Abstract

This study examines differences in structural features of orally-constructed arguments between Advanced and Superior learners of Japanese. By doing so, it attempts to reveal the specific criteria with which Japanese teachers of the language use to evaluate learners’ arguments. Two hypotheses are posited: (a) Superior learners’ arguments are more likely than Advanced learners’ to have substantial macro structures, and (b) Superior learners’ arguments are more likely than Advanced learners’ to have more complex micro structures. A research question asks whether there is a difference in the frequency with which any structural function is used in arguments between the two groups of learners. Data were taken from ACTFL-OPI interviews with learners of Japanese. They were analyzed using a framework for analyzing informal argument. Results provide evidence to support the first hypothesis, and evidence to partially support the second hypothesis. With regard to the research question, it was found that Superior learners use the repeating/rephrasing function more frequently than Advanced learners. Also, it was found that Advanced learners use the non-relevant function more frequently than Superior learners in their arguments. Implications of the findings of this study for intercultural communication research and foreign language teaching are discussed.

Literature Review

Argument has long been an important topic of interest to researchers. One of the major interests to researchers in recent decades has been the analysis of the structural features of informal arguments in everyday communication. This interest is partially demonstrated by the number of studies on the subject (e.g., Azar, 1999; Crammond, 1998; Hays & Brandt, 1992; Scardamalia, Bereiter, & Goelman, 1982; Simosi, 2003; Stein & Miller, 1993; Warnick & Manusov, 2000; Werder, 1999).

Of particular relevance to foreign language teaching and intercultural communication research are studies on cross-cultural differences in argument structures in foreign language teaching. These studies attempt to illuminate the problems that second language learners encounter in constructing arguments, which may be attributable to interference from their first language. For example, some studies have compared arguments constructed in L2 across learners from different cultural backgrounds (Connor, 1996; Kaplan, 1996; Warnick & Manusov, 2000). Other studies have compared native speakers' arguments in their L1 between two cultures (Kobayashi, 1984), while other studies have focused on analyzing arguments in one culture outside the tradition of Western rhetoric (Hinds, 1990). While these studies have implications for teaching foreign languages to students from various cultural backgrounds, the literature reveals little about how learners’ language proficiency affects specific features of
arguments. Because discourse, including argument, in L2 is a communicative act which is likely to be influenced both by an individual learner’s language proficiency and his or her cultural background, it is important to pay more attention to how language proficiency affects learners’ arguments.

Studies (Crammond, 1998; Hays & Brandt, 1992; Scardamalia, et al, 1982) do exist that examine the relationship between children’s age and argument structures, where the main issue is how children’s cognitive development and classroom instruction affect the structures of the arguments they construct. In foreign language teaching, however, the main issue is how learners’ cognitive processing capacity in L2, which is likely to advance together with their L2 proficiency level, affects the structures of learners' arguments, aside from the issue of their general cognitive ability. There appears to be a need to study the relationship between language learners' proficiency level and their argument structures.

Another issue that needs to be raised is the paucity of research on spoken arguments constructed by language learners. With few exceptions (e.g., Warnick & Manusov, 2000), most of the studies on this subject deal with arguments in written compositions. We know very little about how language learners construct arguments in oral communication. As argued by Warnick and Manusov (2000), findings based on written compositions cannot necessarily be generalized to conversational practices. In the ACTFL Proficiency Guidelines (Breiner-Sanders, Lowe, Miles, & Swender, 2000), it is stated that speakers at the Superior level are able to consistently “... provide structured argument to explain and defend opinions...” (p. 18). However, specific features of arguments that distinguish proficient learners from less proficient learners remain unclear. In an effort to shed more light on this area, the present study examines structural features of arguments in oral communication between Advanced and Superior learners of Japanese.

This paper first provides a definition of argument as used in this study. After that it attempts to explain how learners’ proficiency levels affect structural features of arguments they construct.

