RECIPIENT ORIENTATION IN VERBAL REPORT PROTOCOLS: METHODOLOGICAL ISSUES IN CONCURRENT THINK-ALOUD

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ABSTRACT

Verbal report protocols have been widely used as a research methodology to gain information about cognitive processes. Although such self-reports have been considered direct representations of cognitive processes if elicited under appropriate conditions (Ericsson & Simon, 1984, 1993), some researchers (e.g., Witte & Cherry, 1994; Smagorinsky, 1998, 2001) have argued that verbal reports are socially situated constructs rather than merely representations of the thought processes unfolding in the individual mind. The present study examined the social nature of verbal reports, particularly focusing on whether and in what ways concurrent think-aloud (TA) protocol data in interlanguage pragmatics research are recipient designed. Verbal reports were collected from eight native speakers of Japanese engaged in answering a rating scale instrument on refusal strategies. The data were audio-taped, coded, and analyzed qualitatively.

These data suggest that verbal reports elicited by means of TA procedures do contain interactive and social features, that the participants orient to a listener while carrying out the protocol, and that they are selective about what information to report while carrying out the task. The verbal report data gathered in Japanese revealed much information that is not available from data in English.

The results of this study suggest that treating verbal report protocols as solely cognitive products under-represents what they actually reveal. Protocols are socially and interactively constituted, and this fact has to be taken into consideration when analyzing TA data. The strong orientations to the listener observed in this study suggest that a different recipient might evoke different content or types of protocol, just as other social factors could influence the data. Therefore, researchers need to take into consideration that verbal report is a socially situated activity when they collect, analyze, and interpret protocol data.

INTRODUCTION

Initiated and established in the field of cognitive psychology, verbal report protocols have been widely used as a research methodology to gain information about the learners' cognitive processes. As with any methodology, however, there are limitations and criticisms about the use of verbal report protocols. According to Ericsson and Simon's

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(1984, 1993) Information Processing (IP) model, which has been a widely accepted model in collecting and analyzing verbal report protocols, verbal report protocols have been considered a direct representation of the participants' cognitive processes. However, other researchers (e.g., Witte & Cherry, 1994; Smagorinsky, 1998, 2001) have raised questions about that assumption, arguing that verbal protocols are socially situated constructs rather than merely representations of individual cognitive processes. The purpose of the present study is to examine the social nature of verbal protocols, particularly focusing on recipient orientation as observed in verbal protocol data. Specifically, the use of think-aloud protocols (TA) in interlanguage pragmatics research was analyzed. First, I will review the theoretical background pertinent to the study, followed by a report of the details of the study, which is based on the analysis of verbal report data collected from eight Japanese native-speaker participants.

BACKGROUND

Verbal Report Protocols

In cognitive psychology, verbal report protocols have been widely used as a technique to gain information about cognitive processes (Ericsson & Simon, 1984, 1993). The framework proposed by Ericsson and Simon was derived from Information Processing (IP) theory. Its basic assumption is that information that is stored in people's short term memory (STM) is available for retrieval through verbal reports (Ericsson & Simon, 1987). The IP model holds that "information recently acquired (attended to or heeded) by the central processor is kept in STM and is directly accessible for further processing (e.g., for producing verbal reports)" (p. 25). These verbal reports are believed to represent the information stored in STM when elicitation techniques are appropriately used.

There are two forms of verbal report according to Ericsson and Simon: concurrent verbal reports, in which people verbalize the thoughts that come up in their mind as they are completing a task, and retrospective reports, in which they report thoughts regarding the task immediately after a task has been completed. Claims are made that both of these two forms are direct verbalizations of cognitive processes. Within the IP model's framework, verbal reports are divided into three different levels. In Level 1 verbalization,

also called talking-aloud, the participants verbalize the information that is already encoded verbally in their STM. As the information is already verbally encoded, it does not have to be re-encoded for the verbal reports. In Level 2 verbalization, or thinking-aloud, the information originally stored in STM is not in a verbal code, so the participants need to re-encode the non-linguistic information into verbal code. Level 3 verbalization includes introspective reports, in which the participants explain, search for reasons, theorize, or interpret their own behavior or responses. According to Ericsson and Simon, although the verbal reports slow down the processes involved in the behavior, the cognitive processes do not change in Level 1 and 2 verbalization. "The sequence of information remains intact and no additional information is heeded" (1984, p. 18). Thus, Ericsson and Simon treat information elicited in Level 1 and 2 verbalization as direct representations of the participants' cognitive processes in STM. In Level 3 verbalization, however, the cognitive processes are likely to change and information that has not been heeded in STM might be added. Studies have demonstrated that generating explanations or interpreting one's own behavior while carrying out a task (i.e., verbal reports) is likely to affect subsequent processes (Pressley & Afflerbach, 1994). Nisbett and Wilson (1977, cited in Ericsson & Simon, 1987) note that subjects' reasons are often inaccurate accounts of variables that influence their behavior and that "giving a reason for one's behavior is quite different from reporting the thought sequence as remembered" (1987, p. 45). Thus Ericsson and Simon warn researchers not to use Level 3 protocols to investigate cognitive processes and argue that interpretive descriptions and explanations of cognitive processes should be left to the researchers (Ericsson & Simon, 1987; Pressley & Afflerbach, 1995).

Verbal Reports in Interlanguage Pragmatics

Verbal reports have been used by a number of researchers for different research topics and items, for example, they have been used in studies of reading, writing, test-taking, translation, and vocabulary (see Gass & Mackey, 2000; Cohen, 1998, for reviews). Several studies (Eisenstein & Bodman, 1986; Robinson, 1992; Cohen & Olshtain, 1993) have been conducted on interlanguage pragmatics using verbal reports as well.

Eisenstein and Bodman (1986) examined how native and non-native speakers of English express gratitude and used informal interviews that followed the administration

of a questionnaire. Although the verbal report techniques used were interviews, not verbal protocols, these informal interviews revealed information regarding the participants' familiarity with different situations used in the questionnaire and allowed them to express uncertainty and discomfort. Eisenstein and Bodman's analysis showed how these factors were reflected in the questionnaire responses.

Robinson (1992) carried out one of the first studies that applied systematic verbal report methods to examine interlanguage pragmatic production. She combined concurrent think-aloud and retrospective interviews with a discourse completion task (DCT) in order to investigate non-native speakers' refusal performance. Her verbal report data from Japanese ESL learners revealed information about attended features of the research situation, evidence of utterance planning, evaluation of alternative utterances, indications of pragmatic and linguistic difficulty, statements of knowledge about American English refusals and possible sources of that knowledge, indications of methodological difficulty, and the language of thoughts. This study further demonstrated that verbal report procedures do elicit information about language learners' "pragmatic hypotheses" (1992, p. 67) in different areas and that they provide insightful information that is not accessible through an analysis of DCT response data alone.

Cohen and Olshtain (1993) investigated the processes involved in the production of speech acts in role-plays with retrospective verbal reports, describing the ways in which non-native speakers assess, plan, and execute speech acts utterances. The retrospective verbal report data in their study revealed that the participants engaged in very little conscious planning of vocabulary and grammatical structures for their utterances, that they used two or sometimes three languages in planning and executing speech act utterances and a range of different strategies in seeking language forms, and that they paid little attention to grammar or pronunciation in planning and executing utterances. Also, Cohen and Olshtain identified three different characteristics in speech production styles among the participants that they referred to as metacognizers, avoiders, and pragmatists.

Limitations and Criticism of Verbal Report Protocols

As previously stated, in IP theory, verbal protocol data is treated as pure

representations of cognitive processes, and it is assumed that the social factors related to the data collection can be neutralized. Some researchers, however, have begun to acknowledge that protocol data and thinking processes are not solely cognitive, but that they are socially situated activities (Witte & Cherry, 1994; Smagorinsky, 1998, 2001). In IP theory, cognition is treated as an intra-individual phenomenon, but this raises the question as to whether it is, in fact, possible to isolate cognition from its social environment. Pressley and Afflerbach (1994) contend that properties of verbal reports as socially constructed data have often been neglected and that they present one of the "greatest ongoing challenges" in protocol analysis (p. 2).

Ericsson and Simon (1993) emphasize that verbal protocols should not be elicited as an "act of communication" (Smagorinsky, 1998, p. 166). The experimental situation should be in a "nonreactive setting" (Ericsson & Simon, 1998, p. 179) and should be arranged "to make clear that social interaction is not intended, and the experimenter is seated behind the subject and hence is not visible" (1993, p. xiv). By carefully controlling the social interaction that is anticipated to take place, they claim that this "problem" could be reduced or often eliminated (1993). They maintain that "many types of everyday performance" think-aloud protocol being one of such performances, "can be successfully reproduced outside their original reactive social setting" (1998, p. 179), and thus, it is possible to study covert thinking on the basis of verbal reports. However, socio-cultural theorists, for example, offer a very different viewpoint of protocol analysis. Smagorinsky (1998, 2001) suggests treating verbal protocol data from the perspective of cultural-historical activity theory (CHAT), which is based on the work of Vygotsky (1987), Leont'ev (1981), Wertsch (1981), and Cole (1996). In this view, cognition is not isolated from social contexts but rather constitutes a socially situated activity which has roots in participants' cultural history. Referring to Bakhtin's (1984) notions of "addressivity" and "dialogicality", Smagorinsky (1998) comments that any type of speech is socially grounded and "uttered in ways that implies a link to other people" (p. 167). Bakhtin (1986, 1999) argues that addressivity, "the quality of being directed to someone" (1999, p. 132), is an essential marker of an utterance, hence utterances are not "self-sufficient" (p. 130). The addressee can be present or absent and he/she does not even have to be a specific person but can be an indefinite other. In his own study,

Smagorinsky (1997) also reported addressivity in the utterances of his participant. The participant, Doug, was instructed to carry a portable tape recorder and to provide think-aloud protocols on writing. Although the researcher and Doug did not have much personal contact, Doug frequently addressed the researcher or his conception of the researcher in his protocol. The study also revealed that Doug had oriented to the social difference between himself and the researcher by talking about himself differently from the way he talked to his peers. This suggests that a different listener or addressee could have elicited different types of protocol, indicating a strong recipient orientation in the protocol. Based on activity theory and his own studies, Smagorinsky (2001) contends that cognition is a socially mediated phenomenon and that the study of cognition cannot be separated from its social and cultural relationships.

Although not from a socio-cultural viewpoint such as the CHAT perspective, the issue of validity of verbal protocols has also been questioned by other researchers (e.g., Stratman & Hamp-Lyons, 1994; Russo, Johnson, & Stephens, 1989). In particular, the issue of reactivity, that is, the effects of reporting of thoughts on the informants' cognitive processes, has been discussed. Russo et al. (1989) reviewed a number of studies that applied verbal protocols and found the effects of carrying out verbal protocols on the data collected. They also demonstrated significant reactivity with concurrent think-aloud protocols in their own study. They used four different tasks[1], two of which, according to Ericsson and Simon, were predicted to generate reactivity and two of which were not. Russo et al. found significant alternation in accuracy for two of the four tasks and a general prolongation of response time. However, the two tasks in which reactivity was significant were not the ones predicted by Ericsson and Simon, and the one in which they found no reactivity was the activity that, according to Ericsson and Simon, was disqualified as a verbal report technique because of potential reactivity.

