On the Instruction of Conversational Strategies to Japanese Junior High School Students: Implications From the Analysis of Hesitation Phenomena in Their Utterances

Shinya HISAYAMA
Hiroshima University High School

Abstract

With the purpose of identifying strategies to be taught in junior high schools, the present study (a) investigates the relations among hesitation phenomena in students’ utterances, their linguistic proficiency, and their anxiety over English conversations, and (b) explores students’ use of Conversational Strategies. To this end, proficiency tests (consisting of Listening (section) and Structure & Reading (section)), four-point-scale questionnaires for measuring anxiety, and a four-minute interview task were administered to 37 JHS students. The results show that (a) students lacked turn-taking skills, (b) linguistic proficiency had much to do with speech rate, (c) pause length was relevant to students’ anxiety, and (d) students rarely used Conversational Strategies like ‘Asking for Repetitions’, ‘Fillers’, and ‘Paraphrasing’.

1. Introduction

Because of their insufficient linguistic proficiency, novice L2 learners often have difficulty in their target language use. In addition, their language use is occasionally distracted by affective factors such as anxiety. To help the learners overcome hiatus in communication caused by these factors, many researchers have insisted on the effectiveness of teaching communication strategies (henceforth CS) to L2 learners (Faerch & Kasper 1983b, Tarone & Yule 1989, and Dormeyer 1995, to name a few). However, the value of teaching these strategies to L2 learners has been strongly questioned by the school of psycholinguists who claim a similarity in cognitive processes behind L1 and L2 productions (Bialystok 1990, Kellerman 1991). This unsettled argument has caused a puzzling situation among researchers and practitioners, and “the definitive study on the value of communication strategy teaching remains to be done” (Yule & Tarone, 1997, p. 29).

The present study has an exploratory character in that it aims to obtain implications for better CS training through the analysis of learners’ hesitation phenomena. Before we discuss the effectiveness of CS training, the strategies needed and desirable to be taught must be revealed.
2. Theoretical Background

2.1. CS and Conversational Strategies

In his comprehensive volume which analyzed the status quo of CS research, Iwai (2000) summarized three major definitions submitted in the field: interactive definition by Tarone (1983), psychological definition by Faerch and Kasper (1983b), and process-oriented definition of Nimgen project. The difference among these definitions appears to arise from aspects in CS production emphasized by the researchers. In these researches, however, the attention of researchers was mainly drawn to productive strategies, namely, strategies used to solve problems in the language production process, especially, the problem of vocabulary deficiency (Iwai, 2000). Little attention was paid to receptive strategies, that is, strategies employed when learners face difficulties in understanding their interlocutor’s messages.

This imbalance in interest between productive and receptive strategies was reduced in the notion of Conversational Strategy (henceforth ConS) presented by Domyei and Thurrell (1992). Whereas their taxonomy includes traditional categories like ‘message adjustment or avoidance’, ‘paraphrasing’, and ‘mime’, it should be noted here that Domyei and Thurrell suggested the following five sub-strategies as constituents of ‘appeal for help’:

1) Asking the other speaker to repeat when you have not heard or understood something.
2) Asking the other speaker to explain something you do not understand.
3) Checking whether the other person has understood what you have said.
4) Checking whether the other person is paying attention to what you are saying.
5) Reforming what you or the other speaker has said.

(Domyei & Thurrell, 1992, p.43)

Here, the first and the second definition correspond to receptive strategies. The importance of teaching these strategies was also supported by Inuzuka (2002) and Machida (2004), who investigated the effectiveness of CS instruction to Japanese junior high school students.

Domyei and Thurrell’s taxonomy is unique in that it includes a ‘buying time’ strategy. This is used when learners need time to think in conversations. Such time-gaining devices will be useful for novice learners who need more time to think than proficient learners.

Considering these points, I will adopt the term ConS in this research.

2.2. Hesitation Phenomena

In Hisayama (1996), the author analyzed the fluency of picture descriptions made by college students. Criteria used for the analysis were three hesitation phenomena: Pause Length, Frequency of Repetitions, and Frequency of Self-corrections. When these hesitation phenomena are occurring in learners’ utterances, it may be presumed that they are facing problems in their target language use. Another significant aspect of hesitation phenomena is their negative impression over an interlocutor. Lennon (1990) revealed that pauses and repetitions in learner’s utterances may work as dysfluency markers to
their listeners. The more pauses and repetitions appear in learners’ speech, the less fluent impressions they may give to listeners. Thus, it is desirable to reduce the occurrence of these phenomena in learners’ utterances.

