Listening comprehension processes and strategies of Japanese junior high school students in interactive settings

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LISTENING COMPREHENSION PROCESSES AND STRATEGIES OF JAPANESE JUNIOR HIGH SCHOOL STUDENTS IN INTERACTIVE SETTINGS

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by

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LIST OF ABBREVIATIONS

L1: first language
L2: second language
SLA: second language acquisition
ALT: Assistant Language Teacher
JET: Japan Exchange and Teaching (program)
NSs: Native speakers
NNSs: Nonnative speakers
ACTFL: American Council of the Teaching of Foreign Language
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Abstract

The purpose of this study was to investigate the nature of interactive listening and the characteristics of listening comprehension processes for Japanese junior high school students of English. The first aim of this study was to investigate the interplay between the learner’s listening strategies and the speaker’s speech modifications and non-linguistic cues. The second aim was to investigate the listening comprehension processes and listening strategies used by the participants. The methodology employed was primarily qualitative. The literature on listening comprehension models, research areas of difficulties with listening and speech modifications and strategy research were chiefly reviewed. Six selected Japanese junior high school case study students (from a population N=19) and a native speaker (Assistant Language Teacher) participated in this study. Three different types of listening tasks were used to elicit the data. The data collection was mainly based on stimulated recall procedures and task observation. The data analysis followed grounded theory methodology.

The first part of the data analysis indicated that concrete visual referents, contextual cues and speech modifications accompanied by gestures were conductive to listening comprehension for basic level listeners. The data indicated that bottom-up processing and top-down processing interacted with each other. The participants were likely to pay selective attention to an individual known word (s). The second part of the analysis identified 25 types of listening strategies and categorized them as the metacognitive strategies, cognitive strategies and social/affective strategies. The use of listening strategies was shown to greatly depend on task type, L2 proficiency, context and listener’s affective factors. The data also showed that interactive listening as a collaborative process between the listener and speaker to enhances comprehensibility. Repetition by a native speaker was found to be the most effective cue for listening comprehension, while elaboration was the least effective. A major implication of this study is that greater emphasis on interactive listening would promote the communicative language ability of Japanese students of English in their English lessons.
CHAPTER ONE
AN INTRODUCTION TO THE STUDY

This chapter provides the background, personal context and significance of this study, followed by an overview of research methods and definitions of terms. This chapter concludes with an overview of the chapters to follow.

1.1 THE PURPOSE AND AIMS OF THE STUDY

The purpose of this study is to investigate the nature of interactive listening and the characteristics of listening comprehension processes of junior high school students in Japan. To fulfill the purpose of this study, the following aims are proposed:

1. to identify listening comprehension processes and strategies used by Japanese junior high school students of English when listening in interactive settings.
2. to examine the interplay between the learner’s listening strategies and the speaker’s input, including speech modifications and non-linguistic cues.

In order to achieve the aims and fulfill the purpose of the study, the study is guided by the following research questions.

(1) What are the processes of listening comprehension of Japanese junior high school students of English in interactive settings?
(2) What are the listening strategies of Japanese junior high school students of English identified in the interaction?
(3) How are listening strategies and the speaker’s input interrelated in the listening comprehension processes?
(4) What is the relationship between the speaker’s speech modifications and non-linguistic cues and the listening comprehension of Japanese junior high school students of English?
(5) What are the differences in listening comprehension processes and strategies according to the types of listening tasks?
(6) What listening difficulties do Japanese junior high school students of English experience in the interaction?

1.2 BACKGROUND TO THE STUDY

1.2.1 Globalization and English

The worldwide trend towards a borderless age has greatly impacted on education, economy, politics, technology, and other fields in Japan. Along with a growing awareness of globalization, English is considered to be the major international language for the majority of the Japanese in order to keep pace with other industrialized countries. The role of English has evolved into ‘English as a global language’ (Crystal, 1997), beyond the original utility, along with technological and industrial development. In response to the coming Information Technology Age, the ability to write e-mails and use the internet in English has also been recognized as required abilities in the future. Thus, the progress of globalization worldwide and the evolution of the role of English as a global language have compelled the Japanese education system to tackle the urgent task of improving students’ communicative ability in English.

1.2.2 Low performance of Japanese candidates in TOEFL

English education in Japan has come under scrutiny as it has not proven successful in improving English proficiency of Japanese students (LoCastro, 1996; Miyahara & Yamamoto, 1999). TOEFL (Test of English as a Foreign Language) scores have often been cited as the main criticism of Japan’s comparative language proficiency with other countries. For example, according to the Educational Testing Service (hereafter ETS) data for 1998-1999 the Japanese average score (501 points) on TOEFL ranked at 18th among 21 Asian countries and 33rd among 39 countries (equivalent to that of Algeria) (due to unavailability of computer-based TOEFL scores for some countries in 2002, ETS 1998-1999 data for the paper-based TOEFL were used).

The low performance of Japanese candidates has often been attributed to a lack of similarity of the
language systems between Japanese and English (Ohtani, 2001, p.11). The ETS 1998-1999 data show that candidates from the ‘Indo-European language family’ (Finegan, et al. 2000) demonstrate higher performance in TOEFL, e.g., German (617 points), Norway (607 points). However, the TOEFL average scores of the Korean and the Taiwanese candidates are higher (e.g., Korean 535 points, Taiwanese 510 points) than that of the Japanese (501 points), although the Japanese, Korean, and Chinese languages are all linguistically distant from the Indo-European languages. It does not always follow therefore, that linguistic similarity between languages affects the level of TOEFL scores. It is also claimed that the Japanese gain low scores on TOEFL because the proportion of Japanese candidates for the entire population is higher than those of other countries (Council Report of Educational Reform, 2001). However, the ETS 1998-1999 data indicate that the proportion of candidates per 100,000 of population among the Korean and the Taiwanese in TOEFL is considerably higher than that of the Japanese (e.g., Japanese: 80 persons, Korean: 135.4 persons, Taiwanese: 153.1 persons). Thus, nor does it follow that a high percentage of Japanese candidates in the overall population lowers the average score on TOEFL (Yoshikawa, 2000).

1.2.3 Problems with English listening instruction and oral communication

Problems and issues regarding English oral communication and listening instruction at junior high schools in Japan will be mainly discussed below as the present study aims to investigate listening comprehension and strategies of junior high school students in interactive settings. Firstly, according to the 1993 Courses of Study (Ministry of Education, 1990), listening and speaking were considered to be the most important skills for improving communicative ability in English. (Courses of Study, which correspond to a national core curriculum, are generally published by the Ministry of Education three to four years prior to implementation). Although the previous Courses of Study developed before 1993 classified speaking and listening in one category, the 1993 Courses of Study separated listening and speaking. Accordingly in 2000, 42 out of 47 prefectures implemented a listening test as a part of standardized public senior high school entrance examinations (Council Report of Educational Reform, 2001). Additionally, the University of Tokyo, the most prestigious university in Japan, has included a listening test as a part of its
university entrance examination since 1988. However, although along with the growing interest in oral communication it is generally agreed that listening is an important skill to be assessed, the National Center for University Entrance Examination Test, the nationwide standardized university entrance examination, has not yet adopted a listening test (Enjoji, 1996; Saito, 2002). To this end, the Ministry of Education and Science plans to implement a listening test in the National Center for University Entrance Examination Test in 2006 (Council concerning Reform of English Education, 2002).

Secondly, many scholars (e.g., LoCastro, 1996; Moore & Lamie, 1996) have criticized the fact that most Japanese teachers of English still adopt a ‘Grammar-translation’ or ‘Audio-lingual’ method, or an ‘Oral Approach’ (Richards & Rogers, 2001) which emphasize structure-based L2 learning, although the Courses of Study (1990, 1998) emphasize enhancement of communicative language ability. Furthermore, Takahashi (1999) claims that even when teachers conduct communicative activities in the classroom, they mostly focus on reinforcement of learned structures. Communicative language activities are in many cases confined to the mandatory textbooks grounded in a structure-based curriculum.

Thirdly, the fundamental problem of Japanese English education lies in the inflexibility of the curriculum. Teachers in Japan are required to follow the statutory textbooks approved by the Ministry of Education and Science (LoCastro, 1996). Since English teachers are urged to complete the textbooks within the time-constraints of a three or four-hour-a-week curriculum, there is not much room for creative teaching for communicative purposes. According to the new Courses of Study (Ministry of Education and Science, 1998) to be discussed subsequently, the basic language structures are considered to be learned within the overall framework of the three year curriculum of junior high school, and basic vocabulary is reduced from 507 words to 100 words. This aims to provide creativity and flexibility for classroom teachers. On the other hand, under the old curriculum, basic language structures and vocabulary were “graded for complexity and also ordered for priority” (Moore & Lamie, 1996, p.82). Yet it seems problematic to leave
such a decision regarding the sequencing of basic language structures up to teachers because the rationale for grading the basic language structures has not been explained to English teachers by the Ministry of Education and Science.

Fourthly, another issue lies in the large class size in Japan. Japanese language classrooms can have up to 40 students in a class. Such large classrooms make it very difficult for interaction and individual learning, which are crucial for Communicative Language Teaching (Larsen-Freeman, 2000) to take place. Even under such circumstances, some younger teachers to date strive to employ pair work or group work as a learner-centered learning. However, many teachers are more likely to teach English in a teacher-fronted or teacher-centered form (LoCastro, 1996). More recently, since 2000 the Ministry of Education and Science has allowed each school district to reduce class sizes to 30 students. It is hoped that small sized classes will accelerate learner-centered learning.

Lastly, a major criticism identified by many is that the majority of Japanese teachers of English and students at junior high schools have engaged in English classes for the purpose of ensuring that the students pass entrance examinations for senior high schools. Thus, students and teachers are likely to place a higher value on English for entrance examinations than communicative English because entrance to prestigious high schools and universities is generally believed to guarantee better jobs (Locastro, 1996; Moore & Lamie, 1996). This is not to say that English teachers in Japan have not been interested in communicative ability in English. An inquiry of the database of nationwide education bulletins from 1989 to 2001 (Naha City Board of Education, 2002) indicated that 141 out of 564 topics of the research conducted by junior high school English teachers were related to instruction in communicative ability in English.

1.2.4 The new Courses of Study for the teaching of English in Japanese schools

The new 2002 Courses of Study (Ministry of Education and Science, 1998), which were
implemented in 2002, led to a remarkable reform of English education in Japan. According to the 2002 Courses of Study, English is now a required subject for the first time. Although it had actually been taught as a foreign language at every public and private school in Japan, English had been an elective subject prior to the 2002 Courses of Study. According to the 2002 Courses of Study, class hours of English at public junior high schools are flexible, depending on the curriculum of each school, (e.g., Year 7: 3 hours to 4 hours weekly, Year 8 and Year 9: 3 hours to 5 hours weekly). The promising advantage of the new curriculum is that Year 8 and Year 9 students can learn up to five hours of English in a week as maximum class hours whereas, according to the old curriculum, a four-hour-a-week curriculum was the norm. On the other hand, schools can also employ only a three-hour-a-week curriculum as the minimum requirement, if English is considered less important (Kan, 2002, p.10).

A critical component of the 2002 Courses of Study is that they emphasize enhancement of communicative competence in English. At school level, enhancement of students’ communicative ability in English has been one of the main concerns in educational curriculums over the last thirty years. According to the 2002 Courses of Study, ‘practical communicative competence’ in English is expected to be acquired by all students. The 2002 Courses of Study note that practical communicative competence is the ability to use English as a means of communication in an actual situation. However it is not made clear by the Ministry of Education and Science what rationale ‘practical communicative competence’ is based on (Wada, 1999).

Since the implementation of the 1993 Courses of Study, listening and speaking have been considered to be the most important skills for improving communicative language ability in English. The 2002 Courses of Study continue this emphasis and indicate clear guidelines for listening skills related to communication. For example, listeners are expected to comprehend the gist or detailed information from natural speech. Listeners are also expected to respond appropriately to requests and questions. Moreover, listeners are expected to use listening strategies such as asking questions of speakers in order to repair communication problems. It has
been gradually recognized among Japanese teachers of English that listening plays an important role in oral communication.

The 2002 Courses of Study do not provide a plausible explanation of ‘language function’ (van Ek, 1975; Wilkins, 1976; Littlewood, 1981) or ‘language use situation’, although these two concepts are considered to be crucial for improvement of practical communicative competence in English (Morizumi, 2002, p.15). The 2002 Courses of Study give ‘frequently used expression in several occasions’ (e.g., asking for directions) as examples of language functions. Yet the students may end up just memorizing these frequently used expressions and may not be able to produce other forms of expression not listed in the examples (Ushiro, 2001). Additionally, the researcher examined ‘Sunshine’ revised textbooks (Year 7, Year 8, Year 9) and ‘One World’ revised textbooks (Year 7, Year 8, Year 9) and found that language functions of English constitute only a minor part of the textbooks. Thus the focus is still on a structured syllabus, although the textbooks are supposed to meet the dual purposes of mastery of basic language knowledge and enhancement of communicative language ability. Moreover, the revised textbooks do not take into consideration the communicative needs of students (Watanabe, 2002, p.15). Students are expected to engage in communicative language activities within the pre-determined language use situations set by textbook designers. Therefore it can be argued that the 2002 Courses of Study have yet to be adequately designed in order to improve students’ practical communicative competence in English.

Another characteristic of the 2002 Courses of Study is the introduction of English to public elementary schools for the first time. Elementary school teachers can teach English for two or three hours a week as an elective class of ‘Periods for Integrated Study’, which aim at individual instruction, hands-on, problem-solving, and intercultural understanding (Ministry of Education and Science, 1998). In 2001, about 600 elementary teachers across the nation took a two-week-in-service training course in English teaching. A “Guide to English Conversation Instruction for Elementary School” was also published by the Ministry of Education and Science in 2001. 1,300 part-time English teachers have been allocated to elementary schools throughout the
country since 2002. However when compared to the in-service program of elementary school teachers in Korea, which requires them to receive 120 hours’ training in English instruction, the Japanese in-service training program still requires to be improved in the future (Watanabe, 2002, p.20).

Not only improving the English proficiency of the Japanese students but also understanding the languages and cultures of other countries has been considered to be central to the advancement of globalization in Japan. The 2002 Courses of Study (1998) note that students need to cultivate a positive attitude to communicate in foreign languages and understand and appreciate the cultures of other countries. Encouragement of intercultural understanding would contribute to the enhancement of foreign language achievement in two respects. The input-poor context in Japan, where English is learned as a foreign language, requires students to be exposed to abundant English out of the classroom. Thus, acculturation (Schumann 1986), a close psychological distance to the target culture, draws on motivation for further learning of the target language outside the classroom. That is, intercultural understanding of foreign countries motivates students for further learning of English. Another advantage is that the background knowledge (schema) of the target culture assists in the inference of unknown words or content which cannot be interpreted from the learner’s linguistic knowledge.

1.2.5 Japan Exchange and Teaching Program

The most radical education reform for improvement of communicative language ability is the JET (Japan Exchange and Teaching) program. The Ministry of Education and Science, the Ministry of Home Affairs, and the Ministry of Foreign Affairs have collaboratively implemented the JET program since 1987 by inviting native speakers of English to act as assistant language teachers (ALTs hereafter), with the aim of contributing to the enrichment of foreign language education, as well as the development of communicative language ability. In 2002, 5,676 native speakers of English were invited to Japan from more than 20 countries (Council Report of Educational Reform,
Chapter One: Introduction to The Study

ALTs have been allocated to every public junior high school and senior high school throughout Japan. The estimated number of ALTs, including those (2,784) hired by local board of education offices, is approximately 8,400. ALTs are considered to have contributed to increasing students’ interests in the languages and cultures of foreign countries and to have reduced the psychological distance for students (Ministry of Education and Science, 2002). A study by Sick (1996) showed that ALTs also helped to enhance listening comprehension of junior high school students.

Due to various reasons, the JET program has not always proven successful in spite of the enormous expenditure of the government budget (approximately 470,475,000 Australian dollars annually). Firstly, a majority of ALTs do not hold a teacher’s certificate or have not received university accredited teacher training, except for three-or four-day training provided by the Japanese Ministry of Education and Science (Moore & Lamie, 1996, p.168-170). Additionally, their undergraduate specialties vary (only a small portion of ALTs hold a teaching diploma in TESOL). Secondly, ALTs are likely to be treated as ‘human tape-recorders’ as they are expected to read textbooks aloud (Moore & Lamie, 1996, p.177; JET Programme 1997, p.315, 319) and they often suffer from ‘self-introduction blues’ (excessive repetition of self-introduction at every school) (Moore & Lamie, 1996, p.175). Thirdly, team-teaching between ALTs and Japanese teachers of English (JTE hereafter) sometimes ends up with just introducing the ALTs themselves and reading textbooks or enjoying games with students for entertainment because ALTs visit each class just once or twice a year, especially at large schools (Moore & Lamie, 1996, p.175). Fourthly, it is very difficult to find time to discuss team-teaching between JTEs and ALTs because Japanese teachers of English have heavy workloads. Lastly, team-teaching has not been thoroughly examined by the researchers, although there are many practical team-teaching publications which are not based on language theories and research. Thus, it can be argued that ALTs have not contributed so significantly to the enhancement of communicative language ability of students as to warrant the huge amount of expenditure on the JET program. Effective classroom teaching involving ALTs remains to be developed in order to enhance the communicative language ability of students.
In summary, listening is considered to play an important role in improving communicative language ability in English. However, due to several major problems with English education in Japan, the Japanese English education system has not proven successful in improving the communicative ability in English of students. Although drastic educational reforms in Japan have been implemented to improve students’ communicative language ability, the new Courses of Study and JET program have not fully as yet accomplished this purpose.

1.3 PERSONAL CONTEXT OF THE STUDY

By introducing my personal context, the reader will be better able to understand the motivation, conceptual development and academic environment underlying the research.

My interest in the fields of listening and communicative language ability began as a teacher of English at junior high schools in Japan (my occupational background is that I had been teaching English at junior high schools (Year 7 to 9) for 15 years between 1985-1999 before commencing doctoral study in Australia in 2000). Most of my students were L2 elementary level learners who started learning English for the first time at junior high school. My interest in communicative language ability actually started when I had attended undergraduate TESOL teaching methodology classes provided at the Michigan State University in U.S.A. for six months in 1989. Having been impressed by communication-based teaching methodologies, I was appointed by the Prefectural Board of Education as a research group member between 1991-1993. Our research group conducted action research by focusing on the investigation of speech production of students in our classrooms in order to improve students’ communicative language ability. We demonstrated model classes as a presentation of our research results and I was to a large degree successful in my classrooms in improving students’ speaking ability.

In late 1980’s and early 1990’s, the dominant teaching methodologies in Japan were still the
Audio-lingual method and the Oral Approach (Richards & Rogers, 2001), which emphasize speech production. As a consequence, the problem with my students was that they were likely to reproduce the previously learned structures, but to be stuck in free conversation. Terrell (1982, p.121) argues that “What they [students] very often cannot do is participate in a normal conversation with a native speaker”. In spite of the implementation of authentic communicative activities, many students were likely to show less interest in communicating in English and tended to use their native language (Japanese) during the language activities. I analyzed this unsuccessful result as follows; my students might have had an emotional barrier to speak English, presumably because they needed to do several things simultaneously, such as recalling vocabulary and structures, pronouncing properly, and comprehending what is said (Underwood, 1989), or because the fact that “learners need to produce what is not assimilated in long-term memory [through listening] leads to cognitive overload” (Vandergrift, 1999, p.169). Therefore, I felt strongly that there is a limitation to a production-based Communicative Approach (e.g., Littlewood, 1981) at the early stage of second language learning.

The 1993 Courses of Study (Ministry of Education, 1990) emphasized the improvement of communicative language ability of students. Accordingly when I participated in full time in-service training program at Prefectural Education Center in 1995, I conducted a six month-research project to investigate effective classroom devices for developing communicative language ability. With questions in mind as to the production-based Communicative Approach, my research interest was to incorporate listening into production-based methodologies. Influenced by second language acquisition researchers (e.g., Krashen, 1982, 1985) who proposed to emphasize listening and delay oral production at the early stage of language learning, my interest was inclined towards second language acquisition theories and research. I investigated the effects of listening tasks on students’ communicative language ability (at that time the ALTs were not involved in the listening tasks).

I was again appointed as a research member between 1997-1998 and our research group conducted action research to investigate communication strategies use in 1997. It was found that
communication strategies use was conducive to repairing communication problems. However, it was inconclusive as to whether communication strategies use contributed to improvement of communicative language ability. In 1998, our research interest focused on the investigation of effective language tasks which would help to enhance communicative language ability. Authentic tasks which approximated real life interested the students so that they actively participated in communicative tasks. However the problem with communicative tasks was that it was difficult to incorporate them into the structure-based syllabus designed by the Ministry of Education.

I started working with the ALTs in 1987. Team-teaching with native speakers was initially a very challenging experience for me, although the students were excited to communicate with the native speakers in their classrooms over time. I worked with about twenty ALTs. However, I was made aware of the low quality of the ALTs as teachers (Moore & Lamie, 1996) because most of the ALTs had neither a teacher’s certificate, nor had they majored in TESOL. Therefore I doubted that the huge budget used for the JET program was warranted, given that the aim of improving students’ communicative language ability was generally not fulfilled. It certainly did not seem to be in my situation. The simple question I asked was why the Ministry of Education had not employed native speakers of English holding teacher’s certificates in TESOL. Niisato (2002, p.16) claims that the Ministry of Education and Science should send more Japanese teachers of English to universities or institutions in English-speaking countries rather than inviting a large number of native speakers to Japan. Moreover, rarely had team-teaching between JTEs and ALTs been empirically investigated by applied linguists in Japan (Sick, 1996). Therefore, team-teaching between JTEs and ALTs was likely to be conducted on the basis of teachers’ experiences and instincts, without being guided by theory or research findings. Therefore, I strongly felt that the role of ALTs for communicative purposes needed to be empirically investigated by researchers.

1.4 SIGNIFICANCE OF THE STUDY

This study attempts to incorporate psycholinguistic and sociolinguistic
perspectives to explain interactive listening demonstrated by Japanese junior high school students, although the distinction between these two paradigms in current SLA research is not always clear (Ellis, 1994). Psycholinguistic views of L2 learning, which are closely associated with a cognitive approach to L2 learning (e.g., Skehan, 1998), are generally concerned with how linguistic knowledge is acquired as a mental process, and how it is put to use in comprehending and producing utterances, without taking into consideration the learners’ linguistic environment (Hatch, 1983). On the other hand, sociolinguistic views of L2 learning are generally concerned with how the L2 is acquired in the social context, including external factors of L2 learning such as interaction between interlocutors and input provided by interlocutors (Ellis, 1994). In this study psycholinguistic views mainly relate to bottom-up processing and top-down processing (e.g., Peterson, 2001), as well as listening strategies (e.g., Vandergrift, 1996, 1997a). Sociolinguistic views chiefly relate to speech modifications (Long, 1981), simplified input (Chaudron, 1988), collaborative listening (Buck, 2001) and scaffolding (Bruner, 1978; Vygotsky, 1978) (N.B., Vygotsky’s perspectives are also viewed as cognitive psychology, e.g., Johnson & Johnson, 1998).

A number of reviews of listening comprehension have identified a lack of empirically sound models of listening comprehension (Rivers, 1968; Carroll, 1972; Brown & Yule, 1983; Call, 1985; Powers, 1986; Buck, 1990; Morley, 1991; Dunkel, 1991; Dunkel et al., 1993; Rost, 1994; Brindley, 1997, 1998). It seems that a lack of firm theory of listening comprehension is due in part to difficulty in investigating the cognitive process which takes place in the brain (Carroll, 1972; Takei, 2002b). “Listening is less directly observed and less noticeable in both its development and its everyday use” (Rost, 1994, p.1). Furthermore, a number of empirical studies have attempted to investigate listening comprehension of Japanese advanced level learners of English (e.g., Buck, 1990, 1991, 1994; Yoshida, 1983, 1999). However, the listening comprehension of basic-level learners in Japan has received little attention from applied linguists. Therefore this study will help to develop a listening comprehension model of Japanese basic-level learners of English.
The identification of listening strategies contributes to an understanding of how listeners actively attempt to comprehend the spoken language. L2 listening is an active process of inference and hypothesis testing (Buck, 1995, 2001). Traditionally, L2 listening was considered to be a passive skill and merely exposing the student to the spoken language was thought to be adequate instruction in listening comprehension (e.g., Krashen, 1982, 1985). However, current research indicates that listeners actively employ a variety of listening strategies to understand and interpret what is spoken. For example, listeners make a number of inferences on the basis of personal background “within the immediate as well as the larger sociocultural context” (Vandergrift, 1999, p.168). Listeners also ask for repetition or make inquiries to repair comprehension problems (Rost & Ross, 1991; Vandergrift, 1997b). Listeners frequently provide backchannelling cues, verbally or nonverbally, to indicate that they are following the speakers (Buck, 2001). Nonetheless, according to Vandergrift (1997b, p.494), listening strategies have been “the Cinderella of communication strategies”. Furthermore, studies have not attempted to identify listening strategies in interactive settings, with the exception of a few studies such as those by Rost and Ross (1991), Lynch (1995), and Vandergrift (1997b). To address this gap, the present study investigates listening strategies used by Japanese junior high school students.

It could be argued that understanding interactive listening leads to better instruction in oral communication. Communication does not take place when listeners do not understand what is said. Rivers (1968) argues that listening takes up about 40% of time spent in communicating in the real life. Thus listening plays a vital role in oral communication. However, listening is something that has been often taken for granted in communication (Turner, 1995). For example, teaching methodologies such as the Audio-lingual method and the Oral Approach considered listening as a way to reproduce exactly what was heard (Richards & Rogers, 2001). Very few researchers actually studied the conversation between native and non-native speakers from the point of view of listeners. Most researchers seem to have focused on what native speakers do (Anderson & Lynch, 1988). On the other hand, proponents of comprehension-based instruction (Asher, 1969; Winitz & Reeds, 1975; Nord, 1981; Postovsky, 1981; Krashen & Terrell, 1983; Byres, 1984; Mendelsohn, 1994,
1995; Vandergrift, 1999; Rost, 1990, 2000, 2002) consider that emphasis on listening is crucial, especially at the early stage of L2 learning, and oral production should be delayed. The Courses of Study (1993, 1998) have also placed an emphasis on listening in order to promote the communicative language ability of students. Thus, one of the outcomes of this study is to provide an insight into improvement of communicative language instruction.

It is crucial to identify problems which listeners experience in understanding the spoken language (Brown, 1978; Underwood, 1989). Many language teachers are likely not to identify difficulties which their students experience in listening to a foreign/second language, but to just test listening comprehension of students in their classrooms (Mendelsohn, 1995). It is essential that empirical studies identify difficulties with L2 listening for the purpose of developing better L2 listening instruction. Previous studies have attempted to identify difficulties with L2 listening regarding speech rate (Griffiths, 1991), memory (Call, 1985), phonological modifications (Henrichsen, 1984), redundancy (Derwing, 1989) and background knowledge (Chiang & Dunkel, 1992). However, few empirical studies have investigated the difficulties with listening in English which Japanese junior high school students at the basic level experience. Again, this study will contribute to the improvement of listening instruction through a better understanding of the difficulties experienced by novice learners.

In spite of the resources invested in the provision of ALTs, “little empirical research has been done that directly tests its effectiveness” (Sick, 1996, p.199). There is an urgent need to investigate how ALTs contribute to the enhancement of students’ language ability in the classroom. This study attempted to investigate listening comprehension in settings where the ALT and the Japanese students interacted. Thus, the results of this study have the potential to examine the role which ALTs play in order to enhance the language ability of Japanese students in the classroom.

1.5 LOCUS OF THE STUDY
The present study was implemented in Okinawa Prefecture, located in the southernmost part of Japan. The Year 9 students at Arume Junior High School in Higashi village, located in the northern part of Okinawa Prefecture were examined. Arume Junior High School was a small sized junior high school (N=36) located in the countryside on mainland Okinawa.

1.6 OVERVIEW OF METHODOLOGY

Employing qualitative research methodologies, this study explored listening comprehension processes and strategies grounded in the data gathered. Multiple case studies were intended to gain in-depth understanding of the listening comprehension each participant demonstrated. This study mainly adopted stimulated recall and task observation as data collection methods (see Section 3.7).

1.6.1 Theoretical perspectives

In this study, ‘multiple case studies’ (Huberman & Miles, 1994) in a particular context were examined holistically within ‘the naturalistic paradigm’ (Lincoln & Guba, 1985). Themes or categories were grounded in the data (Straus & Corbin, 1998). According to theoretical sampling (Glaser & Straus, 1967), data gathered was continuously compared and analyzed until theoretical saturation was achieved. Case studies enabled the researcher to gain in-depth understanding of the phenomenon embedded in the particular context (Merriam, 1988).

1.6.2 Participants

Nineteen junior high school students (Year 9, age 14 or 15) in Japan participated in this study. Six students out of nineteen were selected as multiple case study participants, according to gender and language proficiency (male low, male intermediate, male high, female low, female intermediate, female high). The participants were overall classified as basic level language learners. A male ALT (age 22) from Canada also participated in this study.
1.6.3 Limitations of the study

The following points need to be made about the limitations of the study.

Firstly, the study was limited to the participants from a particular junior high school. The evidence gained from the participants in this study may not be able to be generalized to other junior high school students in Japan. The research method developed may be applicable to other contexts and the findings may support and extend the works of previous researchers in the field, but specific findings may be unique to the population studied.

Listening tasks needed to be moderately controlled in order to obtain the data to achieve the research purpose. Although natural conversations usually include features of two-way communication, turn-takings and development of the discourse topic, this study designed listening tasks in which the native speaker predominantly held the information and conveyed it to the listeners. The reasons why the listening tasks were moderately controlled were that it is difficult to solely analyze listening when turn-takings between interlocutors take place in the discourse, and also variation of the discourse topic between interlocutors makes it very difficult to yield consistent comparison for each dyad. Nevertheless, in this study the listeners were given plenty of chances to use backchannelling cues or request repetition and clarification. The native speaker also accommodated his speech to increase comprehensibility when necessary. Care was taken to maximize interaction between the listeners and the speaker while engaging in the listening tasks.

The researcher’s role in interpreting the data raises the issue of subjectivity in relation to the evidence collected and the conclusions. To increase the reliability of the study, ‘peer debriefing’ with TESOL Master’s course students and ‘member check’ with the native speaker participating in the study were used.
Questions and directions used by the researcher for stimulated recall may have distorted the reports of the participants. The participants were prompted by the researcher by using stimulated recall in order for them to report on what was heard, although Ericsson and Simon (1993) claim that verbal report of thinking processes needs to be made without any support or training. This was due to the reason why the participants were not able to make self-reports as well as expected because they did not have sufficient knowledge to express their complex mental processes. The participants’ verbal ability to report on listening comprehension was also poor, even though they were able to use their L1 for this purpose. Thus, they were unable to report on their thinking processes and listening comprehension sufficiently without the assistance of the researcher. Leading questions were avoided as much as possible.

1.7 DEFINITION OF TERMS USED IN THIS STUDY

Listening strategies
Listening strategies include verbal or nonverbal feedback such as indication of understanding or non-understanding, requests for clarification and repetition, as well as social/affective strategies such as self-encouragement and metacognitive strategies (e.g., comprehension monitoring). Listening strategies are differentiated from productive communication strategies, although there is some overlap between the two. Categories of listening strategies in this study are partly adapted from the previous studies (Rubin, 1975; O’Malley & Chamot, 1990; Oxford, 1990; Rost & Ross, 1991; Vandergrift, 1996, 1997a, 1997b).

Interactive settings
In interactive settings, a speaker and a listener can communicate in a face to face situation with each other through verbal or/and non-verbal methods. Listeners can request speakers to repeat or clarify a problematic part in listening or show understanding or non-understanding of what is said,
when communication breaks down. Speakers, on the other hand, accommodate their speech when listeners have trouble with understanding. In this study, the listening tasks were conducted using one-way information gaps. These are different from two-way information gap tasks (Ellis, 1994, p.596), in which each of the interlocutors exchange missing information to complete a task, because in this study the role of listeners needed to be moderately controlled for the research purpose.

**Transactional listening**

According to Brown and Yule (1983), transactional listening aims to achieve a successful transfer of information or to complete a task without intervening and clarifying the speaker’s utterances. Buck (2001) calls it ‘non-collaborative listening’.

Listening to a recorded tape without interaction is an example of transactional listening.

**Interactive listening**

Interactive listening attempts to clarify communication problems verbally or non-verbally, demonstrates understanding or non-understanding, or takes responsibility for turn-taking (Brown & Yule, 1983). Listeners and speakers collaboratively attempt to understand what is being said when communication problems take place. Buck (2001) calls it ‘collaborative listening’. This study is intended to investigate the nature of interactive listening.