**Definition of Argument**

As Reinard (1991) claims, most of traditional argumentation studies understand that argumentation is communication that uses logic and rational appeals. Warnick and Inch (1989), offering one typical definition of argument, writes “... an argument is a set of statements in which a claim is made, support is offered for it, and there is an attempt to influence someone (p. 6).” However, Brassart (1996), referring to similarities between argumentative text and descriptive text, argues that “the difference may only be due to content: argumentative text deals with beliefs and opinions, whereas others deal with facts and knowledge (p. 171),” citing Le Ny (1989). Also, Lunsford and Ruszkiewics (2001) agree with Foss and Griffin (1995) who propose another perspective of argument, which aims not to win over another person or group but to invite others to enter a space of mutual regard and exploration. According to Foss and Griffin, this type of argument is called “invitational rhetoric” (p. 7), and it is based on the concept of offering—the giving and expression to a perspective without advocating its support or seeking its acceptance. Given the breadth of these definitions, argument in this study is perceived rather broadly and defined as a set of statements to express the communicator’s opinion or belief, which may involve reasoning or logical appeals.
How Learners’ Proficiency Levels Affect Arguments

Based on the ACTFL Oral Proficiency Guidelines, we can expect that learners at higher proficiency levels make more structured arguments than those at lower proficiency levels. This expectation is consistent with the explanation found in Just and Carpenter’s (1992) cognitive capacity hypothesis. The cognitive capacity hypothesis has been proposed as a theory of language comprehension. The theory argues that a person’s language comprehension depends on his or her working memory capacity, and that capacity limitations affect performance when the resource demands of the task exceed the available supply. Under this theory, when the demand for processing resources is greater than the supply, lower-level processes will be prioritized at the expense of higher-level processes (Zwaan & Brown, 1996). Because lower-level processing in L2 tends to be more resource-consuming for lower-level learners than for higher-level learners, it would be more difficult for lower-level learners than high level learners to accomplish difficult tasks in L2. Zwaan and Brown attempted to apply this theory to explaining why nonfluent L2 readers show less evidence of information integration during text comprehension in L2 than in L1.

Given this explanation, we should expect that lower-level learners are less likely than higher-level learners to construct a structured argument in oral communication. This is because the demand for processing resources in construction of an argument may be greater than the supply that lower-level learners typically have. For lower-level learners, more basic processes such as word selection or sentence construction should be consuming most of their processing resources, which are prioritized at the expense of higher-level processes such as construction of an argument. In contrast, higher-level learners, who do not have to consume their processing resources dealing with lower-level tasks, would be able to use their processing resources in higher-level tasks such as construction of an argument. What remain unclear are the differences in the specific features of arguments between less proficient and proficient learners.

Analytical Framework

A method of analyzing structural features of informal argument proposed by Suzuki (2005) is used in this study. This method describes informal arguments based on functional relations between elements or units of arguments. Different methods of analyzing structural features of arguments have been reviewed (Azar, 1999; Canary, D. Brossmann, J. Brossmann, & Seibold, 1995; Crammond, 1998; Hays & Brandt, 1992; Simosi, 2003; Stein & Miller, 1993; Toulmin, Rieke, & Janik, 1979; Warnick & Manusov, 2000; Werder, 1999). Unlike other methods, Suzuki’s method is capable of describing horizontal as well as vertical relations among units of arguments, covering a wide range of functional relations. Horizontal relations concern extending or expanding another unit or statement in an argument, while vertical relations concern giving reasons for another unit or statement in an argument. The method is also capable of examining arguments in terms of macro and micro structures as well as inter-unit relations that make up each structure. Macro structures refer to global organizational patterns, while micro structures refer to configuration of specific supporting or extending relationship among units of argument, which compose at least a part of an argument. Thus, it provides a comprehensive means of analyzing arguments, rather than focusing on one selected aspect of arguments.
Hypotheses and Research Question

Based on the above discussion, the following hypothesis was put forth:

HP1: Superior learners of Japanese are more likely than Advanced learners to construct arguments that have substantial macro structures.

According to the ACTFL Proficiency Guidelines, the ability to construct structured argument in a consistent manner is one of the features that characterize Superior learners’ discourse. In this study, structured argument is interpreted as argument that has a substantial macro structure, in which three or more units, i.e., independent clauses, are connected in a coherent manner to express a thought. Structure is defined as the interrelation or arrangement of parts in a complex entity (American Heritage Dictionary of the English Language, 2004). Given the definition, three was considered to be an acceptable number to represent the minimum complexity of the interrelation or arrangements of units in an argument. Thus, Superior learners are more likely than Advanced learners to construct arguments that have substantial macro structures.

In addition to macro structures of arguments, micro structures will also be examined. In this study, two different types of micro structures are considered: the compound structure and the serial structure. The compound structure has two or more vertically subordinate clauses that directly support the primary clause through linear logic or reasoning. The serial structure has two or more serially connected vertically subordinate clauses that support the primary clause through linear logic or reasoning.