2.3. Causes of Hesitation Phenomena

Hesitation phenomena can be caused by many factors. In this study, we will focus on two of them – linguistic proficiency and anxiety. First, let us draw our attention to linguistic proficiency. It is certain that low linguistic proficiency is responsible for the frequent occurrence of hesitation phenomena. When learners face difficulties in their target language use, the first thing it was attributed to was their deficiency in linguistic knowledge or skills. Actually, in CS research, the relation between learners’ linguistic proficiency and their CS use was occasionally investigated (Iwai, 2000). The hypothesis in these researches was that low proficiency causes more problems in target language use and leads to the frequent use of CS. This hypothesis has been confirmed so far.

Next, let us move on to the second factor, anxiety. Bachman and Palmer (1996) included ‘affective schemata’ in their model of communicative language ability for the first time. The significance of this affective component was mentioned as follows:

The affective schemata, …, determine, …, the language user’s affective response to the task, and can both facilitate and limit the flexibility with which he responds in a given context.

(Bachman & Palmer, 1996, p. 65, emphasis added)

Bachman and Palmer illustrated the case where affective schemata facilitate learners’ linguistic performance; in other words, those who like to communicate with others tend to get high scores on an interview test. Of course, however, the opposite case will be possible. In this study, therefore, negative affective schemata and its influence over hesitation phenomena were explored.

3. Method

3.1. Participants

37 third year junior high school students participated in this research. They were the students in one of the classes taught by the author. 20 of the 37 participants had passed Grade 3 in the EIKEN Test (a suite of tests administered by The Society For Testing English Proficiency), 12 of them had passed Grade 4, and two had got Grade Pre-2 at the time of the survey.

3.2. Data Collection

3.2.1. Linguistic Proficiency Test

As a proficiency benchmark of the participants, the total score of two English examinations during the class was used in the present study. The test consisted of two sections, namely, Listening section (a total of 25 marks) and Structure and Reading section (a total of 175 marks).
3.2.2. Scales for Measuring Anxiety

With a view to measuring participants’ anxiety over English conversations, a questionnaire consisting of 13 items was prepared (See Appendix). These items were adapted from the Japanese Language Anxiety Scale invented by Motoda (2005), in which she provided 23 items to measure outside-the-classroom anxiety of Japanese language learners in Japan. In order to measure the participants’ in-classroom anxiety, another questionnaire, consisting of 21 items, was also prepared. Both questionnaires have a four-point scale, ranging from (1) “strongly disagree” to (4) “strongly agree”.

3.2.3. Task

The participants were asked to talk about their school life with their ALT. The interview lasted about four minutes, and all conversations were videotaped. Each conversation was transcribed by the author for the later analysis.

3.3. Analysis

3.3.1. Cluster Analysis

Cluster analysis was used to classify the participants into subgroups and to clarify their characteristics. The variables in this clustering were the scores of the listening test, the structure and reading test, the in-classroom anxiety questionnaire, and the in-conversation anxiety questionnaire. Because these four variables have varying distribution, Z-score standardization was employed before calculating the distance matrix. Ward’s linkage method was chosen and the dendrogram was obtained with the analyses Euclidean distances using Excel Macro program. 

3.3.2. Units of Speech Data

In the recent volume which introduces a variety of approaches to analyze learners’ language, Ellis and Barkhuizen (2006) point out the difficulty in identifying units of analysis in learners’ speech data, because there are “a plethora of definitions” (Ibid. p.147). Among these definitions, the five-leveled hierarchy presented by Stenstrom (1994) was chosen in the present study. The validity of this model lies in the fact that it synthesizes much of the work done in the field of interaction analysis and it uses natural spoken data in London-Lund Corpus. The definition of each unit is as follows:

- The TRANSACTION consists of one or more exchanges dealing with one single topic; one or more transactions make up a conversation
- The EXCHANGE is the smallest interactive unit consisting, minimally, of two turns produced by two different speakers
- The TURN is everything the current speaker says before the next speaker takes over; it consists of one or more moves
- The MOVE is what the speaker does in a turn in order to start, carry on and finish an exchange, i.e. the way s/he interacts; it consists of one or more acts
- The ACT signals what the speaker intends, what s/he wants to communicate; it is the
3.3.3. Measurement of Hesitation Phenomena

Ellis and Barkhuizen (2006) mention two kinds of measures of fluency. The first measure is “temporal variables” relating to speed of speaking, which consists of four factors — speech rate, number of pauses, pause length, and length of run. The second measure is “hesitation phenomena” or dysfluency markers, whose constituents are false start, repetitions, reformulations, and replacement.