**Stimulated recall**

Stimulated recall (Nunan, 1992; Gass & Mackey, 2000) is a modified form of retrospective verbal report in which participants make a self-report immediately after carrying out a task. In this study, this method was used for the participants to be prompted and to be given directions by the researcher in order to solicit the data relevant to the research. Stimulated recall was undertaken while watching video-recorded task interaction immediately after completing the task. Stimulated recall occurred in the L1 (Japanese). This was conducted “with some degree of support, for example, providing learners with audio-recordings themselves speaking…” (Gass & Mackey,
2000, p.25). Thinking-aloud and retrospective report methods are different from stimulated recall in that these verbal methods ask participants to make self-report with little support from researchers, recordings or visuals.

**Speech modification**

Speakers make speech modifications in order to repair communication problems. Speech modifications include confirmation checks, comprehension checks, confirmation checks (Long, 1981), repetition (Pica et al. 1987) and elaboration (Chiang & Dunkel, 1992). Speech modifications were initially proposed by the Interaction Hypothesis supporters (e.g., Long, 1983a), arguing that interaction promotes second language acquisition.

**Oral communication**

Oral communication includes not only speaking but also listening. Speaking and listening are closely interwoven in conversations. Oral communication is differentiated from written communication.

**1.8 OUTLINE OF THE STRUCTURE OF THE REMAINDER OF THE THESIS**

The thesis consists of six chapters. The following outline explains how the remainder of the thesis is organized.

Chapter Two—Literature Review

The purpose of this chapter is to provide the theoretical basis which underpins the study. This chapter contains six sections. Following the overview of the chapter, section 2 discusses overall issues of L2 listening in the field of applied linguistics. Section 3 discusses several listening comprehension models. Section 4 discusses listening sub-skills proposed by the researchers. Section 5 describes characteristics of L2 listening and variables which cause difficulties with L2 listening. Section 6 discusses the respective roles which
listeners and speakers play to increase comprehensibility in the interaction. Section 7 discusses
listening strategies in relation to learning strategies and communicative strategies.

Chapter Three—Methodology
The focus of this discussion is on the methods used to gather and analyze data. Initially the
theoretical perspectives of methodology are discussed. Following presentation of research
questions, listening tasks, pilot studies, and participants are described. This is followed with a
discussion of data collection method and analysis procedure. Lastly, validity and reliability and ethical considerations
are discussed.

Chapter Four—Description of Analysis
This chapter mainly describes the listening comprehension of the six case study participants. This
holistic view attempts to analyze listening comprehension in association with all the variables
involved. This chapter also attempts to illuminate several key features of listening comprehension
emerging from the holistic analysis of the six case study participants.

Chapter Five—Interpretation of Analysis
This chapter focuses on specific aspects of listening comprehension emerging from the holistic
analysis in Chapter Four. Listening strategies of participants are classified into 25 categories. Not
only effects of speech modifications on listening comprehension but also the interrelation of speech
modifications and listener’s responses are considered. Following this, this study attempts to
identify difficulties with L2 listening which the participants in this study experienced.

Chapter Six—Discussion and Implications
This chapter makes a conceptual summary of the previous chapters, drawing on the analysis of this
study, the previous research and theories. The collaborative nature of interactive listening and the
characteristics of listening for Japanese junior high school students are discussed. This chapter
concludes with implications for the learning and teaching of English listening for junior high school
language classrooms in Japan and future research directions.
CHAPTER TWO
LITERATURE REVIEW

2.1 INTRODUCTION

This chapter discusses the theory and research into the areas that form the underpinnings for the present study. The first section provides an overview of research into second language listening. The second section discusses various models of listening comprehension processing. The third section discusses listening sub-skills. The fourth section discusses difficulties with second language listening arising from its peculiar characteristics of listening. The fifth section discusses the roles of speakers and listeners during interaction as well as the appropriate assessment of listening in oral communication. The chapter concludes with a discussion of learning strategies, communication strategies, and listening strategies.

2.2. RESEARCH INTO SECOND LANGUAGE LISTENING

L2 (second language) listening has been considered from different angles depending on the theoretical orientation. Structuralists (e.g., Rivers, 1968) considered that language learning proceeds in a linear process. Traditionally language skills have been separated into four skills: listening, speaking, reading, and writing. Structuralists considered that language learning starts with the oral medium skills, (listening and speaking), and moves later to those of the written medium (reading and writing). According to this view, accumulation of discrete micro skills is considered to lead to the acquisition of language proficiency. A different view was that language is learned as an integrative process and it was recommended that all conventional skills be introduced simultaneously (Oller, 1979). In opposition to the structuralists, Oller (1979, p.212) claimed that “the whole is greater than the sum of its parts”. This view underpinned communicative methodologies (e.g., Johnson & Morrow, 1981). Others (Krashen, 1980, 1982,
1985; Long, 1981, 1983b, 1885; Swain, 1985) have stressed the key role that listening as comprehensible input plays in L2 learners acquiring the target language. Krashen (1980, 1982, 1985) argued that L2 learners should receive comprehensible input including items at a linguistic level one stage (\(i + 1\)) ahead of the learner’s current level of L2 proficiency. More recently, the investigation of this claim has turned to the recognition of output (e.g., Swain, 1985, 2000a) and social interaction (e.g., Pica, Young, & Doughty, 1987; Ellis et al., 1994) in language acquisition.

A number of scholars have recognized the crucial role of listening in language acquisition (Asher, 1969; Winitz & Reeds, 1975; Nord, 1981; Postovsky, 1981; Krashen & Terrell, 1983; Byres, 1984; Mendelsohn, 1994, 1995; Vandergrift, 1999; Rost, 1990, 2000, 2002). In opposition to methodology emphasizing oral production, such as the audio-lingual method (e.g., Rivers, 1968), some teaching methodologies supported instruction of listening comprehension, especially at the early stage of L2 development. These included Asher’s (1969) Total Physical Response Approach, Winitz and Reeds’ (1975) delay in oral production and Krashen and Terrell’s (1983) Natural Approach. Influenced by studies of L1 childhood language acquisition (e.g., Brown, 1973), these methodologies considered that language learning should start with listening and that oral production should be delayed. Furthermore, providing a large amount of listening or comprehensible input (Krashen, 1980) was considered to be the best way to learn a second language. Furthermore, others claimed that teachers should teach listening strategies (O’Malley & Chamot, 1990; Rost & Ross, 1991; Mendelsohn, 1994, 1995) to activate listening because “teachers of listening are no longer merely Krashen’s providers of comprehensible input” (Mendelsohn, 1995, p.132).

A number of overviews of listening comprehension have identified a lack of empirically sound models of listening comprehension (Rivers, 1968; Carroll, 1972; Brown & Yule, 1983; Powers, 1986; Buck, 1990; Morley, 1991; Dunkel, 1991; Dunkel et al., 1993; Rost, 1994; Brindley, 1997, 1998; Takei, 2002a). “We are still largely ignorant of what is involved in the process of interpreting language through normal listening” (Brown & Yule, 1983, p.101). One reason for this claim is that “listening is less directly observed and less noticeable in both its development and its
everyday use” (Rost, 1994, p.1). Listening is indeed an invisible cognitive process (Dunkel, 1991). For this reason, listening comprehension has been assessed by indirect performance such as cloze tests, multiple choice tests, and dictation. Most of the research has been concerned with the performance of listeners. However, it is not clear how the spoken language is understood and interpreted by listeners. It is difficult to examine listening comprehension which takes place as a cognitive process in the brain (Carroll, 1972; Takei, 2002b).

2.3. LISTENING COMPREHENSION PROCESSES

There are divergent views about listening processes, rooted in various theoretical assumptions. This section discusses listening comprehension processes from five perspectives. The first three views are rooted in cognitive psychology. Firstly, the listening process is viewed as interactive processes taking place simultaneously between two levels (bottom up and top-down processing). Secondly, listening is viewed as a sequential process, as in information processing often associated with short-term memory, working memory, and long-term memory. Thirdly, the listening process is considered to take place simultaneously on different levels as in parallel distributed processing. The fourth view is that listening is an inferential process, using background knowledge rather than cognitive processing of linguistic knowledge. The fifth view is that affective factors such as interest and motivation strengthen or weaken listening comprehension.

2.3.1 Two levels view: bottom-up and top-down processing

The processes of listening comprehension have often been considered in a two-levels view. The most common two-levels view is bottom-up processing and top-down processing (Rost, 2002). According to Rost (2002), in bottom-up processing listeners first attend to individual phonological units, and decode a larger unit of input in hierarchical order, from vocabulary to structures, and arrive at the meaning of the discourse. In top-down processing, listeners make inferences on the basis of background information, contextual information and expectation. Listening comprehension is considered to be an interactive process of bottom-up processing and top-down processing by utilizing linguistic and non-linguistic information (Rost, 1994, p.32; Nunan, 1999,
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The literature of the two-levels view of listening comprehension processing will be discussed below.

Bottom-up processing has been described in various ways by different scholars. This micro level of listening was described by Carroll (1972) as ‘apprehending linguistic information’. Hughes (1989, p.135) called it ‘micro- skills’, borrowing terminology from the research on sentence processing. This linguistic level was also referred to as ‘lower-level processing’ (Faerch & Kasper 1986; Buck, 1990, 1991; Rost, 1990; Weir, 1993; Brindley, 1998). Top-down processing has also been described in various ways. This macro level was described by Carroll (1972) as ‘relating that information to a wider context’. Hughes (1989, p.134) called it ‘macro- skills’, and it was also referred to as ‘higher-level processing’ (Faerch & Kasper 1986; Buck, 1990, 1991; Rost, 1990; Weir, 1993; Brindley, 1998). There seems to be an agreement among these scholars as to a two-levels view of listening comprehension. Buck (2001 p.52) notes that “Despite some differences, these scholars arrived at similar conceptualizations of listening comprehension… This adds considerable credibility to the two-stages [levels] view of listening.”

A recent model of listening proposes that the two processes interact with and influence each other (Rost, 1994, p.32; Nunan, 1999, p.221; Buck, 2001 p.1). To what degree listeners use top-down processing and bottom-up processing for comprehension according to language proficiency has been of interest to researchers, and is significantly related to the present study. Research results (O’Malley, Chamot, & Kupper, 1989; Rost & Ross, 1991) agree that good listeners are likely to focus on macro components of the discourse and shift their attention to individual words when there is a comprehension problem, while poor listeners are likely to focus on individual words to construct meaning from the task. Researchers also claim that listeners below a certain threshold of language proficiency are unable to activate top-down processing such as redundant information (Anderson & Lynch, 1988; Chiang & Dunkel, 1992). These research results suggest that good listeners are likely to use both top-down processing and bottom-up processing effectively and on the other hand, poor listeners are likely to focus on bottom-up processing. Tsui et al.’s (1998) study using 20,000 students in Hong Kong showed, that bottom-up processing of listening is more
important than top-down processing for learners with poor L2 proficiency. This does not imply that poor listeners do not use top-down processing. That is, poor listeners cannot use background knowledge effectively, and as a result seem likely to be less successful in comprehension of the spoken language. Thus, it is essential that poor listeners and good listeners learn to use both top-down processing and bottom-up processing effectively (Peterson, 1991, 2001).

Interaction of bottom-up processing and top-down processing may be more complex. According to McClelland and Elman (1986, p.119), language processing is “massively parallel, interactive.” Top-down processing may compensate for the deficiencies of bottom-up processing. For example, previous knowledge of soccer may mean that listeners are not required to listen attentively to details about World Cup soccer. “Top-down processing enables the listener or reader to by-pass some aspects of bottom-up processing” (Chaudron & Richard, 1986, p.114). Listeners may use semantic knowledge to help them understand the phonetic input, the vocabulary, and the syntax (Buck, 1995). Listeners may also use their knowledge of lexis and topic to interpret the confusing sounds, but also use bottom-up processing to check the progress of their understanding (Peterson, 1991). Richards (1990) combines listening process (bottom-up and top-down processing) and listening function (interactional and transactional) into an L2 listening model. Richards’ model appears to be “oversimplified” (Buck, 1990, p.82) because he does not take into consideration the interactive aspect of each level, but merely divides them according to situations, although his classification provides a practical insight for language teachers (Morley, 2001). It is dangerous to simplify the interaction of these two levels of processing.

2.3.2 A sequential process of listening

The interactive process of listening comprehension between top-down and bottom-up processing was discussed above. From a different view, cognitive psychology has attempted to uncover a sequence of listening comprehension, which is different from dichotomous views. Anderson’s (1985) account of a listening comprehension model, which influenced the two-levels view, has three stages: perception, parsing, and utilization. During the perceptual phase, listeners focus on
the sounds of language and store them in echoic memory. Because the echoic memory is extremely limited, listeners almost immediately begin to process the sounds for meaning. During the parsing phase, listeners use words and phrases to construct meaningful representations. Listeners decompose the information into a meaningful unit that can be stored in short-term memory. The size of the chunk that listeners retain depends on several factors, including knowledge of language, knowledge of topic, and quality of the signal. In the utilization phase, listeners delve into long-term memory to connect what they hear with what they know. Stored information is in the form of schemata and script, or interrelated concepts.

Anderson’s model was applied to the classification of listening strategies (O’Malley & Chamot, 1989, see Section 2.7.3) and a revised comprehension model (Brown, 1995). Based on Anderson’s model, Brown (ibid. p.61) proposed a model of listening comprehension called ISFU, as follows:

I: **Identify**—Identify the information expressed in the text.

S: **Search**—Search existing files in memory to try to relate this new information to information which you already have.

F: **File**—Store this information in memory, cross-referencing to relevant existing files, or setting up a new file for new information, so that you can relate future information to it from a number of different sources.

U: **Use**—Put this information to use—act upon it in some way.

Anderson’s model explains perception of the sounds and construction of the meaning in more detail, while Brown’s model focuses more on stored knowledge and its utilization. Unlike the two-levels view, the Anderson and Brown models both suggest a sequential order of input perception, recognition, understanding, and utilization.

Other applied linguists have attempted to account for listening comprehension as a sequential process along with the same lines as Anderson and Brown. Attempts were made to uncover the mechanism of listening comprehension in terms of auditory perception and linguistic processing. Clark and Clark (1977) proposed an information process model; the hearer takes in raw speech and
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holds its image in working memory. Then the hearer constructs meaning between propositions. Once the hearer identifies the propositions, the working memory is cleared. Likewise, Turner (1995 p.5) and Underwood (1989 p.2) explain cognitive processing of listening with interrelation between short-term memory and long-term memory. Although short-term memory and long-term memory have been often discussed in SLA research as in the above model, working memory seems to play the most vital role in processing acoustic input. Actual comprehension and inference processes mostly take place in working memory, where listeners take in new information and release old information (Rost, 1994, p.70). Thus, it would be important to examine the role of working memory in further studies.

From the various aspects of listening comprehension discussed above, Buck’s (2001) recent listening model appears to be most comprehensive as follows:

The acoustic input is held briefly in echoic memory, which captures the sound and passes this to working memory. At this stage affective factors, such as interest or motivation may strengthen the input, or weaken it due to the lack of attention. This input is processed in working memory by an executive processor, by means of controlled processes or automatic processes or any degree of combination between the two, and the result is passed to long-term memory. There the input is compared to and synthesized with other knowledge-linguistic, contextual or relevant general knowledge and a feedback loop relates the results back to the executive processor where it may be reprocessed and recycled as necessary. (p.26)

Listening comprehension can be explained by automatic and controlled processing. Applied linguists have claimed that there exist both automatic processing and controlled processing (McLaughlin et al., 1983; McLaughlin, 1987; O’Malley & Chamot,1990). McLaughlin et al. (1983) claimed in their sequential information processing model that the listening skills need to be “routinized ” (p.140) as automatic processing in order to become a proficient listener, while controlled processing takes place when the skills are imperfectly mastered. The more proficient
listeners become, the more likely that processing becomes automatic and unconscious. On the other hand, beginning listeners are likely to rely on controlled processing which takes place consciously. Thus, it is imperative that the ultimate goal in the learning of listening is that listening processing becomes automatic (Rost, 1990; Buck, 1995). The above model, however, takes less into consideration affective and other cognitive variables of second language learners. Nagle and Sanders (1986) proposed an information processing model of comprehension which incorporates controlled and automatic processing as well as the effects of attention and monitoring. Their model is more comprehensive and attempts to account for comprehension incorporating various SLA theories.

2.3.3 Parallel distributed processing

An information processing model which is quite different from other models is ‘parallel distributed processing’ (Rumelhart, Hinton, & McClelland, 1987). In the parallel distributed model, processing must take place not in a sequence but simultaneously on different levels. The information relating to a particular event is spread over a number of inter-connected units, such that the activation of one unit leads to the activation of all the other units. This model has the great potential to account for various types of language comprehension. Yet, L2 learning has received little attention from parallel distributed processing (Ellis, 1994).

2.3.4 Inference, interpretation, and schema

Listening has been mainly viewed above as the linguistic processing of language input. Another view is that listening is inference-based processing (Rost, 1990), which is also associated with the top-down processing discussed above. This section focuses on the inference-based process of listening and is particularly relevant to the present study.

Applied linguists have recognized that interpretation of listening varies according to listeners. It does not always follow in our daily life that listeners understand exactly what speakers refer to. There are often ‘inferential gaps’ (Boliger & Sears, 1981, p.121) between the speaker’s
intention and the listener’s interpretation. Listeners need to bridge this gap by making inferences from what is spoken. Meaning is not something in the text that the listener has to construct, but it is constructed by the listener in an active process of inference and hypothesis building (Buck, 1995, 2001). Different listeners will understand different things due to background knowledge. “The sense that the listener derives is constructed within the listener’s own knowledge domain” (Rost, 1994, p.5). Interpretation of the spoken text may greatly affect listening comprehension. “It is not really the context of situation which influences the process of comprehension, but rather the listener’s understanding and interpretation of this” (Buck, 1990, pp. 403-404). It may follow that individual listeners to a varying extent construct different interpretations on the basis of inference and background knowledge. Interpretation by listeners is not passive but indeed consists of laborious mental activities. Thus, it is “essential to encourage active participation by the listener” (Brown, 1990, p.171).

The listener’s inference contributes to listening comprehension, although it may at times draw on false interpretation. Advanced listeners are capable of predicting the missing part, even though they cannot hear the whole utterance. Oller (1979) calls this ability ‘expectancy grammar’. For example, Yanagii (1984, p.95) shows an example of a sentence in which listeners can predict the missing word as follows: “John ___ sick last night.” It is easily conceivable that listeners with some degree of expectancy grammar would know “was” was missing in the underlined part, because “John” is third person singular and “last night” indicates the past. “John” and “last night” can be considered to add redundancy to the meaning. Oller (1979) explains that, along with expectancy grammar, redundancy in English contributes to comprehension of a sentence which contains noise distraction and unknown words. Rivers (1968, p.138) claims that about 50% of English contains redundant information. If River’s claim is acknowledged, a listener’s inference assists listening comprehension with the help of redundancy in English, although redundancy is claimed to have a varying degree of effect depending on L2 proficiency (Chiang & Dunkel, 1992).

Listeners may not comprehend every utterance which is spoken to them in a real conversation.
Native speakers in most cases may not remember what exactly is said to them (Brown & Yule, 1983). There would be lots of misunderstandings, even between native speakers, when they interpret a spoken message on the basis of wrong inference. Brown (1978, p.281) argues that “we [native speakers] all get by a rough fit with“ (p.281) what is spoken. This leads to the suggestion that “reasonable interpretation” rather than “correct interpretation” (Brown, 1978, p.280) would be necessary for comprehension of spoken language. The aforementioned argument, however may not apply to a situation in which comprehension of exact information is needed. There are also cases in daily life in which listeners need to pay selective attention to precise information, such as price at the cashier or the deadline for assignments in the classroom. Nevertheless, allowing listeners to gain a reasonable interpretation of utterances may be effective for beginning L2 learners to reduce the psychological burden of comprehending all the information spoken to them. Furthermore, reasonable interpretation is relevant to pragmatics (Yule, 1996), in terms of how language is interpreted in context. Listeners may not construct appropriate meaning according to the context, even though they understand the linguistic meaning. Thus, constructing reasonable meaning appropriate for the context is crucial for understanding of spoken language.

The effect of background knowledge on comprehension was also accounted for by schemata, scripts or frames. A schema (Rumelhart & Ortony, 1977) refers to background knowledge or prior knowledge. Most of the research which investigated the effects of schemata on comprehension concerned L1 listening and L2 reading (Long, 1989). Chiang and Dunkel (1992) investigated Chinese learners of English as an L2 using a text with familiar knowledge (Confucius and Confucianism) and a text with unfamiliar knowledge (the Amish people). The study found that the Chinese students significantly increased listening comprehension with regard to the familiar topic than the unfamiliar topic. Their finding supported the positive effect of schema and prior knowledge on listening comprehension. Similarly, other researchers claim that background knowledge or schemata of what is spoken is crucial for comprehension. “Much of the meaning understood from the text is really not actually in the text, per se, but in the reader, in the background or schematic knowledge of the reader” (Carrell & Eisterhold, 1983, p.559). This argument is
quite similar to that made by Buck (1995, 2001) concerning listening comprehension. In a broader sense, it may be argued that “virtually everything we do by way of conversation is a reflection of our cultural norms and values” (Rost, 1994, p.79). On the other hand, this argument leads to speculation that when L2 listeners are not familiar with the context of what is spoken (e.g., Western culture), their lack of knowledge of the target culture may interfere with understanding of the utterances. In this respect, it is imperative that L2 listeners be familiar with the target culture in order to promote listening comprehension.

Listening comprehension can be explained by scripts (Schank & Abelson, 1977). A script is “a structure that describes an appropriate sequence of events in a particular context” (Schank & Abelson, 1977, p.422). According to them, there is a script for a restaurant, in which a customer goes into a restaurant and orders food, then after eating it, asks the waitress for the check and leaves. A sequence of events taking place in a restaurant can be easily inferred after hearing the word, “restaurant”. However, this sequence of events in the restaurant is slightly different from the one in a Japanese context. Similar to the argument for schema, scripts are culturally bound so that there is a danger that L2 listeners may misunderstand scripts of the text by deriving inference from their own culture.

Listening is connected with both co-text and context of situation (Brown & Yule, 1983, p.60). The topic of the discourse is expected by the listener on the basis of co-text in what has been already addressed in the previous discourse. Listeners can predict what may take place in the rest of the text on the basis of what was previously spoken in the text. Listening is also determined by social relationships within the particular context of situation in which the listener exists. A native speaker is likely to construct expectations on the basis of “a set of stereotypes of knowledge which he has been building up from the time he first acquired language as an infant in the culture” (Brown & Yule, 1983, p.60).

To sum up the aforementioned discussion, as Buck (1995) states, “Knowledge of the co-text,
context of situation, and general knowledge and past experiences are used whenever possible to help arrive at an understanding of the message” (p.118). Listening is quite complex processing and is the sum of various factors which to a varying degree affect comprehension.

2.3.5 Affective factors

Affective factors such as the interests and motivation of listeners are considered to have an effect on listening comprehension. Listening comprehension is also affected by psychological aspects such as anxiety and self-confidence. Brown and Yule (1983, p.73) note that “the listener's own personal interests will be a powerful determiner of what he abstracts from what is said”. Rost (1994, p.2) also claims that “Listening is a process that is triggered by attention.” Without the role of active listening, listening comprehension would not be enhanced. Listeners should not be a passive recipient of oral messages or “the learner-as-sponge, passively absorbing the language models developed by textbooks and tapes” (Nunan, 1999, p.209). Saliency of the acoustic input would be dependent on listeners’ values. Listeners would “extract different parts of the text as more ‘salient’ to them...and so build their mental representation” (Brown & Yule, 1983, p.100). Anderson and Lynch (1988 p.11) also argue that “listeners tend to be selective, in terms of what they find most interesting, important or comprehensible”. Thus, providing listening tasks which draw on the learner’s interest as well as comprehensible input would be central to activation of listening comprehension.

2.3.6 Summary

To sum up the review of literature of the listening comprehension process, Buck’s comment (1990) is considerably relevant to the present study:

Any model of the normal process of listening comprehension must allow the sum total of the listeners' knowledge, past experience, current thoughts, feeling, intentions, personality and intelligence to interact freely with the acoustic input and with each other, to create the interpretation of the text. Processing has to be very massively interactive and parallel (p.409).
2.4 LISTENING SUB-SKILLS

A number of researchers have attempted to describe listening comprehension in terms of taxonomies of sub-skills which underlie the process. Taxonomies of listening sub-skills proposed by researchers are discussed below. Firstly, Richards (1983) developed an exhaustive and "more complete taxonomy of listening sub-skills" (Buck, 2001, p.55) written for classroom teachers (Table 2.1). Richards suggests that different lists of 'micro-skills' are required for each purpose. 'Conversational listening' in his taxonomy includes 33 micro-skills and 'academic listening' includes 18 micro-skills. His taxonomy provides a useful model of target listening skills, although Buck (1990, p.85) criticizes Richards's taxonomy in that "it offers no evidence for what seemed to be contrary to much of the research on language processing." Munby (1978) also provided a very detailed taxonomy of language skills called 'enabling skills', which includes both productive and receptive skills. Munby's taxonomy contains an overwhelmingly wide range of micro-skills and includes 119 micro-skills which are relevant to listening. Yet, Munby's taxonomy is less concerned with listening skills than Richards' taxonomy because Munby's does not differentiate listening skills and readings skills. Moreover, Skehan (1984) argues that Munby's taxonomy "is not a taxonomy of skills, but a description of everything that appeared to be of interest to applied linguistics". Furthermore, language teachers may be too confused to select the applicable micro-skills from an extraordinarily wide ranging of taxonomy, although "the detailed requirements listed are very suggestive of the sort of exercise types that will develop each micro skill" (Rixon, 1981, p.69).

Other applied linguists proposed taxonomies, similar to the above, which are thought likely to be important sub-skills. According to Rixon (1981), listeners have four strategies they apply when uncertain: firstly, to remain alert for a gloss or rewording of some sort; secondly, in the meantime to make a guess, to be confirmed or denied later; thirdly, to refer outside to a third person or a reference work of some kind; and finally, to just give up. It appears that Rixon's account is very plausible. However, her rationale seems to be based on the assumption that these processes she describes take
place in serial order. Further, the listening strategies proposed by Rixon are confined to inference. Lund (1990) differentiates listening into listener function and listener response, which are mutually exclusive. Listener functions are what defines how learners approach the text, as in the following six functions; identification, orientation, main idea comprehension, detail comprehension, full comprehension, and replication. Listener responses are simply a modified type of Richards’ (1983) taxonomy. To sum up, in spite of a lack of empirical evidence, Richards' taxonomy of listening skills appears to be more applicable to language classrooms than the other three, although his taxonomy lacks a theoretical model. It would seem imperative that the previously established taxonomies of listening “need to be subjected to a rigorous process of construct validation before they can be considered as anything more” (Buck, 1990, p.102).

Table 2.1: Taxonomy of listening (Richards, 1983)

<table>
<thead>
<tr>
<th>Listening Function</th>
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<tbody>
<tr>
<td>Identification</td>
</tr>
<tr>
<td>Orientation</td>
</tr>
<tr>
<td>Main Idea Comprehension</td>
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<tr>
<td>Detail Comprehension</td>
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<tr>
<td>Full Comprehension</td>
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<tr>
<td>Replication</td>
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</tbody>
</table>

Richards (1983) would be most effective for the actual classroom. Powers (1986) constructed a questionnaire which asked faculty members to rate, among other things, the importance of 21 listening sub-skills, based on Richards’ (1983) taxonomy of skills related to academic listening. Results showed that 9 skills were rated as very important for academic listening. These are: a)
Identifying major themes or ideas, b) Identifying relationships among major ideas, c) Identifying the topic of a lecture, d) Retaining information through note taking, e) Retrieving information through notes, f) Inferring relationships between information, g) Comprehending key vocabulary, h) Following the spoken language mode of lectures, i) Identifying supporting ideas and examples. Although the main objective of his study was to incorporate the findings into the TOEFL listening test, Powers’ findings are indeed suggestive in that the listening taxonomy was examined on the basis of empirical study.

2.5 DIFFICULTIES WITH L2 LISTENING

Difficulties with L2 listening are closely associated with the characteristics of spoken language. Distinctive characteristics of L2 listening and its difficulties, as discussed below, have obvious implications for the present study, which examines the strategies used by learners in their attempt to negotiate these difficulties.

2.5.1 Speech rate, pauses, and memory

Much of the initial research focused on speech rate because most L2 learners consider the rapid speed of NSs (native speakers) to be a major cause of their listening difficulties (Rubin, 1994; Carrier, 1999). L2 listeners would be overwhelmed by the rapid speed of native speakers’ speech. Griffiths (1991) investigated low-intermediate NNSs (non-native speakers) using three types of texts respectively spoken at 100wpm (word per minute), 150wpm, and 200wpm. The results showed that the texts spoken at 200 wpm demonstrated lowest comprehension, but there was not significant difference between performance spoken on those at 100wpm and 150wpm. This led to the conclusion that fast speech rate interferes with comprehension, but too slow speech (100wpm) did not assist comprehension considerably for intermediate level L2 learners. Slow speech may not always help listeners to comprehend utterances, because it may “impair comprehension by prolonging the time pattern that must be held in short-term memory and allowing more time for
memory traces to fade” (Flaherty, 1979, p.275). Similarly, Brau’s (1990) study indicated mixed results. The results of the study indicated that pauses seemed to aid comprehension considerably but, at the highest level, neither slowing down of the utterances nor pauses aided comprehension. On the other hand, at a lowest level, slowing down aided comprehension. Chaudron (1988) suggests after reviewing eight empirical studies that text spoken at around 100wpm may be most appropriate for beginning L2 learners and 30 to 40 wpm faster for intermediate and advanced L2 learners. These results would suggest that there is a different threshold of speech rate according to the language proficiency of L2 listeners. Fast speech results in reduced comprehension, but too slow speech does not always contribute to enhancement of comprehension.

Speech rate has been shown to interact with other features such as pausing, stress, and rhythm patterns. Pauses especially were considered to affect speech rate because speech with long or frequent pauses is eventually considered as slow speech. In a genuine sense, speech rate may need to be measured along with pauses, in other words, with ‘articulation rate’ (total time minus pause) (Griffiths, 1991). Voss (1979,) examined four features of hesitations, including unfilled pauses, filled pauses, repetitions, and false starts. Pauses were examined as a part of hesitation. Voss found that all types of hesitation cause perceptual problems and comprehension errors for non-native speakers of English. NNSs got stuck with bottom-up processing, while native speakers ignored the micro linguistic problems in favor of top-down processing. Furthermore, the effect of pauses on comprehension would be contingent on other variables. Kohno (1993a) presented his subjects with materials that placed pauses at the end of (1) each word, (2) each phrase, (3) each clause, and (4) each sentence. The study found that pauses placed after each phrase promoted listening comprehension the most. The materials with pauses under other conditions did not lead to a significant difference in comprehension. This evidence seems to suggest that listeners “interpret the spoken text as a meaningful chunk rather than as strings of individual words” (Rost, 1994 p.22). Placing pauses without considering meaningful chunks would not lead to increased comprehension.
Furthermore, memory interacts with speech rate. Decoding fast and/or long speech requires a great deal of cognitive load for L2 learners’ memory. Thus, the memory of L2 learners plays an important role in listening comprehension. Call’s (1985) study indicated some degree of relationship between short-term memory and listening comprehension. It had been found that the memory span for target language input for L2 learners is shorter than that for native speakers. According to Call, the capacity for retention in short-term memory of native speakers of English is about seven units plus or minus two (a unit is a meaningful chunk such as words, phrases, a short sentence). Yanagii (1984) notes that according to previous studies, retention of English units for Japanese learners is about 5 to 7 units. In addition, Call’s study showed that memory for syntactically arranged words was the best indicator of listening comprehension. This evidence led her to suggest that syntax plays an important role in retention of utterances. However, the question of how important short-term memory is for listening comprehension still remains (Buck, 1990, p.90).

Memory is also closely related to processing time and amount of information for L2 learners, which may be major causes of difficulties with listening. Anderson and Lynch (1988) argue that “two important factors of difficulty are the amount of information that has to be processed and the amount of time available” (p. 56). For example, it is easily conceivable that retention of information would increase when listeners process a lesser amount of information for a longer time. Due to time constraints of processing spoken text, memory and the amount of information affect listening comprehension. Similarly McLaughlin et al. (1983, p.145) argue that, for beginning second language learners, a new skill is learned when the complexity of tasks and cognitive demands are minimized.

