appendix]

[Geometric Figures for the Director]



[A List of Geometric Figures for the Matcher]