Whether these complex reasoning structures are highly evaluated in Japanese culture is debatable. According to Hazen (1991), there are scholars who believe that Japan does not have any conception of formal logic (Morrison, 1972; Nakamura, 1964), those who believe that Japan does not value logic (Barnlund, 1989; Becker, 1982; Mizutani, 1981), and those who believe that Japan has a different logic (Toyama, 1977). It is true, however, that these observations are not necessarily based on empirical data. It is likely that the criteria for judging the quality of arguments in Japanese culture are not radically different from those in other countries in this age of globalization. If so, the cognitive capacity hypothesis allows us to predict that Superior learners should be more likely than Advanced learners to construct arguments that have complex micro structures. That is because higher-level learners should be able to use their processing resources for higher-level tasks which include construction of complex micro structures in making arguments. Thus, the following hypothesis was offered.

HP2: Superior learners of Japanese are more likely than Advanced learners to make arguments that have complex micro structures.

Finally, this study also examines whether there is any structural function or inter-unit relation in arguments that is more typically used by one group of learners over the other. It is worth exploring, for example, whether any particular type of inter-unit relation is typically used in arguments constructed by proficient learners as a means of effectively elaborating their point. Because very little is known about this question, the following research question was asked:

RQ1: Is there any structural function or inter-unit relation which is more frequently used in arguments by either Advanced or Superior learners of Japanese?
Method

Data
The data used in this study were taken from KY Corpus (Kamada & Yamauchi, 1999), which is a collection of transcribed texts of the ACTFL Oral Proficiency Interviews. The interviews were all conducted by certified Japanese OPI testers with learners of Japanese at different proficiency levels. The interviewees’ native language was English, Chinese, or Korean. For the purpose of the present study, interviews with learners at the Advanced and Superior levels were selected. Learners at these two levels were selected because they are supposed to be able to construct discourse of paragraph length with consistency, i.e., levels of competence at which learners construct arguments. For the purpose of the present analysis, only those parts of the transcripts which were considered to be arguments based on the definition provided in this study, or sets of statements to express the speaker’s opinion or belief, were selected.

In total, data from interviews with 36 learners of Japanese were selected, including 20 learners at the Advanced level (which included 10 English and 10 Korean native speakers) and 16 learners at the Superior level (which included 5 English, 5 Korean, and 6 Chinese native speakers). In the data from the 36 learners, those from 29 learners included arguments. Among the 29 learners, 14 were learners at the Advanced level (which included 9 English and 5 Korean native speakers), while 15 were learners at the Superior level (which included 5 English, 5 Korean, and 5 Chinese native speakers). Also, among the 29 learners whose arguments were analyzed, 18 were men (which included 9 Superior learners and 9 Advanced learners) and 11 were women (which included 6 Superior learners and 5 Advanced learners). The total number of arguments analyzed were 99, including 43 constructed by learners at the Advanced level and 56 constructed by learners at the Superior level.

Data Analysis
The data were coded following the coding scheme in the method proposed by Suzuki (2005). First, the data were segmented into units of analysis. The unit of analysis was a thought turn, or any statement that functioned as a complete thought (Auld & White, 1956; Hatfield & Wieder-Hatfield, 1978). A thought turn can be operationalized as an independent clause that represents each element of argument. The same operationalization has been used successfully by past researchers (e.g., Canary, 1992; Saeki & O’Keefe, 1994). The author segmented the data into units for the whole data set together with an independent coder who did the same for 20% of the data that were randomly chosen. The independent coder who had been trained by the author was blinded to the purpose of this study and to the demographic information of the participants. The resulting unitizing reliability (Auld & White, 1956) between the two coders was .95.

After the unitizing was complete, the text was segmented into chunks. Each chunk included a group of statements or independent clauses used to complete a coherent argument. The author coded all the data together with the independent coder who coded 20% of the data that were randomly chosen using the coding scheme proposed in Suzuki’s method.

In coding the data, it was decided whether the unit in focus was serving as the argument’s nuclear (NC) statement or the central claim, a horizontally continuing (HC) clause which extends or expands the primary clause to which it is linked, a vertically subordinate (VS) clause which supports another statement through reasoning, or non-relevant (NR) clause which has no direct relevance to the argument of interest. Horizontally continuing clauses are
further classified into those serving either the purpose of clarification (-CL), repetition/rephrasing (-RE), addition (-AD), circumstance (-CI), or qualification (-QU). Vertically subordinate clauses are further classified into those serving either the purpose of generalization (-GE), cause/effect (-CE), analogy (-AN), discount (-DI), or quasi-logic (-QL).