Another challenging issue in protocol analysis is the completeness of the data collected. Some information on cognitive processes might not be accessible through verbal reports, especially when the task is complex (Gass & Mackey, 2000). Hauser (2002), for example, in investigating the development of awareness and the use of learning strategies in article use, pointed out incompleteness of verbal report data. After being pre-tested, the participants in his study were given exposure to the target language

features and they were instructed to think-aloud during the exposure. They also had a post-experiment judgment session with the researcher about their behavior during the exposure phase. Then Hauser analyzed how and whether the learners' improvement in the target feature was reflected in think-aloud protocols and the judgment data. He found no indications of any intentional strategies or comments on form related to the use of articles in the think-aloud data. In the post-experiment judgment phase, however, four participants reported that they had been looking for rules in article use, and they were the ones who outperformed those who made no such claim. Analyzing the construction of the think-aloud data of one participant in detail, Hauser argued that the processes of producing verbalizations may have required the participant to make decisions about what to report. Participants appear to have selected certain types of information to report. If this is the case, "all verbalizations are type three [Level three] verbalizations" (Hauser, 2002, pp. 16-17) since reporting involves selection of information and the relative completeness of think-aloud data depends on what information participants select.

As discussed above, questions have arisen about the nature of verbal protocols as cognitive products, and studies have pointed out issues with regard to the social or interactive nature of the protocol, the possible influence of the protocol on a task that the participants are engaged in, and the potential for incomplete data. Although these issues do not completely invalidate the verbal reports as a means of examining cognitive processes, as we would still be able to gain information which otherwise could only be investigated indirectly, it is important that we collect and examine verbal report data carefully and with attention to possible reactivity, as well as to their status as a social construct (cf. Pressley & Afflerbach, 1994). In this study, I examine whether TA protocol data, which are normally considered to be monologues, and thus involving no interaction, may contain any social or interactive features.

Purpose of the Study

The purpose of the present study was to examine whether and in what ways concurrent think-aloud (TA) protocol data in interlanguage pragmatics research are recipient designed. The particular framework of this study came from the notion of "audience design", as proposed by Bell (1984, 1997). Bell claimed that a style shift

occurs primarily based on the speakers' orientation to the audience of a specific speech event. According to this framework, style shift is socially grounded and it "occurs primarily in response to a change in the speaker's audience" (1997, p. 244). By examining whether and in what ways TA protocols reflect the participants' orientation to an audience, we will be able to see whether and how TA protocols are socially designed. In this study, TA protocols were used to investigate the processes of perceptions of refusals in different contexts. Ericsson and Simon's IP model served as a basic theoretical framework in designing the data collection methodology, but at the same time, issues regarding the protocols' social or interactive nature, particularly focusing on recipient or audience orientation, were carefully considered in the analysis of the data.

METHOD

Participants

The participants in this study were six female and two male graduate students studying in Honolulu, Hawai'i. Seven of the participants were studying in the fields of languages, linguistics, or literature, and one was in the field of economics. They were all volunteers who responded to the researcher's call for participation, and they received a small amount of compensation for their participation. All of the participants were native speakers of Japanese, ranging in age from their early twenties to mid-thirties, who had lived in the United States ranging from one year to eleven years.[2] The participants were selected from language learners whose TOEFL scores ranged from 585 to 650. They were also asked to self-rate their proficiency in three categories—beginning, intermediate and advanced—and to indicate what sort of tasks they could carry out in English. The majority of the participants were labeled as advanced learners by themselves and by the researcher. Subject characteristics can be found in Table 1.

Table 1

Subject Characteristics

Subject number (Gender)	TOEFL Score	Proficiency (Oral, Reading, and Writing)	Residence in the U.S (total)[3]	Age
TA1 (M)	613	Adv. Adv.	2m	20's
TA2 (F)	600	Int.	8y 2m	30's
TA3 (M)	650	Adv. Adv.	5y 10m	30's
TA4 (F)	613	Adv.	5y 3m	20's
TA5 (F)	585	Adv. Adv.	4y	20's
TA6 (F)	637	Adv.	1m	30's
TA7 (F)	643	Adv. Adv.	1y	20's
TA8 (F)	620	Adv.	6y 2m	30's
		I-A I-A		
		I-A		
		Adv. Adv.		
		Adv.		
		Int. Adv. Int.		
		Adv. Adv.		
		Adv.		
Mean	620	—	3y 10m	—

Materials

The data collection instrument was a written questionnaire, which was first developed in a study conducted to examine pragmatic transfer (Sasaki & Beamer, 2002). The data collection instrument (Appendix A) consisted of two parts. The first part included questions about the participants' background, such as their age, gender, proficiency levels, experience in learning English, and length of residence in English speaking countries. The second part consisted of ten different situations with two independent refusal responses for each. The instrument also included a sample question with step-by-step instructions so that the participants would fully understand what they were supposed to do. The ten situations included the following: three requests, three invitations, three offers, and one suggestion. A rating scale of 0 (completely inappropriate) to 7 (completely appropriate) followed each response. The background information section and the instructions were written in Japanese to facilitate the participants' understanding.

In order to develop the instrument, the researchers modified the discourse completion task (DCT) in Beebe, Takahashi, and Uliss-Weltz (1990). First, one of the researchers

elicited and recorded oral responses from native speakers of English through role-plays, using the situations given in Beebe et al (1990). The word "refusal" was not used in collecting these data in order to avoid biasing the respondents positively or negatively toward the role-plays. These data were then used to form the responses for the instrument. Finally, the instrument was piloted with two Japanese native speakers and two American English native speakers and was modified based on their feedback. Before conducting the present study, the instrument was further piloted with two Japanese native speakers and any difficult or unclear parts in the instructions were modified based on their feedback. No changes were made, however, in the content of the situations or responses used in the instrument. Below is a sample situation and responses from Item 1 in the questionnaire. Note that a rating scale of 0 (completely inappropriate) to 7 (completely appropriate) followed each response.

Example:

1. Situation: You are the owner of a music store that is financially stable, but not extremely profitable. One of your best workers asks to speak to you in private.

Worker: As you know, I've been here just a little over a year now, and I know you've been pleased with my work. I really enjoy working here, but to be quite honest, I really need an increase in pay.

Response 1: I see, well, let me get back to you on that. Can you give me some justification of why you might need this raise?

Response 2: I don't know. I guess I'd have to look at our books and see if we can financially support that.

Procedures

The questionnaire was administered in a small studio at the University of Hawai'i in October 2002. The participants were instructed to rate the degree of appropriateness of each response in the questionnaire from 0 (completely inappropriate) to 7 (completely appropriate). With all ratings other than 7, they were also asked to underline the parts they thought inappropriate or to check a blank box after the response when they thought something was missing in the response that would make the response appropriate. They were asked to think-aloud while they were filling out the questionnaire. I explained that

what I would like to ask them to do that day was a procedure called "thinking-aloud" and that it was conducted to gain information about what they were thinking. What I asked them to do, as explained in the instructions on the questionnaire, was to read each situation and utterance and rate the appropriateness of each response in each situation. I also explained that I would like them to say everything that came to their mind into the microphone while they were thinking about the appropriateness of each response. They were instructed not to wait until they finished thinking but to speak out at the same time as they were thinking. They were also instructed to say all utterance segments, even hesitations and questions (e.g., "well", "what does this mean?") and not to monitor their speech for the recording. They could choose either Japanese or English, or mix the two languages. They were told to take their time and not to worry about grammar if they carried out the TA in English.

Along with the oral explanation, additional printed instructions in Japanese were provided (Appendix B), and the participants were given opportunities to ask questions when the instructions were not clear. In order to adopt Ericsson and Simon's methodological guidelines, instructions given to the participants followed what Ericsson and Simon proposed. None of the participants had any prior experience in producing TA protocols. However, as the majority of the participants were students of either language or linguistics, many of them had some familiarity with the procedure itself. In addition to the printed instructions and oral explanation, a model TA protocol was produced by the researcher. No words from specific situations in the questionnaire were included so that the modeling would not affect the participants' verbalizations of the task. It took approximately 30 to 40 minutes for participants to complete the whole session. The researcher was not present while the participants were completing the questionnaire and the TA session.

Data Analysis

All TA sessions were audio-recorded, transcribed, and coded. Transcription included the exact utterances of the participants. In addition, features that indicate pauses, hesitation, emphasis, different tones, or intonations were included. No pre-fixed coding scheme was used to analyze the data. I took three of the data sets, which had been

transcribed, and carried out an initial coding by identifying common patterns and themes. I first looked for patterns that were related to any methodological issues in think-aloud data and those that seemed to explain cognitive processes of perceptions of refusals. When necessary, I listened to the audio-recorded data again and applied what I found from the data to the coding by modifying the transcript. Seven categories, each of which consisted of one to three sub-categories, were first identified in the protocol, and all of the data sets were coded based on these categories. The categories included information related to the participants' perceptions of speech acts, such as background knowledge used in evaluating responses, sources of that knowledge, alternative responses, and methodological issues regarding the questionnaire, as well as information relating to the social nature of the protocols. Categories related to speech act perceptions and methodological issues regarding the questionnaire were excluded in the process of analysis since they were not the focus of the present study. For the current purpose, only categories reflecting recipient orientations in the verbal report protocols will be considered.

The categories that were used for this study are as follows: the use of *-desu* form in Japanese (i.e., *-desu*, *-masu* and their variants, which are known as a politeness marker); direct address to the researcher; meta-comments on the participants' behavior, particularly when they were accompanied with the *-desu* form or interactional sentence final particles; awareness of the TA protocols or recording; and selectivity of the information reported.

Discussion and illustrative examples of these categories will appear in the following section. Examples will be presented in the participants' exact utterances, including speech errors or grammatical errors. When they performed the TA in Japanese, the protocol in Japanese will be presented first, followed by an English translation. Comments in parentheses have been made by the researcher, and the utterances which illustrate the feature or category are italicized. When the participants were reading aloud passages from the questionnaire, a different font is used. Participants will be identified with the subject number given in the Table 1.

RESULTS AND DISCUSSION

The main results of this study highlighted issues regarding the social nature of TA protocol data, particularly the recipient orientation observed in the protocol, as well as issues concerning incompleteness of the data. The data examined suggest that verbal reports elicited by means of TA procedures, which have been claimed to be direct representations of cognitive processes (Ericsson & Simon, 1984), do contain interactive and social features, that the participants orient to a listener while carrying out the protocol, and that the participants are selective about what information to report while carrying out the task.

Use of the -desu Form

One of the most important features that demonstrate the social nature of TA protocol data is the use of *-desu* forms (i.e., *-desu*, *-masu* and their variants) in the participants' speech in Japanese. All the participants except for TA8 used the *-desu* form repeatedly in their TA protocol. TA 8 used only English and never code-switched to Japanese throughout her performance, thus using no *-desu* form in Japanese. While TA1 and TA5 mainly used English in their performance, they code-switched to Japanese several times, and during their switches, they used the *-desu* form. Below is an example from the protocol by TA2. Note how the participant shifts the use of *-desu* and *-da* forms in her protocol.