With a purpose of expressing speech fluency numerically, speech rate and occurrence of two hesitation phenomena — Pause Length and Frequency of Repetitions were measured. As for the use of ConS, three types of strategies — Asking for Repetitions, Fillers (a buying time strategy), and Paraphrasing — were chosen to be analyzed.

4. Results and Discussion

4.1. Clusters of the Participants

The participants were classified into five subgroups after applying cluster analysis. The cutting point, shown by the vertical broken line in Figure 1, was decided by considering characteristics of each cluster. Table 1 shows the descriptive statistics of five clusters.

![Figure 1 Dendrogram for the classification](image)

<table>
<thead>
<tr>
<th></th>
<th>Listening</th>
<th>Structure &amp; Reading</th>
<th>Anxiety (in-classroom)</th>
<th>Anxiety (in-conversation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Cluster 1 (n = 11)</td>
<td>0.72</td>
<td>0.69</td>
<td>0.61</td>
<td>0.38</td>
</tr>
<tr>
<td>Cluster 2 (n = 11)</td>
<td>0.18</td>
<td>0.72</td>
<td>0.79</td>
<td>0.43</td>
</tr>
<tr>
<td>Cluster 3 (n = 2)</td>
<td>0.69</td>
<td>0.22</td>
<td>-0.22</td>
<td>1.50</td>
</tr>
<tr>
<td>Cluster 4 (n = 7)</td>
<td>-1.25</td>
<td>0.89</td>
<td>-1.05</td>
<td>0.41</td>
</tr>
<tr>
<td>Cluster 5 (n = 6)</td>
<td>-0.33</td>
<td>0.81</td>
<td>-1.26</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Table 1 Descriptive statistics of five clusters
Participants in Cluster 1 (29.7%) and 2 (29.7%) were characterized by high scores on linguistic proficiency scales (Listening and Structure & Reading) relative to participants in Cluster 4 (18.9%) and Cluster 5 (16.2%). However, participants in Cluster 1 were distinguished from those in Cluster 2 by relatively low scores on anxiety scales. Also, participants in Cluster 4 were distinguished from those in Cluster 5 by their low level of anxiety. Participants in Cluster 3 (5.4%) were characterized by having the lowest scores on anxiety scales.

4.2. Speech Data

Table 2 summarizes indices of fluency in participants' utterances and their ConS use. The data shows that the participants uttered 2.17 words per TURN in a conversation, while ALT articulated 7.75 words. This means the participants held only 21.7% of utterances in the interview.

With regard to Pause Length, each participant differed greatly in their production of pauses. While one participant completely avoided making a pause which lasted more than one second, another participant made lengthy pauses occasionally and filled more than half of his interview time with silence. The mean length of a pause per TURN was 1.23 seconds. Another dysfluency marker, Repetition, was rarely observed in the present study. The participants used Repetitions only 4.1 times in their utterances.

Now, let us switch our attention to the use of ConS. Instead of using English Fillers such as “Well”, “You know”, “I mean”, the participants mainly used Japanese Fillers at two points: at the beginning of their TURN and at “lexical selection points” (Faerch & Kasper, 1983c, p. 215). As for the strategies of Asking for Repetitions, whereas 74% of them were executed in English like “Pardon?”, the other 26% were in Japanese.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Max</th>
<th>Min</th>
</tr>
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<tbody>
<tr>
<td>Total Number of Words</td>
<td>75.8</td>
<td>31.3</td>
<td>172</td>
<td>26</td>
</tr>
<tr>
<td>Total Number of TURN</td>
<td>34.8</td>
<td>6.6</td>
<td>60</td>
<td>23</td>
</tr>
<tr>
<td>Total Number of EXCHANGE</td>
<td>23.7</td>
<td>5.2</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>Pause Length (sec.)</td>
<td>40.0</td>
<td>25.6</td>
<td>128</td>
<td>0</td>
</tr>
<tr>
<td>Frequency of Repetitions</td>
<td>4.1</td>
<td>4.4</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Frequency of Asking for Repetitions</td>
<td>1.5</td>
<td>1.6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Frequency of Fillers</td>
<td>5.2</td>
<td>4.1</td>
<td>14</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2  Speech data per participant