One minor modification was made over this original coding scheme to make it applicable to arguments in oral communication. That was to create a category, filling (FL) function, which has no direct relevance to the argument of interest, but serves as a function to make the conversation flow smoothly, (e.g., “Let me see,” or “I hope that I understood your question correctly”). In this study, it is distinguished from non-relevant (NR) function, which has no direct relevance to the argument of interest and is non-functional. Non-relevant functions in this study, therefore, include statements that are unintelligible, or those that are intelligible but unrelated to the argument in focus (e.g., “What is the right expression?”). As a result, Cohen’s kappa between the two independent coders was .76. See Appendix A for the description of each function in the coding scheme. Appendix B shows samples of coded transcripts for two interviews.

After coding of the data was complete, arguments’ macro structures were examined. Macro structures refer to the global organizations of arguments. It was decided that an argument has macro structure when it is composed of three or more units.

Furthermore, micro structures, which refer to configurations of specific supporting relationships among units of arguments, were analyzed. It was decided that two types of micro structures, both of which represent complexity of reasoning patterns, would be examined: the compound structure and the serial structure. The compound structure is a micro structure with two or more vertically subordinate clauses that simultaneously support the primary clause through linear logic or reasoning. A vertically subordinate clause supports another by generalization, cause and effect, analogy, discount (i.e., undercutting a rival hypothesis or statement, which is equivalent to countered rebuttal), or quasi-logic. The serial structure is a micro structure with two or more serially connected vertically subordinate clauses that support the primary clause.

The extent to which each micro structure was used was calculated as follows. If a primary clause is simultaneously supported by two different vertically subordinate clauses, the argument’s compound structure score is one. If a primary clause is simultaneously supported by three different vertically subordinate clauses, the score is two. Similarly, if a primary clause is supported by a vertically subordinate clause which is further supported by a vertically subordinate clause, the argument’s serial structure score is one. If a primary clause is supported by a vertically subordinate clause which is further supported by two vertically subordinate clauses in a serial fashion, the argument’s serial structure score is two. These scores were totaled for each argument and divided by the number of units in each argument.

Finally, this study examined the frequency with which each structural function or inter-unit relation was used in arguments. The frequency of each function divided by the number of units was compared between the Superior and the Advanced learners’ arguments.

Results

In reporting results, an alpha level of .05 was used for all statistical tests. The results indicate that the Superior learners’ arguments used 7.96 units on average ($SD = 4.27$), while the Advanced learners used 7.53 units on average ($SD = 4.11$). As a result of a $t$-test, the
difference was not found to be significant. \( t = .50, df = 97, p = .62 \). Table 1 shows means and standard deviations of the variables used in the following analyses.

Hypothesis 1 predicated that Superior learners would be more likely than Advanced learners to make arguments that have substantial macro structures. To test this hypothesis, a \( \chi^2 \) test was conducted with the learners’ proficiency level (the two conditions being Advanced and Superior) being the independent variable, and macro structure (the two conditions being arguments with and without macro structures) being the dependent variable. The results indicate that Superior learners are significantly more likely than Advanced learners to make arguments that have macro structures \( (\chi^2 = 6.86, df = 1, p = .01) \). All of the Superior learners’ arguments and 88.4% of the Advanced learners’ arguments had macro structures.

Table 1. Means and Standard Deviations of Variables

<table>
<thead>
<tr>
<th>variable</th>
<th>Advanced (n = 43)</th>
<th>Superior (n = 56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>clarification (-CL)(^a)</td>
<td>.11 (.13)</td>
<td>.09 (.15)</td>
</tr>
<tr>
<td>repeating/rephrasing (-RE)(^a)</td>
<td>.03 (.06)</td>
<td>.07 (.09)</td>
</tr>
<tr>
<td>addition (-AD)(^a)</td>
<td>.10 (.13)</td>
<td>.13 (.17)</td>
</tr>
<tr>
<td>circumstance (-CI)(^a)</td>
<td>.09 (.11)</td>
<td>.09 (.10)</td>
</tr>
<tr>
<td>qualification (-QU)(^b)</td>
<td>.16 (.14)</td>
<td>.14 (.14)</td>
</tr>
<tr>
<td>vertically subordinate (VS)(^b)</td>
<td>.14 (.12)</td>
<td>.18 (.19)</td>
</tr>
<tr>
<td>non-relevant (NR)(^b)</td>
<td>.10 (.15)</td>
<td>.02 (.07)</td>
</tr>
<tr>
<td>filling (FL)(^b)</td>
<td>.08 (.11)</td>
<td>.08 (.11)</td>
</tr>
<tr>
<td>compound structure(^c)</td>
<td>.02 (.04)</td>
<td>.04 (.08)</td>
</tr>
<tr>
<td>serial structure(^c)</td>
<td>.01 (.03)</td>
<td>.04 (.11)</td>
</tr>
</tbody>
</table>