Example 1:

1. *jaa niban ni ikimasu*.(-desu)
2. You are a senior in college. You attend classes regularly and take good class notes. You have a study group tonight. Your classmate often misses classes and often asks you for your class notes. Classmate: We have a test tomorrow, don't we? I don't have the class notes from last week, so would you mind terribly if I borrowed your notes tonight?
3. response, *konnna hito tte irunda yone*. (-da)
4. I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. (Response 1)

5. Unfortunately, I've got to study tonight myself. Sorry. (Response 2)
6. u::n, issho ni benkyou suru noha kojinteki niha iya nande, kouiu hito to ha
7. (3.0) tekisetsu ka douka tte iwaretara, kouiu henji wo suru hito mo iru kamo shirenai kedo, jibun dattara shinai to omounde, *kore ha niban ni shimasu* (-desu)
8. niban ga nana, de, ichiban de, tekisetsu de naino ha, kono saigo ni (3.0) u::n (6.0) *saigo ni tsuketemo dame ka* (-da), ano, yappari issho ni benkyou shitaku naikara, dakara sorega gen-in de *ichiban ha tekisetsu desu* (-desu)
9. (2.0) dakara *ichiban ha tekisetsu ja arimasen* (-desu)(small laugh)
10. e-to, *kouiu baai doushitara iindarou* (-da)
11. toriaezu koko, kono ichiban ha… jibun dattara iwanai tte iunde (3.0) un, kanzen ni hutekisetsu de (3.0) kono "so maybe if you'd like to study together" tte iunoga *hutekisetsu ni shitoki mashou* (-desu)
12. hai, de *sanban iki masu* (-desu)

(TA 2, Item 2, JPN)

1. *well then, I'll move on to [situation] two* (-desu)
2. You are a senior in college. You attend classes regularly and take good class notes. You have a study group tonight. Your classmate often misses classes and often asks you for your class notes. Classmate: We have a test tomorrow , don't we? I don't have the class notes from last week, so would you mind terribly if I borrowed your notes tonight?
3. response. *there is a person like that.*
4. I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. (Response 1)
5. Unfortunately, I've got to study tonight myself. Sorry. (Response 2)
6. well, I don't like to study with such a person, personally, so…
7. (3.0) If you have to say [whether it is] appropriate or not, there might be someone who will respond like this, but I don't think I would do so, *so [I will choose] two* (-desu)
8. seven for response two, and in [response] one, for what is inappropriate, at the end of this (3.0) well (6.0), *it doesn't work, does it*, (-da) well, I don't want to

study together, so because of that, *response one is appropriate* (-desu)

9. (2.0) so *response one is not appropriate* (-desu) (small laugh)
10. well (6.0) *what should I do in this case* (-da)
11. this, for the time being, this, this response one (3.0) because I wouldn't say it myself (3.0), yeah, this is completely inappropriate (3.0) *this [phrase],* "so maybe if you'd like to study together", *is inappropriate* (-desu)
12. ok, then *I'll move on to [situation] three* (-desu)

In prescriptive grammar, the distinction between the *-desu* form and the *-da* form is usually considered to be based on politeness or formality, *-desu* form being more polite or formal, while *-da* is described as casual or informal. According to the descriptive scholarly literature on Japanese, however, there is a sociolinguistic or interactional motivation when people choose different styles. For example, Kindaichi (1982) points out that *-da* style is used when utterances are self-addressed, while the *-desu* form is used when an utterance is addressed to a listener. Makino (1983) provides a more detailed analysis of the style shift between the *-da* and *-desu* forms from the perspective of speaker/listener orientation. Through his detailed analysis of intuitional data, he found that "a target element in a relevant domain cannot be marked formal if the particular domain is highly speaker oriented; if it is not, it can be marked formal" (1983, p. 143). Thus, the use of *-desu* implies a certain amount of attention to the recipient of that utterance. This is particularly true when the utterance is combined with sentence-final particles such as *-ne*, which has interactive characteristics in itself. As is also seen in the transcript above, the participants, even those who mainly used English for their protocol, repeatedly used the *-desu* form in their protocols. When the information uttered was highly speaker oriented—for example, when their comments were questions to themselves—these utterances were not marked with *-desu* form but with *-da* form. For example, in the transcript above, "*saigo ni tsuketemo dame ka*" (it doesn't work, does it) in line 9 is a confirmation of her thought to herself. Also, "*kouiu baai doushitara iindarou*" in line 10 is a question addressed by the participant to herself. The action displays uncertainty about what she was supposed to do in this particular case.

The frequent use of the *-desu* form can also be described as what Cook (1996)

identifies as an "on-stage" marker. Through her observation of teacher-student interaction in a Japanese elementary school classroom, Cook found that when the teacher and the students used the *-desu* form, they did not use it to mark politeness but rather indexed their "social persona" and being "on-stage" (1996, pp. 68, 74). By the same token, it can be argued that the participants in this study were using the *-desu* form as an index that they were playing a social role as "research participants". It should be noted that not all utterances include the *-desu* form, the *-da* form and the *-desu* form shifted a great deal. However, it is important to note that the utterances formatted with the *-da* form are not always self-sufficient as the participants' inner thoughts to themselves. They are often semantically subordinate to an utterance with a *-desu* form. Example 2 illustrates this semantic subordination of the *-da* form to the *-desu* form.

Example 2:

1. You know, do we really have to finish this up tonight, or do you think we could finish it tomorrow morning? Because, um, I hadn't planned on being here much later and my wife and kids are waiting for me to come meet them tonight. I mean if we have to, ok, but you hadn't mentioned it, that there was a deadline for tomorrow, so if we could maybe finish it tomorrow morning, I'd be happy to put the work in then. (response 1)
2. kore ha boku ha iimasen ne (-desu), ichi kurai deshouka (-desu)
3. naze ka tte iuto "do we really have to finish this up tonight" kouiu challenging na iikata ha joushi ni taishite ha ie, toku ni nihon no naka de areba kocchi dattara chotto wakaranai kedo *kouiu iikata ha shinai* (-da)
4. dakara "do you think we could finish that tomorrow morning" *asu no asa dekimasen deshouka tte iu iikata mo shinai* (-da)
5. de mou hitotsu ha mata nihon de areba *jibun no kazoku wo shokuba ni mochikomu toiukoto ha shinai keikou ga aru* (-da)
6. saikin ha kawatte kiteru kamo shirenai kedo dakara e:to jibun ga nihon de ahataraiteta toki ha kouiu koto wo iunoha chotto (unintelligible)
7. tatoeba jibun no okusan ga korekara akachan wo umunda tte koto de areba *iukamo shirenai kamo shirenai* (-da)
8. jissai boku no tomodachi de souyatte kaisha wo yasumasete moratteru hito ha iru

keredomo shiyou ha *konogurai no gohan wo taberu koto gurai dattara mochidashi masen* (-desu)

(TA3, Item 7, JPN)

1. You know, do we really have to finish this up tonight, or do you think we could finish it tomorrow morning? Because, um, I hadn't planned on being here much later and my wife and kids are waiting for me to come meet them tonight. I mean if we have to, ok, but you hadn't mentioned it, that there was a deadline for tomorrow, so if we could maybe finish it tomorrow morning, I'd be happy to put the work in then. (response 1)
2. this one, I wouldn't say [this], (-desu) maybe one (-desu)
3. the reason is, this kind of challenging way [of saying], "do we really have to finish this up tonight", [we] wouldn't say this kind of thing to a boss, especially in Japan, I don't know [about this] in [the U.S], but *[we] don't say this* (-da)
4. so, "do you think we could finish this tomorrow morning?", *[we] don't say something like "can we finish [this] tomorrow morning?"* (-da)
5. another thing is, if in Japan, *there is s tendency that we don't bring up family issues in business* (-da)
6. [it] might have been changing lately, though, so, well, when I was working in Japan, it was a little (unintelligible) to say this kind of thing
7. for example, if your wife is delivering a baby, *[you] might say, [you] might say [this]* (-da)
8. in fact, I have a friend who takes days off from [his] company for such a reason, but as for personal issues, *if it's something like having dinner [together], I wouldn't bring this up* (-desu)

The utterances from line 3 through line 7 are accompanied with the *-da* form, and only line 8 includes the *-desu* form. Lines 3, 4, 5, and 7 are comments that describe the participant's "private belief" and "long-cherished, frozen images" (Makino, 1983, pp. 141-142) about the social context in Japan and of what he or Japanese people would say in such a situation, and they are semantically subordinate to the utterance in line 8. Thus,

using the *-da* form does not necessarily mean that these utterances are self-sufficient, but rather that they are a part of the subsequent utterance phrased with the *-desu* form.

Based on this analysis, it is plausible to argue that the participants were performing as if they were "on-stage" throughout their TA task, and that they shifted to inner speech when they were actually "thinking aloud", which can be marked with a *-da* form. Being "on-stage" in this condition means that they were playing a role of "research participants" in this particular research project. Their engagement in this project as research participants indirectly involves the responsibility to carry out the task for the researcher, thus indicating a recipient orientation in the TA protocol.

Addressivity

All the participants except for TA6 and TA8 addressed the researcher in different ways while they were thinking aloud. TA1 and TA2 directly addressed the researcher by calling her name. Here is an example from TA2's protocol. Note that she addressed the researcher by her name in line 7.

Example 3:

1. hai roku
2. You have a friend staying with you for a week. He has recently lost his job due to the slowing economy. You also know that he has a wife and two children to support. He comes rushing up to you immediately when you return home from work. Friend: Oh, god, I'm sorry. I had an awful accident. I was trying to help out and while I was cleaning, I bumped into the table and your family's china vase fell and broke. I feel just terrible about it. I'll pay for it, I promise.
3. Don't worry about it. It's not that important. (Response 1)
4. Ok, I know you're good for it. Don't worry, you can take your time. We'll think about it. (Response 2)
5. (3.0) *kono, o-ke- no speru ga* sakki ha ki ga tsuitemo iwanakatta n desukedo *capital ni surun deshouka* (question)
6. *soretomo saikin ha komoji de kaiteru baai mo arun deshouka.* (question)
7. *Tomomi-san, kore atode yokattara oshiete kudasai.*
8. e: tokorode kotae ha (3.0) kon-na: komatteru no ha wakaru kedo kore yomesan mo

kodomo mo issho ni uchi ni isourou shiteiru n deshou ka

9. u::n (6.0)

(TA2, Item 6, JPN)

1. now [moving on to situation] six
2. You have a friend staying with you for a week. He has recently lost his job due to the slowing economy. You also know that he has a wife and two children to support. He comes rushing up to you immediately when you return home from work. Friend: Oh, god, I'm sorry. I had an awful accident. I was trying to help out and while I was cleaning, I bumped into the table and your family's china vase fell and broke. I feel just terrible about it. I'll pay for it, I promise.
3. Don't worry about it. It's not that important. (Response 1)
4. Ok, I know you're good for it. Don't worry, you can take your time. We'll think about it. (Response 2)
5. (3.0) this, spelling of "Ok", I didn't mention it before even though I noticed it, *[do they] write in capitalized letters?*
6. *or [do they], these days, write in lower cases?*
7. *Tomomi-san, if you don't mind, please tell me about this later.*
8. well then, the answer is (3.0), like this, [I] understand [this person] is in trouble, but are his wife and kids staying as well?
9. well (6.0)

TA2, as is seen in the transcript, explicitly talked to the researcher, who was not present in the studio where she was carrying out the task. TA2 talked to the researcher again, calling her name, in the later part of her TA protocol. TA1 also talked to the researcher explicitly, addressing her by name. It is obvious that they were aware of the existence of the researcher even though she was not present and they were aware that they were performing the task for the researcher.