2.5.2 Phonological modifications, prosodic features, and saliency

Difficulties in recognizing sounds lie in the perception of phonological modifications as clusters rather than discrimination of phonemes as minimal units, although the initial testing of spoken language focused on discrimination of phonemes. Lado (1961) focused on discrete-point test to
assess separately phonemes, stress, and intonation. The sum of a candidate’s responses in discrete sub-tests was considered to correspond to proficiency in listening comprehension. However, studies of phonological aspects of listening indicated unsuspected phonological difficulties which L2 learners face in comprehending listening in a foreign language. For example, Henrichsen (1984) examined the effects of “sandhi” (sandhi comes from the Sanskrit word “sandhi” which means “putting together”), which is phonological modifications of spoken language such as assimilation, liaison, elision, and contraction, on the listening comprehension of ESL students and NSs. The study showed that the NSs’ comprehension was significantly better than that of all levels of the ESL students. When sandhi was not present, high-level ESL students performed much better than low-level ESL students. This result appears to suggest that phonological modifications are difficult in comprehending English for all level of ESL learners. This result does not support Lado’s (1961) discrete-point view of spoken language. Weir (1993) claims that “Few people would not believe that an ability of discriminate between phonemes implies a capacity to comprehend verbal messages” (p.90). Henrichsen (1984) also argues that “one of the aspects of input which promotes comprehension and language learning is increased perceptional saliency of forms through reduced sandhi-variations.” (p.106). For example, it has been found that ‘teacher talk’ (Chaudron, 1983b, 1988), spoken in enunciated English, includes a lesser amount of phonological modification (sandhi) so that it increases comprehension. Input with reduced phonological modifications may be central to what comprehensible input is composed of, which has been one of the main issues in SLA research.

Stress and intonation as ‘paralinguistic cues’ (Brown, 1990) are interrelated with pauses and gestures when listeners attempt to interpret the spoken text. The purpose of stress is to highlight words which carry the main information which speakers want to convey. In English, stressed words are clearly enunciated, longer, and louder. Stressed words are often preceded or followed by short pauses (Buck, 2001). In a real conversation, stressed words, which are assumed to be important by the speaker, are often repeated and followed by gestures. It is known that paralinguistic cues are often accompanied by the speaker’s gestures. Furthermore, Brown notes
(1990, pp.113-143) that stress and intonation directly contribute to the interpretation of the verbal content of the message, whereas loudness, pitch, and tempo contribute to the interpretation of the speaker’s attitudes, such as anger, nervousness, and excitement. However, intonation can be also used to express the speaker’s attitudinal meaning. Thus, it is difficult to determine whether stressed words or pauses, gestures, repetition, or a combination of these affect comprehension. Listeners might, on the other hand, fail to interpret the speaker’s message appropriately if they are not familiar with the stress, rhythm and intonation patterns which a particular group of people use.

In terms of difference between English and Japanese, English has a stress-timed rhythm, while Japanese has a syllable-timed rhythm (Asao, 1993). This difference sometimes makes it difficult for learners of other languages to recognize the rhythm of English (Brown, 1990). Intonation and stress patterns vary according to gender, age, country, and social status (Buck, 2001). Rost (1994) suggests that “the analysis of intonation is complex but picking up stressed words is a realistic and helpful exercise” for students (p.11). It might be difficult, especially for beginning L2 learners to infer from a speaker’s intonation what the native speaker indeed intends to convey. Furthermore, according to Lynch (1998), many L2 learners are likely to transfer stress patterns of the L1 to the listening process of the L2, but proficient listeners are less likely to be affected by prosodic features of the L1. This would suggest that L2 listeners need to be familiar with the prosodic patterns of the target language.

Saliency and frequency of words associated with phonological stress are shown to affect the listening comprehension of L2 learners. Ogata (1993) investigated phonological stress on words, and found that content words (nouns, adverbs, adjectives, verbs) are likely to have stronger stress on them and that on the other hand, function words (conjunction, articles, pronoun, auxiliary verbs) are likely to have weaker stress. It is also known that NSs are most likely to stress important words. Buck (2001, p.17) notes that “high frequency words are recognized faster than lower-frequency words…the fainter the sound, the longer it takes to recognize the word.” Furthermore, Pica, Young, and Doughty (1987) reported that comprehension improved when content words were repeated. In their study, it was considered that saliency of words increased by
repetition. Repetition by speakers increases saliency of words so that it leads to increased comprehension. In other words, salient words such as content words which are important to understand utterances receive more attention from listeners when speakers place phonological stress on these words.

The effect of repetition is also related to redundancy. Redundancy, mostly in the form of repetition, has a varying degree of effect on the comprehension of L2 learners. Chaudron (1983a) found that redundancy in the form of a repeated noun is more helpful in both recognition and recall than any other devices tested. Yet the research findings have been shown to vary according to the proficiency level of L2 learners. Derwing’s (1989) study showed that simple redundancy of the type used by Chaudron (1983a) facilitated understanding for low-intermediate students, while redundancy of another type, such as the increased use of background details, distracted from comprehension. The follow-up study of elaboration by Derwing (1996), using adult intermediate-advanced L2 learners, showed that elaboration has a varying degree of effect on comprehension according to the quality of the elaboration. For example, paraphrasing with markers (e.g., “in other words”) was found to be the most effective, while elaboration with irrelevant information was the least effective. Further, Chiang and Dunkel (1992) found that high intermediate students benefited from speech modifications such as elaboration and redundancy, while low-intermediate students did not. These contradictory results may be due to the fact, that at the lowest level of proficiency, some kinds of redundancy add to the listening load in that they provide more language to process. Anderson and Lynch (1988, p.51) argue that “L2 learners have to reach a certain minimum level of proficiency before they can take advantage of the redundancy that a well-meaning native speaker may build into spoken language”.

2.5.3 Spoken language and written language

Functional grammar proponents (e.g., Halliday, 1985, 1987; Chafe & Danielewicz, 1987) analyze spoken and written language in relation to the social context. Spoken language is regarded as time-bound, ephemeral, informal (Halliday, 1985), rapid, evanescent (Chafe & Danielewicz, 1987)
and produced for particular participants. On the other hand, written language is regarded as spatial, static, permanent, displaced in time (Halliday, 1985), deliberate and editable (Chafe & Danielewicz, 1987) and frequently aimed at a wide and unknown audience. There are also lexical differences between the two. Lexis related to the immediate situation and ‘lexical sparsity’ (Halliday, 1985) are more prominent in spoken language, while lexical density is higher in written language (Halliday, 1987). Halliday (1987, p.66) notes that “Written language tends to be lexically dense, but grammatically simple, spoken language tends to be grammatically intricate, but lexically sparse”. ‘Grammatical metaphor’ (Halliday, 1985, 1987), which for example includes nominalization, is more characteristic of written language than spoken language. Furthermore, Chafe and Danielewicz (1987) view language as a continuum from conversation to academic writing. For example, conversations are inclined to have inexplicit and limited vocabulary as well as colloquial words, while academic writings tend to have explicit, varied, and formal vocabulary, and stronger coherence within the discourse.

There are other characteristics of listening which distinguish it from other language skills. These peculiar characteristics of listening make it difficult for L2 learners to learn listening. Difficulties in learning listening are closely associated with characteristics of the spoken text which are different from those of the written text. The nature of spoken language in everyday life is unplanned discourse (Buck, 2001, p.9), while written language is self-monitored (Halliday, 1987). That is, what listeners have to listen to consists of hesitation, fillers, false starts, vocabulary repair, even grammatically ‘incorrect sentences’ (Hatch, 1983) which are characteristic of unplanned spoken language. Furthermore, listening takes place in real time with no chance of review and processing (Weir, 1993), which involves a different process from reading, where the reader faces “a permanent written text” (Buck, 2001 p.3). One reason listening is categorized as a receptive skill may be that learners cannot manipulate the spoken language uttered to them. Mendelsohn (1995, p.132) claims that “Listeners are at the mercy of speakers”. This does not imply that listeners have no control over what is going to be said. Some researchers (e.g., Vasseur, et al., 1996) argue that listeners play an active role in changing the interactive features of conversation.
2.5.4 Discourse markers and redundancy

Discourse markers which mark relationship between chunks of discourse were examined as to whether or not they have an effect on the comprehension of L2 listeners, mostly in university lectures settings. Chaudron and Richards (1986) found significantly positive effects on comprehension for macro discourse markers such as “to begin with” and “what happened then was”, but not for micro discourse markers such as “well” and “eventually.” Dunkel and Davis’ study (1994), however, claimed that no effect for these discourse markers was found. Flowerdew and Tauroza (1995) cited deficiencies in the research designs of these studies as being responsible for these findings. In the case of Chaudron and Richards’ study (1986), they cited the use of inauthentic text (a lecture presented in a reading style as opposed to a conversational style). In the Dunkel and Davis’ study (1994), they claimed that no distinction was made between macro- and micro-markers. On the other hand, Flowerdew and Tauroza’s (1995) study found that both macro- and micro-discourse markers had a positive effect on comprehension. These conflicting results provide inconclusive evidence because each of them employed different research methods. One possible explanation may be that discourse markers “aid comprehension by acting as filled pauses and thus allow more processing time” (Flowerdew & Tauroza, 1995, p.452). The three studies above used university level subjects who were considered to have sufficient English ability to make the most use of discourse markers. For beginning L2 learners, discourse markers may merely add additional cognitive load for processing.

2.5.5 Task type and text type

Task types were found to affect listening comprehension. Many variables interact with task difficulty. Long (1983b) claims that a two-way task, in which interlocutors exchange missing information respectively, promotes listening comprehension more than a one-way task. A number of empirical studies (e.g., Long, 1980 cited in Long, 1983b, Doughty & Pica, 1986) showed that
two-way tasks resulted in increased negotiation of meaning and comprehension. On the other hand, Gass and Varonis’ study (1985) found no difference in negotiation of meaning and comprehension between these two types of task. Further, Plough and Gass’ study (1993) showed that familiarity with task and interlocutors had effects on task performance. After investigating several variables of listening tasks, Brindley (2002) concludes that many variables of listening interact with task difficulty. Simply adjusting one element of a task would not account for task difficulty.

Types of listening text have also been shown to affect listening comprehension. Shamony and Inbar (1991) found that, as measured by a comprehension test, the newscast was the most difficult, the lecture the next most difficult, and the dialogue the easiest text type to comprehend. They suggest that texts which most closely resemble spoken language are easier to process than those which exhibit more written features. Furthermore, Chiang and Dunkel (1992) found that learners who listened to a lecture on a familiar topic had higher comprehension scores than those who listened to a lecture on an unfamiliar topic. Listening texts also need to be taken into consideration for designing listening tasks.

2.5.6 Visual aids and context

Visual aids have been shown to have a varying degree of effect on listening comprehension. The findings of empirical studies show different results according to the proficiency level of L2 learners. Mueller (1980) studied the effect of visual aids on comprehension, using three groups as in ‘Visual before’, ‘Visual after’, and ‘No visual’ on comprehension. The results showed that the less proficient the learners were, the more crucial the visual aids were, although they were sometimes not helpful for advanced listeners. Furthermore, Kohno (1993b, p.48) claims that pictures may help to enhance listening comprehension, but this does not always mean that listening comprehension itself is enhanced because pictures may be momentary aids only in particular contexts. It is also claimed that spoken text without visual aids is likely to be too explicit and have
too much redundancy (Kohno, 1993b, p.347).

There are some linguistic and non-linguistic environments which help listening comprehension in oral communication. Influenced by L1 childhood acquisition studies, Krashen and Terrell (1983) claimed that L2 learners increase listening comprehension at an early stage of development when learning focuses on a “here and now” context. That is, it was assumed that beginning L2 listeners comprehend utterances spoken about what they can actually see nearby and what is happening now better than what they cannot see and what is not happening now. Similarly, they claimed that beginning listeners understand the utterances better with the help of extralinguistic cues such as visual aids, and realia. These arguments suggest that in language classrooms it is more effective for beginning listeners to receive materials situated in ‘here and now’ contexts with the help of extralinguistic cues (Krashen, 1982, 1985).

2.6. INTERACTION AND LISTENING COMPREHENSION

Central to this study is the notion of interaction between interlocutors which has become the major concern of L2 learning in recent years. Contrary to the views of the behaviourists (e.g., Skinner, 1957) and nativists (e.g., Chomsky, 1965), communicative approaches had focused on improvement of the communicative competence of individual L2 learners (e.g., van Ek, 1975; Wilkins, 1976; Widdowson, 1978; Brumfit & Johnson, 1979; Littlewood, 1981; Johnson & Morrow, 1981). The interactivists of SLA research (e.g., Hatch, 1978; Long, 1985) extended beyond the individual, viewing language acquisition as the result of the collaborative discourse which the learner and advanced speakers jointly construct. The sections below are concerned with the framework of the interactivists, discussing how a speaker and a listener contribute respectively to listening comprehension in interactive settings.

2.6.1 The role of the speaker: input, interaction and listening comprehension

SLA researchers have been concerned with the effect of interaction on listening comprehension.
Effects of modified input and modified interaction or negotiation of meaning on L2 listening comprehension have been one of the major interests for SLA researchers over the past twenty years. Pica’s (1994) overview of previous studies notes that “Negotiation, with its emphasis on achieving comprehensibility of message meaning...has sparked and sustained considerably more interest in the field of SLA” (p.495).

L2 research into input and interaction was at the outset influenced by the research into first language acquisition. Researchers (e.g., Snow & Ferguson, 1977) investigated the language spoken by mothers or caretakers to their children and this linguistically adjusted language was referred to as ‘caretaker speech’, ‘motherese’, ‘baby talk’, ‘child-directed speech’. Simplified speech is characteristic of caretaker speech. Caretaker speech includes more grammatical, simple, redundant speech than that addressed to adults. Researchers (Krashen, 1982; Hatch, 1983) also identified slow speech rate with inserted pauses in caretaker speech (Krashen, 1982; Hatch, 1983).

Following the studies of caretaker speech, ‘foreigner talk’ addressed to non-native speakers by native speakers was investigated by applied linguists. The studies (e.g., Hatch, 1983) of foreigner talk identified simplified speech such as omission (e.g., Man eat fish), expansion (e.g., You eat now), and replacement or rearrangement (No have work). Although simplified and slow speech are characteristic of both caretaker speech and foreigner talk, what distinguishes foreigner talk from caretaker speech is that foreigner talk at times has ungrammatical utterances. Foreigner talk sometimes includes pidgin-like language (e.g., Me Tarzan) (Long, 1996). Additionally, the simplified register used by L2 classroom teachers, which was referred to as ‘teacher talk’, was found to have similar features with caretaker speech (Chaudron, 1983b, 1988). Teacher talk, which has shorter, syntactically simplified speech as in foreigner talk and caretaker speech, was also found to assist comprehension of L2 learners (Chaudron, 1988). However, it is claimed that syntactic simplification does not always lead to an increase in listening comprehension. Lynch (1996), for example, claims that simplified English sometimes appears to be ‘choppy’ and makes the text more difficult to understand.
Simple exposure to input may not be enough. Learners need comprehensible input. Krashen (1980, 1982, 1985) and Long (1981, 1983b, 1985) strongly argue that comprehensible input is necessary for second language acquisition. The Input Hypothesis proposed by Krashen claims that learners need input \((i+1)\) slightly ahead of their current level of language development. The Input Hypothesis also claims that input becomes comprehensible as a result of simplification “with the help of context or extra-linguistic information” (Krashen, 1982, p.21), and learners need ‘roughly-tuned’ input. The success of the Comprehension Approach methodologies (Asher, 1969; Winitz & Reeds, 1975; Nord, 1981; Postovsky, 1981) confirmed that these teaching methodologies provide comprehensible input and thus promote learning. Furthermore, the Input Hypothesis was empirically supported by Immersion Programs in Canada (Genesee, 1983) and other evidence (see Long, 1983b for further discussion). Yet this hypothesis came under harsh attack from some researchers (e.g., Gregg, 1984; Faerch & Kasper, 1986; White, 1987), who claimed that the processing responsible for comprehension and for acquisition are not the same. Rost (1990) defines listening comprehension as “essentially an inferential process based on the perception of cues rather than straightforward matching of sound and meaning”(p.33). In spite of strong support for the Input Hypothesis, a lack of evidence means that the claim that comprehensive input facilitates language acquisition is not fully supported. Indirect evidence “provides only weak support in favor of the necessity of comprehensible input” (Ellis, 1991, p.186). On the other hand, although the significant role of comprehensible input in L2 acquisition was acknowledged, factors such as comprehensible output (Swain, 1985, 2000a) and comprehended input (Gass, 1988) were claimed to be more conducive to L2 acquisition.

Others (e.g., Long, 1983a) argue that it is speech modifications which are more important for comprehension of input. The studies of speech modifications laid the theoretical foundation of Krashen’s Input Hypothesis and were the extended studies of modified input (e.g., teacher talk). Long (1981, 1983a, 1985) argues that not only comprehensible input but also speech modifications are needed for L2 language acquisition to take place. Long (1983b) argues that modifications to the interaction structure of conversation are “the most important and widely used” way of making
input comprehensible (p.342). Long (1983a) also recognized significant differences between the talk of NS-NS and that of NS-NNS with respect to language management and functions performed, which were different from caretaker speech or foreigner talk. In order to solve communication problems, NS-NNS pairs were likely to use speech modifications such as confirmation checks, comprehension checks, clarification requests, and repetitions (Table 2.2). Accordingly, Long (1985) proposed the Interaction Hypothesis as follows:

Step 1: Interactional adjustments (speech modifications) promote comprehension.

Step 2: Comprehensible input promotes acquisition.

Step 3: Thus, it is deduced that interactional adjustments facilitate acquisition.

Table 2.2: Examples of speech modifications in NS-NNS conversations
Source: Pica et al. (1987) p.740

| (a) Confirmation check: Moves by which one speaker seeks confirmation of the other’s preceding utterance through repetition, with rising intonation, of what was perceived to be all or part of the preceding utterance. |
| (b) Clarification request: Moves by which one speaker seeks assistance in understanding the other speaker’s preceding utterance through questions (including wh-, polar, disjunctive, uninverted with rising intonation, or tag), statements such as I don’t understand, or imperatives such as Please repeat. |
| (c) Comprehension checks: Moves by which one speaker attempts to determine whether the other speaker has understood a preceding message. |

Following the argument made by Long, a mass of empirical studies have been undertaken to investigate the effects of speech modifications on comprehension. Although scholars (e.g., Tajima & Koike, 1993; Weir, 1993; Buck, 2001) all agree that speech modifications help listeners to understand the spoken text, the research findings show conflicting evidence.

Pica, Young, and Doughty (1987) for the first time attempted to examine Long’s hypothesis (1985)
that negotiation of meaning between interlocutors promotes listening comprehension. They compared the effects of premodified input (with decreased complexity and increased quantity and redundancy) and interactionally modified input (with opportunities for interaction) on the listening comprehension of sixteen L2 adult learners of English, using a direction-giving-task. The results supported Long’s first step that interactional adjustments promote comprehension. Subjects who received interactionally modified input overall outperformed those who received premodified input. The results also showed that repetition of content nouns contributed most greatly to comprehension. Furthermore, Pica, Young and Doughty claimed that redundancy in input was an important factor, whereas grammatical complexity of the input seemed to make little difference. Their study also suggested that the quantity of input also appeared to be important, “as a vehicle for redundancy” (p.753) and they noted that interactional adjustments are not the only way of making input comprehensible (e.g., consulting a dictionary may be helpful for comprehension).

Three research studies published in 1994 also attempted to investigate the effects of premodified speech and interactionally modified speech on listening comprehension using similar research designs. Ellis et al.’s (1994) study compared the effects of unmodified speech, premodified speech, and interactionally modified speech respectively on listening comprehension of vocabulary for students of two different high schools in Japan. The results of their study partially supported the effect of interaction on comprehension. The study suggested that “interaction gives them [the students] a degree of control over the input they receive…time to focus their attention on key or problematic items” (p.482). Loschky (1994), using university students learning Japanese, also examined unmodified input, premodified input, and interactionally modified input which was assumed to have a varying degree of effect on listening comprehension of locative vocabulary and structures. The results supported the effect of moment-by-moment comprehension, but failed to support the claim that interaction facilitates acquisition. Gass and Varonis (1994) also investigated the effects of unmodified input, premodified input, and interactionally modified input on the performance of 16 native-nonnative dyads, using a direction-giving task which replicated Pica et al.’s study (1987). Their study also supported the claim that interaction promotes comprehension,
but again failed to support the hypothesis that interactional adjustments facilitate acquisition.

All three studies above supported Long’s first step that interaction promotes comprehension. Yet all of them failed to support Long’s third step, that interaction facilitates acquisition. These studies also suggested that the increased processing time and increased amount of input which interaction brought learners may have promoted listening comprehension. Gass and Varonis (1994) attempted to account for the effect of interaction on listening comprehension from a different perspective: “interaction serves to focus learners’ attention on form” (p.300). That is, attention through interaction to a communication problem or a discrepancy between learner language and the language spoken to learners would make the input salient to L2 learner, and thus promote comprehension. “What is crucial about interaction is the fact that input becomes salient in some way” (Gass, 1997, p.128). Likewise, after reviewing the research into negotiation, Pica (1994) concludes that “it [negotiation] can help make input comprehensible to learners, help them modify their own output, and provide opportunities for them to access L2 form and meaning” (p.520).

The Interaction Hypothesis has yet to be examined fully in further empirical studies and needs a more advanced theoretical model.

In response to such criticism, Long (1996) proposed a refined version of the Interaction Hypothesis (p.414):

It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner’s developing L2 processing capacity, and that these resources are brought together most usefully, although not exclusively, during negotiation for meaning. Negative feedback obtained during negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language-specific syntax, and essential for learning certain specifiable L1-L2 contrasts.

Initiated by Long (1991), a great deal of empirical studies to date have attempted to incorporate form-focus instruction in a communicative program. The studies (e.g., Doughty & Vareta, 1998) overall appear to suggest that selective attention, corrective feedback towards communication
problems or a gap between target language and learner’s interlanguage promotes listening comprehension. Yet most of these studies are concerned with the acquisition of particular grammatical items or vocabulary through negotiation for meaning, which is focused on productive performance (Ellis, 1991). Effect of form-focused instruction on listening comprehension remains yet to be investigated by further studies.

The interrelationship of input, interaction, and acquisition needs to be discussed with caution. Swain (2000a) claims that “Virtually no research has demonstrated that the greater comprehensibility achieved through negotiation leads to second language learning” (p.98). It seems that the developmental effects of interaction may not appear immediately (Gass, 1988, 1997). Although there has been a tremendous development in the research of input, interaction, and acquisition, there remains a great deal to be investigated in further studies.

### 2.6.2 The role of the listener in the interaction

The previous section discussed the role of the speaker in the interaction. This section discusses the role of the listener in oral communication as the present study investigates listening comprehension in interactive settings. Brown and Yule (1983) differentiate between two types of listening; one is ‘transactional listening’, where listeners aim to achieve a successful transfer of information or to complete the task without intervening and clarifying the speaker’s utterances, and Buck (2001) calls this ‘non-collaborative listening’. The other is “interactive listening” where listeners attempt to clarify communication problems verbally or non-verbally, demonstrate understanding or non-understanding, or take responsibility for turn-taking, and Buck (2001) calls this ‘collaborative listening’. This study primarily concerns interactive listening.

There appear to be universal elements in conversation according to Goffman (1981), although interlocutors have different conversation styles depending on the social context to which they belong:

(a) Opening: all societies have developed routine ways of beginning
(b) Turn-taking: all groups have subtle systems for deciding whose turn it is to speak;

c) Closing: all societies have ritual ways of drawing conversations to a close;

d) Back-channeling signals: we have all developed verbal and non-verbal systems for the listener to give feedback to the speaker;

e) Repair systems: all social groups have ways of repairing a conversation if understanding breaks down.

Listeners are co-responsible for all these features in conversation. Listeners show the timing of the opening and closing of a conversation with non-verbal cues or with verbal feedback. Listeners are responsible for comprehension and confirmation checks, clarification requests (Lynch, 1995), or queries (Rost & Ross, 1991) in order for the listeners and speakers to collaboratively maintain the conversation. Listeners give backchannelling cues verbally, such as “Oh, I see,,” and “Really?”, or non-verbal signals such as head nods, furrowed brow, narrowed eyes, arched eyebrows, widened eyes (Rost, 1994, p.84) in order to indicate that they are following the speaker. Backchannelling cues also are important to show the listener’s understanding and non-understanding to a speaker (Vandergrift, 1997b). In Japan, it is known that listeners always provide ‘listenership cues’ (Rost, 1990, p.100) called “Aizuchi” for the interlocutor to maintain the conversation (LoCastro, 1987). “Successful conversation requires active cooperation on the part of listeners and successful listening involves far more than language processing” (Buck, 1995, p.116). Furthermore, listeners switch to the role of speakers by providing appropriate backchannelling signals when turn-takings take place.

Backchannelling cues need to be interpreted with caution as a legitimate indication of a listener’s understanding. As discussed above, backchannelling cues are helpful to maintain the conversation and indicate the listener’s understanding or non-understanding. Gardener’s (1998) study also found that vocalization of understanding in the form of minimal responses such as “Yeah”, ”Mm hm,” “Uh- huh,” and “Mm” assist listening comprehension. Yet backchannelling
cues may not always mean that listeners understand the utterances. Anderson and Lynch (1988) claim that “We don’t know that between friends, uh-uh and hmm produced by one of them was in full evidence of full comprehension, or partial comprehension” (p.8). Similarly, Brown and Yule (1983) argue that “The occurrence of even these occasional indications [such as “uh-huh”] must be treated with some caution as evidence of understanding” (p.144). Vandergrift’s (1997b) study also found ‘faking’ as one of the listening strategies with which listeners pretended to understand utterances by using backchannelling cues. Although backchannelling cues are found to assist listening comprehension, they need to be interpreted carefully.

In contrast to the view that speech modifications (Long, 1983a) affect comprehension, listeners’ feedback may direct how speakers react to listeners since speaking and listening are interwoven in a conversation. Pica et al’s (1987) study suggested that 50% of NS’s checks and confirmations appeared to be initiated by NNS’s moves: “repeated words by NNS may have served as yet another signal for the NS to repeat words and thus, indirectly, may have acted as aids to the comprehension of the directions to our task.” (p.752). Similarly, Hawkins’ (1985) study found through retrospective data that the listeners’ signals of comprehension affected the speaker’s utterances, although about 50% of responses made by listeners did not indicate comprehension. Rost (1994) also argues that listeners’ moves can ‘reframe’ the content of a conversation or shift the topic of a conversation. SLA research has mainly been concerned with how the speaker’s modifications affect listening comprehension. The investigation of how listeners can alter the conversation and direct the speaker’s reaction would shed light on the understanding of interactive listening.

The continuum model of listeners’ response types (Figure 2.1) below clearly illustrates the behaviors of listeners in oral communication. Implicit/indirect behavior of listeners includes overriding (ignoring the other’s utterances and carrying on with the topic addressed before), lack of uptake (e.g., silence) and minimal feedback (e.g., uh-huh). Intermediate behavior of listeners corresponds to hypothesis forming (of the speaker’s intention) and reprise of non-understanding (e.g., repeating the beginning of an utterance which the listener have not understood).
Direct/explicit behavior of listeners includes metalinguistic queries and comments (e.g., clarifying the unknown part). Vasseur et al. (1996) argue that listeners need to move from the implicit (less active) stage towards the explicit (more active) stage, while from a nonverbal research perspective the ‘implicit communication’ (nonverbal behavior) of listeners is argued to greatly affect the behavior of speakers in interaction (e.g., Mehrabian, 1972).

Figure 2.1 Continuum of response types of listeners in communication

Source: Vasseur et al. (1996)

Please see print copy for Figure 2.1

2.6.3 Collaboration for comprehensibility

A major contribution of the present study is the detailed examination of the nature of collaborative discourse between a listener and a speaker and how this mediates comprehensibility through interaction. A number of scholars (e.g., Brindley, 1998; Buck, 2001; Rost, 2002) argue that in interactive settings a listener and a speaker collaboratively construct the meaning of the utterances and solve communicative problems or arrive at increased understanding. The study by Hatch (1978) showed that joint work between a listener and a speaker successfully arrived at understanding of the messages through negotiation of meaning. Her study also showed that “scaffolding” (Bruner, 1978) by the speaker helped to “shift down the syntax difficulty” (Hatch, 1978, p.419) and led to increased comprehension of the dialogue. Pica et al. (1996) attempted to identify the interrelationship between a listener and a speaker in terms of increased comprehensibility. Their study, using a quantitative method, showed that the listener’s feedback to the utterances prompted the speaker to provide modified input by way of segmentation and repetition, and conversely speaker’s modified input prompted the listeners to increase comprehensibility. Although applied linguists have been more likely to investigate comprehension during the interaction as ‘provider of input to learners’ (e.g., Gass, 1997) or listener’s strategies (e.g., Vandergrift, 1997) with which a speaker or a listener separately
contributes to comprehensibility in the discourse, it would be more plausible to examine
comprehensibility as the interplay between a listener and a speaker. However, few studies of SLA
have been conducted from this perspective. These sorts of studies have been mainly undertaken in
the areas of conversation analysis and discourse analysis (e.g., Bremer et al., 1996).

The concept of ‘scaffolding’ presents a different view of interaction and concerns the collaborative
nature of interactive listening. Vygotsky (1978) advocated the notion of ‘the zone of proximal
development’, the level of performance which a learner is capable of when there is support from
interaction with a more advanced interlocutor. With this interactional view, an unskilled learner
gradually becomes autonomous through collaborative talk with a skilled individual (e.g., adult,
native speaker). This concept would be applied to a context where low level listeners in learning
L2 promote comprehensibility with support from an advanced speaker, which is considerably
significant for the present study, as in this study the native speaker collaboratively constructed the
meaning of the utterances with low level junior high school students. Similarly, Swain (2000a)
claims that collaborative dialogue between interlocutors mediates joint problem solving which
takes place in the course of interaction. In other words, speech modifications by native speakers
can be claimed to play a partial role in scaffolding the development of the listener’s comprehension
during the interaction.

2.6.4 Social relationship and comprehension

Second language acquisition research has identified the effects of the social relationship between
interlocutors on interactional features in the discourse. Unequal status between interlocutors in the
social relationship affects interaction, comprehension, and production. As discussed above, given
that interaction between interlocutors affects listening comprehension (e.g., Pica et al., 1987), it is
also important to examine interactional features in the social relationship. For example, it has been
found that gender has effects on interactional features between interlocutors and this factor will be
investigated in the present study. Zimmerman and West’s (1975) study found considerably different features of repair and interruption between mixed-sex pairs as compared to same-sex pairs. Pica et al.’s (1991) study found that NNSs had less interaction with male NSs than female NSs. Furthermore, it was found that dyads involving NSs and NNSs affect interaction. The studies (Varonis & Gass, 1985; Pica et al., 1996) showed that dyads of NNSs and NNSs increased interaction more than dyads of NNSs and NSs. Other studies indicated that the interaction of teacher and students affects listening comprehension in interactive settings. Pica and Doughty’s (1985) study showed that group activities produced a larger amount of interaction than teacher-fronted activities. Pica (1987) explains that “teachers and students engage in a social relationship which affords them unequal status as classroom participants, thereby inhibiting successful second-language comprehension, production, and ultimately acquisition” (p.4). Furthermore, Hill et al. (1986) found that between Japanese interlocutors, knowledge of status relationship controls the appropriate language forms to be used in a given situation according to age, occupation, and other social status.

These studies suggest that interlocutors with equal status (e.g., NNSs and NNSs, student and student) are likely to produce a larger amount of interaction than counterparts with unequal status (e.g., NSs and NNSs). Thus, it can be assumed that the amount of interaction resulting from the social status difference would affect comprehension to some degree, although the quality of the interaction might differ, e.g., teachers might be more skilled in scaffolding learners.

### 2.6.5 Assessment of interactive listening

A great deal of listening takes place in the context of oral interaction where listening and speaking are closely interconnected. In real life, listening and speaking take place simultaneously and it is unnatural to measure speaking or listening alone. In spite of the crucial role of listening in a communicative context, most listening assessment has been concerned with measuring transactional listening in transactional situations (Buck, 2001). This section discusses issues regarding the assessment of listening in authentic oral communication since such issues are
relevant to the present study, listening tasks needed to be moderately controlled (see Section 3.4).

There are some difficulties with the measurement of listening in interactive settings. Firstly, a difficulty with testing listening in oral interaction may be that “Listening is less directly observable and less noticeable in both its development and its everyday test” (Rost, 1994, p.1). Interactive listening can be measured only through the actual performance of listeners. “A problem confronted by the language testers is that he [sic] cannot test competence in any direct sense; he can measure it only through manifestation of it in performance” (Carroll, 1968, p.51). The second difficulty in measuring interactive listening may be that a listener and a speaker often switch roles respectively in oral communication. The listener switches to the role of speaker when turn-taking takes place. Thus, it is difficult to assess only listening comprehension in oral interaction. The third problem is the accommodation of the assessors who are usually employed in oral interviews to assess communicative ability. The assessor as an interlocutor of a candidate was frequently found to repair, elaborate, repeat, and slow down utterances or to use Yes/No and tag question (Cafarella, 1997). The issue is to what degree can assessors accommodate problems with communication to have justifiable assessment among test takers. Lastly, the practicality of assessing listening in oral communication can be addressed. An oral proficiency test generally includes an examiner and a candidate in a face to face situation. It is very costly to employ and train examiners to administer oral proficiency tests to a large group. Buck (2001) claims that it makes, “more practical sense to stick with the traditional practice to testing non-collaborative listening…interactive assessment is both expensive and time-consuming…requiring expertise generally associated with testing speaking rather than listening” (p.98).