The graph in Figure 2 illustrates which speaker, the participant or the ALT, took initiative in an EXCHANGE. ALT Q in the graph, which occupies 78.9%, shows that an EXCHANGE was started with questions by the ALT like “What subjects do you like?” The bordered area in the graph, that is ALT S (8.7%), stands for cases where the ALT opened an EXCHANGE with making a statement, e.g.; “Science was my favorite subject.” The least occupied area in the graph (0.6%) is Student Q, which shows that an EXCHANGE was initiated by students’ questions, e.g.; “Where are you from?” The striped area in the graph, that is Student S (3.9%), expresses the cases where the student started an
EXCHANGE with their statement, e.g.; “I want to go to a foreign country.” These results indicate that most of the conversations were dominated by the ALT, who initiated an EXCHANGE 19 times more frequently than the students.

![Figure 2 Initiation of EXCHANGE](image)

Table 3 presents the means of speech data in clusters. ‘Only Pause TURN (henceforth OPT)’ in the last line of the table shows the case where the participant said nothing during their TURN and yielded it to the ALT. As for Total Number of Words, the participants in Cluster 1 and Cluster 2 uttered significantly more words ($M = 87.4$, $SD = 30.6$) than those who were in Cluster 3 and Cluster 4 ($M = 52.4$, $SD = 12.8$), $t(33) = 3.90$, $p<0.001$. The participants in Cluster 5 made the longest pause in the interview ($M = 63.0$, $SD = 33.3$), which were significantly longer than those of Cluster 1 ($M = 29.9$, $SD = 17.6$), $t(15) = -2.72$, $p = 0.015$, and Cluster 2 ($M = 31.2$, $SD = 24.9$), $t(15) = -2.24$, $p = 0.040$. Also, the results indicate that the ratio of OPT of Cluster 5 (18.9%) was the highest among five clusters.

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Words</td>
<td>82.6</td>
<td>92.1</td>
<td>101.1</td>
<td>57.7</td>
<td>46.2</td>
</tr>
<tr>
<td>Total Number of TURN</td>
<td>34.7</td>
<td>37.2</td>
<td>34.5</td>
<td>36.0</td>
<td>29.2</td>
</tr>
<tr>
<td>Total Number of EXCHANGE</td>
<td>24.5</td>
<td>25.6</td>
<td>23.0</td>
<td>22.9</td>
<td>20.0</td>
</tr>
<tr>
<td>Pause Length (sec.)</td>
<td>29.9</td>
<td>31.2</td>
<td>44.0</td>
<td>48.9</td>
<td>63.0</td>
</tr>
<tr>
<td>Only Pause TURN/Total Number of TURN (%)</td>
<td>6.7</td>
<td>15.7</td>
<td>2.9</td>
<td>11.8</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Table 3 Means of speech data for each cluster

The last point to be mentioned is the use of paraphrasing. Ten samples of paraphrasing were observed in the research. Six of them were used by the participants in Cluster 1, and two of them were employed by the participant in Cluster 3. The other two samples were produced by the participants in Cluster 2 and Cluster 4. The strategies used in Cluster 1 and 2 were ‘approximation’, e.g. ‘character’ for ‘Peter Rabbit’, and ‘code-switching’, e.g. ‘/pomeranian’ for ‘Pomeranian’. The participant in Cluster 3 used only ‘code-switching’, e.g. ‘/židen’ for ‘a street car’. The participant in Cluster 4 used gestures in his utterances.

4.3. Discussion

As mentioned in the previous section, the ALT held the floor of conversation in most cases. The following extraction from the data shows a typical pattern of interaction:

ALT: OK. Do you belong to any club? [Initiate]
Participant: --- I’m in the tennis club. [Response]
ALT: Uh. OK. OK. um How often do you play tennis? [Follow-up][Initiate]
Participant: Five days in a week. [Response]
ALT: Five days a week. OK. um What time do you play tennis? [Follow-up][Initiate]
Participant: After school. [Response]
ALT: After school. OK….... [Follow-up] (01, Cluster 1)

Here, the participant’s role in the conversation appears to be just ‘being asked’. One possible cause for this participants’ passiveness in conversations is that, in a teacher-centered classroom, students are unlikely to have a chance of two-way communication. In other words, teachers tend to extract answers from students by giving them questions, and they evaluate students’ answers by saying, “Good,” or “That’s right.” In these classes, students seldom return a question such as “What do you think”, or “How about you?”