The first part of Example 3 also includes another type of data that shows the participants' awareness for the researcher, i.e., a question. The participant was asking a question about the spelling of "OK". From the direct request for information directed to

the researcher, it is obvious that the question was addressed to the researcher. In the earlier part of her TA protocol, as seen in Example 4, TA2 also addressed the researcher by suggesting a change for a phrase given in the item.

Example 4:

1. hai soredeha yon-ban ni iki masu
2. sichue-shon (reading the situation and utterance)
3. demo kore ha sichue-shon no setsumei nande ano betsu ni koko ha hutekisetsu ja nai n da na
4. *Tomomi-san kore ha salesperson ni shita hou ga ano; hankan wo kawanai hito ga ooi njanai n deshouka*
5. *salesman ja nakute kono salesperson ha dou deshouka*

(TA2, Item 4, JPN)

1. now I'll move on to [situation] four
2. situation (reading the situation and an utterance)
3. but since this is an explanation of the situation, this part is not inappropriate, isn't it
4. *Tomomi-san, this one, it's better to [change this] to a "salesperson", there will be more people who won't get offended, don't you think?*
5. *not a "salesman", but how about a "salesperson"?*

Although not explicitly addressing the researcher by name, data from other participants also showed that they were aware of the existence of the researcher or at least of some kind of audience for their task. One example is the use of apology. Apology was observed in many participants' protocol data. Here I will discuss two examples from TA1's and TA7's protocols.

Example 5:

1. so this (unintelligible) this is perfect but uh not necessarily
2. the reason is na (unintelligible)
3. (2.0) okay (3.0) wait wait
4. let me check uh the instruction again

5. I may misunderstood
6. (mumbling)
7. (4.0) Okay, a whole thing I got the mistake in question one I totally misunderstood
8. (3.0) *sorry that because uh I thought this is conversation*
9. worker (unintelligible) response I thought the response two is actually the utterance of owner
10. *uh no no the worker, sorry,* so I misunderstood that
11. uh so let me make a correction first
12. uh no just (unintelligible) financially support that (3.0) can you (3.0)

(TA1, Item 1, ENG)

TA1, realizing that he had misunderstood the context and the instructions for the task, apologized for his initial rating and explained the reason why he had misunderstood in line 8. He apologized again when he uttered a wrong word in line 9. Although not included in the transcript, he also corrected his pronunciation error while he was reading the passage aloud and apologized with the word "sorry". In other protocol data, although it was impossible from the audio recording to detect exactly what had happened, TA4 apologized for the noise that either she or something around her had made. TA7 also apologized for a speech error and TA5 "excused" herself when she sneezed. These instances cannot be seen as characteristics of the participants' internal conversation but rather as an attempt to interact with an imagined audience. The apologies observed here are all, to some extent, task-related. The participants were apologizing when they thought they were not doing the task in the way they were supposed to do it or when they believed what they were doing was not right. These apologies indicate the participants' orientation to the task, but also that they are performing the task not for their own benefit but for another party.

Apology can also be linked to the participants' monitoring of their speech. For example, as is seen in the following example, when TA7 made a speech error, she apologized and repaired the error.

Example 6:

1. dakara "so believe me" tte iu kawari ni

2. kou kou kou dakara gurama- yori mo conversation no hou ga useful dayo tte itte ageta hou ga
3. kono seito ha nattoku suru to omou node
4. chotto kore mo *tarinai ma-ku ni maru wo tsuke, a gomen-nasa,i check shite* ato ha sanban desu
5. niban

(TA7, Item 5, JPN)

1. so instead of saying "so believe me",
2. if you tell [the student] that because so and so, conversation is more useful than grammar,
3. I think this student will be convinced, so
4. this one, *I will circle the "missing mark", oh, I'm sorry, [I will] check [the "missing mark"]* and then [the rating is] three
5. [moving on to response] two

The instructions on the questionnaire told her to "write an X (check) mark" in the blank—tarinai ma-ku—after the response when she thought something was missing in the response. TA7, realizing that she uttered "circle" instead of "check", corrected her speech error, along with apologizing. The participants were instructed that they need not be concerned with coherence, speech errors, grammatical errors, or such. However, this segment suggests that the participants were, in fact, monitoring their speech despite the instructions. Ericsson and Simon (1998) comment that in TA protocols, participants do not monitor their overt verbalizations, but the participants in this study were monitoring their speech while carrying out the TA protocol.

Explanation of Behavior

Another feature that indicates recipient orientation is the participants' explanation of their own behavior while answering the questionnaire, which was particularly noticeable in the use of the *-desu* form and interactional sentence final particles. This observation agrees with what Bracewell and Breuleux (1994) categorized as "plan" or "goals" or

what Witte and Cherry (1994) defined as "procedural goals" in their research on writing. In the cases of the above studies, the writers formulated a set of different goals when planning, and these formulations of behavior served as instructions issued by the writers themselves on what to do next. In Bracewell and Breuleux (1994), goals included those related to, for example, the participants' intention (e.g., "what I want to get down here"), future action (e.g., "I'm going to reread this"), and potential action (e.g., "what is the word I'm looking for?") (p. 74). "Procedural goals" in Witte and Cherry (1994) referred to the writer's cognitive plan of what the next step was. An example of procedural goals is a comment such as "I'm going to have to write some notes down" (p. 29). Witte and Cherry treated goals as comments that the participants use for their own sake, for planning their next action, and some instances in my data corresponded with their analysis. However, the data also indicate that even those comments might not only be made for the participants' own sake but also for the researcher's benefit.

As will be observed in the following example, when comments relating to procedural goals were uttered in English, the distinction as to whether they are self-addressed or addressed toward an imagined audience cannot be made clear. However, when looking at the utterances in Japanese, we note that these meta-comments are used with -*desu* form and sometimes with interactional particles such as -*ne*, a sentence-final particle which adds interactive characteristics to the sentence. Here I will discuss two examples, one each from the English and Japanese transcripts.

Example 7:

1. ah ok I have no idea (3.0)
2. yeah I answered all the questions uh uh but ok *let me check the answer again*
3. (mumbling) ah (10.0) ok ah (5.0)
4. uh ok that's situation one and situation two
5. (mumbling)
6. ah ah *let me change uh uh the answer here*
7. the situation response two *I put I marked six but I change it to seven and I make a note here*
8. ah this is a undirect answer (3.0) so a little bit (3.0) ah impolite (5.0)
9. ah the distance the friendship (6.0) between the two (3.0) ah affects my answer

10. situation three uh (2.0) ok situation four ok situation five (reading the passage of situation 5)
11. yeah I made note well I I can't underline response one but here in this situation the situation five ah no respect to student so I made note here

(TA1, ENG)

In the example above, it is not clear whether the participant's meta-comments were made for his own sake (i.e., merely as confirmation of his own procedural goals) or for the listener's (i.e., the researcher's) benefit. He might be simply thinking his procedural goals aloud to help him get through the task, or he might be asking his listener to "let" him check or change his rating. These comments could be considered as both speaker and listener directed, and the distinction is not clear. When we examine the protocol data in Japanese, however, we see clearer distinctions. The example below is taken from TA4's protocol. Note how her use of the *-da* form shifts to the *-desu* form.

Example 8:

1. un kore ha *iinjanai ka na* (-da)
2. (3.0) demo nanka kou saigo ka nanka ni "but thanks for your invitation anyway" mitai no nanka kou ireta hou ga iinoka, demo soremo mata *nihonjin teki nano kana:* (-da)
3. u:n demo chotto kou yappa saigo ni nanka "but thanks for your invitation anyway" mitaina kotoba wo ireru to motto tekisetsu ni naruto omou kara ma *roku kurai kana* (-da)
4. *kon-na mon deshouka* (-desu)
5. *chotto ja kakuni shimasu ne* (-desu, -ne)

(TA4, Item 10, JPN)

1. yeah, *this is good, I think* (-da)
2. but, something like, at the end, it might be better to say something like "thanks for your invitation anyway", but *this might be something Japanese* (-da)
3. well, but, something like, at the end, if you put something like "but thanks for your invitation anyway", I think [the response] will be more appropriate, so *I*

guess [the rating is] around six (-da)

4. *this should be good* (-desu)
5. *well then, I will check [my answers]* (-desu, -ne)

In this example, TA4 shifted her use of -*da* form and -*desu* form. When she mentioned her personal belief, opinion, or feeling, she used the -*da* form, but she switched to the -*desu* form when she uttered an evaluative comment on her reasoning in line 4 and when she explained her behavior in line 5 that she would be checking her answers. Shifting to the -*desu* form suggests that TA4 oriented to the researcher. As explained earlier, the -*desu* form displays participants' listener orientation. Arguably, thus, with a -*desu* form, utterances specifying "procedural goals" reflect the participants' audience awareness. TA4's use of the interactional particle -*ne* is another indication of recipient orientation. The final particles in Japanese, particularly -*ne* can be associated with speech functions such as displaying and seeking agreement, confirmation, or cooperation (Yoshimi, 1999). Final particles in general have an interpersonal nature in Japanese (Maynard, 1993, 1997), and -*ne* specifically indexes the interpersonal rapport between speaker and hearer (1993) and "indexes the speakers' and addressee's attitude of general mutual agreement" (Cook, 1988). Kamio (1997) summarizes by writing that, when a speaker uses -*ne*, s/he conveys the "co-responding attitude" of the listener, which encourages the listeners to have identical cognitive state toward the relevant information. When using -*ne*, interaction is more foregrounded rather than the information exchange (Maynard, 1993, 1997).

In this case, the participant's evaluation of her reasoning and actions in line 4 and line 5 falls into a domain shared by the participant and the researcher (cf. Makino, 1983). The style shift from -*da* to -*desu* and use of sentence-final particle -*ne* can be understood to index inclusion of the researcher in the participant's action at those moments of the verbalization.

Another example can be observed in the verbal protocol of TA3. This participant uses the -*da* form when he is confirming his thoughts to himself, but switches to the -*desu* form along with the interactional sentence-final particle, -*ne*, when he starts talking to an imagined audience about the procedures.