Oral proficiency tests, which to date are considered to measure listening skills in interactive settings, have not proved successful in measuring listening comprehension in communicative settings. As an example, one major oral proficiency test, the ACTFL (American Council on the Teaching of Foreign languages) Oral Proficiency Interview (SIT, 2001) can be considered in terms of listening assessment. The problem with this oral proficiency test is that it is mainly concerned with
speaking (Yoffe et al., 1997). It has paid little attention to listening ability. Specifications of the comprehension component appear to indicate that the level of comprehension is measured according to the complexity of the spoken language. Listening comprehension seems to play a passive role in order to assist speaking in the ACTFL Oral Proficiency Interview. It is known that in real life communication listeners actively employ clarification requests and other strategies to recover communication problems (Buck, 1995). The critical problem with this oral proficiency test may be that the assessment criteria are not based on firm theoretical definitions of the constructs (Bachman & Palmer, 1996). At the present stage, it seems very difficult to construct a valid oral proficiency test incorporating listening comprehension due to many difficulties, although no researcher will deny the significant role of listening comprehension in oral interaction. (N.B. although Vandergrift (1997b) used the ACTFL Oral Proficiency Interview to investigate listening strategies in a face to face situation, he did not address these issues).

2.7. STRATEGIES RESEARCH

Listening strategies research has for the most part based its theoretical framework on research of learning strategies and communication strategies (e.g., Bacon 1992a, Vandergrift, 1996, 1997a, 1997b) with some exceptions. For this reason, the sections below include discussion of the areas of learning strategies research and communication strategies research upon which this study draws. Research into learning strategies and communication strategies which is relevant to listening strategies research is discussed first and then followed by discussion of listening strategies.

Research into strategy use in second language learning has identified a great number of learning strategies (e.g., Rubin, 1975; O’Malley & Chamot, 1990; Oxford, 1990), and communicative strategies (e.g., Tarone, 1981; Faerch & Kasper, 1983). The distinctions among learning, communication, and production strategies are particularly important in second language acquisition (Faerch & Kasper, 1984; Kasper & Kellerman, 1997). The focus of interest in learning strategies has been on language acquisition, while research on production and communication
strategies has more often been concerned with language use (O’Malley & Chamot, 1990). Learning strategies often concerns the characteristics of good L2 learners. Communicative strategies are mainly concerned with recovery of communication problems or collaborative interaction between interlocutors. In principle, learning strategies are distinguished from communicative strategies in that the former help the learner to assimilate language knowledge and skills, while the latter aim to solve communication problems (Tarone, 1981). Yet the sharp distinction between these two types of strategies is at times unclear and useless (Mendelsohn, 1994).

2.7.1 Learning strategies

Discussion of this section focuses on issues of the good language learner, contingency of strategy use, and the metacognitive, cognitive and socio/affective categories which this study adopted.

The first issue is that research into learning strategies in second language acquisition emerged from a concern for identifying the characteristics of good language learners. Research efforts concentrating on the ‘good language learner’ (Rubin, 1975; Naiman et al., 1978) identified strategies reported by students or observed in learning situations that appeared to contribute to learning. Research efforts initially succeeded in identifying a variety of distinct language learning strategies and separating out learner characteristics. However, these studies were likely to exclude poor learners. “Those studies which do not include poor learners cannot be used to say that poor learners do the same things that so-called good learners do” (Gass & Selinker, 1994, p.266). Moreover, use of these learning strategies appears to interact with learner characteristics and other learning variables. Politzer and MacGroarty (1985) compared ESL student responses on a self-report survey of learning strategies with test scores for listening comprehension, grammar, and communicative competence. The results indicated that strategy choice can be affected by various different variables as follows: achievement, level of language learning, goal of language study, method of teaching, cultural background of the learner, and possibly gender. Consequently, these researchers were hesitant about identifying good learning strategies for all situations and all
purposes since “good behaviors may be differentially appropriate for the various types of skills related to the purpose of second language study” (Politzer & MacGroarty, 1985, p.118).

The second issue deals with consistency of a classification scheme that researchers can use to identify strategies and to classify them. Oxford’s study (1990) and O’Malley et al.’s study (1990) are focused on below as these two studies are very relevant to the present study. Oxford (Ehrman & Oxford, 1989; Oxford & Nyikos, 1989) claimed that such factors as motivation, gender, and years of language study had the greatest effect on strategy use. After several years of longitudinal studies, Oxford (1990) proposed the SILL (Strategy Inventory for Language Learning), which provides an excellent classification scheme for language teachers. Oxford distinguishes direct strategies and indirect strategies, comprising more than 60 exhaustive classifications. She especially classifies affective and social strategies in great detail. Vandergrift’s (1996, 1997a) inventories of listening strategies include social/affective strategies adapted from Oxford’s category scheme. However, while Oxford’s classification scheme provides researchers with a better tool for systematically classifying and coding learning strategies, it is not grounded in theory (Skehan, 1991). This weakness leads to another issue.

Attempts were made to base strategy classification on cognitive theories as there was a lack of theoretical basis for learning strategies. O’Malley et al.’s (1985) study of the learning strategies of high school ESL students for the first time called attention to metacognitive and cognitive strategies. The significance of this study is that the classification of learning strategies is based on cognitive theories. In order to validate and further refine this classification scheme, this research team investigated the use of learning strategies by high school and college students learning Spanish and Russian (Chamot & Kupper, 1989). Results indicated that students at higher course levels used more learning strategies than students at beginning levels, and that all students used more cognitive strategies than metacognitive strategies. Based on students’ reports of strategy use to lower their anxiety, a third category was added to include affective factors, and renamed as ‘socio/affective strategies’. Similar to the claim made above by Oxford, Chamot and Kupper (1989) concluded that strategies use depends on the objectives of the particular language course, prior language study,
type and degree of difficulty of task, and motivation.

O’Malley and Chamot (1990) consolidated their previous findings and divided strategies into metacognitive, cognitive, and social/affective strategies. According to their classification scheme, metacognitive strategies include seven strategies, cognitive strategies include eleven strategies and four strategies constitute socio/affective strategies (Table 2.3). Their classification scheme was applied to the studies of listening strategies (Vandergrift, 1996, 1997a) on which the present study bases its theoretical framework. Metacognitive strategies are conducive to planning and monitoring progress, or reviewing accomplishment and future learning directions (O’Malley & Chamot, 1990, p.8). Cognitive strategies are used during the execution of a task to facilitate comprehension or production (Chamot, 1995, p.15). The social/affective strategies proposed by O’Malley et al. (1990) are not classified as exhaustively as Oxford’s (1990) category.

Table 2.3: Learning strategies and their definition
Source: O’Malley et al., (1990)

<table>
<thead>
<tr>
<th>Learning strategies and their definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: O’Malley et al., (1990)</td>
</tr>
</tbody>
</table>

Please see print copy for Table 2.3

Communication strategies contribute to maintaining communication and solving communication problems. The receptive strategies (e.g., Lynch, 1995) of communication strategies have much in common with the features of interactive listening. For this reason, interactive listening research has been greatly influenced by communication strategies research (e.g., Vandergrift, 1997b). Research into communication strategies has been based on two different major perspectives; a psycholinguistic perspective and an interactional perspective, although the two for a large part overlap each other (Yule & Tarone, 1997). The psycholinguistic perspective (Faerch & Kasper, 1983) includes changing the original communicative goal (reduction strategy) and maintaining the original goal by developing an alternative plan (achievement strategy) when communication
problems take place. The interactional perspective (Tarone, 1981) considers communication strategies as joint work between an L2 learner and his/her interlocutor in order to bridge the gap between the linguistic knowledge of the two in real communication situations, whether or not there is a communication problem. The principles of the interactional perspective advocated by Tarone (1981) are similar to the collaborative process identified in interactive listening.

Communication strategies instruction has not gained full support in SLA research yet. Communication strategies have come under scrutiny, although they have been widely recognized as being conducive to solving communication problems. It is claimed that teachers should place more emphasis on language itself rather than teaching communication strategies. “What one must teach students of a language is not a strategy, but language” (Bialystok, 1990, p.147). Kellerman (1991, p.158) also argues, “Teach the learners more language and let the strategies look after themselves.” Additionally, similar to the claim made for language learning strategies, Sato (1986) claims, “The strategies that facilitate communicative performance are not necessarily ones that lead to successful second language acquisition” (p.42). On the other hand, Larsen-Freeman and Long (1991) claim that communication strategies are helpful for acquisition. It is still premature to conclude that communication strategies facilitate language acquisition. Research remains yet to examine long-term acquisition resulting from communicative strategies instruction.

2.7.3 Listening strategies in transactional settings

Identification of listening strategies has been more often conducted in transactional settings than in interactive settings. The studies of Vandergrift (1996, 1997b) are described in more detail since these two studies are relevant to the present study. Firstly, effective strategy uses and ineffective strategy uses are discussed, followed by strategy uses related to gender and middle high school students.

The listening strategies of effective and less effective adult ESL learners were first studied by
Murphy (1985), using a think-aloud procedure. He determined that effective listeners were more open and flexible, using more strategies and a greater variety of different strategies. Less effective listeners, on the other hand, concentrated on their own knowledge, or elaborated on the text information too late in the listening process. Murphy concluded that effective listeners use a wider variety of strategies and engage in more active interaction with the text. Nevertheless, Murphy could not precisely name or classify many of the strategies he had identified since a systematic taxonomy of language learning strategies had not yet been sufficiently developed.

Effective and ineffective listeners were also examined by O’Malley, Chamot, and Kupper (1989). They examined listening strategies used by eleven high school age ESL students by employing a think-aloud data collection method. Listening strategies were coded into the categorization of perception, parsing, and utilization, according to the model of Anderson (1985). The results showed that elaboration, self-monitoring, and inferencing are effective strategies used by listeners. It was also found that effective listeners were likely to listen for larger chunks and shift their attention to individual words when there was a problem in comprehension. Furthermore, good listeners tended to connect segments into overall meaning. This result is congruent with that of Rost and Ross (1991) in that advanced listeners attended to the macro component of the discourse, while ineffective listeners were likely to focus on individual words to construct meaning from the task. They concluded that effective listeners are likely to use both top-down processing and bottom-up processing effectively. On the other hand, ineffective listeners were likely to focus only on bottom-up processing.

Following the same line as the previous studies, differences in listening strategies between effective and less effective high school learners were also investigated by Chamot and Kupper (1989). Using a think-aloud procedure, these researchers determined that effective students at the intermediate level made greater use of strategies such as selective attention, self-evaluation, note-taking, and elaboration (use of world knowledge). Although there appeared to be very little quantitative difference, effective learners used these strategies with greater persistence and purpose
(Chamot & Kupper, 1989). Furthermore, in the same study the results of university students learning Russian indicated that successful listeners more frequently employ comprehension monitoring and problem identification and they combine strategies such as inferencing and elaboration more often and in more interesting ways.

The differences in listening strategies between successful and less successful listeners were also investigated by Bacon (1992b), using university students learning Spanish, by adopting an immediate retrospective elicitation technique after the subjects heard radio broadcasts. Bacon concluded through her qualitative analysis that success in listening appeared to be related to the uses of a variety of strategies, flexibility in changing strategies, motivation, self-control, maintaining attention, and effective use of background knowledge (elaboration). Interestingly, she noted that monitoring appeared to be used equally by successful and less successful listeners, although the former were “more realistic” (p.330) in evaluating their comprehension. Additionally, based on a quantitative analysis, she concluded that subjects used more cognitive than metacognitive strategies.

Vandergrift’s studies (1996, 1997a) are extremely relevant to the present study. Vandergrift (1996), in the first phase of his study, used a structured interview to identify the types and number of distinct strategies that high school Core French students used in different types of listening tasks. Student strategies at all four course levels were related to three broad categories: metacognitive, cognitive, and social/affective strategies. The total number of distinct strategies reported increased by course level. Of the total number of strategies reported by each student, the largest percentage was cognitive strategies. Although the students reported fewer distinct metacognitive strategies, the number of reported strategies in this category increased by course level. Females tended to report a greater number of distinct metacognitive strategies than males. Reported use of social/affective strategies also increased by course level, just as the overall number reported in the other two strategy categories increased by course level,

Vandergrift (1997a) further investigated his previous listening strategy categories. He examined
listening strategies of high school Core French students by using think-aloud data collection technique and used the same categories as in the previous study (Vandergrift, 1996). In his study, intermediate level listeners used metacognitive strategies twice as much as novice listeners. This result is similar to that of Vandergrift’s (1996) study. Metacognitive strategy use increased according to proficiency level. Comprehension monitoring appeared to be reported most often in metacognitive strategies. In the category of cognitive strategies, summarizing, elaboration and inferencing were heavily used. Vandergrift stated that metacognitive strategies such as selective attention and comprehension monitoring, as well as cognitive strategies such as elaboration and inferencing, were reported more frequently and combined more effectively by successful listeners.

Strategy uses of the different genders were examined by Bacon (1992a). She investigated comprehension, strategies and cognitive and affective reactions of students by asking her subjects to think-aloud after listening to an oral text. She found that males were significantly more confident of their comprehension, felt better, and relied more on English and bottom-up processing strategies than did females. There were several interactions between gender and passage type. Moreover, females used a significantly higher proportion of metacognitive strategies than did males, who tended to favor a direct and more varied cognitive approach.

The study conducted by Kang (1997) is significant in that the Korean middle school students investigated in his study received a similar English education to the junior high school students being investigated in the present study. Kang investigated listening strategies as well as other learning strategies adopted by 60 students, using retrospective interview and a think-aloud protocol. Kang reported that most listeners used cognitive strategies such as paying attention, seeking opportunities to practice and identifying the purpose of the task, and compensation strategies such as guessing. Advanced students relied on key words, main ideas, or a combination of picture cues and key words, while poor students used picture cues or familiar words (e.g., as in TV commercials) exclusively. The results indicated that advanced students did not use more strategies than poor students did, but the former used more effective strategies than the latter. This
evidence is inconsistent with that of other studies (e.g., Murphy, 1985). Kang claims that “the criteria of good language learners’ strategies should be based not on ‘how many’ or ‘what kinds of’, but ‘how to combine’ [sic] through metacognitive processes” (p.20)

2.7.4 Listening strategies in interactive settings

Listening strategies in interactive settings have received little attention, although strategic competence is widely recognized as an important component of communicative competence (Canale & Swain, 1980). Receptive strategies (listening strategies) are “the Cinderella of communication strategies” (Vandergrift, 1997b, p.494), while the productive strategies of communication strategies have received considerable research attention (e.g., Tarone, 1981; Faerch & Kasper, 1983). Research into listening comprehension has focused largely on the identification and teaching of strategies that L2 learners use in transactional listening (e.g., O’Malley, Chamot, & Kupper, 1989; Bacon, 1992a, b; Vandergrift, 1996, 1997a).

Only three empirical studies (Rost & Ross, 1991; Lynch, 1995; Vandergrift, 1997b) which investigated listening strategies in interactive settings have been recognized in the SLA literature. The empirical studies of Rost and Ross (1991) and Vandergrift (1997b) are discussed in great detail as these studies are extremely relevant to the present study.

Rost and Ross (1991) examined the relationship between observed strategy uses and language proficiency. Japanese learners at different levels of proficiency in English listened to a 3 minute narrative presented by a native speaker in a one-to-one situation. At key junctures in the story, the students were encouraged to ask questions in Japanese about the developing story line. The types of feedback used by the students were categorized into a typology of listener strategies in Table 2.4.

Table 2.4: Typology of listener feedback

Source: Rost and Ross (1991)

Please see print copy for Table 2.4
Rost and Ross’s (1991) study showed different strategies across proficiency levels. Learners with low proficiency more frequently used ‘global questions’ such as asking for repetition, rephrasing, or simplification and ‘lexical questions’ such as asking for specific words. Rost and Ross explain that “Beginning learners, lacking a critical mass of lexical knowledge, are forced to allot most of their attention to specific word meanings and parsing the input into basic constituent structure” (p.262). Thus, low level listeners tended to fail to grasp the discourse topic of the information. On the other hand, listeners with high proficiency used ‘forward inference’ such as asking a question, using already given information and ‘continuation signals’ such as backchannelling cues more often. Rost and Ross (1991) note that “Learners at advanced stages are better able to chunk information...This ability enabled them to devote their attention to metacognitive strategies, such as selective attention” (p.262). This study suggests that the types of listening strategies used by listeners vary according to the proficiency level of L2 learners. Furthermore, in their expanded account of strategy selection, they add that “listeners used lexical reprise most often, from the perspective of cognitive ease and social risk” (p.261). For example, low level learners with anxiety or in stressful settings selected low risk strategies.

Vandergrift (1997b) examined listening strategies (called ‘receptive strategies’ by him) by using ACTFL (American Council on the Teaching of Foreign Languages) Oral Interview Test in a one on one situation with native speakers. Interviews between learners of French and interviewers were video-recorded, and then types and frequency of listening strategies were identified. Vandergrift modified strategies classification based on the typology developed by Rost and Ross (1991). Four local reprise questions (lexical reprise, fragmental reprise, lexical gap, and positional reprise) were categorized into one strategy since it was difficult to distinguish them more specifically in actual use. ‘Forward inference’ (Rost & Ross, 1991), not identified in Vandergrift’s study was not included. ‘Continuous signals’ identified in the form of non-verbal cues were referred to as ‘backchanneling cues’ and were coded separately, either as ‘uptakes’ (e.g., nods, “mmm,” “uh huh”) or ‘faking’ (a noncommittal response in spite of non-comprehension).
‘Global reprise’ and ‘hypothesis testing’ were coded both in English (native language) and in French (L2). Moreover, ‘kinesics’, which was used to indicate non-comprehension, was also added in the coding list.

Similar to Rost and Ross’ study (1991), the results of Vandergrift’s (1997b) study varied according to the L2 proficiency level of listeners. Novice-level listeners relied mostly on kinesics such as shaking or cocking the head, shrugging shoulders, waving arms, raising or furrowing eyebrows, and other non-verbal cues in order to indicate to their interlocutors their need for clarification or further input. Novice-level listeners explicitly expressed their inability to comprehend, while the more advanced listeners conveyed lack of comprehension in more subtle, almost imperceptible ways. It was also found that advanced learners were less likely to seek clarification to verify comprehension and were likely to use the target language to do so. Also, ‘faking’ was more frequently used by novice-level learners. Vandergrift’s study also found the ‘global queries’ and inability to capture the discourse topic observed by Rost and Ross.

Although their studies shed light on listening strategies in interactive settings there is an apparent drawback in the research designs of Rost and Ross (1991) and Vandergrift (1997b). They allowed the subjects to use their native languages in order to ask questions or make inferences. It could be argued that difficulties in the use of listening strategies by L2 learners lie in the anxiety of L2 use since there is a lack in the learners’ linguistic knowledge of L2 or unfamiliarity with the target context. Given that their models take into consideration social/affective factors, allowing learners to use their native languages makes their subjects feel at ease about resorting to clarification requests. For this reason, the present study encouraged the students to use the target language in order to inquire or give other verbal feedback.

Lynch (1995) also investigated listening strategies in an interactive setting. The underlying concepts which Lynch describes are consistent with the more precise categories described in the typology developed by Rost and Ross (1991), although he did not develop a precise taxonomy for classifying listening strategies. Two categories described by Lynch are ‘listener’s query’ (old
information questions) and ‘discourse forward’ (new information question). The former indicates a question asked by a listener to signal a problem in understanding the speaker. The latter prompts the speaker to elaborate or expand on the practical consequences of what the speaker has said. Lynch’s categories are less exhaustive than those of Rost and Ross (1991), and Vandergrift (1997b).

2.7.5 Summary of strategies research

To sum up, as different researchers dealt with different categories, different L2 proficiency and different learning environments in order to examine effective strategies, it is difficult to draw a general conclusion as to the characteristics of effective strategies. It is safer to conclude that effective strategies are contingent on L2 proficiency, the classification scheme, research methods, and other variables. Further, macro metacognitive, cognitive, social/affective categories seem to have the potential to yield a robust and consistent classification scheme because this classification has been empirically tested and is based on cognitive theories (e.g., Anderson, 1985).

Empirical studies of listening strategies instruction have shown that strategy instruction is conducive to enhancing listening comprehension (e.g., O’Malley et al., 1990) and effective listening strategies could be teachable (Rost & Ross, 1991). Additionally, Mendelsohn’s (1994, 1995) approach provides not only a sound rationale for strategy-based listening instruction but also extensive examples and suggestions for classroom implementation. Nevertheless, it is still not conclusive that listening strategies contribute to the long-term acquisition of second language (Larsen-Freeman & Long, 1991; Ellis, 1994; Gass & Selinker, 1994; Cohen, 1998). Field (1997) argues that strategies are compensatory and, as learner’s ability improves, can and should be discarded, except in emergencies. What is important would be that listening strategies need to be gradually removed as listening skills improve, and strategies should not be regarded as a substitute for listening skills (Mendelsohn, 1998, Lynch, 2002). It is also a prerequisite that learners reach a certain level of L2 proficiency to make the most of listening strategies (Buck, 1995).
3.8 SUMMARY OF THE CHAPTER

As discussed in the previous sections, there are gaps in the literature which the present study aims to address. Firstly, there is the lack of a sound theoretical model of interactive listening. Listening comprehension models have chiefly been considered in terms of transactional settings. This study seeks to contribute to our understanding of what is involved in interactive settings. Secondly, few studies have perceived interactive listening as the collaborative process between a speaker and a listener(s). SLA researchers have been more likely to view listening comprehension during the interaction from the speaker’s perspectives. The role of listeners in the interaction has received little attention in previous studies. This study investigates not only the role of speaker (in terms of, for example, speech modifications) but also the contingent strategies used by the listener in negotiating comprehension of the input. Thirdly, identification of listening comprehension processes will make language teachers and syllabus or material designers aware of listening problems which learners of English might experience (in particular, Japanese basic level-students). This will assist in the diagnosis of learner’s problems, curriculum planning, material design and assessment procedures, supporting the implementation of a more communicative approach to English learning in Japanese schools.
3.1 INTRODUCTION

The overall purpose of this study is to examine the nature of interactive listening and characteristics of listening comprehension processes for Japanese junior high school students of English. This study aimed to achieve this purpose through the analyses of qualitative research methods such as stimulated recall (Nunan, 1992; Gass & Mackey, 2000), video-recorded listening task interaction observation, follow-up interviews, and questionnaires. The inquiry of multiple case studies was undertaken to gain in-depth information from a particular context of junior high school students in Japan. The research design and methods used in conducting the present study are discussed in this chapter.

3.2 RESEARCH QUESTIONS

This study was guided by the following research questions.

1. What are the processes of listening comprehension of Japanese junior high school students of English in interactive settings?

2. What are the listening strategies of Japanese junior high school students of English identified in the interaction?

3. How are listening strategies and the speaker’s input interrelated in the listening comprehension process?

4. What is the relationship between the speaker’s speech modifications and non-linguistic cues and the listening comprehension of Japanese junior high school students of English?

5. What are the differences in listening comprehension processes and strategies according to
6. What listening difficulties do Japanese junior high school students of English experience in the interaction?

3.3 QUALITATIVE RESEARCH

Qualitative research is an umbrella concept covering several forms of inquiry. Denzin and Lincoln (1994, ix) claim that “the field of qualitative research is far from a unified set of principles promulgated by the networked groups of scholars.” It has numerous variations, depending on the researchers. Patton (1990, p.66) lists ten theoretical traditions (e.g., ethnography, phenomenology, symbolic, and others). Tesch’s (1990, p.58) list of forty-five approaches to qualitative research is a mix of designs (action research, case study) and data analysis techniques (context analysis, discourse analysis), and disciplinary orientations (ethnography, oral history). Denzin and Lincoln (1994) include under “strategies of inquiry” the following areas: case studies; ethnography and participant observation; interpretive practice; grounded theory; biographical method; historical social science; and clinical research. While these categorizations can be distinguished from one another, they share the essential characteristics of qualitative research which are discussed below.

3.3.1 Situating this study in a qualitative research paradigm

The perspectives of this study therefore, will be situated within the characteristics of a qualitative research paradigm. Firstly, there are multiple constructed realities that can be studied only holistically (the whole is more than the sum of the parts) so that prediction and control are unlikely outcomes (Lincoln & Guba, 1985, p.37). The investigation of listening comprehension processes and strategies in this study revealed multiple variables derived from the embedded context being investigated. Secondly, another major characteristic of qualitative research is that the researcher is the primary instrument for data collection and analysis (Merriam, 1998, p.7). Uncovering the unidentified listening processes and strategies mainly rested with the researcher’s interpretation of
the multiple data sources. Thirdly, qualitative research usually involves field work (Merriam, 1988, p.3). In this study, it was necessary for the researcher to be a participant observer at the study site. Fourthly, qualitative research is inductive, and focusing on process, understanding and interpretation, rather than deductive and experimental (Goetz & LeCompte, 1984, p.4). This study is primarily concerned with processes rather than outcomes or products. That is to say, the present study aims to examine the processes and strategies of listening rather than performance as the end outcome of listening tasks. Finally, in this study qualitative themes or categories are grounded in the data (Glaser & Strauss, 1967). Themes or categories in the light of listening comprehension and strategies emerged from the data being gathered.

3.3.2 Naturalistic Inquiry

In this study, a predominantly naturalistic inquiry and grounded theory were followed using multiple case studies. A naturalistic paradigm is consonant with other features of qualitative research which are discussed above. According to Lincoln and Guba (1985), a naturalistic paradigm is underpinned by five axioms. Integration of a naturalistic paradigm into the present study is explained below (Table 3.1).
Table 3.1  Integration of a naturalistic paradigm into this study

<table>
<thead>
<tr>
<th>Axiom</th>
<th>Naturalistic paradigm (Lincoln and Guba, 1985)</th>
<th>Integration into this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Realities are multiple constructed, and holistic (p.37).</td>
<td>Multiple data collection methods were adopted to interpret holistically unpredictable outcomes of the case being studied.</td>
</tr>
<tr>
<td>2</td>
<td>Knower and known are interactive, inseparable (p.37).</td>
<td>The investigator discussed it with a native speaker. The participants were probed by stimulated verbal recall. Also, they were interviewed as well as provided with questionnaire for further investigation.</td>
</tr>
<tr>
<td>3</td>
<td>Only time and context bound working hypotheses are possible (p.38).</td>
<td>A working hypothesis grounded in the data of the particular cases was reformulated during data analysis to generate plausible accounts. Constant data analysis took place inductively and deductively.</td>
</tr>
<tr>
<td>4</td>
<td>All entities are in a state of mutual, simultaneous shaping, so that it is impossible to distinguish causes from effects. (p.38).</td>
<td>Variables concerning listening comprehension and strategies were interrelated. Causal relationships were, thus, not always in linear association.</td>
</tr>
<tr>
<td>5</td>
<td>Inquiry is value-bound. (p.38).</td>
<td>Investigation of listening was affected by the values of the researcher as well as theories and the paradigm being utilized.</td>
</tr>
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</table>

3.3.3  Grounded theory

Grounded theory has as its explicit purpose the generation of theory from data. Grounded theory is not a theory, but a method, an approach, and a strategy (Punch, 1998). The essential idea in grounded theory is that theory is developed inductively from data. According to theoretical sampling (Glaser and Straus, 1967), data collected are continually compared and analyzed until theoretical saturation is achieved. Thus, data analysis frequently takes place along with data collection. In this study, the data being gathered were constantly compared and analyzed at given
points and then modifications of data collection methods were attempted. Strauss and Corbin (1994, p.277) claim that researchers should follow the notion of developing theories when grounded theory methodology is adopted. It is possible that the grounded theory that emerges from this study is transferable to other contexts.

This study, however did not always seek to develop theories and categories which could be generalized to any context, but rather sought to uncover listening processes and strategies which were unique in a given context. This study considered that the conceptions being generalized are embedded in a thick context of descriptive and conceptual writing (Glaser and Strauss, 1967, pp.31-32). It sought out not only generation of concepts or theories (grounded theory), but also interpretation of the phenomenon embedded in a particular context (case studies).

### 3.3.4 Case Studies

Case studies were selected to arrive at in-depth understanding of listening comprehension and strategies in interactive settings and to interpret multiple events embedded in a particular group of junior high school students in Japan. That is, the meanings derived from the cases in this study were “embedded in participants’ experiences and mediated through the investigator’s own perceptions” (Merriam, 1988 p.19). Case studies have various attributes which are congruent with general characteristics of qualitative research (Gillham, 2002). Case studies are however, differentiated from other types of qualitative research in that they include *thick description* (Geertz, 1973) and analyses of a single unit or *bounded system* (Smith, 1978). Yin (1994) defines a case study, “is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p.13). Stake (1994, 1995) considers the case as an *integrated system*. In a more inclusive sense, Miles and Huberman (1994) consider the case as “a phenomenon of some sort occurring in a bounded context” (p.25).

Examined in this study were ‘multiple case studies’ (Miles & Huberman, 1994; Merriam, 1998) of
junior high school students from a single classroom. In this study six participants were selected as multiple case studies. Patton (1990 p.184) notes that “In-depth information from a small number of people can be very valuable, especially if the cases are information-rich.” It was considered that cases of selected students would help to understand listening comprehension and strategies more intensively than the investigation of a large number of students. By employing multiple case studies, researchers can seek out both what is common and what is particular about the case (Stake, 1994, p.238). Furthermore, adopting multiple case studies enhances the external validity or generalizability of the findings (Merriam, 1998). “If a finding holds in one setting and, given its profile, also holds in a comparable setting, but does not in a contrasting case, the finding is more robust” (Miles & Huberman, 1994, p.29).

Case studies are congruent with the aim of this study in that the data collected in the case studies are expected to explore unidentified findings and generate different accounts of listening strategies and processes (Merriam, 1988). Listening is an invisible cognitive process so that there may be other listening processes and strategies, used by low level L2 learners, which are different from the ones found in the previous research (e.g., Rost & Ross, 1991). The variables are so embedded in the context as to be impossible to identify ahead of time (Merriam, 1998, p.32 ).

3.4 LISTENING TASKS

The listening tasks were designed by the researcher. These tasks were loosely controlled because it was considered that distracting variables would make it difficult for this study to examine listening strategies and comprehension. That is, there were two difficulties with the design of listening tasks in interactive settings (see also Section 2.6.5). Firstly, speakers and listeners generally exchange respective roles in normal conversation (Underwood, 1989; Koike, 1993; Brindley, 1998; Buck, 2001). It was assumed that this would make it difficult for the researcher to examine listeners exclusively. Secondly, the topic of conversation is likely to change according to the interlocutors involved. For this reason, it would be difficult to compare various topics derived from uncontrolled interaction.
Therefore, it was assumed that the loosely controlled listening text would increase construct validity of the data gathered as the focus is on the comprehension processes and strategies of listeners. The listening text was, however, designed not to yield the features of written text as in dense information, but rather was flexible enough for the native speaker to include in his speech the features of the spoken text such as false starts, pauses, repetition, and elaboration. Furthermore, the tasks were designed to reveal the listener’s understanding or non-understanding without the necessarily making verbal responses.

Felt-made story making sets (“At the Beach” for Task A and “Blue’s Clues” for Task B, produced by Learning Curve Incorporation, FELTKids series) were selected as the listening task materials. The listening tasks used in the previous studies (e.g., Ellis et al., 1994) were found to be too difficult for Japanese junior high school students. Most materials suitable for the language level of Japanese junior high school students were also found to be too childish for them, which would not attract adolescent students’ interests. Thus, felt-made tasks were appropriate in the following three respects. The felt-made pictures appeared interesting enough to attract students’ interests. Choosing felt-made pictures one after another, based on sub-tasks of the story, was expected to reveal a sequence of comprehension processes so that it would make possible comparison between sub-tasks. Moreover, most of the felt-made pictures in this study included familiar words for Japanese junior high school students, e.g., sun, baby, bird, sunglasses, and sea. Thus, there was no threat to internal validity with excessive difficulty of vocabulary used in the tasks. The listening tasks were modified, reflecting the results of the pilot studies accordingly.

Task A and Task B were both ‘Story Completion Tasks’ in which the participants completed the stories described by the native speaker by selecting or moving the objects being referred to. The tasks were made entertaining to suit the students’ interests and were designed to be interactive. Decision-making and problem-solving factors were included in the task implementation. As such it was expected that these factors would ensure that the participants were not passive listeners. Sheets of paper written in Japanese, which explained the context or directions for problem-solving
and decision-making, were provided in order for the researcher not to interfere with the listening processes. The initial parts of both tasks were made easier for the participants not to lose confidence in their comprehension abilities. Additionally, the main characters of the story were considered to be the participant him/herself so that he/she was expected to actively participate in the listening tasks.

Task A Figure 3.1 was a story about a teenage boy/girl on the beach. After placing the sun, a flying bird, a coke bottle, a walking bird, and sunglasses on the felt board, the participant was asked whether he/she preferred beach volleyball or Frisbee. Then a coke bottle was moved from the girl/boy to the boy/girl. Next, the participant was asked to choose one of the given object because he/she could not swim. Then, a trouble occurred; the dog ran away with his/her bag. Finally, the native speaker asked the participant how he/she would solve this problem and then free conversation continued (see Appendix IV).