Notes. The standard deviations are in the parentheses beside the mean values.

\(^a\) The frequency with which each function was used was divided by the number of units per argument.

\(^b\) A composite variable of vertically subordinate functions (i.e., GE, CE, AN, DI, and QL), which was created because CE, AN, and DI were seldom used.

\(^c\) Each micro structural complexity score was divided by the number of units per argument.

The second hypothesis predicted that Superior learners would be more likely than Advanced learners to make arguments that have complex micro structures: the compound structure and the serial structure. To this hypothesis, a \( t \) test was conducted with learners’ proficiency level being the independent variable and with each of the compound structure and the serial structure as the dependent variable. The results indicate that Superior learners’ arguments are significantly more likely than Advanced learners to use the compound structure \( (t = 2.36, df = 91.02, p = .02) \). No significant difference was found between the two groups of learners for the serial structure \( (t = 1.91, df = 66.89, p = .06) \).

Research Question 1 asked whether the frequency of any structural function or inter-unit relation in arguments distinguishes Advanced learners from Superior learners. To answer this question, a \( t \) test was conducted with the learners’ proficiency level being the independent variable, and the frequency with which respective function or inter-unit relation is used divided by the number of units being the dependent variable. After looking at descriptive statistics of the functions, however, it was clear that, cause/effect (CE), analogy (AN), and discount (DI) were seldom employed. That made the distribution of their data unsuitable for
regular tests to examine mean differences between the two groups. Therefore, it was decided to combine all the five vertically subordinate functions to create one variable for the analysis.

The results indicated that Superior learners had a significantly higher likelihood of using the repeating/rephrasing function than Advanced learners \((t = 2.39, df = 95.41, p = .02)\). Also, findings yielded that Advanced learners had a significantly higher likelihood of using the non-relevant function than Superior learners \((t = -2.83, df = 54.75, p = .01)\). The difference between Advanced and Superior learners was not significant for other functions (for clarification (CL), \(t = -.46, df = 97, p = .65\); for addition (AD), \(t = 1.02, df = 97, p = .31\); for circumstance (CI), \(t = .08, df = 97, p = .94\); for qualification, \(t = -.40, df = 97, p = .69\); for coordinative, \(t = .08, df = 97, p = .94\); for vertically subordinate (VS), \(t = 1.43, df = 93.81, p = .16\); for filling (FL), \(t = -.12, df = 97, p = .90\)).

**Discussion**

This study attempted to find out whether there is any difference in structural features of arguments in oral communication that distinguishes Advanced learners from Superior learners of Japanese. In this study, two hypotheses were offered, which predicted that Superior learners would be more likely than Advanced learners of Japanese to make structured arguments in oral communication, in terms of macro (Hypothesis 1) and micro (Hypothesis 2) structures.

The results provide evidence to support the first hypothesis: Superior learners' arguments are more likely than Advanced learners' to have substantial macro structures. According to the cognitive capacity hypothesis, it is likely for lower-level learners that lower-level processes such as word selection or sentence construction consume most of the processing resources, and that their resources cannot be used for high level processes such as construction of argument. In contrast, Superior learners, who do not consume their processing resources dealing with lower-level tasks, are likely to use their processing resources in higher-level tasks which include construction of structurally integrated argument in oral communication.

With regard to micro structures (Hypothesis 2), the results provide evidence to partially support the hypothesis. That is, Superior learners are more likely than Advanced learners to use the compound structure in their arguments. However, Advanced and Superior learners were not found to be different with regard to the extent to which they use the serial type micro structure. Give the result, frequent use of compound micro structure appears to be one of the characteristics of proficient learners' arguments in oral communication.