Example 9:

1. e-to "I actually have plans for this weekend"
2. maa appropriate ja naku temo ichi yori ha ii to omou kara
3. *maa goban ka rokuban kana* (-da)
4. *aruimi chotto kaketeru kana* (-da)
5. koredakara nihon de areba chotto kou youji ga arundakedo tte iu koto de sumu keredomo
6. amerika deno expectation ha "have plans for this weekend" tte itta tokorode
7. aite ni doredake kou appropriate ka douka to iuto
8. mata boku no kankaku deha wakari kaneru kedo
9. *maa demo ichiban yoriha iinja naikana* (-da)
10. *chotto matte kudasai ne* (-desu, ne)
11. ano koreha shiteiinoka wakarannai kedo
12. chotto ichiban ne ichiban to niban tte iuka ichiban meni sukoshi dake
13. *modotte mou ikkai dake sokowo yomasete morai masu* (-desu)
14. tteiuka anoo ichiban no koroha mada nani wo itteru noka yoku wakattenakatta kara
15. *kore ha dame dattara kokkara keshite kudasai* (-desu)
16. souiu kotowoshite yoku nakattara
17. *iinokana* (-da)
18. *setsumei wo yonde miyo* (-da)
19. *tokuni modoccha ikenai ttte kaite naiyona* (-da)
20. *hai soreja chotto ichiban modori masu ne* (-desu, ne)

(TA3, Item 10, JPN)

1. well "I actually have plans for this weekend"
2. [this] may not be appropriate, but as I think [it is] better than [response] one
3. *well maybe [the rating is] five or six* (-da)
4. *in a way [something is] missing a little bit* (-da)
5. this one, if in Japan, you can just say you have some plans
6. [if you think about] expectations in the U.S., just saying "[I] have plans for this weekend",

7. as for how appropriate for someone
8. I cannot really know, but
9. well, but, [this is] better than [response] one (-da)
10. *please wait a second* (-desu, ne)
11. well, this thing, I don't know if I can do this, but
12. to [response] one, [response] one and [response] two, no to [response] one, a little bit
13. *I will let myself go back [to response one] and read that part once again* (-desu)
14. well because when [I was doing item] one, [I] did not know what I was doing very well
15. *if this is not ok, please delete from this part* (-desu)
16. if I am not allowed to do this kind of thing
17. *is it okay* (-da) (*falling tone)
18. *let me read the instruction again* (-da)
19. *it is not written that [I] cannot go back* (-da)
20. *well then, I will go back to [item] one* (-desu, ne)

As can be seen in line 3, line 4 and line 9, TA3 uses the *–da* forms when he confirms his thoughts about his ratings of that item. In line 10, however, he switches to using the *–desu* form when he starts talking to an imagined audience. He was not certain whether what he was going to do next was what he was supposed to do in the research project and he was requesting someone to "wait for a second". Not only by using the *–desu* form, but also by requesting, as requesting is obviously an action that needs a recipient, he brings an audience into his protocol. In line 13, when he describes his behavior, he uses the *–desu* form, which indicates the existence of an other in his mind. Also, the word "sasete morau" is used to ask someone to "let" you do something, and it clearly brings an audience into his protocol. The utterance in line 17 is a confirmation of his thoughts about the procedure and the one in line 18 is a part of his procedural goals of his future action. Utterances in line 13 and line 18, however, are clearly oriented to a listener. As stated above, the final sentence particle *–ne* also confirms this interpersonal orientation.

Awareness of the TA Protocol

Another indication of recipient orientation was identified by features that describe the participants' awareness for the TA protocol. One of such features is the repeated use of hesitation tokens by the participants. Some examples observed in the data include: *u::n*, *e:tto*, *n::*, and *ano:* in Japanese, and *um*, *uh, let's see*, *let me see*, and *you know* in English. Notice how the hesitation token *u::n* and *e::to* are used in the following example in the protocol of TA7.

Example 10:

1. You are a senior in college. You attend classes regularly and take good class notes. You have a study group tonight. Your classmate often misses classes and often asks you for your class notes.
2. Classmate: We have a test tomorrow, don't we? I don't have the class notes from last week, so would you mind terribly if I borrowed your notes tonight?
3. I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. (Response 1)
4. Unfortunately, I've got to study tonight myself. Sorry. (Response 2)
5. *u::n* (2.0) *u:n* (1.0) ichiban ha betsu ni korede ii ki ga shimasu
6. *e::to* (1.0) *u::n* (3.0) chanto *u::n* (1.0) aite no itta koto ni taaishite
7. *u::n* to (1.0) benkyou shinakya ikenai tte itteru kedo nanka shitsurei no naiyou ni (1.0)
8. *u::n* (1.0) issho ni benkyou dekiru nara iiyo mitai na kekkou kanji no ii kotae dato omou node
9. *u::n* (1.0) demo moshikashitara nanka arunoka tomo omoun desuga
10. I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. (Response 1)
11. *u::n* (1.0) chotto demo nanka kono hito moshikashitara kono kurasumeito no hito to benkyou shitaku nainokana toiukimo shinakumo naikedo
12. sono hen no handan ga muzukashii node
13. *u::n* (3.0) doushiyokka na (1.0) goban ni shimasu

(TA7, Item 2, JPN)

1. You are a senior in college. You attend classes regularly and take good class notes.

You have a study group tonight. Your classmate often misses classes and often asks you for your class notes.

2. Classmate: We have a test tomorrow, don't we? I don't have the class notes from last week, so would you mind terribly if I borrowed your notes tonight?
3. I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. (Response 1)
4. Unfortunately, I've got to study tonight myself. Sorry. (Response 2)
5. *u::m* (2.0) *u:m* (1.0) [I feel response] one is good as it is
6. *well* (1.0) *u::m* (3.0) properly *u::m* (1.0) to what the person said
7. *u::m* (1.0) [this person] says that s/he has to study, but not to be impolite,
8. *u::m* (1.0) I think this is a good response in that [s/he says] it is ok if [the other person] wants to study together, so
9. *u::m* (1.0) but somehow [I feel that] this person may not want to study with this classmate
10. but it is difficult to judge
11. *u::m* (3.0) what should I do (1.0) [I will mark] five

As is found in this transcript, from line 5 through line 12, the hesitation token *u::n* and *e::tto* are repeatedly used. As can be seen from the transcript, most of the hesitation tokens are accompanied with quite long pauses. For example, in line 6, there would have been a very long pause without these tokens. Similar cases were also observed in other participants' data. In these examples, there would have been very long pauses when hesitation tokens were taken out. As is common in TA studies, the participants were instructed to continue talking, and were not allowed to have a long silence. That could be a possible reason why they kept using hesitation tokens, and that can illustrate the participants' orientation toward the task they were instructed to carry out. Their orientation to the task indicated their indirect orientation to the researcher as well since the task was required by the researcher. Thus, this also infers the recipient orientation in the TA protocol, not only that there might be a "high processing load" (Kasper, 1998) for the participants in carrying out the protocol.

Languages Used in Protocol

Another characteristic of recipient orientation was indicated by the languages the participants used in TA protocol. Robinson (1992) used TA and retrospective interviews to investigate Japanese ESL learners' production of refusals. Although the researcher was a native speaker of English and unable to understand Japanese, the participants were instructed that they could choose either Japanese or English to carry out the TA protocol. None of the participants, however, chose to carry out the protocol in Japanese, and only a few utterances in Japanese were observed throughout the protocols. In the present study, the researcher was a bilingual speaker of Japanese and English, and the participants were given a choice of carrying out the protocol either in Japanese or English, or a mixture of the two languages. Out of the eight participants, five carried out the TA in Japanese and three performed the TA in English. This difference between the two studies suggests that the participants' language choice was also an indication of recipient orientation. In the present study, all but one participant knew the researcher personally before carrying out the study, thus, they knew that she is a proficient bilingual speaker of Japanese and English. The only participant who did not know her personally knew that she was studying for an MA degree in ESL in the Department of Second Language Studies.

Knowing whether the researcher was able to understand Japanese or not may have possibly influenced the participants' language choice. This is also plausible in view of the discrepancy between the languages used in the TA and reported as a language of thought in Robinson's (1992) retrospective interviews. Although all the participants carried out the TA in English, in the retrospective interviews with the researcher, some of the participants indicated that they were thinking in Japanese for at least some parts of the protocol. Although they claimed that they had been thinking in Japanese, they chose to use English instead of Japanese. This could be a possible accommodation by the research participants to a researcher's monolingual competence.

Selectivity of Information

The data elicited from the TA also showed that the participants might not have been simply reporting what they were thinking but that they might have made decisions about what information to report. The selectivity of reporting is another feature that illustrates

the participants' recipient orientation in the TA protocol. One example is seen in the protocol of TA2. Note that the participant explicitly mentioned that she was being selective about the information to report.

Example 11:

1. hai roku
2. You have a friend staying with you for a week. He has recently lost his job due to the slowing economy. You also know that he has a wife and two children to support. He comes rushing up to you immediately when you return home from work. Friend: Oh, god, I'm sorry. I had an awful accident. I was trying to help out and while I was cleaning, I bumped into the table and your family's china vase fell and broke. I feel just terrible about it. I'll pay for it, I promise.
3. Don't worry about it. It's not that important. (Response 1)
4. Ok, I know you're good for it. Don't worry, you can take your time. We'll think about it. (Response 2)
5. (3.0) kono, o-ke- no speru ga *sakki ha kga tsuitemo iwanakatta n desukedo* capital ni surun deshouka
6. soretomo saikin ha komoji de kaiteru baai mo arun deshouka.
7. Tomomi-san, kore atode yokattara oshiete kudasai.
8. e: tokorode kotae ha (3.0) kon-na: komatteru no ha wakaru kedo kore yomesan mo kodomo mo issho ni uchi ni isourou shiteiru n deshou ka
9. u::n (6.0)

(TA2, Item 6, JPN)

1. now [moving on to situation] six
2. You have a friend staying with you for a week. He has recently lost his job due to the slowing economy. You also know that he has a wife and two children to support. He comes rushing up to you immediately when you return home from work. Friend: Oh, god, I'm sorry. I had an awful accident. I was trying to help out and while I was cleaning, I bumped into the table and your family's china vase fell and broke. I feel just terrible about it. I'll pay for it, I promise.
3. Don't worry about it. It's not that important. (Response 1)

4. Ok, I know you're good for it. Don't worry, you can take your time. We'll think about it. (Response 2)
5. (3.0) this, spelling of OK, *I didn't mention it before even though I noticed it,* [do they] write in capitalized letters?
6. or [do they], these days, write in lower cases?
7. Tomomi-san, if you don't mind, please tell me about this later.
8. well then, the answer is (3.0), like this, [I] understand [this person] is in trouble, but are his wife and kids staying as well?
9. well (6.0)

In this transcript, TA2 was dealing with Situation 6 on the questionnaire. Response 2 of Situation 6 started with a capitalized "Ok", but in the previous situation (Situation 5), "OK" was written in lower case. TA2 noticed that the spelling of these two "OK"s was different and raised a question. The utterance in line 5 suggests that she noticed something about the spelling of "OK" in the former situation but did not verbalize her thoughts. At the second encounter with "OK" featuring a different spelling, she chose to report what she noticed and request an explanation. The information that was not reported was not task-related but a question raised out of TA2's own curiosity. It is plausible to argue that the priority of reporting that issue might have been lowered because it was not task relevant.[4]

TA2 made a decision of what information was important and needed to be reported in this protocol. This indicates the participant's orientation to the TA task and an index of her social persona as a research participant in this particular study. By deciding what information to report, she was selecting information necessary for the researcher, hence this decision making processes can be characterized as indirect orientation to the recipient of the task.