Figure 3.1: **Task A.** Beach story (besides the board are distractors [bucket, sun oil, star shell, Frisbee])

Figure 3.2: **Task B.** Story in the house (besides the boards are distractors [a picture of
Task B (Figure 2) was a story about events in a house. After placing a framed picture of a red sofa, a flying bird, a dog, and a baby on the felt board, the boy (girl) shook hands with one baby. Then the participant was asked whether he/she wanted to listen to the radio or play with the babies. Next, his/her friend said on the phone that he/she received a concert ticket. After that, the postman came and the participant was asked where he/she should go to receive the letter. Upon receiving the letter, the participant made a decision as to whether he/she would stay with the babies or go to the concert with his (her) friend, and finally free conversation continued (see Appendix V).

Task C was designed to further investigate the listening comprehension and strategies of the six selected students. Through ongoing analysis of transcribed data and observation of interactive listening tasks, Task A and Task B did not appear to reveal as much difference in performance between the low level students and the high level students as expected. (After the completion of analysis, the data revealed various differences in performance of Task A and Task B among different levels of participants. However, during the data collection, there emerged a need to
account for the apparently unexpected phenomenon by using a different type of task.) Therefore, it was assumed from the analysis of Task A and Task B that types of listening task might affect performance differences between the low level students and the high level students. According to ‘emergent design’ (Lincoln & Guba, 1985), data collection methods were expanded and modified. Glaser and Strauss (1967) claim that there are times throughout an investigation when a deductive strategy is used. As a consequence, the researcher continually shifted back and forth between deductive and inductive modes of thinking.
Table 3.2: Ongoing analysis of differences and similarities between Tasks (A&B) and Task C (summarized before implementation of Task C)

<table>
<thead>
<tr>
<th>Tasks A &amp; B</th>
<th>Task C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Differences)</strong></td>
<td><strong>(Differences)</strong></td>
</tr>
<tr>
<td>The context was “here and now.”</td>
<td>The context is relatively abstract.</td>
</tr>
<tr>
<td>The story was expressed in the present tense.</td>
<td>The context is in the future, rather than in the present context.</td>
</tr>
<tr>
<td>The story was planned.</td>
<td>The explanation of a shopping plan is unplanned. The order of explanation is not designated.</td>
</tr>
<tr>
<td>The order of description was designated in advance.</td>
<td></td>
</tr>
<tr>
<td>Visual aids such as pictures were helpful for understanding of spoken language.</td>
<td>There are no visual aids, so the listener may need to rely more on what will be said.</td>
</tr>
<tr>
<td>Gestures were often used when the listeners did not understand what was said.</td>
<td>Gestures may not be helpful for listening comprehension because the context is not concrete.</td>
</tr>
<tr>
<td>The speaker could easily confirm whether the participants chose the correct answers. (When the participants made errors, the speaker adjusted his speech, i.e. repetition, elaboration, slower speech.)</td>
<td>It may be difficult for the speaker to confirm whether or not participants will understand what will be said because note-taking will be done in Japanese. (So, there may be less speech modification.)</td>
</tr>
<tr>
<td><strong>(Similarities)</strong></td>
<td><strong>(Similarities)</strong></td>
</tr>
<tr>
<td>It was possible to analyze the process of each sub-task when participants chose objects or made responses.</td>
<td>It will be possible to analyze the process of each sub-task when participants take notes</td>
</tr>
<tr>
<td>Speech modification such as repetition, enunciation, elaboration, or hesitation (pauses, and false starts) helped to enhance listening comprehension.</td>
<td>Speech modification such as repetition, enunciation, elaboration, or hesitation (pauses, and false starts) will help to enhance listening comprehension.</td>
</tr>
</tbody>
</table>
Before implementing Task C, differences and similarities which were assumed to exist in the three tasks were summarized in Table 3.2 above. After taking into consideration the characteristics of Task A and Task B, Task C included some other features which first two tasks did not have.

Task C was designed to examine a sequence of listening comprehension in separate sub-tasks and focus on listening performance in interactive settings. The context of Task C was to understand what was spoken about the shopping appointment made between the native speaker and the students. The native speaker gave the students the information associated with shopping; e.g., meeting date, time, place, shopping place. The six selected students took notes of what was said by the native speaker, as it was assumed that the written information would reveal listening processes and difficulties with listening. Individual information was not provided in the same sequence, but randomly arranged by the native speaker, as spoken language is naturally unplanned (Buck, 2001, p.8). The context of what was spoken about in Task C was less concrete and took place in the future tense (see Appendix VI).

3.5 PILOT STUDIES

Pilot studies were undertaken both in Australia and Japan in December, 2001 before implementing the major study. The results of the pilot studies provided an insight into listening task design and data collection methods. The first pilot study conducted in Australia aimed to examine the validity and reliability of the listening tasks to be used by the students. Five students participated in the first pilot study: a Year 2 boy (aged 8) and a Year 7 girl (aged 13), both from Papua New Guinea, who had approximately equivalent English proficiency with a similar cohort of native English speaking Australian students; a Year 8 girl (aged 14) from Sri Lanka, whose English proficiency was slightly below her average Australian classmates; a female Sri Lankan doctoral student (aged 45) and a male Chinese TESOL Master’s course student (aged 33), both of whom had low advanced language proficiency. Task A and Task B designed by the researcher, which are explained in Section 3.4, were examined to ensure that they were valid and reliable enough to conduct the main investigation. Accordingly, Task A had minor revisions and Task B had major changes with
respect to the baseline story and vocabulary used. It was considered that the two types of task had equivalent difficulty for L2 learners. Immediate retrospective verbal report while watching the video-recorded task was not tested because the verbal report of the tasks was to be conducted in Japanese.

The second pilot study conducted in Japan asked the participants to engage in listening tasks and then produce retrospective verbal reports. Initially three Year 9 junior high school students, who had English proficiency slightly above their average classmates’ level and went to the school located in the neighboring area of the school to be investigated for the major study, participated in the pilot study. Later two female adults were also examined. The second pilot study aimed to achieve four purposes. The first aim was to reconfirm the validity and reliability of the listening tasks for Japanese junior high school students. The second aim was to train the native speaker who was to conduct the tasks in the major study. The third aim was to familiarize the researcher with the instructions to be given and with the data collection procedures. The fourth aim was to ensure that students could verbalize their listening comprehension and strategies.

The second pilot study attempted to test the six conditions below for retrospective self-verbal report developed by the previous study (Nanda at el., 1987), which followed suggestions made by Ericsson and Simon (1984).

(1) The data should be collected immediately after task performance, when memory is still fresh.
(2) Subjects should be provided with contextual information to activate their memories.
(3) All the information asked for must be directly retrievable, i.e. must have been heeded during task information, so that the subjects are not induced to generate responses based on inferencing and generalizations.
(4) For the same reason, the information asked for should relate to specific problems, or a specific situation.
(5) No leading questions should be asked, to minimize the effects of ‘researcher bias’.
(6) The subjects should not be informed that they will be asked for retrospective comments until after task performance, so as not to affect their performance on the task (Nanda at el., 1987, p.217).
Major concerns about these six conditions were evident from the results of the pilot study. When the students were asked to self-report listening comprehension and strategies while watching video-recorded tasks, they were likely to simply say, “This was difficult (easy)” or “I didn’t understand (understood) this.” They were often stuck for words as to how they should express their listening comprehension processes and strategies. As a result, the researcher needed to give them specific directions, or ask them questions or clarify their problems and reasons in order to solicit feedback from them, which seemed suitable for the study. Moreover, the students were given the remote control to stop the video tape recorder at certain points when they wanted to report their listening comprehension. This was intended to initiate verbal reports by the students. However, taking into consideration the situation where the researcher and the native speaker were present as well as the students’ classroom teaching style in which the teachers usually initiated the classroom activities, it was difficult for the students to initiate the remote control operation (Stein, 1999, p.76) and make a self-report. In addition, Reid (1987) notes that Asian students are likely to provide an answer that the researcher expects because of their cultural characteristics. Furthermore, it was suspected the students did not have sufficient metalanguage with which they could express their listening comprehension.

These results led to an additional examination in which two female adult participants (aged 41, and 47) were asked to self-report their listening comprehension. However, it was found that they also had difficulties with self-reporting listening comprehension. It was felt that a large amount of time should be spent to train participants for self-verbal report. Although some researchers (Ericsson & Simon, 1987, 1993; Stein, 1999) contend that long-term participant training does not necessarily need to be undertaken to have a valid and reliable result, in the Japanese context where students tend to be passive in the classroom, it is advised that the students should be given sufficient training for self-report. Pressley and Afflerback (1995, p25) too, criticize short-term training; “many of the studies that we examined involved only about 10 minutes or so of practice”. Therefore, the pilot study did not in part meet the conditions employed in the previous study (Nanda et al. 1987). This issue is fully discussed in Section 3.7.3. The results made the researcher aware of the necessity for
stimulated recall method prompted by the researcher.

The results of the second pilot study led the researcher to revise the listening tasks and data collection methods. It was necessary to switch from retrospective self-verbal report to stimulated recall (Nunan, 1992; McDonough & McDonough, 1997; Gass & Mackey, 2000,) in which the students were prompted and given specific instructions to talk about listening comprehension and strategies employed. Gass and Mackey (2000) define ‘stimulated recall’ as a technique “to explore learners’ thought processes or strategies by asking learners to reflect on their thoughts after they have carried out a task,…with some degree of support, for example, providing learners with an audio-recording of themselves speaking…” (p.25).

Although it was considered that the two listening tasks had equivalent difficulty, Task B needed to be revised to clarify the story plot and change the objects to be selected in the second pilot study. Task A did not have any revision.

3.6 PARTICIPANTS

The junior high school students were selected as participants because of the researcher’s interest in their English proficiency through 15 year’s teaching experience as an English teacher at public junior high schools in Japan. The target group of this study was Year 9 junior high school students (N=19) in Japan. In Japan, junior high school students range from Year 7 (age 13) to Year 9 (age 15). At public junior high schools in Japan, students start learning English as a foreign language for the first time. Another participant was a native-speaker, one of the Assistant Language Teachers (hereafter ALT) who were allotted to municipal or village boards of education or the district boards of Education throughout the country. The number of ALTs being invited to Japan amounted to about 5,676 in 2002 (Council Report of Educational Reform, 2002).

The junior high school selected as the site of the multiple case studies was Arume Junior High School in Higashi Village in Okinawa Prefecture, the southernmost in Japan. Higashi Village is
located in the northern part of Okinawa Prefecture. The population of Higashi Village was about 2,000. Its main industry was agricultural products such as pineapples and sugar canes. Higashi Village had three junior high schools; Higashi Junior High School, Arume Junior High School, and Takae Junior High School. Arume Junior High School was selected because the students had relatively balanced language proficiency, while the other two schools had students with extremely low proficiency. Arume Junior High School had 37 students in total. Large schools were not selected as the teachers at these schools had 22-24 teaching hours of classes in a week so that there was a strong concern that the teachers could not spare time to participate in the study. On the other hand, the teachers at Arume school had 12-14 hours of classes so that it was felt that the English teacher could spare time to cooperate with the project. The parents were composed of the low middle class and mostly placed a high value on education. Due to geographical remoteness from big cities, the students at this school did not have serious discipline problems. Some successful graduates had gone to the most prestigious senior high school in the prefecture.

The Year 9 class had 19 students (11 boys and 8 girls). Due to the small size of the school, Year 9 had just one class. All the students had gone to the same school from kindergarten age. Year 9 students, the highest grade at junior high school, were selected because it was assumed that this grade would enable the researcher to examine relatively complex listening comprehension processes and strategies as compared to the other two lower grades. It was also assumed that they had been studying English intensively as they were about to sit for high school entrance examinations in two months. The students had just spent about 400 hours in English classes over three years (approximately 140 hours for one year). The amount of vocabulary they had learned up to that stage was about 1,000 words. This is not to say that they knew 1,000 words.

The cohort of participants (N=19) is classified as ‘Novice-Mid’ according to the ACTFL (American Council for the Teaching of Foreign Languages) listening guideline (1999) as follows:

• Able to understand some short, learned utterances, particularly where context strongly
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supports understanding and speech is clearly audible.

- Comprehends some words and phrases from simple questions, statements, high-frequency commands and courtesy formulae about topics that refer to basic personal information or the immediate physical setting.

- Requires long pauses for assimilation and periodically requests repetition and/or a slower rate of speech.

The cohort in Figure .3.3 showed variation in listening ability according to the results of a listening test (STEP 4th grade, see Appendix VII), which was conducted before the listening tasks for ‘purposive sampling’. The results of the listening test were analyzed using the SPSS Ver.10 statistical package. A statistical summary of the cohort in this study was made (mean: 13:37, SD: 2.99, full score: 20, maximum: 18, minimum: 7). According to Figure 3.3, the histogram shows that the clusters of this cohort are slightly towards scores above the mean score. A stem and leaf plot graph and boxplot graph did not identify outliers. Thus, the cohort in this study was considered to form a normal distribution. According to the scores on the listening test, six students were selected as case studies (see Section 3.7.7.2).

The results of the listening test were used to place students into two matched groups. That is, each group represented a similar range of listening abilities as measured by the test. It was decided that one group would begin with Task A (Group 1) and the other would begin with Task B (Group 2). The mean score STEP for Task A takers (N=10) was 13.2 and the mean of Task B (N=9) takers was 13.3. Table 3.3 describes the range in detail.
Table 3.3: Distribution of listening test score according to Group 1 and Group 2 participants and scores

<table>
<thead>
<tr>
<th>Group 1</th>
<th>S1</th>
<th>S3</th>
<th>S5</th>
<th>S6</th>
<th>S9</th>
<th>S10</th>
<th>S12</th>
<th>S13(Eri)</th>
<th>S15</th>
<th>S18(Risa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Score</td>
<td>11</td>
<td>17</td>
<td>9</td>
<td>14</td>
<td>16</td>
<td>12</td>
<td>7</td>
<td>14</td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2</th>
<th>S2</th>
<th>S4(Miki)</th>
<th>S7(Jun)</th>
<th>S8</th>
<th>S11(Yuji)</th>
<th>S14(Eri)</th>
<th>S15</th>
<th>S17</th>
<th>S19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test score</td>
<td>13</td>
<td>11</td>
<td>15</td>
<td>11</td>
<td>18</td>
<td>11</td>
<td>14</td>
<td>17</td>
<td>12</td>
</tr>
</tbody>
</table>

As shown in Table 3.3, a male student, S5 (score: 9) and a female student, S12 (score: 7) gained the lowest score for each gender (S1 to S11 were males and S12 to S19 were females). However, these two students were not included in the sample group. S5 performed considerably better in Task A as compared to his performance in the usual classroom so that his English teacher questioned his task performance. S12 was not included in the sample group because she had had mainstream experience in special education at primary school. Yet S12 managed to complete Task A somehow, thus her data was included in the entire population. Accordingly, S4 (a male named Kota) and S14 (a female named Miki) were considered to be low level students for case studies. Furthermore, S7 (a male named Jun) and S13 (a female named Eri) were classified as intermediate level and S11 (a male named Yuji) and S18 (a female named Risa) as high level respectively for the case studies.

The native speaker was a male Chinese Canadian who had been teaching English as the ALT at three schools in Higashi Village for five months since September of 2001. He had regularly visited the school being employed for five consecutive days (in a week) every three weeks. The students had had about 20 hours of contact with the native speaker during the English class. Higashi Village District was selected partly because the ALT visited schools more frequently in this district, so the ALT was easily available for the study. He hardly understood Japanese so that the students needed to rely mainly on English or other cues instead of resorting to their native language for communication with the ALT. Prior to the research, he was provided with instruction for the listening tasks and was trained to accommodate his speech according to the degree of understanding of the students at another junior high school. One female teacher, an English teacher at Arume Junior High School, cooperated in collecting the questionnaires from the
students. She had ten years’ experience of teaching English.

3.7. DATA COLLECTION METHODS

According to theoretical sampling (Glaser & Strauss, 1967) and grounded theory (Strauss & Corbin, 1998), as the data collection advanced, the researcher revised the data collection methods, and reformulated the previous hypotheses. “The design of a qualitative study is emergent (emergent design, Lincoln and Cuba, 1985, p.41) and flexible, responsive to changing conditions of the study in progress” (Merriam, 1998, p.8). Thus, in this study data collection and data analysis sometimes advanced simultaneously.

Finding appropriate research methods to investigate invisible mental events and thought processes of second language learners have been considered difficult by researchers (e.g., Nunan, 1992; Cohen, 1998). One of the problems confronting the listening researcher is that listening comprehension is an invisible cognitive process. In this study, there was a strong need to find an effective research method which could enable access to the mental events of listeners.

This study recognized the appropriateness of stimulated verbal recall and task interaction observation to investigate listening processes and strategies. It was considered that at the initial stage of data collection the data derived from a student’s stimulated verbal recall would most represent a second language learner’s listening processes and strategies. The analysis of stimulated verbal recall indeed revealed many unobservable aspects of listeners which video-taped interaction observation could not identify (e.g., listeners’ subtle gestures of hesitation). However, as the data collection and analysis advanced, there emerged a need to rely more on task interaction observation. A close examination of task interaction observations confirmed that stimulated recall was the most reliable source of data (see next section). Therefore, the initial task observation analysis was strengthened by stimulated verbal report.

Having analyzed the stimulated recall data, it was then deemed necessary to return one again to the task interaction observations. It was at this point of the analysis process that the observations
began to play a more important role in understanding and interpreting listening comprehension and strategies in the course of data collection and analysis.

3.7.1 Issues in introspective methods

This section attempts to further validate stimulated recall through discussion of issues in introspective methods, reflecting on the results gained from the pilot studies.

Firstly, concurrent verbal report has been adopted by various researchers. Advocates of concurrent verbal report (Chamot & Kupper, 1989; O’Malley, Chamot & Kupper, 1989; Buck, 1990, 1991; Ericsson & Simon 1993; Vandergrift, 1997a; Stein, 1999) argue that online cognitive process is best examined by concurrent verbal reports of learners. Verbalization of listening comprehension has been shown by a number of researchers (Buck, 1990, 1991; O’Malley & Chamot, 1990; Bacon, 1992b; Vandergrift, 1997a) to reveal most listening processes, difficulties, and strategies. Furthermore, O’Malley et al. (1989) note that “One of the strengths of concurrent analysis of an ongoing task, or thinking aloud is that the mental processing in short-term memory, which is lost in retrospection, can be described and reported”(p.24). Ericsson and Simon (1987, pp. 24-25) add that “recently acquired information in short-term memory (STM) is directly accessible for further processing, and information in long-term memory must be retrieved and processed in STM before it can be reported.”

The concern with concurrent reports is that they may interfere with online processes and distort natural processes of learning. The supporters of retrospective verbal report (Poulisse, Bongaerts & Kellerman 1987; Pressley & Afflerbach, 1995; Kang, 1997) claim that the intervention by concurrent verbal report distorts the process of language learning. Bacon (1992a, p.318) claims that “A major drawback to listening-process research is the virtual impossibility of reporting on listening while one is listening.” While many studies of reading and writing have proved successful in adopting a concurrent verbal report method, this may be due to the fact that the processes of reading and writing are reciprocal. Given that listening activity is interrupted and also
listeners are required to report the process verbally, it is highly likely that the process of listening would be distorted by concurrent reporting. Bacon (1992a, p.320) adds that “…think-aloud introspection would forcibly interrupt comprehension and natural listening in a non-research context.” This study suspected that intervention of ongoing listening would distort the process and this would contaminate the validity of the data. Thus this study did not utilize concurrent verbal report.

Secondly, whether or not to leave directions for verbal report open-ended has been an issue. This study adopted ‘stimulated recall’ in which retrospective verbal report was modified as a data soliciting method. The stimulated recall method was designed for participants to be prompted and to be given directions by the researcher in order to solicit the data which were relevant to the research, while watching a video-recorded task immediately after completing the task. The difficulty with retrospective self-report is that it leaves the directions open-ended so that participants can report freely what they think in the light of their thought processes and strategies. Thus, leaving the directions open-ended in retrospective report may not address aspects of cognitive processing that are of primary interest to the investigator, although Ericsson and Simon (1993) argue that participants should not be provided with the information about the particular processes and strategies the researcher is interested in. After examining 38 studies in which verbal report was employed to investigate reading, Pressley and Afflerback (1995 p.123) speculate that “feedback and additional instruction were probably offered in an ad hoc fashion”, and most of the studies did not specify how the directions for verbal report were given. As mentioned before, the results of the pilot studies indicated that retrospective self-report did not reveal much about participants’ listening processes and strategies. Therefore, in the present study participants were prompted and given directions by the researcher, using stimulated recall. It should also be noted that the stimulated recall took place in the participants’ L1.

Thirdly, another option of introspective examination is for subjects to write their thought processes
and interpretation. Buck (1991) stopped the tape at certain points and asked intermediate L2 learners to write their responses and feedback. Yet, from the researcher’s teaching experience, there was a strong concern that some male students would not write their feedback in sufficient detail.

Fourthly, training subjects for verbal report has been an issue. This study considered that the participants should be trained for a long period to verbalize their mental processes, i.e., to develop a language to talk about their listening strategies. However, Ericsson and Simon (1993) claim that thinking-aloud is such a natural process that lengthy training is not required. Yet the results from the pilot studies suggested that it was very difficult for the participants to self-report their listening with only ten-minutes’ practice. Pressley and Afflerback (1995) also claims that most of the studies examined by them spent only ten minutes or so for training. Dr. Jan Turbill at the University of Wollongong reported that she spent approximately one year enabling younger children to self-report their thought processes by developing a meta-language in a specific language learning. This issue remains to be investigated in the further examination of research methodologies conducted by protocol researchers (Pressley & Afflerbach, 1995 p.123).

Fifthly, another issue in listening research is that the subjects can express only conscious strategies and processing, but not automatic processing. Ericsson and Simon (1993) claim that automatic processing occurs so quickly that intermediate products of processing are not heeded in short-term memory and, are thus not available for short-term memory. One of the limitations of this study was that the data collection method could not access full automatic processing, but only controlled processing was accessible. Furthermore, Pressley and Afflerbach (1995) claim that processing of verbalization is congruent with the characteristics of controlled processing, thus verbal report is effective for introspective study.

One characteristic of controlled processes compared to automatic processes is that they have not been automatized, ones that tend to occur sequentially, one step at a time. Thus, their structure is well matched to the structure of verbalization, which can only report processes in sequence, one at a time.(ibid. p.9)
Lastly, there is another issue as to the adoption of verbal reports. Ericsson and Simon (1993) argue that theorizing about one’s cognitive process should not be attempted by the subjects. That is, subjects should not be encouraged to explain why they are doing what they are doing. Pressley and Afflerbach (1995, p.131), on the other hand, claim that subjects should be encouraged to “label their cognitive processes and to explain why they are processing as they might be revealing about sophisticated processing.” This controversial issue led to the decision that the researcher should not encourage the students to explain metacognitive processes such as comprehension monitoring when most students did not have sufficient metacognitive knowledge to explain their responses. Rather, it was felt that the researcher and other language experts should analyze and judge these complex cognitive processes. Thus, it appeared more accurate for the researcher to interpret the listening task interaction on the basis of the reporting of content rather than on the basis of participants’ interpretations of the content (Gass & Mackey, 2000, p.112; Johnson, 1992, p.88). Yet, the students in this study were not discouraged from attempting to explain their complicated processes if they were willing to do so.

There remain many issues associated with verbalization of language processing. “Verbal-self report remains an underdeveloped methodology” (Pressley & Aflerback, 1995, p.119). Pressley and Aflerback (pp. 120-121) and Cohen (1998) point out that the research results using verbal report are influenced by the following factors: (a) the subject’s familiarity with the verbal reporting methodologies, (b) personalities of subjects, (c) whether or not explicit direction is given, (d) practice in verbal report, (e) the method of analysis. Ericsson and Simon (1993, p.250) also point out that the ability to self-report probably correlates with verbal report ability in general. Another issue is the possibility of a lack of verbalization due to the unequal status between the researcher and the students. Murphy (1985) reported that students sometimes ended up talking about what they thought he wanted them to say as opposed to what they were actually thinking on their own (p.38). These issues, in addition to the above discussion, were taken into consideration to encompass a valid and reliable research method in this study. And for these reasons, it was decided
that to use a more structured stimulated recall to gain access to students’ listening strategies.

3.7.2 Stimulated recall

Stimulated recall was conducted in the main study, basically following six considerations made by Nanda et al. (1987), on which the pilot studies were based (See Section 3.5). These six considerations are next discussed in detail.

Firstly, the data must be collected immediately after the listening task. There was a concern that stimulated verbal recall would make it difficult for the participants to recollect the details of the listening task. Cohen (1987) argues that the data must be collected as close to the event as possible since “the bulk of forgetting occurs immediately after the event” (p.84). However, it was considered that verbal recall while watching the video-recorded activity immediately after completing the tasks would reduce participants’ memory load. Immediate verbal recall after completing the listening task enabled the researcher to investigate what processes the listeners went through and what strategies the listeners employed to interpret and understand the listening tasks. The listening tasks were also designed to fit within a suitable length of time (approximately 10–15 minutes) so as not to cause excessive memory load.

Secondly, participants must be provided with contextual information to activate their memories. Video-recorded tasks were most conducive to achieving this purpose. The video-recordings of listening tasks provided the participants with a virtual reproduction of what took place in the tasks. As the participants could repeatedly watch the video-recorded task interaction, interruption for prompting by the researcher did not seem to be a critical problem. There was no occasion during stimulated verbal recall when the participants could not recall their listening tasks. Therefore, it was considered that the degree to which stimulated verbal recall could reconstruct the mental events of listeners while watching a video-recorded task would be reasonably successful.
Thirdly, all the information asked for must be directly retrievable so that participants are not induced to generate responses based on inference and generalizations. Nisbett and Wilson (1977 cited in Buck, 1990, p.161) claim that if subjects are asked to retrieve information which is not in their immediately preceding thoughts, then it needs to be retrieved from long-term memory and this takes time and effort. In such cases there is a danger that subjects may be inclined to generate a seemingly reasonable explanation. Through the pilot studies, the participants were found to tend to respond to the questions based on their experience as follows; “Why was this task difficult?” “Because I don’t know much vocabulary, so probably vocabulary was difficult.” There were some occasions when the researcher interrupted the participants’ verbalizations to clarify whether their responses were based on their previous experiences or what they had in mind during the tasks. Furthermore, an issue related to this was to explicate whether understanding of the listening tasks took place during the listening tasks or after listening to what had been said again while watching the TV monitor screen for stimulated recall. Some participants gave feedback such as “Now I understand what he said (because I heard it again).” Confusion between the understanding which occurred during the tasks and that which occurred during stimulated verbal recall needed to be avoided. For this reason all stimulated recall interview were audio-taped so this could be discerned at a later time.

Fourthly, the information asked for should relate to specific problems or a specific situation. This condition appears to be contradictory to Ericsson and Simon’s (1993) claim that directions to verbal report should be open-ended. Pressley and Afflerback (1995, p.11) argue that “leaving directions open-ended means that subjects might feel compelled to report any and all information that they can access in short-term memory.” Yet this issue was not critical under the stimulated verbal recall prompted by the researcher.

Fifthly, to minimize the effects of “researcher bias”, no leading questions should be asked. During the pilot studies the participants were at times stuck for words as to how to explain their listening
comprehension. Thus, the researcher needed to infer by leading questions what the participants intended to say. There were other occasions when the researcher needed to clarify the reasons and difficulties by providing them with specific questions. Yet, every attempt was made to avoid leading questions so as not to contaminate participants’ verbalizations and to reduce researcher bias.

Lastly, participants should not be informed that they will be asked for retrospective comments until after task performance, so as not to affect their performance on the task. A frequent criticism of verbal report instruction is that it changes processing (Ericsson & Simon, 1993). In this study, the directions for and practice of verbal recall were provided after the tasks so as not to affect the listening comprehension processing.

Another benefit of stimulated verbal recall in this study was that the participants were allowed to report verbally their feedback in their native language. Cohen (1998) warns, “The researchers need to be aware that the practice of requiring verbal reports to be in the target language may be at the expense of collecting adequate data” (p.55).

3.7.3 Observation

Observation is an effective research technique to directly elicit the data in the context being investigated, while other research methods such as interviews and diaries can gain “second hand information” (Merriam, 1988, p.88) after the activities being investigated are completed. In this study the researcher was able to directly observe listening task interaction. Selinker (1974) claims that “[from] the only observable data in meaningful performance situations we can establish legitimate judgment” (p.35). On the other hand, Cohen (1998) argues that observation does not enable the researcher to examine internal mental events and strategies such as reasoning and decision making. As mentioned above, however in this study stimulated recall compensated for its deficiency. Another drawback is that any observational scale or checklist may limit how the
observer views the students’ strategy use and learning processes. Since this study purported to
explore listening comprehension processes and strategies, based on grounded theory, observation
was “unstructured” (Punch, 1998) so that any predetermined observation checklist was not utilized.

According to Junker’s (1960) observer classification, the researcher would be positioned as
‘observer as participant’, in which participation in the sample group was secondary to his role in
observation. The field notes were written up after the listening tasks because the researcher was
engaged in giving directions and operating the recording instruments. Care was taken not to be
obtrusive for the interlocutors in the listening tasks.

Recorded listening task interaction was considerably advantageous because the researcher could
repeatedly observe and interpret the data. As mentioned previously, stimulated recall
supplemented and strengthened the video-taped task interaction. The transcribed observation data
were revised several times while analyzing the video-recorded interaction when stimulated recall
revealed listener’s behaviors or thoughts which observation did not identify. For this reason
transcribed observation data was very interpretative, reflecting on multiple sources of data. It
should also be noted that the transcriptions needed to be translated from
to Japanese English. Translations were checked by the ALT.

3.7.4 Questionnaire

Questionnaires were provided “to learn about the characteristics, attitudes, or beliefs” (Marshall &
Rossman, 1999 p.95) of the participants. Two different types of questionnaires were completed to
identify the listening difficulties and the differences in participants’ attitudes towards listening
respectively before and after the listening tasks. Both types of questionnaire were semi-structured
and included specific questions and open-ended questions (see Appendix II & III). It was
considered that the written self reports would enable the researcher to further understand the
participants’ listening processes and strategies. For some students, verbal recall might have been
too obtrusive or unfamiliar. Thus, the written self-report in the form of the questionnaires would
be conducive to revealing the students’ attitudes or problems which could not be identified by
verbal recall or observation of task interaction.

3.7.5 Interviewing

Interviews enabled the researcher to gain more in-depth understanding of the participants’
perspectives, which other methods could not identify. “We interview people to find out from them
those things we cannot directly observe...The purpose of interviewing, then, is to allow us to enter
into the other person’s perspective” (Patton, 1990, p.196). In this study, the semi-structured
follow-up interviews were used in a non-threatening atmosphere to gain open-ended responses and
also to “locate each respondent’s answer to the same question rather quickly and to organize
questions and answers that are similar” (Patton, 1990, p.285). In this study, the interviews
included a less structured written interview schedule. Leading questions were avoided as “leading
questions reveal a bias or an assumption that the researcher is making, which may not be held by
the participant” (Merriam ,1998, p.78). Instead, probing in the form of asking for details and
clarification took place to specify or to enquire in depth about participants’ responses.

3.7.6 Other data collection tools

Various other tools were used to collect the data. A digital video-tape camera (Panasonic NV-C7)
was used to monitor the listening activities while the ALT and the students were collaborating to
complete the tasks. After the listening tasks, an audio-tape recorder (Sony M-830) was used to
monitor the verbal reports of the participants as well. Additionally, the 1995 STEP (standardized
test of English proficiency) 4th grade listening test was administered to the participants (see
Appendix VII). Field notes were also used to document the interaction during the task, and to
document the other variables associated with this study. Furthermore, two types of felt-made story
completion sets and the note-taking task described were most central to the investigation of this
study.

3.7.7 Procedures in data collection
It took twelve separate days to implement the listening tasks and stimulated recall, and eight weeks to complete the whole data collection. After gaining permission from the relevant authorities in December of 2001, data collection procedures proceeded through four stages from January of 2002 to March of 2002. The data collection procedure contained four stages. The first stage included the pilot study, listening test, and questionnaire (Type 1). The second stage was composed of the major data collection in which stimulated recall and listening task observation (Tasks A & B) played the critical roles. The third stage included an additional task (Task C) which re-examined listening comprehension. The fourth stage contained follow-up examination including a questionnaire (Type 2), follow-up interview and the gathering of relevant documents. The data collection methods, instruments and procedures are discussed in detail in the subsequent sections. Prior to the investigation, the participants were informed that the data gathered would be confidentially treated and that they could withdraw from the study. The pilot studies are not described in this section as they are explained in Section 3.5.

3.7.7.1 Stage 1

After the pilot studies, prior to implementation of the listening tasks, all the participants took the STEP 4th grade listening test which was considered to be the most authoritative English Proficiency test in Japan. The STEP test received official Ministry of Education authorization in 2000. According to the STEP data (STEP, 2003) the candidates of the STEP test in 2002 were approximately 3.6 million and in 2003, 246 universities and 685 senior high schools admit the qualifications of the STEP test as credits for English classes (in 1999 the annual candidates of TOEIC worldwide were about 0.71 million and the annual candidates of TOEFL worldwide were about 0.93 million).