The compound type of reasoning structure has a primary clause which is directly supported by more than one reason. This finding is meaningful when we consider the fact that Advanced and Superior learners were not found to be different in their frequency of using vertically subordinate functions. What distinguishes Advanced learners from Superior learners, therefore, is how they structure vertically subordinate functions, not how frequently they use these functions in arguments. Unlike the observations made by past researchers about the peculiarity of Japanese argument or logic (Barnlund, 1989; Becker, 1982; Mizutani, 1981; Morrison, 1972; Nakamura, 1964; Toyama, 1977), Japanese teachers appear to value highly the use of the compound micro structure, one of the complex reasoning patterns frequently found in Western arguments.

In contrast, the serial type of reasoning structure in which a primary clause is supported by a reason which is further supported by a reason seems less of a characteristic of
proficient learners’ arguments. Possibly, it is more difficult, thus resource-consuming, in oral communication for learners to construct arguments with the serial structure than arguments with the compound structure.

The research question of this study asked whether Advanced and Superior learners of Japanese would be different in the extent to which they use any particular structural function or inter-unit relation in arguments. Advanced learners were found to use the non-relevant (NR) function more frequently than Superior learners. Also, Superior learners were found to use the repeating/rephrasing (RE) function more frequently than Advanced learners. It is not surprising to find out that less proficient learners use the non-relevant function more frequently in their argument in oral communication. According to the cognitive capacity hypothesis, less proficient learners must consume their processing resources for lower-level tasks such as word selection or sentence construction, which may keep them from performing higher-level tasks such as making coherent arguments. At the same time, their processing resources may often not be sufficient to do even the lower-level tasks without mistakes. This indicates that they may be more likely than higher-level learners to make mistakes in sentence construction. This in turn explains why Advanced learners use unintelligible statements or intelligible statements that are non-functional, i.e., non-relevant (NR), more frequently than Superior learners.

Superior learners were found to use the repeating/rephrasing function more frequently than Advanced learners. Warnick and Manusov (2000) write that people may simply repeat or paraphrase their position when they express their views. This suggests the possibility that horizontal elaboration through repeating or rephrasing has a critical place in making effective arguments in oral communication, although research on argumentation generally focuses solely on reasoning activities, paying little attention to horizontal elaboration. In fact, when people communicate orally, they need to make themselves understood, making their point clear to the listeners on the spot, which is probably more difficult to accomplish when they try to do the same thing in written communication. Repeating and rephrasing critical points may be an effective means of accomplishing the task successfully in oral arguments. Indeed, Johnstone (1986) suggests that repeating or rephrasing a point is a typically non-Western characteristic of arguments. Because there has been little research done on this issue, further research needs to be conducted to see whether this is true in communication in other cultural contexts.

Overall, it has been found in this study that there are several important structural features that are used by different degrees between Advanced and Superior learners. This study has implications for intercultural communication research by suggesting that cross-cultural differences in argument features may be understood better when we consider them along with the speakers’ language proficiency. A constructive approach to understanding arguments in foreign language teaching, therefore, may be to balance out our attention to cross-cultural differences and learners’ proficiency levels.

This study also has implications for foreign language teaching. It suggests that there appear to be several strategies to strengthen learners’ arguments in oral communication. These strategies may include building up learners' oral argumentation skills with particular emphasis on teaching how to structure an argument well and strengthen reasoning through providing more than one reason to support an argument’s central claim. The emphasis will also be put on teaching how to strengthen horizontal elaboration of an argument through rephrasing or repeating critical points.
One limitation of this study is that it examines arguments constructed only by learners of Japanese. Future research may consider examining learners of other languages to see the extent to which the findings from this study are generalizable.

References


Appendix A. Inter-Unit Relations in Suzuki’s Framework for Analyzing Informal Argument
1 Nuclear (NC)
   An NC statement is a central statement. It can be an opinion, a belief or a fact.
   Example: “I think they have changed a lot.”
2 Horizontally Continuing (HC)
   An HC statement expands another statement to develop an additive relationship.
2.1 Clarification (-CL)
HC-CL clarifies another statement through elaboration by specifying it in greater detail or by exemplifying it.
Example: “To be more specific, Chinese corporations have been owned and managed by the national government.”

2.2 Repetition/Rephrasing (-RE)
HC-RE makes an exact restatement of another statement or rephrases it in a somewhat different way.
Example: “In other words, I cannot forget it.”