CONCLUSION

Through this study, the social and interactive nature of the verbal protocols was highlighted by analyzing how the protocols are audience designed. In particular, verbal

report data carried out in Japanese revealed much information that was not available from data in English. In Japanese, it is very important to choose appropriate styles by differentiating forms (e.g., verb endings) of utterances in accordance with the context, social distance, and the social group that co-participants belong to (Maynard, 1997). This sensitivity of style change enabled us to see a clearer style shift of language use in the Japanese TA protocols.

The data elicited by means of a TA procedure, which have been claimed to be direct representations of cognitive processes (Ericsson & Simon, 1984), were not solely cognitive but contained features that indicate recipient orientation. The participants used the *-desu* form repeatedly in their protocols, which not only links the utterances to a listener but also indexes the participants' being "on-stage" as research participants. They addressed the researcher, either directly or indirectly. Their use of meta-comments, combined with the *–desu* form and interactional sentence-final particles, suggested that those comments might be used for the researcher's benefit rather than as cognitive goal formulation. Also, it was observed that the participants chose what information to report by not verbalizing certain information while carrying out the protocol.

The results of this study do not invalidate verbal report techniques as a valuable research methodology. By means of verbal report, we will still be able to gain information that otherwise can only be investigated indirectly. However, some important issues which need to be taken into consideration have emerged. Although containing much valuable information, treating verbal report protocols as solely cognitive products under-represents what they actually reveal. Protocols are socially and interactively constituted, and this fact had to be taken into consideration when analyzing TA data. The strong orientations to the listener observed in this study suggest that a different recipient might lead to different content or types of protocol, just as other social factors could influence the data. Thus, it is important that researchers acknowledge that the protocol is a socially situated activity and that we collect, analyze, and interpret verbal report data carefully, based not only on what is produced but also on how it is produced.

REFERENCES

Bakhtin, M. M. (1981). *The dialogic imagination: Four essays by M. M. Bakhtin* (M. Holquist, Ed., and C. Emerson & M. Holquist, Trans.). Austin: University of Texas Press.

Bakhtin, M. M. (1984). *Problems of Dostoevsky's poetics by M. M. Bakhtin* (C. Emerson, Ed. & Trans.). Minneapolis: University of Minnesota Press.

Bakhtin, M. M. (1986). *Speech genres and other late essays* (C. Emerson, & M. Holquist, Ed., and V. W. McGee, Trans.). Austin: University of Texas Press.

Bakhtin, M. M. (1999). The problem of speech genres. In Jaworski, A. & Coupland, N. (Eds.), *The discourse reader* (pp.121-132). New York: Routledge.

Beebe, L. M., Takahashi, T., & Uliss-Weltz, R. (1990). Pragmatic transfer in ESL refusals. In R. Scarcella, E. Anderson, & S. Krashen (Eds.), *Developing communicative competence in a second language* (pp. 55-73). New York: Newbury House.

Bell, A. (1984). Language style as audience design. *Language in Society, 13*, 145-204.

Bell, A. (1997). Language style as audience design. In N. Coupland. & A. Jaworski. (Eds.), *Sociolinguistics: A reader* (pp. 240-250). New York: St. Martin's Press.

Bracewell, R. J., & Breuleux, A. (1994). Substance and romance in analyzing think-aloud protocols: Issues for research. In P. Smagorinsky (Ed.), *Speaking about writing* (pp. 3-19). Thousand Oaks, CA: Sage.

Charmaz, K. (2002). Qualitative interviewing and grounded theory analysis. In J. Holstein, & J. Gubrium. (Eds.), *Handbook of interview research* (pp. 657-694). Thousand Oaks, CA: Sage.

Cohen, A., & Olstain, E. (1994). Researching the production of second-language speech acts. In E. Tarone, S. M. Gass, & A. Cohen (Eds.), *Research methodology in second-language acquisition* (pp. 143-156). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cohen, A. (1987). Using verbal reports in research on language learning. In C. Faerch. & G. Kasper (Eds.), *Introspection in second language research* (pp. 82-95). Philadelphia: Multilingual Matters.

Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Harvard University Press.

Cook, M. H. (1988). The Japanese *-masu* suffix as an indexical of affective distance. Paper presented at the Honorifics Conference, Portland State University/ Reed College.

Cook, M. H. (1996). The use of addressee honorifics in Japanese elementary school classrooms. In N. Akatsuka, S. Iwasaki, & S. Strauss (Eds.), *Japanese/Korean linguistics* (Vol. 5, pp. 67-81). Stanford: The Center for the Study of Language and Information.

Eisenstein, M., & Bodman, J. W. (1986). 'I very appreciate': Expressions of gratitude by native and non-native speakers of American English. *Applied Linguistics, 7*, 167-185.

Ericsson, K. A., & Simon, H. A. (1984). *Protocol analysis*. *Verbal reports as data*. Cambridge, MA: The MIT Press.

Ericsson, K. A., & Simon, H. A. (1987). Verbal reports on thinking. In C. Faerch. & G. Kasper (Eds.), *Introspection in second language research* (pp. 25-53). Philadelphia: Multilingual Matters.

Ericsson, K. A., & Simon, H. A. (1993). *Protocol analysis. Verbal reports as data (2nd ed.)*. Cambridge, MA: The MIT Press.

Ericsson, K. A., & Simon, H. A. (1998). How to study thinking in everyday life: Contrasting think-aloud protocols with descriptions and explanations of thinking. *Mind, Culture, and Activity, 5*, 178-186.

Faerch, C., & Kasper, G. (1987). From product to process - Introspective methods in second language research. In C. Faerch. & G. Kasper (Eds.), *Introspection in second language research*. (pp. 24-53). Philadelphia: Multilingual Matters.

Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research.* Mahwah, NJ: Lawrence Erlbaum Associates.

Hauser, E. (2002, October). Incomplete verbalization in concurrent think-aloud protocols. Paper presented at Second Language Research Forum, Toronto.

Jourdenais, R. (2001). Cognition, instruction, and protocol analysis. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 354-375). Cambridge: Cambridge University Press.

Kamio, A. (1997). *Territory of information.* Amsterdam: John Benjamins.

Kasper, G. (1998). Analysis of verbal protocols. *TESOL Quarterly, 32*, 358-362.

Leont'ev, A. N. (1981). *Problems in the development of the mind*. Moscow: Progress Publishers.

Makino, S. (1983). Speaker/listener orientation and formality marking in Japanese. *Gengo kyouiku, 84*, 126-145.

Maynard, S. (1989). *Japanese conversation: Self-contextualization through structure and interactional management*. Norwood, NJ: Ablex.

Maynard, S. K. (1990). *An introduction to Japanese grammar and communication strategies*. Tokyo: The Japan Times.

Maynard, S. (1993). *Discourse modality: Subjectivity, emotion and voice in the Japanese language*. Amsterdam: John Benjamins.

Maynard, S. (1997). *Japanese communication: Language and thought in context*. Honolulu, HI: University of Hawai'i.

Nihongo kakekomi dera. [On-line dictionary]. Available from http://ws.31rsm.ne.jp/~toolware/cgi-bin/toppage.cgi

Nisbet, R. E., & Wilson, W. T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review, 84*, 231-259.

Pressley, M., & Afflerbach, P. (1995). *Verbal protocols of reading*. Mahwah, NJ: Lawrence Erlbaum Associates.

Raven, J. C. (1958). *Standard progressive matrices*. London: H. K. Lewis.

Robinson, M. A. (1992). Introspective methodology in interlanguage pragmatics research. In G. Kasper (Ed.), *Pragmatics of Japanese as a native and target language* (pp. 27-82). SLTCC Technical report #3. University of Hawaii. Honolulu. HI.

Russo, J. E., Johnson, E. J., & Stephens, D. L. (1989). The validity of verbal protocols. *Memory & Cognition, 17*, 759-769.

Sasaki, T., & Beamer, M. S. (2002, December). Pragmatic transfer among Japanese learners of English. Paper presented at Modern Language Association annual convention, New York.

Smagorinsky, P. (1994a). Introduction. In P. Smagorinsky (Ed.), *Speaking about writing* (pp. 3-19). Thousand Oaks, CA: Sage.

Smagorinsky, P. (1994b). Think-aloud protocol analysis. Beyond the black box. In P. Smagorinsky (Ed.), *Speaking about writing* (pp. 3.-19). Thousand Oaks, CA: Sage.

Smagorinsky, P. (1997). Personal growth in social context: A high school senior's search for meaning in and through writing. *Written Communication, 11*, 283-310.

Smagorinsky, P. (1998). Thinking and speech and protocol analysis. *Mind, Culture, and Activity, 5*, 157-177.

Smagorinsky, P. (2001). Rethinking protocol analysis from a cultural perspective. *Annual Review of Applied Linguistics, 21*, 233-245.

Stratman, J., & Hamp-Lyons, L. (1994). Reactivity in concurrent think-aloud protocols. Issues for research. In P. Smagorinsky (Ed.), *Speaking about writing* (pp. 89-111). Thousand Oaks, CA: Sage.

Vygotsky, L. S. (1987). Thinking and speech. In R. Rieber & A. Carton (Eds.), *L. S. Vygotsky, Collected works* (Vol. 1, pp. 39-285). New York: Plenum.

Wertsch, J. V. (1981). The concept of activity in Soviet psychology: An introduction. In J. V. Wertsch (Ed. & Trans.), *The concept of activity in Soviet psychology* (pp. 3-36). Armonk, NY: Sharpe.

Witte, S. P., & Cherry, R. D. (1994). Think-aloud protocols, protocol analysis, and research design: An exploration of the influence of writing tasks on writing processes. In P. Smagorinsky (Ed.), *Speaking about writing* (pp. 3-19). Thousand Oaks, CA: Sage.

Yoshimi, D. R. (1999). L1 Language socialization as a variable in the use of *ne* by L2 learners of Japanese. *Journal of Pragmatics, 31*, 1513-1525.