This listening test was intended to measure the general listening ability of the participants for ‘purposive sampling’ as well as to increase their awareness of second language listening before conducting the questionnaire (Type 1). The STEP 4th grade listening test was equivalent to
proficiency to be achieved at Year 8 level in Japan. Thus, it was considered that the present listening test was appropriate for measuring the listening ability of Year 9 students. The 1995 STEP listening test was administered because it was assumed that no students had taken the same listening test before. The length of the listening test was 18 minutes and included twenty questions. The listening test was administered by the researcher in the students' English class.

After the listening test, the students answered the semi-structured questionnaire (Type 1), supervised by the researcher. This questionnaire examined their attitudes towards L2 listening, L2 learning, and L2 communication, as well as their difficulties with L2 listening. It also examined their attitudes towards the ALT. It took approximately 20 minutes to answer the questionnaire. Before conducting the listening tasks, a written instruction to prepare for some unexpected events during the task was discussed with the native speaker. This was done “to take into account as many eventualities as can be anticipated” (Gass & Mackey, 2000, p.62).

3.7.7.2 Stage 2

Stage 2 was divided into two parts; a listening task session attended by all the participants (N=19) and another listening task session attended by only six selected participants. Listening tasks and stimulated recall were conducted for two or three students each day during a 45-minute recess after lunch and after school. The listening tasks were implemented in the kindergarten classroom which was separated from other buildings. This was done so that there would be no interference from other students. It took about 30 to 40 minutes for each participant to complete the whole activity. In the first round of the listening task, all 19 participants took either Task A or Task B. Ten students (six males and four females) participated in Task A and nine students (five males and four females) participated in Task B. Following this, as mentioned above, from among the nineteen students, six students (three males and three females) were selected to undertake the task which they did not engage in the first round. That is, six selected participants took both Task A and Task B. Six case study students were selected for more in-depth investigation of their listening
strategies and comprehension.

Task implementation proceeded through the following procedure. After setting the video camera and other equipments in appropriate places, the participant and the native speaker sat face to face across the table. The location of the video camera was considered not to be obtrusive for the participants. The researcher was present throughout the whole activity. Enough time was given to the participants to understand the directions. All participants followed the same procedure. This started with an informal greeting and the speaker then asked several questions such as “Where do you live?” or “What did you study today?” Next, the warm-up task was explained by the researcher in Japanese. This warm-up task was a part of STEP 5th grade listening test, which was designed for 7th graders. It contained 5 picture-matching questions in which the participants had to select one picture corresponding to one of four sentences being read. This task was intended to establish a non-threatening situation for the participants. This fairly easy task was also expected to make each student feel confident in their listening ability. The researcher was concerned that the participants might abandon the task before its completion. Therefore, it was hoped that all participants would actively participate in the major tasks after completing the first easy task. This activity also aimed to allow the native speaker to accommodate his speech according to the degree of understanding of the participants.

The warm-up task was followed by the Story Completion Task (Task A or Task B). Each student spent about 5 to 14 minutes on this activity, depending on performance. The whole task performance was monitored by a video camera. After confirming that the participant was ready to undertake the task and that the video camera was ready to operate, the researcher gave directions to the participant in Japanese. Written instructions for the task were read out for all participants to maintain consistency of conditions (Gass & Mackey, 2000, p.58). After that, the participants were provided with a sheet of paper written in Japanese which explained the context of the story. The participants were not informed that they would recall and verbalize listening comprehension processes and strategies after the task. The students were encouraged to indicate
non-understanding or understanding and clarify comprehension problems during the listening task when they felt this was necessary since there was a strong concern that the students would not clarify ambiguous parts, or would ‘fake’ (Vandergrift, 1997b) comprehension. The native speaker was expected to accommodate his speech as naturally as possible according to the degree of the listener’s understanding. Therefore, pauses, elaboration, repetition, and other features associated with spoken language were to be used by the native speaker rather than just reading the written script. During the task, two sheets of paper written in Japanese involving decision-making and problem-solving were provided to the participants. Care was taken by the native speaker to have the participants understand the task through the use of verbal and non-verbal cues. Thus, it was expected that all the participants would complete the task.

Immediately after the listening task, stimulated verbal recall was conducted and also audio-recorded. It took about twenty minutes for the participants to finish verbal recall. The written directions and the information as to the objectives were read by the researcher to the participants in Japanese. The participants were allowed to report on the task in their native language. Prior to verbal recall of the listening task, the participants were provided with a two digit multiplication calculation (e.g., $12 \times 9$) and were asked to explain how they solved the calculation. This warm-up exercise was suggested by the previous study (Ericsson and Simon, 1993) to train verbalization and ease participants’ tension. While watching the TV monitor screen which showed the listening tasks, the participants were asked to explain what they understood and how they interpreted the listening tasks. The video-recordings were stopped by the researcher using a remote control after completion of each sub-task or when probing for more information was necessary at particular points during the sub-tasks. The researcher sometimes encouraged the participants to explain their listening comprehension in more detail as ‘a reminder’ (Ericsson & Simon, 1987). The researcher used non-cueing probes such as “What were you thinking then?” “Can you be more specific?” (Vandergrift, 1997b, p.391).

After 19 participants took either Task A or Task B in the first round of task implementation, the
duration for each task was also measured to examine the relative difficulty of the two (Table 3.4). The results showed that there was not a great difference of mean duration between Task A (mean: 6 minutes 43 seconds) and Task B (mean: 7 minutes 8 seconds). (However, the analysis of stimulated recall and task interaction later revealed that Task B was more difficult than Task A.)

After examining listening test scores and performance on either Task A or Task B, as well as by requesting their English teacher’s advice, six participants were selected as multiple case studies according to language proficiency (high: Yuji, Risa, intermediate: Jun, Eri, low: Kota, Miki) and gender (males: Kota, Jun, Yuji; females: Miki, Eri, Risa) (see also Section 3.6).

Table 3.4: Distribution of duration of Task A and Task B

<table>
<thead>
<tr>
<th>Duration and participants (e.g., 7'37”= 7 minutes 37 seconds)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task A</strong></td>
<td></td>
</tr>
<tr>
<td>Student S1     S3     S5     S6     S9     S10    S12    S13(Eri) S16 S18(Risa)</td>
<td></td>
</tr>
<tr>
<td>Student S2     S4(Kota) S7(Jun) S8 S11(Yuji) S14(Miki) S15 S17 S19</td>
<td></td>
</tr>
<tr>
<td><strong>Task B</strong></td>
<td></td>
</tr>
<tr>
<td>duration 7'37”  7'54”  6'03” 10'31” 5'12” 6'13” 13'31” 5'07” 4'27” 5'34” 6'43”</td>
<td></td>
</tr>
<tr>
<td>duration 10'09” 10'35” 6'30” 7'48” 3’43” 7’11” 10’47” 4’11” 4’48” 7’08”</td>
<td></td>
</tr>
</tbody>
</table>

Following the first round of task implementation, in the second round of task implementation, six selected students were provided with another kind of task (Task A or Task B) to conduct more in-depth investigation of listening comprehension and strategies. They followed the same procedure as conducted in the first round of investigation. This second round of task implementation was intended to provide a comparison of differences in performance between Task A and Task B, as it was estimated that second language listeners would demonstrate different strategies, difficulties, and comprehension processes according to the types of listening tasks.

3.7.7.3 Stage 3

As discussed in Section 3.4, Task A and Task B did not appear to reveal much difference in
performance depending on language levels. This led to an additional examination using another type of listening task, Task C, to reformulate the hypothesis and construct a plausible account of the unexpected phenomenon. The pilot study was conducted with two Year 8 students as well as the native speaker and one female English teacher. The researcher then discussed the legitimacy of the design of Task C with the native speaker. Individual pieces of information about a shopping appointment written on separate small sheets of paper were randomly arranged in advance by the native speaker. Prior to the task, the students were provided with two practice sessions in note-taking to ensure that they were comfortable taking notes in Japanese. They were advised to take notes of only key information because, during the practice, some students had attempted to write the whole translation. Task C implementation followed exactly the same procedure as the previous tasks. First, the written directions were read out for the participant and then the video-recording started to operate. Every time an individual piece of information was provided, the native speaker allowed enough pauses for the participant to take notes. After the tasks, the participants were asked to explain what they understood while looking at the notes they had written. This verbal recall was also audio-recorded. If necessary, the researcher prompted the students to clarify the problems and the reasons underlying their responses.

3.7.7.4 Stage 4

The semi-structured questionnaire (Type2) was distributed for the 19 participants shortly after the listening tasks. The questionnaire asked the participants about their difficulties and the attitudes which they had identified in the verbal recalls or during the listening tasks. All of the questionnaires were returned within two or three days. The results of this questionnaire were compared with those of the questionnaire (Type 1) conducted before the listening tasks.

Six selected students were, additionally, interviewed for more in-depth investigation. Follow-up interviews took place within one week after the listening tasks. After examining task performance, verbal recall, and questionnaire responses, there arose some more questions which needed to be
clarified for these participants. They were interviewed with respect to the differences in listening between the interactive settings and transactional settings, listening cues, their attitudes, and other issues related to their listening tasks. Furthermore, the English teacher was interviewed as to how she had taught listening in her class as well as about her beliefs related to improving listening ability. Other documents related to this study were gathered. The native speaker continued to discuss with the researcher through e-mails the issues associated with the listening tasks after the researcher returned to Australia.

3.8. DATA ANALYSIS METHODS

Data collection and analysis sometimes proceeded at the same time. Analysis during data collection “helps the fieldworker cycle back and forth between thinking about the existing data and generating strategies for collecting new data” (Miles & Huberman, 1994, p.50). A ‘working hypothesis’ (Lincoln & Guba, 1985) grounded in the data in the particular context was reformulated during data analysis to generate plausible accounts. According to ‘emergent design’ (Lincoln & Guba, 1985), data collection methods were expanded and modified during data analysis. Merriam (1998, p.162) also warns, “Without ongoing analysis, the data can be unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed.”

3.8.1 Procedures in data analysis

Stage 1 (Ongoing analysis)

Ongoing analysis was undertaken while collecting the data. Audio-recorded stimulated recall and video-recorded task interaction were transcribed by word processor to ensure whether or not any further data collection was needed (see Appendix ). Stimulated recall reported in Japanese
was translated into English. Transcripts of the 19 participants amounted to approximately 190 pages. A total of 1,475 units of stimulated recall and task interaction for the six selected participants was transcribed. Each unit of stimulated recall or task interaction was separated every time a long pause took place or the listeners made verbal or non-verbal responses. Therefore a large unit included eight to ten sentences, while a small unit contained a short utterance (e.g., O.K.). The native speaker, who participated in this study as an interlocutor, examined the transcript as ‘member check’ (Lincoln & Guba, 1985). Furthermore, listening test results, questionnaires (Type 1), transcripts of stimulated recall and listening task performance were analyzed to conduct follow-up interviews. In addition, Master’s course students at the University of Meio in Japan analyzed a part of the video-recorded task interaction of the participants as ‘peer debriefing’ (Lincoln & Guba, 1985).

Stage 2 (Data coding)
All the data of case study participants were coded on A3 size paper to “note recurring patterns” (Miles & Huberman, 1994, p.246) emerging from the data (see Appendix ). Coding of the data was undertaken according to listening strategies, comprehension processes, and difficulties with listening in order to achieve purposes, aims, and research questions of this study (see Appendix ). First, listening comprehension processes were coded because listening comprehension processes were considered to include listening strategies, difficulties and other feature of task interaction. This aimed to interpret the entire phenomenon of task interaction, regardless of whether or not some of the coded data were relevant to the research foci. Then, listening strategies and difficulties with listening were extracted from the coding of listening comprehension processes and then separately coded from the data of the questionnaires and follow-up interview.

Stage 3 (Categorization)
The coded data were analyzed to generate categories of listening strategies. After reviewing the literature, it was decided to classify listening strategies based on solid language theories because of
variation of categories adopted by different researchers. For this reason this study adopted the established strategy categories (e.g., Vandergrift, 1997a) which based their rationale on cognitive theory (see Section 3.8.2). In addition, strategy categories of interactive listening (e.g., Rost & Ross, 1991) were also included. After selecting a categorization scheme, the definition of individual categories was described. According to the definition of listening strategy categories, each coded listening strategy was allotted to a corresponding category. Each category of the coded data was constantly compared and contrasted until the category was saturated. That is, categorization of the data continued until at every attempt, classifying the strategy uses would have the same result (so as not to have different classification results). Following the analysis of six selected students in the sample, other students (N=13) were also examined to ensure that the strategies identified in the sample group were consistent with those of the entire population. Furthermore, strategy uses were counted and the listening strategy inventory was generated. In the process of categorization, strategies in the previous studies consonant with those of the present study were included and ones inconsistent with this study were excluded, and new findings were added (see also section 5.2).

Stage 4 (Description of analysis)

At the stage of writing up the analysis, this study attempted to analyze the data holistically in order to seek the emerging key themes (see Chapter Four). This analysis was intended to yield ‘thick description’ (Geertz, 1973) of the whole phenomenon of task interaction. The entire processes of listening comprehension for the six case study participants were constantly analyzed and compared until key themes emerged (Glaser and Strauss, 1967). After ensuring that key themes emerged, more in-depth investigation of specific key themes was carried out into the next stage.

Stage 5 (Interpretation and reformulation of analysis)

Following the previous analysis stage, specific key themes were thoroughly examined (see Chapter Five). The analysis of the data was extended to the entire population when necessary. These key themes were constantly analyzed until conceptual saturation emerged (Glaser and Strauss, 1967).
Furthermore, at the stage of concluding the analysis, the researcher recursively needed to re-examine the original transcribed data and make a slight reformulation of the data analysis to “make conceptual coherence” (Miles & Huberman, 1994, p.261) the with conclusion drawn from the data analysis.

3.8.2 Analysis of listening strategies

Listening strategies grounded in the gathered data were constantly compared and contrasted. Although the main goal of case studies is heuristic and exploratory (Merriam, 1988 p.59), it was considered that there should be a foundation for the problem to be investigated as well as to refine what is already known. Nunan (1989, p.89) argues that “…there is no such thing as theory-free observation.” Several categorization schemes were synthesized to generate the new categories. The categorization schemes adopted by this study are based on cognitive psychology theories and empirical studies (see Section 5.2). The rationale of O’Malley and Chamot’s (1990) learning strategies is based on solid cognitive theories (e.g., Anderson, 1985). Oxford’s (1990) learning strategies are the most exhaustive and multi-leveled. Additionally, the categories in both studies were developed and tested under longitudinal research. Vandergrift (1996, 1997a) bases her rationale on the preceding two studies. The studies of Rost and Ross (1991), and Vandergrift (1997b) uncovered listening strategies in interactive settings, and have been the only available empirical research by major researchers conducted in interactive settings, while most other research have investigated listening strategies in transactional listening settings.

Some issues of the categorization of listening strategies are discussed below. It was problematic that some studies (Vandergrift, 1996, 1997a) shared one strategy category in combination with another category (e.g., ‘comprehension monitoring’ in combination with ‘translation’). This study, however, considered “Categories should…be mutually exclusive, independent, and be derived from a single classification” (Holsti, 1969, p.95).
Furthermore, the criteria included in macro categories (metacognitive, cognitive, social/affective) are not clear in the literature. For example, O’Malley and Chamot (1990), and Vandergrift (1996, 1997a) included ‘evaluation’ in metacognitive strategies, while Stein (1999) included ‘evaluation’ in cognitive strategies.

There also arose a need for clarification concerning conceptual issues in the course of analysis. The first issue is that listening strategies were categorized on the basis of different rationales by the same scholar. For example, Vandergrift reported two studies (1996, 1997a) which investigated listening strategies in transactional listening and based the rationale on cognitive theories (e.g., Anderson, 1985). Another study (Vandergrift, 1997b) which investigated interactive listening reported on listening strategies based on communication strategies (Tarone, 1981; Faearch & Kasper, 1983). Additionally, Rost and Ross (1991) based the typology of listening strategies in interactive settings on the Interaction Hypothesis (Long, 1985). Therefore, in order to avoid confusion, this study decided to incorporate cognitive theories and results of empirical studies of interactive listening in order to generate listening strategies category.

The second issue is that second language research from the outset has been concerned with effective learning strategies employed by good learners (e.g., Rubin, 1975). Thus, most of the established learning strategies, on which recent listening strategies research has been based, has paid little attention to unsuccessful learners (Cohen, 1998). This study, however, aimed to describe holistically multiple events taking place in the bound context. That is, not only successful listeners’, but also unsuccessful listeners’ strategies were included.

Another methodological issue is that unconscious strategies use was not available for the study. For example, the students who comprehended the literal meaning of the spoken language did not report any strategy use, although stimulated recall revealed a fairly larger number of implicit strategies. Automatic processing is not available for strategies research (Cohen, 1998). It was attempted to clarify the above issues throughout analysis of the data.
3.9 VALIDITY AND RELIABILITY

Triangulation, derived from multiple sources of data, increases reliability of the study. Four types of triangulation identified by Denzin (1978) add credibility and trustworthiness (Lincoln & Guba, 1985) to the data gained in this study.

1. Data-triangulation: the use of a variety of data sources; for example, stimulated verbal recall, questionnaires, analysis of three types of task interaction, interviews, field notes, listening test.

2. Investigator triangulation: the use of several different researchers or evaluators; for example, peer debriefing, member check, discussion with the native speaker of English and the Japanese teacher of English.

3. Theory triangulation: the use of multiple perspectives to interpret a single set of data; for example, cognitive theories, the Interaction Hypothesis, learning strategies.

4. Methodological triangulation: the use of multiple methods to study a single problem or program; for example, case study, grounded theory, descriptive statistics.

In the above examples, ‘peer debriefing’ (Lincoln & Guba, 1985) took place twice (total of four hours) when the researcher explained the research plan in the classes for the TESOL Master’s course at the University of Meio in Japan. Master’s course students and an experienced American TESOL professor analyzed the task performance of six selected students while watching recorded listening tasks. Seven students and a lecturer participated in the first analysis and six students and a lecturer participated in the second analysis. Furthermore, in September of 2002, ‘inter-rater reliability’ (Bachman, 1990) was measured by comparing the researcher’s listening strategies categorization in this study with a counterpart by a TESOL Master’s course student. This purported to examine consistency of categorization of listening strategies between the raters. Kota’s (S4) listening strategies were exclusively examined
as a sample of rating. Inter-rater reliability was 0.89. Thus, it was felt that reliability of classification of listening strategies was considerably high enough.

‘Member check’ (Lincoln & Guba, 1985) frequently took place during and after the data collection period through discussion with the native speaker and the Japanese teacher of English. Here is an example of an e-mailed member check which the researcher received from the native speaker.

In response to your questions…

1) I didn’t repeat myself and give redundant information because in normal conversation, you don’t repeat yourself. I only repeat myself when the students asked for the information again. This would be consistent with normal conversation.

(Received from the native speaker on 16 March, 2002, in Australia)

Four aspects of validity and reliability pointed out by Yin (1984) were also considered to have robust research design (Table 3.5).

Table 3.5  Situating validity and reliability in this study

<table>
<thead>
<tr>
<th>Area</th>
<th>Definition</th>
<th>Stance in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct</td>
<td>establishing correct operational measures for the concepts being studied</td>
<td>The role of listeners was fixed. Spoken responses were avoided. Verbal recall revealed most listening processes, difficulties, and strategies.</td>
</tr>
<tr>
<td>Internal</td>
<td>establishing a causal relationship, whereby certain concepts are shown to lead to other conditions, as distinguished from a spurious relationship</td>
<td>Listening task designs were examined through pilot studies. All felt-made pictures were explained. (In the pilot studies, some participants were confused about what the pictures showed.) Any other variable which might contaminate the results was eliminated.</td>
</tr>
</tbody>
</table>
### External Validity

- Establishing the domain or population to which a study’s findings can be generalized

### Interpretation

Interpretation drawn from multiple case studies is a ‘working hypothesis’ rather than generalization (Cronback, 1975 pp.124-125). Generalizability of findings is left up to the reader or user (Wilson, 1979 p.34).

### Reliability

- Demonstrating that the study can be replicated with similar results

### Trustworthiness

- Triangulation of the study increased trustworthiness. This study may not necessarily be replicable. “Since there are many interpretations of what is happening, there is no benchmark by which one can take repeated measures.” (Merriam, 1988 p.170)

## 3.10 ETHICAL CONSIDERATIONS

This study had the approval of the Human Research Ethics Committee, University of Wollongong. Prior to the study, all the participants and their parents returned their written consent forms accepting that their listening tasks would be video-recorded for the study. The teacher and the principal of the school gave their written permission to involve the students and school facilities for the purpose of the study. It was affirmed that it was the responsibility of the researcher that the data gained from this study would be confidentially dealt. Pseudonyms were used to describe the participants so as to preserve anonymity.
NOTE
Please see print copy for all Chapter 4 examples, as none of the Japanese characters used have come across in the PDF version of this file.
4.1 INTRODUCTION

This study investigated nineteen Japanese junior high school students in Japan in order to examine the following six research foci: 1) listening comprehension processes, 2) listening strategies, 3) L2 listening difficulties, 4) effects of native speaker’s speech modifications and nonlinguistic cues on listening comprehension, 5) differences in comprehension and strategies according to listening task types, 6) interactive features of listeners and speakers. Six participants were selected out of nineteen for multiple case studies according to language proficiency and gender. The analysis conducted was mainly based on the data gathered from stimulated verbal recall and observed task interaction. Questionnaires, follow-up interview and other documents supplemented the analysis of the data.

In addition to examining the research foci above, the present chapter also focuses on a) the relationship between language proficiency and listening comprehension processes, b) how each participant employs bottom-up processing (lexis, structure, phonology, discourse, paralinguistic knowledge) and top-down processing (background knowledge, inference). This chapter contains holistic description of listening comprehension processes identified for the six selected participants.

In this study, listening comprehension processes refer to the entire listening behaviors which took place during the listening tasks. That is, description of listening comprehension processes in this chapter includes not only overall processes of listening comprehension, but also listening strategies, relationship of speaker’s speech modifications and non-linguistic cues in comprehension, and difficulties with listening due to listening processes being associated with all of them. However, care was taken to avoid overlap with the analysis of Chapter Five which elucidates specific aspects
This chapter attempts to yield an in-depth overall description of the listening comprehension of six individual participants in the sample group. Six individuals were analyzed holistically in order to orient the readers to a comprehensive understanding of the phenomena which took place in the interactive listening tasks. Listening comprehension processes which were observed by the researcher and reported by the participants in Task A, Task B, and Task C, are included in this chapter.

4.2 CASE STUDY STUDENTS

In the initial part of each case study, a brief description of the participant’s L2 proficiency and personal background associated with this study is included. Listening proficiency was measured by the listening test before listening task implementation, as well as by the STEP (Standardized Test of English Proficiency) grade which the participants held. Listening Task A and B were randomly allotted to the entire population in order to hold balanced language proficiency across the participants. Although Task A, B, and C were not undertaken in the same order (for example, Kota chronologically engaged in the listening tasks in the order of Task B, Task A, and Task C, while the task implementation for Risa followed the order of Task A, Task B, Task C), the description of all case study participants’ tasks progresses in the order of Task A, Task B, and Task C to maintain consistency for the sake of the readers.

4.2.1 Kota (S4: Student 4)

Kota had the lowest English proficiency (except for S12) within the cohort of the participants. His score of the STEP listening test was “11” (mean 13.37, SD: 2.99, full score: 20). Kota did not hold any STEP grade (the average Year 9 junior high school students in Japan are considered to hold the STEP 4th grade). According to the questionnaire (Type 1) before the listening tasks, he did not show strong interest in the communicative activities with the native speaker (participant in this
study) both in and out of the classroom.  Kota was, however, very cooperative with the teachers out of the class (e.g., helping his English teacher with preparation for class). He had a girl friend, which was relevant to his interpretation in this study.

Kota’s listening processes are most intensively described because his data yielded very interesting and various results as compared to a limited amount of data gained from the high level students. An in-depth description of Kota’s listening task performance also aims to explain the contents of the listening tasks in order to familiarize the readers with what was required in the listening tasks. Kota’s listening processes for individual tasks are especially described in great detail. Kota took Task B first, then Task A and finally Task C. However, as mentioned above, the description of listening task activities progresses in the order of Task A, Task B, and Task C.

4.2.1  Kota: Task A

The Story Completion Task kit (felt-made pictures and board) was placed on the table. Task A included 11 subtasks. The aim of Task A was to complete the story described by the native speaker. Task A included nine concrete referents to be selected (the sun, a flying bird, a coke bottle with straw, sunglasses, a walking bird, a beach ball, a Frisbee, a float, a dog) and three distractors (a star fish, sun cream, a bucket). The boy (the girl for female students) was the main character in the story.

After it was ensured that the video-camera was set and other necessary items were in the appropriate places, Kota and the NS (native speaker) sat face to face across a small table. Prior to the major listening task, a brief free conversation was followed by a warm-up Picture Selection listening task. The direction before listening were read out by the researcher in Japanese; “Mr. Jason will talk about the story on Okuma Beach. You need to place on the board the object which is most appropriate to what will be said. The context of the story is that you are sunbathing on Okuma Beach. The weather is cool and cloudy now. You came to the beach with your friend, Naomi (Ken for female students).”
Kota comprehended Task A with relative ease, compared to Task B. It took him 7 minutes and 5 seconds to complete Task A, while it took 10 minutes and 35 seconds for Task B. The observation of the two tasks revealed that Kota obviously felt more comfortable in comprehending Task A due to task familiarity (Kota engaged in Task B first). A partial reason for this could be that Kota was familiarized with the same types of sub-tasks and the same words used (e.g., Sub-task 6 for both tasks demanded that he answer an “either-or question”, and the word, “bird” was used as a key word for both tasks). Similarly, the other five case study participants reported that Task B was more difficult.

Kota demonstrated his nervousness in the initial part of Task A. For Sub-task 1 the native speaker said, “The sun is shining in the sky.” Kota nervously moved not only the sun but also a bird into the sky, although he knew from the experience of Task B that he should move one referent at a time. Kota reported in the stimulated recall that he chose both the sun and a bird when he heard ‘the sky’ since they were both associated with the sky.

In Sub-task 2 the NS said, “You see a bird in the sky.” Kota placed a walking bird in the beach scene instead of a flying bird and then examined the NS’s face for assistance because a flying bird was already chosen in the previous sub-task. He eventually took the walking bird out of the beach scene. Touching the object and simultaneously examining the speaker’s face were characteristic of his comprehension monitoring.

For Sub-task 3 the NS said, “You are happy that you came to the beach with your friend. Naomi is drinking coke using a straw.” Kota did not understand what had been said for a while so that the NS repeated the same sentence twice. It did not take much time for him to spot the coke bottle and place it on the girl. Kota seemed to comprehend the text by inferring from the word “straw” (a familiar Japanese word).

For Sub-task 4 after the NS said, “You are wearing sunglasses”, Kota placed a pair of sunglasses on
the boy’s face unconfidently and then, in a similar manner to what was observed in Sub-task 2, examined the NS’s face. According to stimulated recall, Kota first misunderstood that he would take off Naomi’s sunglasses (Naomi wears sunglasses). However, judging from the NS’s face, Kota placed another pair of sunglasses on the boy and this was reinforced by the speaker’s nodding.

In Sub-task 5, Kota had a problem when the NS said, “You see a bird walking on the beach.” Kota confused the walking bird with the flying bird beforehand. The NS repeated the utterance, but judging from the previous performance of Kota as to the birds (in Task B Kota did not know the meaning of “bird”), the NS switched from using repetition to using “directional gaze” (fixing NS’s gaze in the direction) (Rost, 2002, p.37) for the walking bird to be selected. Then, being aware of the NS’s gaze direction, Kota chose the walking bird.

Kota experienced more problems in the second half of Task A. Sub-task 6 asked, “Do you want to play beach volleyball or Frisbee?”, followed by the NS’s gesture comparing the two. After considering for a while, Kota chose a beach ball and this was reinforced with the NS’s utterance, “O.K., good.”

Sub-task 7 was instantly accepted with the listener’s nodding after the NS said “You stop playing beach volleyball.” Then, the NS described Sub-task 8, “You are thirsty. But there are no drinks in the ice box. You ask your friend, Naomi, ‘give me your drink’.” This sub-task was different from other sub-tasks in that the previous sub-tasks requested the listener to select the objects which were not chosen before, while this task demanded that Kota move the previously selected object from one location to another. Kota instantly touched the coke bottle because he was more likely to pay selective attention to the familiar word, “coke”. The NS repeated “You say to Naomi, ‘give me your coke’.” Kota, however, did not seem to understand the complex language structure. This seemed to make him more nervous and confused. Again, the NS used a hand gesture showing that the coke bottle was passed from the boy to the girl (Example 1).
Example 1 (N: Native speaker, observation transcript)

017 N: (Kota is holding the coke bottle and thinking.) You say to Naomi...you say, “Naomi, give me your drink.” (N repeats the same gestures. Kota holds coke and is thinking.) “Give me your drink.” (N moves his hand from the girl to the boy) (Kota tries to place coke bottle and N nods. Kota places coke bottle on the boy.)

018 N: OK.

In Sub-task 9, after hearing “Naomi says, ‘let’s swim.’ But you say, ‘I can’t swim.’ What do you do?”, Kota received a sheet of directions written in Japanese saying that “You have a problem. What do you have to choose next? Please choose the object which is most appropriate to the present situation.” The listener was requested to choose the float. The NS repeated, “Naomi says, ‘let’s go swimming’.” and then elaborated, “If you go into the water, you will drown. You need something to keep you floated.” However, Kota did not appear to comprehend at all what had been said. The NS, then repeatedly made gestures to indicate “floating”, but in spite of repeated utterances, elaboration, and repeated gestures, Kota did not understand. Finally, the NS gave up describing and then pointed with his hand in the direction of the objects which had not been chosen, while adding, “Is there something you can choose?” Shortly after that, Kota spotted the float and this was reinforced by the speaker’s nodding.

For Sub-task 10 the NS said, “While swimming, the dog came and took your bag away. It was gone with your bag.” Due to familiarity with the word “dog”, Kota spotted the dog instantly and placed it on the beach. Then, after hearing two familiar words, “dog” and “bag”, Kota brought the dog closer to the bag. The NS repeated the utterances, but Kota kept holding the bag and the dog in his hand because he did not understand “run away”, that is, to move the dog and the bag away from the beach. Thus, the NS again resorted to non-verbal cues, using hand movement to indicate ‘going away’ (Example 2).

Example 2 (Observation transcript)

023 N: (Kota places the bag beside the dog and N nods.) And it runs away with your bag. The dog
Chapter Four: Description of Results

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runs with...away with your bag. (Kota is holding the bag and the dog. N makes a gesture of ‘going away’ with his hand.)

024 N: (Kota moves the dog and the bag out of the beach.) OK.

Sub-task 11 asked Kota to respond to the directions written in Japanese saying, “Now you are in trouble. What will you do to solve this problem?” This sub-task allowed the participant to answer in Japanese. Follow-up questions such as “Will you look for the bag by yourself?” were freely responded to by the participant with the help of the researcher.

4.2.1.2 Kota: Task B

The Task B kit included 8 objects to be selected (a framed picture of a red sofa, a bird, a dog, a baby named Masako, a radio, a telephone, a mailbox, a letter) and 3 distractors (a sock, a picture of a boy, and a red sofa). Task B was divided into 11 sub-tasks.

First, the directions for Task B written in Japanese and explaining the context in the story were read out to Kota by the researcher. These said, “Mr. Jason (native speaker) will explain in English what will happen in your house. You need to choose the object (felt-made picture) which is most appropriate to the story explained. You do not need to be concerned about the precise location very much. The story is that your sister left her child, Aiko, and then several visitors will come to your house. You can ask questions if you do not understand what is being said.” The main character in the story, a boy (a girl for female listeners) was considered to be the participant him/herself.

The baseline story of Sub-task 1 was, “There is a picture of a red sofa on the door.” According to the follow-up interview, due to his nervousness, Kota moved many irrelevant objects, as in Example 3, without attending to what had been said, so that the native speaker needed to wait for him to settle down.
Example 3 (N: Native Speaker, observation transcript)

001 N: There is a picture of the red sofa on the door. (*Kota* moves a picture of a boy into the room.)

(*Kota* moves the red sofa into the room and then moves the stool, the easel and the window out of the room.)