2.3 Addition (-AD)
HC-AD expands another statement by extending beyond it and adding new information.
Example: “Also, it is possible to respect our tradition in a different way.”

2.4 Circumstance (-CI)
HC-CI provides circumstantial information or the framework for interpreting another statement.
Example: “In Korea, Confucian tradition still remains, which makes women more lady-like.”

2.5 Qualification (-QU)
HC-QU qualifies another statement or gives exception to it.
Example: “Although it is a matter of personal choice, . . .”

3 Vertically Subordinate (VS)
A VS statement supports another statement based on linear logic.

3.1 Generalization (-GE)
VS-GE provides an example that could be generalized to another statement. It can be a statement of a general principle from which a conclusion about a specific case can be drawn.
Example: “I myself have been accused of doing that.”

3.2 Cause/Effect (-CE)
VS-CE shows a cause-effect or an effect-effect or a sign relationship to support another statement.
Example: “. . . because people, if they get too drunk, make other people, annoyed.”

3.3 Analogy (-AN)
VS-AN provides an analogy to support another statement.
Example: “If artificial insemination is against nature, biologically-engineered vegetables should also be against nature.”

3.4 Discount (-DI)
VS-DI undercuts a rival statement to support another statement.
Example: “Critics’ argument that couples not sharing the same family are more likely to divorce is statistically ungrounded.”

3.5 Quasi-Logic (-QL)
VS-QL provides quasi-logical support, other than the kinds stated in 4.1 to 4.4 for another statement.
Example: “. . . because Japan has a different system from China”

4 Non-Relevant (NR)
An NR statement is either unintelligible or intelligible but non-functional in the argument.

*Example:* “What is the right expression?”

5 Filling (FL)
An FL statement has no direct relevance to the argument of interest, but serves to make the conversation flow smoothly.

*Example:* “Let me see.”

*Note.* In some cases, a unit serves as a complete function together with another unit or units, in which case it is coded as HC-AD (CO), for example. It means that the unit is horizontally continuing from another clause A, adding information to A, but it is also coordinative with A because its meaning is complete together with A.

**Appendix B. Examples of Coded Script**

**Interview 1**

Interviewer: . . . What is your perception of Japanese women if you compare them with Korean women?

Interviewee A (Advanced level; Korean):

<table>
<thead>
<tr>
<th>unit number</th>
<th>argument</th>
<th>code</th>
<th>connected to</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>I think they have changed a lot.</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td>While I was in Korea, I had an impression that Japanese women were very family-minded, caring, and kind in traditional and Confucian settings.</td>
<td>HC-CI</td>
<td>(3)</td>
</tr>
<tr>
<td>(3)</td>
<td>Although it is not that my impression of Japanese women after I came to Japan is totally different from my previous impression of them,</td>
<td>HC-QU</td>
<td>(4)</td>
</tr>
<tr>
<td>(4)</td>
<td>They express their opinions straight,</td>
<td>VS-QL</td>
<td>(1)</td>
</tr>
<tr>
<td>(5)</td>
<td>in other words, they are westernized.</td>
<td>HC-CL</td>
<td>(4)</td>
</tr>
<tr>
<td>(6)</td>
<td>In Korea, Confucian tradition still remains, which makes women more ladylike.</td>
<td>HC-CI</td>
<td>(1)</td>
</tr>
<tr>
<td>(7)</td>
<td>That is, Korean people still think that ideal women have long hair, right carriage, and intelligence, which is a part of traditional Confucian way of thinking.</td>
<td>HC-CL</td>
<td>(6)</td>
</tr>
</tbody>
</table>

**Interview 2**

Interviewer: . . . What do you think about drinking alcohol as a non-drinker?

Interviewee B (Superior level; Chinese):

<table>
<thead>
<tr>
<th>unit number</th>
<th>argument</th>
<th>code</th>
<th>connected to</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Let me see.</td>
<td>FL</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td>Although it's a matter of personal choice,</td>
<td>HC-QU</td>
<td>(3)</td>
</tr>
<tr>
<td>(3)</td>
<td>I think they should limit the amount of drink so that they can control themselves.</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>because people, if they get too drunk, make other people annoyed.</td>
<td>VS-CE</td>
<td>(3)</td>
</tr>
<tr>
<td>(5)</td>
<td>I think they should control the amount of what they drink.</td>
<td>HC-RE</td>
<td>(3)</td>
</tr>
</tbody>
</table>