APPENDIX A-1

アンケートにお答えになる前に以下の質問にお答え下さい。情報は匿名で扱われますので、個人の情報が他に漏れることはありません。

Background Information

1. 年齢 _____代 性別 (女性[ ] /男性[ ])

2. 英語を母国語としない国でどれだけの期間英語を学びましたか？

(年 ヶ月)

3. 海外に 1 ヶ月以上滞在したことのある場合、国と滞在期間・時期を以下に記入してください。 例：a. カナダ (1 年 3 ヶ月 滞在時期：1997～1998 年)

a. _____ (年 ヶ月 滞在時期： ～ 年)

b. _____ (年 ヶ月 滞在時期： ～ 年)

c. _____ (年 ヶ月 滞在時期： ～ 年)

4. 現在の学生としての立場に〇をつけて下さい

英語プログラム(NICE・HELP 等) 学 部 (UH KCC そ の 他 ( ))

大学院(修士・博士) その他( )

5. 一番最近の TOEFL のスコア(受けたことがあれば) (：受験年月)

そのほかに英語関連の資格があれば(英検等) (：受験年月)

ELI の学生である場合は今学期にとっているコース全てに〇をつけてください

ELI 70, 80, 72, 82, 73, 83, 100

HELP や NICE の学生である場合とっているコースとレベルを書いて下さい

5. ご自分の英語力はどこにあてはまると思いますか？

(beginning, intermediate, advanced)

_____ Oral _____ Reading _____ Writing

どの程度であれば英語が使えますか？(例：簡単な会話くらいなら・日常生活問題なし等々) _____

6. 普段、自分の自由時間のうちどの程度の割合で以下の人達と時間を**過ごしてい**ますか？(誰かと一緒にいるときに)

_____(%)__ 日本語のネイティブスピーカー

_____(%)__ 英語のネイティブスピーカー

_____(%)__ 他の言語圏出身の人　(英語で？　はい　いいえ　)

7. 普段、自分の自由時間のうちどの程度の割合で以下の人達と時間を**過ごしたい**と思いますか？

_____(%)__ 日本語のネイティブスピーカー

_____(%)__ 英語のネイティブスピーカー

_____(%)__ 他の言語圏出身の人　(英語で？　はい　いいえ　)

Questionnaire

それぞれの状況に関して以下の手順に沿って答えてください

＊研究者から Thinking aloud を頼まれた方は実際の記入をはじめる前に Thinking Aloud Instruction と書かれた用紙を読んでください。

1. それぞれの状況と会話を読んでください。それぞれの状況毎に a)状況 b)ある人の会話 c)話者に対する 2 つの返答 d)それぞれの返答に対するスケールがあります。

2. それぞれの返答がその状況と会話に対してどの程度適していると思うかを 0(=完全に不適切である)から 7(=完全に適切である)のスケールに沿って数字の横にチェックしてください。

3. 回答が 7 でない場合、*返答文の中で*その返答が適切でないと感じられた部分(特定の部分があれば)に*下線を引いてください*。

4. 返答に*何かが欠けている*せいで不適切であると思われる場合(例 : 理由を言うべきなのに理由が述べられていない等)は*文の後ろの(　)部分にチェックマーク*(X)を書きこんでください。

＊これはあなた自身の個人的な意見を知るためのものですので、どの回答が正しい/間違っている、というのではありません。例えば、 一つの状況の二返答において両方ともが「完全に不適切」、「完全に適切」になる場合、また他の組み合わせになる場合など、様々な回答状況がありえます。

Example:　(下の脚注参照)

[5]**Situation:** You work in a store and a customer asks you for some help.
Customer: Yes, I was wondering where you have software for accounting?
Response 1: Sure I will, but [6]that's not my department, so it might take a while.(　)
[7]0[X] 1[　] 2[　] 3[　] 4[　] 5[　] 6[　] 7[　]
Response 2: I'm sorry, I'm new here. Let me check with my manager. [8](X)
0[　] 1[　] 2[　] 3[　] 4[　] [9]5[X] 6[　] 7[　]

1. **Situation:** You are the owner of a music store that is financially stable, but not extremely profitable. One of your best workers asks to speak to you in private.

Worker: As you know, I've been here just a little over a year now, and I know you've been pleased with my work. I really enjoy working here, but to be quite honest, I really need an increase in pay.

Response 1: I see, well, let me get back to you on that. Can you give me some justification of why you might need this raise? (　) (* "Let me get back to you." = "Let me talk to you later.")

0[　] 1[　] 2[　] 3[　] 4[　] 5[　] 6[　] 7[　]

Response 2: I don't know. I guess I'd have to look at our books and see if we can financially support that. (　)

0[　] 1[　] 2[　] 3[　] 4[　] 5[　] 6[　] 7[　]

2. **Situation:** You are a senior in college. You attend classes regularly and take good class notes. You have a study group tonight. Your classmate often misses classes and often asks you for your class notes.

Classmate: We have a test tomorrow, don't we? I don't have the class notes from last week, so would you mind terribly if I borrowed your notes tonight?

Response 1: I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Unfortunately, I've got to study tonight myself. Sorry. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

3. **Situation:** You are at a friend's house for lunch.

Friend: How about another piece of cake?

Response 1: It was really good thanks, but um, I'm trying to watch my weight. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: No thank you. I couldn't eat another bite. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

4. **Situation:** You are the president of a printing company. You have just signed a long-term contract with a new parts supplier, company X. A salesman from another parts supplier, company Y, calls you on the telephone.

Salesman: I have some new figures my sales manager has just authorized and I'd like to meet to discuss them. I was wondering if you would be my guest at The Ritz-Carlton in order to talk it over and have a look at the contract.

Response 1: You know, that sounds really great, but we've actually, uh, given that contract to someone else, and if you could call me next fiscal year, I'd love to hear from you. ( )

(* "fiscal year." = "会計の行われる年度.")

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: I'm sorry, we've just signed a contract with another supplier. Thank you for your offer. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

5. **Situation:** You're a language teacher at a university. It is just about the middle of the term now and one of your students asks to speak to you.

Student: Um, excuse me, some of the students were talking after class recently and we kind of feel that the class would be better if you could give us more practice in grammar and less in conversation.

Response 1: Well, you know, when we started the semester we went through the syllabus and you saw that the focus of this class was on conversation and communication skills, not grammar, and I was really clear about that, so believe me I think the conversation will be much more useful in the long run for you than grammar. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Uh, ok. This is what all the students thought? Let me think about it and we'll talk about it in class tomorrow. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

6. **Situation:** You have a friend staying with you for a week. He has recently lost his job due to the slowing economy. You also know that he has a wife and two children to support. He comes rushing up to you immediately when you return home from work.

Friend: Oh God, I'm so sorry! I had an awful accident. I was trying to help out and while I was cleaning I bumped into the table and your family's china vase fell and broke. I feel just terrible about it. I'll pay for it, I promise.

Response 1: Don't worry about it. It's not that important. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Ok, I know you're good for it. Don't worry, you can take your time. We'll think about it. ( ) (* "I know you're good for it." = "I know you will pay me back for it.")

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

7. **Situation:** You are at the office in a meeting with your boss. It is getting close to the end of the day and you have promised to have dinner with your family.

Boss: We really have to finish this up tonight. Why don't you go order some pizza, it looks like we're going to be here for a few more hours.

Response 1: You know, do we really have to finish this up tonight, or do you think we

could finish it tomorrow morning? Because, um, I hadn't planned on being here much later and my wife and kids are waiting for me to come meet them tonight. I mean if we have to, ok, but you hadn't mentioned it, that there was a deadline for tomorrow, so if we could maybe finish it tomorrow morning, I'd be happy to put the work in then. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Uh, tell you what, I could give you about thirty more minutes, but after that I've really gotta get home. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

8. **Situation:** A friend invites you to dinner, but you really dislike this friend's husband/wife.

Friend: How about coming over for dinner Sunday night? We're having a small informal get-together.

Response 1: You know I'd really like to, but I got a really important meeting early on Monday morning, so uh, I'm afraid I'm going to have to pass this time. Sorry about that. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Ok, let me get back to you on that for sure. I might have something planned this weekend. Let me check. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

9. **Situation:** You've been working in an advertising agency for some time. The boss had recently offered you a raise and promotion, but it involves moving out of the state. The boss calls you into his office.

Boss: I'd like to know what you think about the offer of the executive position in our new offices in Mainville. It's a great town—only three hours from here by plane. And a nice raise comes with the position. What have you decided?

Response 1: Well, you know, I've decided that I'm afraid I'm going to have to pass on this. I know it's not very good for my career, but, you know, the kids have just started school here and, uh, my wife's not very happy about the idea of moving, so I'm afraid I'm going to have to pass. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: I really want to spend more time with my family and at this point, um, I really can't take that position. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

10. **Situation:** You are a top executive at a very large accounting firm. You also have tentative plans for this weekend. One day the boss calls you into her office.

Boss: Next Saturday my husband and I are having a little party. I know it's short notice, but I am hoping all my top executives will be there with their spouses. What do you say?

Response 1: I'm sorry. I already have plans for the weekend. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: You know I'd really love to, but I actually have plans for this weekend. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

全ての設問に答えたか、

不適切だと思われる部分に下線を引いたかを確認してください

Thank you for completing this survey. We really appreciate it!!

ご協力ありがとうございました

APPENDIX A-2

Before you begin the actual survey, please answer the following background questions. Again, all of this information will be anonymous and nobody will know what you write:

Background Information

1. Age _____; Gender (F[ ] / M[ ])
2. How long have you studied English in **non-English-speaking** countries?

(years months)

3. If you have lived abroad for over one month, please indicate the countries you have lived, the total amount of time in each, and which year it was.

Example: Canada (1 years 3 months: 1997 ~ 1998)

a. _____ (years months: ~)

b. _____ (years months: ~)

c. _____ (years months: ~)

4. Please circle your current academic standing.

English language program (e.g., NICE/ HELP) Undergraduate (UH / KCC / Other)

Graduate (MA / Ph.D) Other (please indicate:)

5. What is your most recent TOEFL score? (Date:)

Please indicate if you have any other scores in tests for English language proficiency (e.g., STEP) . (Date:)

6. If you are a students NICE or HELP, please list the courses you are taking.

7. Please estimate your English language level: (beginning, intermediate, advanced)

_____ **Oral** _____ **Reading** _____ **Writing**

8. About what percentage of your free time in the US **do you spend** with (when you are with somebody):

_____(%)__ Japanese native speakers?_

_____(%)_ American English native speakers?

_____(%)__ Other language speakers? (In English? Yes No)

9. About what percentage of your free time **would you like to** spend with (when you are with somebody):

_____(%)____ Japanese native speakers?

_____(%)___ American English native speakers?

_____(%)___ Other language speakers? (In English? Yes No)

Questionnaire

Please answer the following questionnaire by providing your perspectives on the situations and statements provided.

**** If you were asked to carry out a think-aloud protocol, please read the instructions on a separate sheet before responding to the questions.***

1. Read each situation and the dialogues. In each situation there are a) a context; b) one person's "talk"; c) two possible responses to the first person; d) a scale for each response for you to circle.
2. Please circle how appropriate you believe each response to be (0=completely inappropriate, 7=completely appropriate).
3. If you answer anything less than 7, **please underline IN THE RESPONSE ITSELF what you believe makes the response not completely acceptable**.
4. If you think the response is inappropriate because it is lacking something (e.g., a reason should be stated but it is not), **please circle in a blank space after the sentence**.
5. ***Please note: this is based on what you think is appropriate—there are no right or wrong answers. It is possible to have 2 completely appropriate/inappropriate responses, or any other combination, for any given situation.**

Example: (See footnotes below)

①**Situation:** You work in a store and a customer asks you for some help.