Once *Kota’s* listening processes were “triggered by attention” (Rost, 1994, p.2), the observed data indicated that he confused “a framed picture of a red sofa” with similar distractors such as a “picture of a boy” and “a red sofa”. *Kota* paid selective attention to a single known word such as “picture”, “sofa”. That is, when *Kota* attended to the word “picture”, the observed data indicated that he confused the framed *picture* of red sofa with the *picture* of boy. Similarly, when *Kota* gave selective attention to “a red sofa”, he confused the framed picture of a *red sofa* with the *red sofa*. Therefore the NS needed to repeat a small chunk of words or phrases to differentiate the concrete object to be selected from the distractors. Anderson and Lynch (1988) note that listeners at lower levels of proficiency are more likely to find that a simple repetition of a noun phrase is the easiest to comprehend. Moreover, the NS elaborated on the previous utterances as follows; “Usually you see pictures on the wall. This time you see a picture on the door.” Still *Kota* did not understand what was being said. What eventually contributed to his comprehension was the NS’s gesture towards the smaller picture (of red sofa). Once *Kota* comprehended the framed picture of a red sofa, he faced another problem with location of the picture. Thus the speaker needed to repeat the phrase with stress on the preposition as in “*On* the door”. Still, *Kota* did not understand the precise location of the picture. Gestures made by the NS eventually had an effect on his comprehension of the location.

Once *Kota* had a sense of success after completing Sub-task 1, he started to show a quicker understanding in the subsequent sub-tasks. For Sub-task 2 the NS said, “You can see a flying bird through the window.” *Kota* first attempted to place the bird beside the door. The NS, however, repeated the phrase with stress on the noun to be attended as in, “In the *window*”. In Sub-task 2, *Kota* encouraged himself with reinforcement for his performance, as in “This is it!”; probably because he began to have more confidence in his performance. For Sub-task 3 the NS said, “The dog comes into your house and plays with the baby.” *Kota* held the dog and thought for
a moment. The utterance, “Into the room”, followed by the NS’s gesture of pointing at the room made him aware that the dog was in the room. The observed data indicated that a sequence of events described above such as these appeared to have taken place in his mind during this sub-task. Stimulated recall, however, revealed that Kota combined “dog” and “house” because he attempted to construct plausible meaning from the familiar words without attending to the whole discourse (Example 4). The data indicated that Kota was more likely to pay selective attention to a familiar word.

Example 4 (R: Researcher, stimulated recall transcript)

031 R: (What were you thinking then?)
032 Kota: …
   (This…I could hear “dog” and “house”. So I thought he meant a doghouse.)
033 R: (Oh, did you?)

Sub-task 4 which said, “Another baby, Masako comes into the room” was instantly comprehended because Kota, like other participants, understood it from the baby’s name.

Like other participants, Kota had a problem with Sub-task 5, which was not expected prior to the major study and during the pilot studies. The native speaker said, “You like the babies. You shake hands with one of the babies.” Kota did not know even the meaning of ‘hand’. Thus the NS elaborated, “So you pick up the baby and you shake its hand”, followed by a gesture of shaking hands with both his hands. Kota, however, had two babies hold hands since he simply combined the two words, baby and hold (which he understood from the speaker’s gesture) to make sense out of them for himself. Therefore the NS made Kota aware by using a stressed word and a gesture that the boy, “you” was shaking hands with a baby. (Example 5)

Example 5 (Stressed words are in italics, observation transcript)

039 N: (Kota places two babies near the window.) Which is you? (N points at the boy.) Which is you? (Kota touches the boy.)
040 N: (N nods.) You pick up the baby and shake its hand. You shake its hand.
041 N: (Kota brings two babies toward the boy.) OK. Good.
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*Kota* made a false interpretation by combining known words. For Sub-task 6 the NS said, “Do you want to play with the babies or listen to the radio?” The NS gave a cue by using a gesture. After that, *Kota* chose both a baby and a radio and then brought them closer to the boy (you). The NS accepted this as choosing both. The observation of this sequence of behavior did not indicate any major problem except that *Kota* chose both. Stimulated recall, however, revealed that he made a false inference in the way the two words, “baby” and “radio” made sense to him (Example 6). *Kota* did not know that he was being asked to choose one or the other.

**Example 6** (Stimulated recall transcript)

050 R: (Why did you choose two things [baby and radio]?)

051 Kota:

I could hear “baby” and “radio”. [Inferring from speaker’s gesture which shows comparison with both hands], I thought I held them up with my both hands.)

052 R: (Oh, I see.)

Sub-task 7, which said, “You stop listening to the radio and playing with the babies”, was comprehended readily.

In Sub-task 8 and Sub-task 9, *Kota* again made a false interpretation on the basis of his experience. For Sub-task 8 the NS said, “You hear the telephone ring. It’s your friend on the telephone. He says that he has received a free concert ticket.” *Kota* successfully moved a telephone instantly. In spite of repetition of ‘he’, stimulated recall revealed that *Kota* misunderstood that the telephone call was from his girl friend. This may be because he talked to his girl friend on the telephone very often. He was more likely to interpret what had been said based on his own experiences.

*Kota’s* false interpretation was carried on into Sub-task 9. For Sub-task 9 the NS said, “The postman comes. He has a letter for you.” Following the utterance, directions written in Japanese were given to *Kota*. These said that “You have to go somewhere in the picture (of the
story) to receive something. Where do you have to go?” The boy (the listener himself) in the story was expected to go outside the house to receive a letter. Kota attempted to seek the correct answer by touching several things such as an easel and a cradle. What was characteristic of these attempts was that he tried to check his hypothesis by touching several things, and at the same time examined the speaker’s face to see if his hypothesis was correct. This type of comprehension monitoring was identified throughout Kota’s task performance. What eventually contributed to his understanding was a cognate (a borrowed word from English) which had phonologically similar sound and the same meaning. When Kota heard “postbox” in the utterance, he associated it with “post” which meant the postbox in Japanese. Accordingly, he spotted the letter under the mailbox which Sub-task 10 demanded.

Sub-task 11 revealed a false interpretation along the same line. Stimulated recall revealed Kota’s misunderstanding that he was going out with his girl friend to the concert. In this sub-task, the listener received directions written in Japanese saying that “You have to make a decision. Will you stay with the babies or go out with your friend?” This sub-task allowed the listener to respond in Japanese. It aimed to extend the story by having free conversation, so that when the student could not answer in English, or did not understand what had been said, the researcher helped the student with translation in Japanese or in English.

4.2.1.3 Kota: Task C

After conducting Task A and Task B, it was felt that there was little difference in listening comprehension according to language proficiency. Although this study identified considerable difference in listening comprehension and strategies across language level, after completing the analysis of the data, it was felt that there was a necessity for further investigation during the data collection to examine the effect of task type difference on listening comprehension. Prior to Task C implementation, it was assumed that low level students might in some cases have performed
nearly as well as high level students because Task A and Task B included plenty of contextual cues and concrete referents. Therefore Task C aimed to reduce contextual cues and visual aids so that it was assumed that difference in listening comprehension according to language proficiency would be recognized (see Section 3.4 in Chapter Three).

Task A and Task B were the extended listening activities in the classroom in which the ALT, a regularly visiting native speaker, could be involved. Task C, on the other hand, was designed to approximate a real interactive setting. That is, when the speaker produces long utterances, the listener (especially a non-native speaker) needs to take notes by asking questions or requesting repetition from the speaker. This setting in real life could be, for example, an interaction between a lecturer and a student taking lecture notes, or an interaction between a non-native speaker making a shopping list and a native speaker who asks the non-native speaker to go shopping for him/her.

The setting designated for Task C was that the native speaker made an appointment to take the student shopping. Key information such as date and meeting place needed to be written by the students in order for them to keep their appointment. The listener needed to rely mainly on the spoken information provided by the speaker as there were no visual aids and concrete referents. Another aspect which approximated the authentic conversation was that the information, written on separate sheets of paper, was not presented to the individual participants in a fixed order. This simulated the unplanned and spontaneous nature of spoken language rather than the fixed order characteristic of written language (Buck, 2001, p.8). Sufficient pauses were provided until the participants had finished taking notes. The participants reported that they did not have time constraint problems with taking notes. As explained before, the order of the information provided by the native speaker was randomly arranged for the individual participants. Therefore Task C could not be broken down into a fixed order of sub-tasks, but included 8 types of randomly arranged sub-tasks.

After the participants practised two examples of note-taking, the directions read out by the
researcher to the participant said, “After the graduation ceremony, you are going to make an appointment to go shopping with Mr. Jason (native speaker). You are going to buy basketball shoes. The shopping plan is all left up to Mr. Jason. You should take notes so as not to miss the information when Mr. Jason explains his plan. You are encouraged to ask questions when you do not understand what is said. You are allowed to take notes in Japanese.”

After confirming that Kota wanted to buy NIKE shoes, first, the native speaker asked Kota whether he wanted to go to Jasco department store in Chatan (place) or San-A supermarket in Nago (place). In spite of the NS’s question, Kota continued to take notes without replying to the question. Then the speaker’s gesture comparing the two places while repeating the question made Kota aware that he was requested to choose one of them, so that he replied, “Jasco”.

For the second piece of information the NS said, “We will go to Jasco on Sunday, March the 17th.” No repetition took place. Kota misunderstood this as “meeting at seven”. This may be because he gave selective attention to the familiar word, “seventeenth” and misinterpreted this number as a meeting time for the shopping appointment. The NS paused until the participant had finished writing. For the third piece of information the NS said, “The shoes will cost 6,750 (six thousand seven hundred and fifty) Yen.” Kota non-verbally requested repetition for this information by sticking out his index finger. After the NS repeated the previous utterance, Kota wrote in Japanese, “Foot size is 250cm.” Kota reconstructed a totally different number for which it was impossible that such a large shoe size existed.

For the fourth piece of information the NS said, “We will go to Jasco using my car.” No repetition took place. Kota wrote in Japanese, “Go to Jasco by car.” The NS continued by saying “You can ask two or three of your friends to come with you.” Kota made a non-verbal request for repetition with his index finger. After the repetition, Kota wrote, “There were two or three girls.” Stimulated recall revealed that Kota thought he would go shopping with his girl friend in his mother’s car. He considered his friends to be girl friends, just as he interpreted Task B. The
stimulated recall also revealed that Kota usually went shopping in his mother’s car.

In the last four pieces of information, no repetition took place. For the fifth piece of information the NS said, “We will meet in front of Arume School.” Kota wrote in Japanese, “Arume School.” The observation appeared to indicate that Kota understood the utterance, but stimulated recall revealed that Kota thought he was being instructed to go to school to take a rest. For the sixth piece of information, the NS said, “And we will leave Arume at nine twenty in the morning.” Kota’s notes saying in Japanese, “Arume school at nine twenty” were almost correct.

Then the NS said for the seventh piece of information, “We will leave Jasco at four in the afternoon.” Kota gave selective attention to familiar words, and wrote in Japanese, “Jasco in the afternoon”.

For the last piece of information, the NS said, “You can tell your parents that we will be home by six pm.” Following the topic of shopping, Kota made an interesting interpretation. His notes indicated that he bought six pairs of pants (underwear). In Japanese “pants” means “underwear”. It may be because he misheard “six pm” for “six pants”. Another interesting point was that Kota, like other participants, confused past tense with present or future tense, although he knew that he would go shopping in the future (Example 7). The notes written by Kota are shown in Example 7 as reference for the task description.

Example 7 (Kota’s notes)
1. Nike shoes, went to Jasco[department store] in Chatan[place]
2. meeting at seven
3. foot size is 250cm
4. going to Jasco by car
5. There were 2 or 3 girls
6. Arume[place] school
7. Arume school at nine twenty
8. Jasco in the afternoon
9. bought 6 pairs of underwear
4.2.1.4 Summary of Kota

Six characteristic features of Kota’s listening comprehension were identified through his task performance. Firstly, Kota appeared to pay selective attention to single familiar word(s). In other words, he seemed to process hardly any large chunks of acoustic input at the sentence and discourse level, or even at the phrase level. This seems to indicate that there was a gap between his linguistic knowledge and what was said. Secondly, he was more likely to construct his interpretation based on his prior experiences and knowledge, by combining individual known words in such a way that they made sense to him. “The sense the listener derives is constructed within the listener’s own knowledge domain” (Rost, 1994, p.5). His inference, however, for the most part resulted in false interpretations. He intensively activated his prior experiences and knowledge to fill in the gap between his linguistic knowledge and what was said. Thirdly, it is apparent from the data that the speaker’s gestures and paralinguistic cues or visual aids such as concrete referents contributed greatly to Kota’s listening comprehension. Kota’s lack of linguistic knowledge was compensated for by these non-linguistic cues. The aforementioned evidence indicates that Kota, a low level student, utilized not only bottom-up processing (vocabulary, phonology) but also top-down processing (prior experience, knowledge, extralinguistic cues) to interpret the utterances. Therefore these two processing systems seemed to interact with each other rather than operated separately. Fourthly, nervousness due to a lack of confidence in his ability made it difficult for Kota to tune into what was spoken. However, once he achieved a sense of success, he demonstrated far better performance. Fifthly, in Task A and Task B Kota was more likely to monitor his comprehension by moving the referents (felt-made pictures) rather than using verbal strategies. On the other hand, in Task C, due to a lack of visual aids, comprehension monitoring was not identified. (see Chapter Five). Sixthly, this study identified a large quantity of interaction between the native speaker and Kota during Task A and Task B, while only a very small quantity of interaction took place in Task C.
4.2.2 Miki (S14: Student 14)

*Miki* was the lowest level female student (except S12, who had experienced special education at elementary school). Her listening test score was ‘11’ (mean: 13.37, SD: 2.99, full score: 20), the second lowest score next to S12 (score: 7). She had a STEP 5th grade certificate which corresponded to the average Year 7 level (the participants were all Year 9 students). Her personality was, according to her English teacher, reserved and quiet. The questionnaire (Type 1) indicated that she did not communicate very frequently with the native speaker in and out of the classroom and also felt nervous about talking to the native speaker. *Miki* took Task B first, then Task A, and lastly Task C.

4.2.2.1 Miki: Task A

The duration of task performance appeared to suggest that *Miki* had performed Task A with the same degree of difficulty as compared to Task B, although she reported that Task B was more difficult. It took *Miki* exactly 7 minutes and 11 seconds for both Task A and Task B. It was assumed that redundant time was spent on Task A because *Miki* was more likely to remain silent as an indication of non-understanding. After giving the directions, for Sub-task 1, the native speaker said, “The sun is shining in the sky.” After considering for a while, *Miki* placed the sun in the sky.

For Sub-task 2, immediately after the NS said, “You see a bird in the sky”, *Miki* moved a flying bird into the sky. Then, the NS continued on to Sub-task 3 by saying, “You are happy that you came to the beach. Your friend, Ken, is drinking coke.” Shortly after that, *Miki* placed the coke bottle on the boy. Stimulated recall revealed that *Miki* paid selective attention to the borrowed word, “drink”, which held the same meaning in Japanese.

In Sub-task 4, shortly after hearing “You are wearing sunglasses”, *Miki* had the girl wear sunglasses. Then, in Sub-task 5, *Miki* appeared to be confused for a moment after hearing “You see a bird
walking on the sand.” This was presumably because, according to stimulated recall, Miki first attended selectively to the word “bird” which had already been chosen as a flying bird, so that she unconfidently chose the other bird which had not been chosen, even though she did not understand the words “a walking bird”.

Miki came across difficulties in the following five sub-tasks. In Sub-task 6, after hearing twice, “Do you want to play with the Frisbee or with the beach ball?” followed by the NS’s gesture of choosing one or the other, Miki replied verbally, “beach ball” and chose it. Miki appeared to comprehend the ‘either-or’ question with relative ease as compared to the similar question in Task B. Sub-task 7, which said that “You stop playing with the beach ball”, was easily comprehended.

For Sub-task 8 the NS said, “You are thirsty. But there are no drinks in the ice box. You ask your friend, Ken, ‘Give me your drink’.” Miki did not understand what had been said so that the NS repeated the previous utterance and made a gesture of “asking for something”. Stimulated recall indicated that what eventually contributed to Miki’s comprehension was selective attention to the known words, “give me”. The observation also identified some degree of phonological stress on “Give me your drink” (italics indicate stress) in the speaker’s utterance.

Miki experienced the greatest difficulty in Sub-task 9. Silence which lasted more than five seconds was identified four times. The interaction which took place in this sub-task demonstrated a complicated performance. After hearing, “Ken says, ‘Let’s swim.’ But you say, ‘I can’t swim.’ What do you do?”, Miki received the directions on a sheet of paper which asked her what she should choose to solve the problem in this situation. Miki chose the float right away because, according to stimulated recall, she understood that she could not swim. However, the NS misunderstood that Miki did not understand the request fully and then demanded her more precise understanding (Example 8). This request made Miki more confused. Although Miki was holding the float, the NS elaborated on the preceding utterance by saying, “You need to wear the float. You needed to put the float on”, or “Keep you floating. So you can breathe.” Miki was
more confused presumably because “wear”, “put on”, “floating”, and “breathe” were not included in the word lists in the three junior high school textbooks which the participants used. Implicit non-verbal signals such as silence and thinking were characteristic of Miki’s non-understanding. She politely waited for contextual cues or other extralinguistic cues to assist in her comprehension. The observed data revealed that a combination of repetition, elaboration, and gestures, in varying degrees, appeared to contribute to Miki’s completion of this sub-task, rather than any single particular effective listening cue.

Example 8 (N: Native speaker, R: Researcher, stimulated recall transcript)

029 R: (You chose the float in the beginning? Did you understand the situation?)
030 Miki: (I chose it because I couldn’t swim.)
031 R: You didn’t give any reinforcement such as “Yes”, “OK” at that time. Why didn’t you do this?
032 N: I guess I was unsure she understood the whole situation. Because normally the other students would put it off at the first step.
033 R: You suspected that she may not have understood the situation.
034 N: Right. That’s why I demanded it precisely.

In Sub-task 10, after hearing, “The dog takes your bag. And it runs off the beach”, Miki paid selective attention to the known words, “dog” and “bag”, and then brought them together. However, what was actually conducive to Miki’s completion of this sub-task was the NS’s gesture of “going away”. After that, for Sub-task 11 Miki received a sheet of paper asking her how she should solve the problem in this situation. The participant was allowed to respond in Japanese and the extended conversation continued with the help of the researcher.

2.2.2 Miki: Task B

First, in Sub-task 1, the native speaker said, “You see a picture of the red sofa hanging on the door.” Like Kota, Miki confused the framed picture of a red sofa with other distractors such as the picture of a boy and the red sofa. Thus the NS needed to clarify these three with repetition. Once Miki recognized the framed picture of a red sofa, the NS continued by saying, “hanging on the door.”
An unfamiliar word, “hanging” made Miki confused and she remained silent, which showed non-understanding. Then the NS stressed the location with a paralinguistic cue, “On the door” (italics indicate stress). What eventually contributed to Miki’s comprehension was the NS’s gesture of “hanging on the door”.

In Sub-task 2, the NS said, “You see a bird flying in the window.” According to stimulated recall, Miki did not know the word, “bird” (In Task A she knew the word “bird” because she experienced Task B beforehand). Thus the speaker needed to repeat the small chunk of word(s), “bird in the window” or just “bird”, with the stress on the key word. Eventually Miki again relied on the NS’s gesture of “flying” to arrive at understanding of the utterance. For Sub-task 3, the NS said, “A dog comes into the room. And it’s playing with baby, Aiko.” Miki chose the correct referent right away. Then, in Sub-task 4, Miki moved baby Masako quickly after hearing “Another baby, Masako comes into the room.”

Miki was confused in Sub-task 5. After hearing, “You like the babies. So you shake hands with one of the babies”, Miki brought the baby closer to the girl’s (you) hand. However, Miki actually did not understand the literal meaning of “shaking hands”. Stimulated recall indicated that Miki attended to the word, “hand”, and at the same time utilized the NS’s gesture of “holding hands” to complete this sub-task.

In the following five sub-tasks, Miki demonstrated similar features of task performance. After asking Miki in Sub-task 6, “Do you want to listen to the radio or play with the babies”, the NS needed to repeat the question or repeat the gesture of “comparing the two” because Miki remained silent, with a confused expression on her face. Miki imitated the NS’s gesture and said, “Play” unconfidently. Her verbalization was accepted as “playing with the babies”. Stimulated recall, however, revealed the NS’s misunderstanding of Miki’s response. (Example 9).
Chapter Four: Description of Results

Example 9 (Stimulated recall)

045 R: [Miki says, “play”] “” (Why did you say, “play” at that moment?)
046 Miki: “” (I was asking a question about “play”.)
047 R: “” (Oh, you asked the meaning of “play”.)
048 Miki: “” (No. I asked him whether he said, “play”)

Sub-task 7 which, said, “You stop playing with the babies” was comprehended instantly. In Sub-task 8, shortly after the NS said, “The telephone rings”, Miki moved the telephone into the room, presumably because the word “telephone” is a familiar word (a borrowed word) to the Japanese.

For Sub-task 9 the NS said, “A postman comes. And he has a letter for you. What will you do?” Then the directions written on a sheet of paper asking Miki where she should go in this situation were given to her. Miki instantly touched the mailbox and this was reinforced by the NS’s nodding.

Shortly after Miki spotted the mailbox, the NS continued on to Sub-task 10 by specifying the next action, “Where can you find the letter?” and added, “You get the letter from the mailbox.” In spite of the NS’s repetition, Miki did not understand this. Then, after hearing, “Look for the letter in the postbox,” Miki successfully spotted the letter, under the mailbox. Yet stimulated recall revealed that Miki incidentally spotted the letter by paying selective attention to the known word (Example 10).

Example 10 (Stimulated recall)

057 R: (What did you think he said about the mailbox?)
058 Miki: (There was a letter inside the mailbox. So I would look at the inside.)
059 R: (Why did you think so?)
060 Miki: “” (It’s because he said, “look”.)
061 R: “” (Oh, he
said, “look for”. But you heard “look”. So you thought you would look inside the mailbox.

062 Miki: (That’s right.)

In Sub-task 11, the directions asking Miki whether she would stay with the babies or go to the concert with her friend was extended to a free conversation with the help of the researcher.

4.2.2.3 Miki: Task C

Miki’s Task C listening performance demonstrated much better results than expected. Frequent repetition of the utterances did not take place throughout the task. Some mishearing took place instead. After confirming that she wanted to buy NIKE shoes, the NS first asked Miki, “Did you want to go to Jasco in Chatan or San-A in Nago?” Like Kota, Miki kept writing in her notes without responding to the question. Then the NS’s gesture of “choosing between the two” made Miki aware of the question and she replied verbally “Chatan.”

After hearing the second piece of information, “We will go to Jasco on Sunday, March the 17th”, Miki perfectly reconstructed in her notes what had been said, while most of the other participants had difficulty with this information. The NS, then said for the third piece of information, “Please bring for the shoes, 6,750 Yen.” Miki wrote in Japanese “1,600 Yen” in her notes. She understood that the NS was referring to the amount of money, although the number Miki understood was not close to the actual number.

Following a long pause after hearing the fourth piece of information, “We will go to Jasco using my car”, Miki wrote in Japanese, “went to Jasco by car”. Then the NS continued by saying, “You can ask two or three of your friends to come with us.” Presumably due to the relatively long sentence, Miki requested repetition by sticking out her index finger. Her notes said in Japanese, “Kanbosuasu with two or three friends”. Miki comprehended the general intention of this segment of information. After discussion with the NS, it was assumed that Miki misheard “come
with us” for “kanbosuasu [kanbøsasu]” which was neither English nor Japanese.

No repetition of utterance took place in the following four pieces of information. For the fifth piece of information the NS said, “We will meet in front of Arume School”. Then the NS proceeded to the sixth piece of information by saying, “And leave Arume at nine twenty in the morning.” Miki consolidated the two pieces of information and wrote in Japanese, “Arume, nine twenty in the morning.” Miki’s understanding represented almost exactly what had been said.

After having heard the seventh piece of information, “We will leave Jasco at 4pm”, Miki signalled non-understanding by shaking her head, and said in Japanese, “I don’t know.” Her notes said in Japanese, “Jasco, 4 pi-en.” Stimulated recall revealed that her difficulty rested in the mishearing of “4pm” for “4 pi-en [pi-en]”. Finally, the NS informed Miki that “You can tell your parents that you will be home by six o’clock.” After the utterance was repeated twice, Miki wrote in her notes in Japanese, “going home at 16 o’clock.” Miki understood that she would go home at a particular time although, according to the stimulated recall, she did not know that this information was meant for her parents.

Example 11 (Miki’s notes)
1. (Nike shoes)
2. (Jasco [department store])
3. (Nago [place])
4. (Sunday, March 17th)
5. (1,600 yen)
6. (went to Jasco by car)
7. (Kanbosuasu with two or three friends)
8. , (Arume [place], nine twenty in the morning)
9. (Jasco)
10. (4 pi-en)
11. (going home at 16 o’clock)

### 4.2.2.4 Summary of Miki
Characteristic features of Miki’s task performance were identified. Firstly, Miki was more likely to remain silent and not to request repetition when she did not understand what had been said. She used “wait and see strategy” (Bremer, 1996 et al., 1996) until contextual cues or other non-verbal cues supplement her lack of linguistic knowledge, without explicitly indicating her non-understanding. Her implicit responses were once mistakenly regarded by the NS as non-understanding, even though she had in fact comprehended the utterance. Nevertheless, the NS in most cases appropriately recognized Miki’s implicit signals of non-understanding so that he repeated and elaborated the utterances where necessary. Other study (Bremer et al., 1996) also reports that implicit indications of non-understanding led to a series of reformulations of utterances by the speaker. Secondly, Miki tended to pay selective attention to individual known words and attempted to construct plausible meaning out of them. Her interpretation, based on selective attention to individual words, did not lead to critical misunderstanding, although she experienced minor misunderstanding. This is presumably because she was more cautious of making errors in interpretation while she remained silent. Thirdly, due to her limited L2 knowledge, she was more likely to rely on non-verbal cues to complete the sub-tasks. In some of the sub-tasks in Task A and Task B, in spite of the speaker’s repetition and elaboration, she did not understand what had been said. In most cases when Miki had troubles with comprehension, kinesics eventually contributed more to the completion of the sub-tasks than verbal interaction. Therefore, Miki’s listening processes included bottom-up processing (lexis) and top-down processing (inference, non-verbal information). Fourthly, in Task C, she performed far better than she did in Task A and Task B. The present study could not identify the specific reasons for the differences in task performance between Task A & B (considered to be the same type of task) and Task C. Fifthly, she was more likely to monitor her comprehension by moving the concrete referents (felt-made pictures). She did not explicitly check comprehension or clarify non-understanding verbally.

4.2.3 Jun (S7: Student 7)

Jun was classified as an intermediate level student within the cohort of the participants. His listening test score was ‘15’ (full mark: 20, mean: 13.37, SD: 2.99).
He held a STEP 4th grade certificate. The average Year 9 junior high school students were considered to hold a STEP 4th grade certificate. The questionnaire (Type 1) indicated that Jun felt that it was enjoyable to communicate with the native speaker. According to his English teacher, Jun actively participated in the communicative activities with the ALT, the native speaker in the classroom. He was, however likely to make careless errors in answering the quizzes in the class. Jun was nominated by his school teachers to go to the senior high school (Year 10 to Year 12). The students nominated by their school teachers for senior high school were generally considered to be well behaved students. Jun took Task B first, then Task A, and lastly Task C.

4.2.3.1 Jun: Task A

The observation indicated that Jun performed Task A with relative ease compared to Task B, although some false interpretations were identified. Shortly after the native speaker said for Sub-task 1, “The sun is shining in the sky”, Jun placed the sun in the sky. Similarly, in Sub-task 2, Jun spotted “a flying bird” and placed it in the sky. Then, after hearing, “Naomi is drinking coke through a straw”, Jun placed the coke bottle on the girl without any difficulty. Likewise, in Sub-task 4, Jun placed a pair of sunglasses on the boy shortly after hearing “You are wearing sunglasses.”

Jun, however, experienced great difficulty in Sub-task 5, while other participants did not have much difficulty with this sub-task. Immediately after the NS said, “You see a bird walking in the sand”, Jun requested the NS to repeat the preceding sentence. The NS repeated it, but Jun seemed not to have understood at all what was being said. Then the NS elaborated on the preceding utterance using different words and also enunciated it with clearer and slower speech. Jun activated his mental image and placed the boy (You) upside-down in the way it made sense to him. In response to the unexpected action, the NS again attempted to repeat and elaborate the previous utterance. In spite of repetition and elaboration, Jun appeared to be more confused. Finally, the NS gave up trying to provide verbal description. The NS then pointed with his hand at the
objects left, which had not been chosen, and at the same time said, “Maybe from one of other objects, you see a bird walking.” The NS’s gesture of “walking” was also shown to Jun. The gesture and pointing at the referents made Jun aware that he needed to choose the walking bird. However, stimulated recall indicated that Jun felt, on the basis of his world knowledge, it was strange to see a walking bird and attempted to make a reasonable interpretation in a way which made sense to him (Example 12).

Example 12 (Stimulated recall transcript)

012 Jun: (First I thought the bird was walking, but I felt this was strange. So I thought I was looking at [the bird].)
014 Jun: (If I was upside down, I thought I could see the flying bird.)
015 R: (You took walking for looking.)
016 Jun: (That’s right.)

The following five sub-tasks were comprehended by Jun without much difficulty, although many others had trouble with Sub-task 8, Sub-task 9, and Sub-task 10. For Sub-task 6, the NS asked, “Do you want to play beach ball or Frisbee?”, later followed by the NS’s gesture of “choosing either”. After that, Jun chose the beach ball right away. Sub-task 7 which said, “You stop playing beach volleyball” was instantly comprehended. Then, in the next sub-task, after the NS repeated a few times, “You ask your friend, Naomi, ‘Give me your drink.’”, Jun moved the coke bottle from the girl to the boy with no trouble. In Sub-task 8, after hearing, “Naomi says, ‘Let’s go swimming.’ But you say, ‘I can’t swim.’”, a sheet of paper asking Jun what he should choose to solve the problem in this situation was given to him. Immediately Jun spotted the float and then had the boy wear the float (many others had a problem with this sub-task). After that, however, Jun moved the girl to the sea and then moved the boy under a parasol. However, responding to stress on a key word, “And you go swimming, too” (italics indicate stress), Jun moved the boy to the sea. Afterwards stimulated recall revealed that if Jun was in that situation, he thought he would rest under the parasol because he could not swim. Jun intensively activated his interpretation in a way which made sense to him, but in many cases resulted in false interpretation.
In Sub-task 10, the NS said, “The dog takes your bag and runs away with the bag.” After hearing the utterance once, Jun moved the bag and the dog away from the beach. Since Jun understood this sub-task instantly without any repetition, while most of the others struggled to comprehend the meaning of “run away”, his comprehension was questioned. Stimulated recall, however, revealed that he paid selective attention to the known words, “dog” and “bag”, and interpreted these two in a way which made sense to him by utilizing the contextual cues even though he did not understand the meaning of “run away” (Example 13). This time his interpretation resulted in correct understanding.

Example 13 (Stimulated recall)
038 R: (So other students were confused in this sub-task, why did you understand it right away?)
039 Jun: (I thought the dog took away.)
040 R: (Why did you think so?)
041 Jun: (I heard “dog” and “bag”. So I thought the dog took away the bag.)
042 R: (Then, did you know the meaning of “run away”?)
043 Jun: (I didn’t know what was being said.)
044 R: (Then, you judged this in the context?)
045 Jun: (I judged it in the context.)

Lastly, a sheet of paper asking Jun how he should solve the problem in this situation was given and the extended conversation continued with the help of the researcher.

4.2.3.2 Jun: Task B

Like Kota and Miki, Jun was confused in Sub-task 1. After hearing, “There is a picture of the red sofa hanging on the door”, Jun paid selective attention to individual words in the utterance. Jun separately touched, one after another, the framed picture of the red sofa, the easel, the red sofa, and the door, which were directly or indirectly relevant to the preceding utterance. Therefore, the native speaker needed to clarify the differences between them. Once Jun recognized the concrete referent being referred to, he faced the problem of where it should be placed. The NS thus needed to repeat the location with some degree of stress by saying, “On the door” (italics indicates stress).
Sub-task 1 then was completed.

In the second sub-task the NS repeated twice, “You see a bird in the window” and then Jun instantly placed the bird in the window. Then, for Sub-task 3 the NS said, “The dog comes into the room.” Jun gave selective attention to the known word, “dog”, and placed it in the room. The NS then continued by saying, “The dog is playing with baby Aiko.” After several repetitions, Jun noticed that the dog and the baby were interrelated, and then they were placed closer. Jun was likely to pay selective attention to the individual known words. Sub-task 4, which said, “Another baby, Masako comes into the room”, was instantly comprehended.

The fifth sub-task confused Jun. After the NS repeated, “You shake hands with one of the babies”, later followed by repetition of the gesture of “holding hands”, Jun first attended to the known word, “baby”. Then he verbally echoed the unknown word, “shake”, with a rising tone. According to stimulated recall, what contributed to completion of this sub-task was the combination of the known words, “hand” and “baby”. Accordingly, Jun moved the baby closer to the boy’s (you) hand and this was accepted. Stimulated recall, however, revealed that Jun misinterpreted what had been said on the basis of his world knowledge that babies are generally held in the arms (Example 14).