With regard to the number of words uttered in the interview, the participants articulated 2.71 words per TURN. This result implies that the participants’ utterances were limited to word- or phrase-level. This tendency strongly manifested among the participants in Cluster 4 \(M = 1.60\) and Cluster 5 \(M = 1.58\), who had relatively low linguistic proficiency. Thus, there is a good possibility that enhancing students’ linguistic proficiency will result in increasing their speech rate.

The next argument deals with the occurrence of pauses. The fact that more than 15% of the TURN of Cluster 2- and Cluster 5-participants were occupied with OPT implies that the occurrence of OPT has something to do with anxiety. To put it another way, the more anxiety the learners feel, the more OPT might be observed in their utterances. It is true that the occurrence of pauses depends on the learners’ linguistic proficiency, but the influence of anxiety should not be overlooked.

As for the use of ConS, it was illustrated that the participants were in need of over-learning of these strategies. Although the participants had the linguistic knowledge of Asking for Repetitions and Fillers, that is, they knew the phrases such as “I beg your pardon,” or “Well,” they were not able to activate this knowledge unconsciously in on-line dialogue. Therefore, when the participants’ attention was drawn to contents of their messages, these strategies were automatically employed in their first language (Faerch & Kasper, 1983c).

The last point to be discussed here is the use of another ConS – Paraphrasing. Among the total of 2,800 words in the present data, only ten samples were obtained. The scarcity of this strategy may be attributed to the linguistically burdensome process in the use of this strategy. This assumption coincides with the fact that nine out of ten samples were used by the participants with high linguistic proficiency. In case when both ‘code-switching’ and ‘approximation’ were used by the same speaker, the former appeared prior to the latter. A legitimate reasoning for this L1-strategy preference is that the speaker gave priority over the flow of conversation and ran a risk of misunderstanding. In other words, the participant preferred “economy” to “clarity” (Poulisse, 1997, p. 50).
5. Conclusions

I would like to summarize five implications for the instruction of ConS. First, in order to make a conversation more interactive, the students need to be taught how to take turns effectively and naturally. After the interview, the ALT commented as follows, “Don’t wait to be asked. If one person feels s/he has to ask all the questions, the conversation dies!” His comment should not be forgotten. Second, with a purpose of speaking more in conversation, students must enhance their linguistic proficiency. Especially, those who are in Cluster 4 and Cluster 5 will need special attention. Third, a great deal of practice of Asking for Repetitions and Fillers are necessary to ensure automatization of these strategies. Fourth, the way to relieve anxiety among the students must be investigated, especially for those who are categorized to Cluster 2 and Cluster 5. To help this investigation, a careful analysis of in-class and in-conversation questionnaire results is needed. Finally, the students need to be aware of the effectiveness of paraphrasing.

It should be noted that this study examined only on-line spoken data in the interview. Therefore, it was impossible in the present study to analyze what was happening in the students’ minds when they kept silent. Think-aloud data would help us to reveal these hidden processes.

Notes

1 This program is available at http://aoki2.si.gunma-u.ac.jp/lecture/stats-by-excel-vba/html/ clustan.html.

References

犬塚章夫. (2002). 「生徒はいかにしてコミュニケーション・ストラテジーを習得するか—日本人中学
Appendix

Items in In-conversation Anxiety Scale

1. ALT と話しているとき、英語を間違えないか心配です。
2. ALT が、私の英語を下手だと思わないか心配です。
3. ALT が、授業で勉強したものと違う英語を使ったとき、不安になります。
4. ALT との会話で、言いたいことが英語で上手く言えないとき、あせります。
5. 何回言っても、ALT が私の英語を分からないとき、あせります。
6. ALT が私の英語を聞いて、“What?”や“Pardon?”などと聞き返したとき、不安になります。
7. ALT が、私の知らない英語をたくさん話すと不安になります。
8. ALT との会話で、知っている英語が思い出せないとき、あせります。
9. ALT の英語が分からないと、どう反応してよいか分からないとき不安になります。
10. 私には英語の会話能力がないのだろうかと、心配になります。
11. ALT が私の英語を聞いて、分からないという顔をしたとき、不安になります。
12. ALT が、私の英語を笑わないか心配です。
13. 英語での会話が、なかなか上手にならないことが心配です。