Customer: Yes, I was wondering where you have software for accounting?

Response 1: Sure I will, but ②that's not my department, so it might take a while. ( )

③0[X] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: I'm sorry, I'm new here. Let me check with my manager. ④(X)

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] ⑤5[X] 6[ ] 7[ ]

①First, read the situation and the utterance.

②Since you think the phrase "that's not my department" lowers the appropriateness, you underline that part.

③As you think the response is completely inappropriate, you put an X mark next to "0".

④As you think something is missing in the response, you put an X mark in the blank after the sentence.

⑤Although the response is not completely appropriate, since you think it is quite appropriate, you put an X mark next to "5".

1. **Situation:** You are the owner of a music store that is financially stable, but not extremely profitable. One of your best workers asks to speak to you in private.

Worker: As you know, I've been here just a little over a year now, and I know you've been pleased with my work. I really enjoy working here, but to be quite honest, I really need an increase in pay.

Response 1: I see, well, let me get back to you on that. Can you give me some justification of why you might need this raise? ( ) (* "Let me get back to you." = "Let me talk to you later.")

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: I don't know. I guess I'd have to look at our books and see if we can financially support that. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

2. **Situation:** You are a senior in college. You attend classes regularly and take good class notes. You have a study group tonight. Your classmate often misses classes and often asks you for your class notes.

Classmate: We have a test tomorrow, don't we? I don't have the class notes from last

week, so would you mind terribly if I borrowed your notes tonight?

Response 1: I'm going to have to study tonight, so maybe if you'd like to study together, that'd be fine. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Unfortunately, I've got to study tonight myself. Sorry. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

3. **Situation:** You are at a friend's house for lunch.

Friend: How about another piece of cake?

Response 1: It was really good thanks, but um, I'm trying to watch my weight. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: No thank you. I couldn't eat another bite. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

4. **Situation:** You are the president of a printing company. You have just signed a long-term contract with a new parts supplier, company X. A salesman from another parts supplier, company Y, calls you on the telephone.

Salesman: I have some new figures my sales manager has just authorized and I'd like to meet to discuss them. I was wondering if you would be my guest at The Ritz-Carlton in order to talk it over and have a look at the contract.

Response 1: You know, that sounds really great, but we've actually, uh, given that contract to someone else, and if you could call me next fiscal year, I'd love to hear from you. ( )

(* "fiscal year." = "会計の行われる年度.")

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: I'm sorry, we've just signed a contract with another supplier. Thank you for your offer. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

5. **Situation:** You're a language teacher at a university. It is just about the middle of the term now and one of your students asks to speak to you.

Student: Um, excuse me, some of the students were talking after class recently and we kind of feel that the class would be better if you could give us more practice in grammar

and less in conversation.

Response 1: Well, you know, when we started the semester we went through the syllabus and you saw that the focus of this class was on conversation and communication skills, not grammar, and I was really clear about that, so believe me I think the conversation will be much more useful in the long run for you than grammar. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Uh, ok. This is what all the students thought? Let me think about it and we'll talk about it in class tomorrow. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

6. **Situation:** You have a friend staying with you for a week. He has recently lost his job due to the slowing economy. You also know that he has a wife and two children to support. He comes rushing up to you immediately when you return home from work.

Friend: Oh God, I'm so sorry! I had an awful accident. I was trying to help out and while I was cleaning I bumped into the table and your family's china vase fell and broke. I feel just terrible about it. I'll pay for it, I promise.

Response 1: Don't worry about it. It's not that important. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Ok, I know you're good for it. Don't worry, you can take your time. We'll think about it. ( ) (* "I know you're good for it." = "I know you will pay me back for it.")

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

7. **Situation:** You are at the office in a meeting with your boss. It is getting close to the end of the day and you have promised to have dinner with your family.

Boss: We really have to finish this up tonight. Why don't you go order some pizza, it looks like we're going to be here for a few more hours.

Response 1: You know, do we really have to finish this up tonight, or do you think we could finish it tomorrow morning? Because, um, I hadn't planned on being here much later and my wife and kids are waiting for me to come meet them tonight. I mean if we have to, ok, but you hadn't mentioned it, that there was a deadline for tomorrow, so if we could maybe finish it tomorrow morning, I'd be happy to put the work in then. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Uh, tell you what, I could give you about thirty more minutes, but after that I've really gotta get home. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

8. **Situation:** A friend invites you to dinner, but you really dislike this friend's husband/wife.

Friend: How about coming over for dinner Sunday night? We're having a small informal get-together.

Response 1: You know I'd really like to, but I got a really important meeting early on Monday morning, so uh, I'm afraid I'm going to have to pass this time. Sorry about that. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: Ok, let me get back to you on that for sure. I might have something planned this weekend. Let me check. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

9. **Situation:** You've been working in an advertising agency for some time. The boss had recently offered you a raise and promotion, but it involves moving out of the state. The boss calls you into his office.

Boss: I'd like to know what you think about the offer of the executive position in our new offices in Mainville. It's a great town—only three hours from here by plane. And a nice raise comes with the position. What have you decided?

Response 1: Well, you know, I've decided that I'm afraid I'm going to have to pass on this. I know it's not very good for my career, but, you know, the kids have just started school here and, uh, my wife's not very happy about the idea of moving, so I'm afraid I'm going to have to pass. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: I really want to spend more time with my family and at this point, um, I really can't take that position. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

10. **Situation:** You are a top executive at a very large accounting firm. You also have

tentative plans for this weekend. One day the boss calls you into her office.

Boss: Next Saturday my husband and I are having a little party. I know it's short notice, but I am hoping all my top executives will be there with their spouses. What do you say?

Response 1: I'm sorry. I already have plans for the weekend. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Response 2: You know I'd really love to, but I actually have plans for this weekend. ( )

0[ ] 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ]

Please check if you have answered all the questions

and if you underlined the parts that make the responses inappropriate.

Thank you for completing this survey. We really appreciate it!!

Thank you very much for your cooperation.

APPENDIX B-1

Thinking Aloud Instructions

研究者から Thinking aloud を頼まれた方は*アンケートの記入にかかる前に*こちらの指示を注意深く読んでください。分からないことがありましたら、気軽に質問してください。

1. まず、アンケートの指示にあるようにそれぞれの状況と会話を読んでください。それぞれの状況毎に a)状況 b)ある人の発話 c)話者に対する 2 つの返答 d)それぞれの返答に対するスケールがあります。

2. それぞれの返答がその状況と会話に対してどの程度適していると思うかを 0(=完全に不適切である)から 7(=完全に適切である)のスケールに沿って数字の横にチェックしてください。

3. *それぞれの返答についての適切さを考えるのと同時に、録音用のマイクに向かって頭の中に浮かんだ考えを全て口に出して言って下さい。*考え終わるのを待つのではなく、頭に浮かぶのと同時にそれを口に出してください。これは Thinking aloud と呼ばれるもので、あなたが考えていることをデータとして得るために行われるものです。あなたが考えていること全てを口に出してください。躊躇や疑問の言葉　(例：「え～と…」、「これどういう意味？」等)などもそのまま全て言ってください。録音用に言いなおす必要などありません。

4. *日本後でも英語でもどちらの言語でも結構です。*その時に頭の中に浮かんだ言語でしてください。両方の言語を混ぜてしまっても構いません。

5. 答えている途中に意見を変えたくなったらそのままその考えを口に出してください。

6. 時間は気にせずに、また英語で Thinking aloud を行う場合の文法なども気にしないで下さい。わからないことがありましたらお聞き下さい。

＊ともかく頭の中に浮かんだことは全て口に出してください。

＊録音用の機材にはできるだけ触らないようお願いします。

それではアンケートの方に記入をはじめてください。

APPENDIX B-2

Thinking Aloud Instructions

If you were asked to carry out a Thinking Aloud protocol, please read this instruction carefully before starting the questionnaire. If you have any questions, please feel free to ask me.

1. First, as in the instruction in the questionnaire, please read each item and utterance. In each item, we have a) a situation, b) somebody's utterance, c) two responses to the utterance, and d) a rating scale for each response.
2. Please rate the appropriateness of each response in each situation from 0 (completely inappropriate) to 7 (completely appropriate) by putting an X mark next to the numbers.
3. ***While you are thinking about the appropriateness for each response, please speak out everything that comes up to your mind into the microphone.*** Please do not wait until you finish thinking. Please speak out at the same time as you are thinking. This is a procedure called 'thinking-aloud', and it is conducted to gain information about what you are thinking. Please speak out everything that goes through your mind. Please speak out everything, even hesitations and questions (e.g., "well", "what does this mean?") or anything like that. Do not monitor your speech for recording.
4. ***You can choose either Japanese or English.*** Please speak out with the language that comes up in your mind. You can mix the two languages.
5. If you feel like changing your opinion as you are speaking out, please feel free to do so.
6. Please take your time. Also, please do not worry about grammar if you carry out the TA in English. If you have any questions, please ask me.

∗Please speak out everything that goes through your mind.

∗Please avoid touching the recording device as much as possible.

∗Please start the questionnaire now.

Endnotes:

[1] These four tasks included (a) a verbal task, anagrams, (b) a numerical task, choosing two gambles, (c) pictorial task, Raven's (1958) progressive matrices, and (d) the mental addition of three-digit numbers. The first two tasks meet the Ericsson and Simon's criteria as the subjects are instructed to report only the contents of STM, but the latter two tasks have the risk of reactivity due to their complexity and their requirement of recoding of information. In the second and the fourth tasks, they found a significant improvement and decrease of accuracy in the task results, respectively. The other tasks, including pictorial task, which was disqualified as a non-reactive task according to Ericsson and Simon's notion, showed no effect.

[2] This is a total length of residence in the U.S, including the residence before coming to Hawaii.

[3] The number reported here is either the participants' total length of residence in Hawaii or the total length of residence in the U.S. when the participants stayed in other states before coming to Hawaii. However, when there is over one year between their residence in other states and that in Hawaii, that other time is not included.

[4]Also, next to the studio, where the participants were carrying out the task, there was a room, which you can see the inside through a small window in the studio. Some participants talked to the researcher after the TA session about the people next to the studio (they could see the people through the window). Two instances were reported regarding those people in the actual data, but more than two participants reported about those people in informal conversation with the researcher afterwards. It is possible to consider that the participants chose not to report what they noticed about these people while they were doing TA as they were not task-related. However, they were observed only in the comments from informal conversations, which were not recorded, so it could not be verified by discourse data. Had it been more carefully analyzed, it could have given us more insights about the selective nature of reporting information.

[5] まず状況と発話を読む

[6]「that's not my department」という説明が適切さを下げていると思うので下線を引く

[7] 返答が完全に不適切であると思うので“0”の横にチェック

[8] 返答に何かがかけていると思うので文の後ろの空白(　)にチェック

[9] 完全に適切ではないが、適切さは高いと思うので“5”の横にチェック

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