**Example 14 ( Stimulated recall)**

<table>
<thead>
<tr>
<th>R</th>
<th>[Jun moves the baby closer to you (boy).]</th>
</tr>
</thead>
<tbody>
<tr>
<td>022</td>
<td>(Why did you move the baby closer to your (boy’s) hand?)</td>
</tr>
<tr>
<td>023</td>
<td>Jun: “” (Because I heard “hand”.)</td>
</tr>
<tr>
<td>024</td>
<td>R: (What would you do with hand?)</td>
</tr>
<tr>
<td>025</td>
<td>Jun: (I thought I would hold her in my arms. Because we generally hold the baby in our arms.)</td>
</tr>
</tbody>
</table>

In the following five sub-tasks, repetition of the utterances took place with high frequency. In Sub-task 6, the NS repeated the question, “Do you want to play with the babies or listen to the radio?”, later followed by a gesture of “choosing either”. Jun, in his confusion, imitated the NS’s gesture. After several repetitions, Jun understood what had been said. Sub-task 7, which said,
“You stopped playing with the babies”, was instantly comprehended.

In Sub-task 8, immediately after Jun heard the familiar word, “telephone”, he moved it into the room. In Sub-task 9, after having heard, “The postman comes to the door. He has a letter for you. What will you do?”, Jun received a sheet of paper asking him where he should go in this situation. After a few repetitions, Jun successfully placed the boy beside the mailbox. The NS then proceeded to the Sub-task 10 by saying, “You look inside the mailbox. You open the postbox.” What actually contributed to completion of this sub-task was Jun’s transfer of his knowledge of Japanese. That is, Jun thought that from the preceding utterance he heard the word “post” which held the same meaning in Japanese with “postbox” and also had similar sound with “postbox” (Example 15).

Example 15 (Observation transcript)
032 N: You look inside the mailbox. You look inside the mailbox. You open the postbox. You open the postbox.
033 Jun: Post( ) (Japanese, means the postbox. Jun touches the postbox.)
034 N: You find the letter inside.

In Sub-task 11, Jun received the directions which asked him what he would do in this situation. Decision-making was carried out by Jun and the extended conversation continued with the help of the researcher.

4.2.3.3 Jun: Task C

A great deal of requests for repetition took place during Task C. Informing Jun of the shopping plan started with confirming that Jun wanted to buy NIKE shoes. Then the native speaker first asked Jun whether he wanted to go to Jasco in Chatan or San-A in Nago. Like the other participants, Jun did not realize that he was being asked a question so he kept taking notes. Repetitions of the question made Jun aware that he needed to answer the question and he replied verbally, “Chatan”.
Then, for the second piece of information, the speaker said, “We will go on Sunday, March 17th.” Jun’s request for repetition was shown with his index finger accompanied by his verbalization, “One more.” Jun wrote in his notes in Japanese, “Sunday, May 17.” Stimulated recall revealed that Jun misunderstood “May” for “March”. Then, for the third piece of information, “You should bring 6,750 Yen.” Jun requested the NS to repeat it, using his index finger and saying, “One more.” After repetition, Jun attempted to reconstruct by mumbling what was said. A sufficient pause allowed Jun to make an attempt to recall what had been said. His notes demonstrated perfect comprehension of the words, “6,750 Yen”.

For the fourth piece of information the NS said, “We will go to Jasco using my car.” Jun requested repetition and wrote in Japanese, “Going by own car.” The NS continued by saying, “You can ask two or three friends to come with us.” Jun requested repetition again and then wrote in his notes in Japanese, “two or three friends.” Up to this point Jun appeared to comprehend approximately what had been said.

Jun reported in stimulated recall that he became unsure after the fourth piece of information. The NS combined the fifth and the sixth pieces of information by saying, “We will meet in front of Arume School. And leave Arume at nine twenty in the morning.” Jun requested repetition of these utterances. In this study, taking into consideration the participants’ language proficiency, one piece of information was provided directly after another. It was assumed that since two pieces of information were combined together, this made it more difficult for Jun to understand the utterances. This minor finding above led the researcher to make the further assumption that since, in normal conversation, multiple information is presented to the listener simultaneously, this would make L2 listening comprehension more difficult due to a non-native speaker’s limited cognitive load.

For the above two pieces of information, Jun wrote in his notes in Japanese, “School at eight in the morning.” Although, for other participants, these two pieces of information were provided
separately, there was no inadequate coherence between the two. Moreover, the native speaker and the researcher questioned why Jun wrote “eight o’clock” instead of “nine o’clock”, because the junior high school students generally had no trouble with one digit numbers. It was found in stimulated recall that Jun misheard the pronunciation of the preposition for “eight” as shown in Example 16.

Example 16 (N: Native speaker, R: researcher, stimulated recall transcript)

012 Jun: (I became unsure around this point on…come to school at eight in the morning) [5&6. Departure time and meeting place]
013 N: “I said, ‘nine twenty’.”
014 Jun: “” (Oh, “nine”.)
015 R: Probably I guess that “at [ə]” of “at nine” sounded like “eight”[eit].
016 Jun: (Yes, right, right.)

For the seventh piece of information the NS said, “We will go to Jasco at four in the afternoon.” After repetition of the utterance was requested by Jun, he wrote in his notes in Japanese, “four in the morning”. Stimulated recall revealed that Jun thought he would leave to go shopping at four o’clock, although he had already written, “eight o’clock” as departure time. As shown in Example 16, these two separate departure times made Jun more confused. Then, in the last information the NS said, “You can tell your parents that you will be back home by six o’clock.” This was repeated at Jun’s request and Jun wrote in Japanese, “buy six clocks”. Following the line of the discourse topic concerning shopping, Jun misinterpreted “by six o’clock” as “buying six clocks”.

Example 17 (Jun’s notes)

1. Buy Nike shoes
3. Sunday, May, 17th
4. 6,750 Yen
5. going by own car
6. two or three friends
7. school at eight in the morning
8. four in the afternoon
9. buying six clocks
4.2.3.4 Summary of Jun

Distinctive features of Jun’s listening task performance were identified. Firstly, Jun was more likely to make false interpretations on the basis of world knowledge when his linguistic knowledge was not sufficient. In other words, after making inferences about unknown or unfamiliar words, he could not correct his misinterpretation so that his interpretation resulted in critical misunderstanding. He actively participated in listening tasks, but activated interpretation at times resulted in misinterpretation. Secondly, he was more likely to pay selective attention to individual known words. In Task A and Task B, he completed some sub-tasks by attending to individual words, while other sub-tasks were not easily comprehended due to his lack of structural knowledge. Thirdly, he frequently gave explicit responses such as repetition of known words or requests for repetition. This may be because, as the questionnaire indicated, he enjoyed communication with the native speaker inside and outside the classroom. Fourthly, although a large amount of interaction was identified in Task A and Task B, a limited quantity of interaction took place in Task C.

4.2.4. Eri (S13: Student 13)

Eri was classified as intermediate level within the cohort of the participants. Her listening score was ‘14’ (full score: 20, mean:13.37, SD: 2.99). She had a STEP 4th grade certificate. According to her English teacher, Eri had been very actively involved in the communicative activities with the native speaker in the classroom. Eri was also active in her club activity. Moreover, Eri had had personal contact out of the classroom with an ALT (different from the ALT in this study) very intensively for about two months when she practiced for an English story-telling contest at which she represented her school. As the questionnaire (Type 1) indicated, she showed a strong interest in communicating with the native speaker in this study. Eri took Task A first, then Task B next, and lastly Task C.
4.2.4.1 *Eri*: Task A

A great deal of interaction between *Eri* and the native speaker took place throughout Task A. In Sub-task 1, immediately after the NS said, “The sun is shining in the sky”, *Eri* placed the sun in the sky. Stimulated recall indicated that she inferred “the sun” when she heard “the sky” and “shining”. Actually she did not hear “the sun”. Shortly after hearing, “You see a bird flying in the sky”, *Eri* completed Sub-task 2. Likewise, *Eri* instantly completed Sub-task 3 by placing the coke bottle on the boy.

In Sub-task 4, after hearing, “You see a bird walking in the sand”, *Eri* was confused for a moment. She paid selective attention to the known word, “bird”, and verbally echoed it. Stimulated recall revealed that *Eri* felt that it was strange to see a walking bird because she did not very often see birds walking in her residential area. *Eri*’s general image was that birds are “flying animal”. Next, for Sub-task 5 the NS said, “You are wearing sunglasses.” *Eri* paid selective attention to the familiar word, “sunglasses” and echoed it. This sub-task was instantly completed as well.

The first half of Task A was easily comprehended, but *Eri* came across difficulties in the second half. After the NS asked in Sub-task 6, “Do you want to play beach ball or Frisbee”, *Eri* echoed with the known word, “Frisbee” and chose it. After hearing “You stop playing with Frisbee”, Sub-task 7 was instantly comprehended.

For Sub-task 8 the NS said, “You are thirsty. There are no drinks in the icebox.” *Eri* attended selectively to the known word, “ice box”, and echoed it. Then, *Eri* picked up the sun oil, but as the NS kept repeating the utterance, “You ask Ken, ‘Give me your drink.’”, she didn’t place it on the board. Stimulated recall revealed that *Eri* misunderstood “sun oil” for “milk” and *Eri* thought that the girl was going to give “milk” to Ken because she understood there was no drink in the ice box. After several repetitions of the utterance, *Eri* successfully moved the coke bottle from the boy to the girl.
The NS, then proceeded to sub-task 9 by saying, “Ken says, ‘Let’s go swimming.’ But you say, ‘I can’t swim.’ What will you do?” A sheet of paper asking Eri what she would choose to solve the problem in this situation was handed to her. Although the NS stayed on the topic of swimming, Eri made a decision to play with the dog rather than to swim, on the basis of her own ideas about how she would act if she was in that context (Example 18). In Example 18, Eri replied, “Uh-huh”, but she actually did not understand what was being said. Repetition and elaboration such as “Oh, come swimming”, accompanied by the gesture of “inviting”, eventually led to the successful completion of this task.

Example 18 (Observation transcript)
026 N: You want to go swimming.
027 Eri: Uh-huh.
028 N: But you can’t swim.
029 Eri: (Eri chooses the dog.) Dog’s…play.
030 N: But your friend Ken says, “Oh, come swimming…come swimming.” And you want to go swimming. (N makes a gesture of ‘inviting’) How can you go swimming?

Eri struggled to comprehend Sub-task 10 the most. Eri paid selective attention to the known words, one after another, and attempted to combine these words to make a reasonable interpretation (Example 19).

Example 19 (Eri’s reprise is English, observation transcript)
034 N: When you are swimming, a dog comes onto the beach.
035 Eri: Dog. (Eri places the dog on the beach.)
036 N: And he takes your bag.
037 Eri: Bag. (Eri moves the bag beside the dog.)
038 N: He takes your bag. He runs away with your bag.
039 Eri: Runs...run away?
040 N: He runs away with your bag.
041 Eri: (Eri shakes her head.) No.
042 N: The dog takes your bag in its mouth. (N makes a gesture of “biting the bag”.)
043 Eri: Mouth?

Eri attended to the two known words, “dog” and “bag”, and moved them closer to each other.
However, she did not know what to do next with these two referents. The NS repeated the same sentence or phrase with some degree of stress on key words and also elaborated on these utterances with different expression. Moreover several gestures were utilized to help Eri to complete this sub-task. In spite of these non-linguistic and linguistic cues, Eri was more confused (as she explained later in stimulated recall) because she did not know the meaning of “run away”. Therefore Eri, in her confusion, gave up the first assumption that the bag and the dog were interrelated for unknown reasons, and then her interpretation resulted in the totally wrong story (she thought the dog released the bag when she attended to the words “out of” after hearing “It (dog) takes your bag out of the beach”). What eventually contributed to completion of this sub-task was the NS’s gesture of “going away” with his hand. After that, for Sub-task 11 Eri received a sheet of paper asking her how she would solve the problem in this situation. Eri gave her solution to the problem in the story and the extended conversation continued with the help of the researcher.

4.2.4.2 Eri: Task B

Eri performed much better in Task B than in Task A, although she reported that Task B was more difficult. Repetition and elaboration did not take place very frequently, due to her good performance. Unlike the others (Kota, Miki, Jun), in Sub-task 1 Eri spotted the framed picture of a red sofa immediately and placed it on the door successfully. In Sub-task 2, Eri placed the bird in the window without repetition. Likewise, in Sub-task 3, Eri spotted the dog instantly and placed it closer to the girl (you). Then Eri comprehended Sub-task 4 without repetition and moved baby Masako into the room. Stimulated recall revealed that she understood this task because of the name of the baby.

Up to Sub-task 4, Eri appeared to understand the literal meaning of what had been said without repetition, except for stress on location, “on the door” in Sub-task 1. However, in Sub-task 5, Eri was confused for a moment when the NS said, “You shake hands with one of the babies.” Eri repeated the word “shake” with rising intonation in order to ask a question. In response to this, the
NS repeated the word. Accordingly, Eri placed the baby beside the girl (you) and this was accepted. However, stimulated recall revealed that Eri did not fully comprehend what had been said. Eri attended to the known words, “baby” and “hand”, and then combined them so that they made sense to her. (Example 20)

Example 20 (Stimulated recall)

022 R:  (What did you think “shake hands” meant?)
023 Eri:  (I didn’t know.)
024 R:  (That’s why you said “shake”, isn’t it?)
025 R:  [Eri moved the baby beside the girl’s hand.] (Why did you place the baby beside your hand?)
026 Eri:  (I didn’t understand “shake”, but he said “hand”. So I thought I held the baby’s hand.)

In Sub-task 6, Eri instantly understood that she was being requested to choose the babies or the radio and this was comprehended without repetition. Sub-task 7, which said, “You stop listening to the radio” was comprehended immediately as well. In Sub-task 8, shortly after Eri heard, “The telephone rings”, she moved the telephone into the room.

In Sub-task 9, after hearing, “A postman comes to the door. He has a letter for you.”, Eri received a sheet of paper asking her where she should go in this situation. Eri paid selective attention to the known word, “door” and touched it. Then following a repetition of the preceding utterances, Eri successfully found the letter under the mailbox and was thus able to complete Sub-task 9 and Sub-task 10, while most of the participants had trouble with these two sub-tasks. Stimulated recall indicated that Eri gave selective attention to the known word, “letter”, and incidentally spotted the letter under the mailbox, although she did not understand what had been said. This was an incidental understanding. Then, after receiving a sheet of paper asking Eri whether she would stay with the babies or go out with her friend, she made her decision and the extended conversation continued with the help of the researcher.
Frequent requests for repetition took place throughout Task C. After confirming that Eri would buy NIKE shoes, the native speaker asked her whether she wanted to go to Jasco in Chatan or San-A in Nago. Like the other participants, Eri kept writing in her notes without responding to the question. After repetition of the same question, Eri responded verbally to it with, “Jasco.” Then, for the second piece of information the NS said, “We will go on Sunday, March the 17th.” Eri attempted to recall by mumbling what had been said. A sufficient pause allowed Eri time to reconstruct the preceding utterance. The NS repeated the same information in response to Eri’s request which indicated, “Once more”, shown with her index finger. Eri wrote in Japanese, “going on 27th, Sunday.”

For the third piece of information the NS then said, “You should bring 6,750 Yen.” Following a request for repetition with her index finger, the NS repeated it. Still, Eri did not know what had been said. The NS again repeated the information in response to her request. However, she had no idea of what had been said, and eventually the NS abandoned further effort to make her comprehend the information and proceeded to the next piece of information. Thus, no note-taking for this information took place. Then, for the fourth piece of information the NS said, “We will go using my car”, and added, “And you can ask two or three friends to come with us.” Eri wrote in her notes in Japanese, “getting in Jason’s car and taking two or three friends.” This time Eri comprehended approximately what had been said.

In the following four pieces of information conveyance, several ‘continual signals’ (Rost & Ross, 1991), informing the native speaker that he could continue to speak, were identified. They were mainly demonstrated by the verbalization of understanding, “O.K.” For the fifth piece of information the NS said, “We will meet in front of Arume School.” Eri showed no continual signal. After a short pause, the NS added, “And leave Arume at nine twenty in the morning.” These two pieces of information were repeated at Eri’s request and Eri showed understanding with the continual signal, “O.K.” Eri combined the two pieces of information and wrote in Japanese,
“meet at Arume at nine in the morning.”

The NS then conveyed the seventh piece of information, “We will leave Jasco at four in the afternoon.” Eri responded to this with “O.K.” and wrote in her notes in Japanese, “We are at Jasco in the afternoon.” Finally, the NS informed Eri that “You can tell your parents that you will be home by six o’clock.” Eri’s notes, which said, “coming back by six”, captured the gist of the information.

Example 21 (Eri’s notes)
1. buying Nike shoes
2. Jasco[department store]
3. going on 27th, Sunday
4. getting in Jason’s car and taking two or three friends
5. meeting at Arume[place] at nine in the morning
6. We are at Jasco in the afternoon
7. coming back by six

4.2.4.4 Summary of Eri

There were distinctive features of listening performance for Eri. Firstly, Eri was more likely to give explicit backchannelling cues to the speaker. She frequently demonstrated her understanding with her feedback to the speaker. In other words, her listening strategies were remarkably collaborative in that her backchannelling cues enabled the speaker to backtrack her comprehension. Secondly, related to the previous feature, backchannelling cues for Eri included mostly repetition of a single word or the questioning of a particular word in the preceding utterance. This indicates that she was likely to pay selective attention to a single known word so that she hardly processed acoustic input at the structural level. Thirdly, relevant to backchannelling cues, about half of her indication of understanding resulted in false interpretation (see Section 5.2.18). The observation suggested that to a great extent she understood the utterances, yet, stimulated recall revealed that her interpretation in some cases led to misunderstanding. Although her backchannelling cues
were very collaborative and responsive to the speaker, it was hard to identify whether the backchannelling cues indicated her understanding or her unwillingness to interrupt the speaker. Fourthly, she was more likely to rely on world knowledge or personal experience when her linguistic knowledge was not sufficient to complete the task. Inferences based on her background knowledge resulted in false interpretation as well. Thus, her listening comprehension processes included in varying degrees, both bottom-up processing (lexical level) and top-down processing (background knowledge, inference).

4.2.5 Risa (S18: Student 18)

*Risa* had the highest language proficiency among the female students. *Risa* (Year 9) held a STEP 3rd grade certificate, which was generally held by Year 10 or Year 11 students at senior high school. *Risa*’s listening test score was ‘17’ (mean: 13.37, SD: 2.99, maximum: 18). She practiced Judo (a martial art) and achieved good results in Judo tournaments. For this reason, she was nominated by her school teachers to go to a prestigious private senior high school, without sitting for the entrance examination. According to her English teacher, she actively participated in communicative activities with the native speaker in the classroom. On the other hand, due to her cautious personality, she was more likely to seek the perfect answer in order to avoid the careless mistakes in her English class. *Risa* reported in her follow-up interview that she felt nervous in a face to face situation with a stranger, even while participating in Judo tournaments in one to one contact. Likewise, *Risa* reported that she felt nervous about engaging in the listening tasks with the native speaker. *Risa* took Task A first, then Task B, and lastly Task C.

4.2.5.1 Risa: Task A

The first five sub-tasks were easily comprehended and repetition did not take place (except Sub-task 4). *Risa* reported in stimulated recall that she understood the literal meaning of what had been said on some of the sub-tasks of Task A and Task B. The observation of task performance
also revealed that Risa understood the literal meaning without assistance from listening strategies or the speaker’s listening cues such as gestures and repetition. Therefore, it was assumed that a part of Risa’s listening comprehension was automatically processed. Thus, her comprehension was partially unavailable to the listener’s consciousness and the researcher’s observation (Cohen, 1998).

In Sub-task 1, shortly after hearing the utterance, Risa placed the sun in the sky. In Sub-task 2, Risa instantly placed the bird in the sky. Likewise, in Sub-task 3, Risa placed the coke bottle on the boy. In Sub-task 4, Risa was confused for a while after hearing, “You are wearing sunglasses”, although for the other participants this sub-task was the easiest because “sunglasses” are a familiar Japanese word. Then, the native speaker repeated the previous utterance by adding the words, “on your face”. Accordingly, Risa placed the sunglasses on the face of the girl. Stimulated recall revealed that although Risa understood the meaning of sunglasses, she could not make a decision as to what to do with the sunglasses, presumably because she did not know the meaning of “wear”.

Risa came across some difficulties in the following five sub-tasks. In Sub-task 6, the question as to whether she would choose the Frisbee or beach volleyball was repeated twice before Risa made her choice. Sub-task 7, which said, “You stop playing beach volleyball”, was comprehended instantly. In Sub-task 8, the utterance, “You ask your friend, Ken, ‘Give me your drink.’” was repeated several times. After repetition without other listening cues, Risa successfully moved the coke bottle from the boy to the girl. Then, in Sub-task 9, after hearing, “Ken says, ‘Let’s swim.’ But you say, ‘I can’t swim.’”, Risa received a sheet of paper asking her what she should choose to solve her problem in this situation. After one repetition, Risa completed this task by having the girl wear the float.

In Sub-task 10, after hearing, “A dog takes your bag.”, Risa appeared to be confused. Stimulated recall revealed that, in spite of her understanding of the utterance, Risa’s confusion was caused by her indecisiveness about whether she should move the dog beside the bag, or move the bag beside
the dog. The native speaker reported afterwards that Risa appeared not to comprehend this, therefore the NS elaborated on the previous utterance, accompanied by the gesture of “taking the bag and running away.” The gesture of “running away” and repetition of the description continued until eventually repetition and gestures contributed to completion of this sub-task. The observation revealed that, in spite of her understanding, due to her cautiousness Risa was still concerned that her interpretation was inappropriate (Example 22). Moreover, stimulated recall revealed that Risa understood the literal meaning of what was being said, but she was not sure that she could move the dog and the bag off the board, which was supposed to be a beach scene, because the directions in the beginning said, “The story takes place on the beach.” Indecisiveness, which the NS misunderstood as non-understanding, may have been due to Risa’s cautiousness. In Sub-task 11, after receiving the directions, the extended conversation continued with the help of the researcher.

Example 22 (Observation transcript)
026 N: It runs off the beach.
027 N: [Risa is thinking.] The dog and the bag are on the beach now. But it runs off the beach. [N makes a gesture of ‘running away’.]
028 Risa: (Oh, I see.) [Risa holds the bag and the dog and is thinking.]
(Where shall I move them?)
029 N: It runs away. It runs off the beach. [Risa moves the bag and the dog out of the beach.]
30 Risa: (I wonder if this is all right.)

4.2.5.2 Risa: Task B

The first four sub-tasks were relatively easily comprehended without repetition of the utterances. In Sub-task 1, unlike the others (Kota, Miki, Jun), Risa instantly spotted the framed picture of the red sofa and placed it precisely on the door. Then, in Sub-task 2, Risa readily placed the bird in the window as well. Likewise, in Sub-task 3, Risa placed the dog beside the baby shortly after hearing the utterance. Then, in Sub-task 4, Risa moved baby, Masako instantly.

In Sub-task 5, after the NS repeated, “You hold the hand of one of the babies”, Risa placed the baby
beside the girl. Generally the NS had accepted this gesture as indicating understanding of this task. However, the NS asked *Risa* for a more precise understanding, judging from her facial expression (Example 23). In the example, the NS’s listening cues were “triggered” (Pica, 1991) by the listener’s sign of non-understanding. After repetition of a few utterances, what eventually contributed to the completion of this sub-task was the NS’s gesture of “holding hands”.

Example 23 (N: Native speaker, R: Researcher, stimulated recall transcript)

020 R: “How did you know she was not sure?”
021 N: “Oh, hesitation.”
022 R: “Oh, you saw her hesitation on her face.”
023 R: [*Risa* is thinking during the task.] (What were you thinking then?)
024 Risa: (I was wondering what I should do with the baby.)
025 R: (How did you figure out what you had to do?)
026 Risa: [I got it by looking at Mr. Jason’s gesture. I was wondering whether I should hold the baby’s hand or hold the baby [in my arms].] ([Mr. Jason made a gesture of holding the hand.] So I thought I should hold the baby’s hand.)
027 R: (So you found out what you should do when you looked at his gesture?)
028 Risa: (Yes.)

The NS’s misunderstanding of *Risa*’s behavior was also identified in Sub-task 6. After the NS asked *Risa* whether she wanted to play with the babies or listen to the radio, she appeared to be confused. After a long pause, *Risa* completed this sub-task. Although the observation suggested that *Risa* understood what had been said, the thinking process which took place in her mind was more complicated (Example 24).

Example 24 (R: Researcher, N: Native speaker, stimulated recall transcript)

029 R: (Why were you confused here?)
030 Risa: (I understood that I was asked whether I would play with the babies or listen to the radio. So I wanted to play with
the babies. But I was confused how I could express to play with the babies [by moving the baby’s felt-made picture]).

031 R: What did you think then?
032 N: I thought she was trying to answer me.
033 R: You mean with her own words?
034 N: Because normally whenever she does that, she is trying to converse on that down. Normally, she associated with that, trying to verbalize. I thought she was trying to.

035 R: (Why did you choose the radio at that time?)
036 Risa:

(I didn’t know how to express “playing with babies” [with the picture to be selected]. So I chose the radio instead.)

Sub-task 7, which said, “You stop listening to the radio”, was instantly comprehended. Then in Sub-task 8, Risa moved the telephone quickly. In Sub-task 9, after Risa heard, “The postman comes to the door. He has a letter for you”, she received the directions. Risa then instantly moved the girl beside the mailbox. Next, in Sub-task 10, after repetition of the description, Risa understood the literal meaning of what was being said, and spotted the letter under the mailbox. In Sub-task 11, a sheet of paper about her decision-making was provided for Risa, then the extended conversation continued with the help of the researcher.

4.2.5.3 Risa: Task C

The observation of Risa’s listening performance in Task C showed a lack of confidence. When the NS confirmed whether or not Risa wanted to buy NIKE shoes, she asked herself, “Is he asking a question?” After that, the NS provided the first piece of information, and Risa attempted to recall by mumbling what had been said and again asked herself, “Is he talking about time?” She wrote down in Japanese, “Sunday, 17:00.” Then the NS asked Risa whether she wanted go to Jasco or San-A and she verbally responded to this. The NS then said for the third piece of information, “We will meet in front of Arume School.” Risa again attempted to recall by mumbling and wrote in Japanese, “Arume school.” Stimulated recall revealed that Risa understood that this meant the meeting place. After the fourth piece of information was provided,
Risa wrote in her notes in Japanese, “going at nine twenty”, which was approximately what had been said.

After hearing the fifth piece of information, “We will leave Jasco at 4pm”, Risa was confused because she misheard, “pm”. The NS’s comprehension check made Risa more confused and she expressed her emotional state, “Oh, I am nervous”. According to stimulated recall, Risa attempted to maintain discourse coherence more than any other participant (Example 25). That is, Risa attempted to combine separate pieces of information in a way which would form a reasonable interpretation for her as a shopping appointment, while the others attended to individual pieces of information without being concerned about the discourse (for example, Jun wrote different departure times even though they were not coherent in the whole discourse.).

Example 25 (Stimulated recall transcript)
018 Risa: …
   (…But
   in this task, I needed to be concerned about what I heard first as well as the following
   information. This made me more and more confused.
019 R: 
   (Can you tell me in more detail on what occasions this took
   place?)
020 Risa:
   (For example, after
   hearing Sunday in the beginning, I had to connect it with what time which was spoken later.
   So this made it difficult for me to write down what I heard.)

After hearing the sixth piece of information, “You can tell your parents that we will be back by six
o’clock”, Risa requested repetition and wrote in her notes in Japanese, “coming back at six.” Then,
after hearing the seventh piece of information, Risa wrote in Japanese, “going by Jason’s car, going
to Jasco with two or three friends”, which approximately replicated what had been said. Lastly,
Risa’s notes said, in Japanese, “6,700 Yen”, close to the “6,750 Yen” which was actually referred to.

Example 26 (Risa’s notes)
1. Sunday
2. 17:00 o’clock
3. Arume school
4. going at nine twenty
5. four o’clock
6. coming back at six
7. going by Jason’s car
8. going to Jasco[department store] with two or three friends
9. 6,700 Yen

4.2.5.4 Summary of Risa

*Risa* demonstrated some characteristic features of listening comprehension. Firstly, because she understood for the most part the literal meaning of the utterances, a part of her listening comprehension was automatically processed. Thus, some of her listening comprehension processes were unavailable to her consciousness or to the researcher’s observation. However, it was assumed that she needed to rely mainly on controlled processing during Task C because she had difficulty with this task. Secondly, she in part paid selective attention to individual words or relied on repetition of the utterances to complete some sub-tasks. This suggests that her listening processing took place partially at the structural level, as well as at the lexical and phrase level. Thirdly, gestures were conducive to completion of some sub-tasks. That is, she needed to rely on extralinguistic cues to compensate for a lack of linguistic knowledge. Fourthly, what was indeed characteristic of her listening processes was cautiousness and indecisiveness. Due to cautious interpretation, she did not have any misunderstanding. Indecisiveness took place because, according to her follow-up interview, she was nervous in a face to face situation with the native speaker. Finally, similar to other participants, in Task C interaction between the speaker and *Risa* did not take place very often, while a great deal of interaction took place in Task A and Task B.

4.2.6 *Yuji* (S11: Student 11)

*Yuji* (Year 9) was the highest level student within the cohort of participants. He held a STEP 3rd grade certificate which generally Year10 and Year11 students held. His listening score was “18”, the highest in the population (mean: 13.37, SD: 2.99, full score: 20) and had confidence in his scholastic achievement. *Yuji* was nominated by the school teachers to go to the most prestigious
senior high school, Kaiho Senior High School in Okinawa Prefecture which his sister also attended. Yuji had gone to private preparatory classes after school almost daily on weekdays since he began elementary school (in Japan private preparatory classes generally aim to provide tutoring for school subjects or prepare students for entrance examination). His parents were very enthusiastic about their children’s education. However, in spite of his high scholastic achievement, according to his English teacher, he did not actively participate in the communicative activities with the ALT. Nonetheless, he indicated in the questionnaire (Type1) that he felt it was enjoyable to communicate with the ALT. Yuji took Task B first, then Task A, and finally Task C.

4.2.6.1 Yuji: Task A

Yuji for the most part understood the literal meaning of the utterances. Even when he misinterpreted the utterances, Yuji’s interpretation resulted in completion of the sub-task (Sub-task 5). From Sub-task 1 to Sub-task 4, Yuji instantly understood the literal meaning of what had been said. In Sub-task 5, Yuji waited for a moment (roughly a few seconds) then, after the NS’s repetition of the utterance, he quickly completed the sub-task. The observation did not reveal a major problem with his performance in Sub-task 5. However, stimulated recall later indicated that Yuji misinterpreted the utterance but incidentally chose the appropriate referent by using contextual cues and “good guessing” (Rubin, 1975), as shown in Example 27.

Example 27 (Stimulated recall transcript)

013 R:  (It took you a little time to find the bird. Why?)
014 Yuji:
  (I understood the meaning, but I was looking for where the bird was.)
015 R:  (What kind of bird were you looking for?)
016 Yuji:
  (I couldn’t hear “walking” at that time, but he said, “in the same”. So it was in the same place.)
017 R:  (Oh, you took “sand” for “same”.)
Yuji understood almost perfectly the literal meaning of the following five sub-tasks. In Sub-task 6, he verbally responded to the ‘which-question’, “I want to play Frisbee.” Then, Sub-task 7 was instantly comprehended. In Sub-task 8, Yuji considered for a moment, and following a repetition, he placed the coke bottle on the boy. Next, shortly after hearing, “Naomi says, ‘Let’s go swimming.’ But you say, ‘I can’t swim.’”, Yuji had the boy wear the float. Thus, a sheet of paper asking Yuji to choose the float was not given, since he had completed in advance the task which was requested in the written directions. Likewise, in Sub-task 10, after hearing the utterance only once, Yuji moved the dog and the bag off the beach, while most of the participants had problems with their understanding of moving the dog and the bag off the beach. Then a sheet of paper asking him for his own solution to the problem in this situation was given to Yuji and the extended conversation continued in English.

4.2.6.2 Yuji: Task B

Yuji for the most part understood the literal meaning of what had been said. It was assumed that most of his listening was automatically processed. Thus, many of his listening processes were unavailable to stimulated recall or the researcher’s observation. Yuji relied on his linguistic knowledge more than any other participant, while the others in some cases relied on contextual, extralinguistic, and paralinguistic cues. In Sub-task 1, shortly after he heard the utterance, Yuji placed the framed picture of the red sofa on the door. As mentioned beforehand, when Yuji was asked in stimulated recall how he understood this sub-task, he simply answered, “I understood everything.” Thus there was no further clue to identify his listening process in some of sub-tasks. Sub-tasks 2, 3, and 4 were instantly comprehended without difficulty. In Sub-task 5, after the NS’s repetition of the preceding utterance, Yuji moved the baby closer to the boy’s hand and this was accepted. However, stimulated recall revealed that Yuji mistakenly thought that he held the babies up with his arms.

The following five sub-tasks were also easily comprehended. After hearing, “Do you want to
listen to the radio, or play with the babies?”, *Yuji* chose “baby”. Stimulated recall indicated that, unlike the others, *Yuji* interpreted this beyond the sentence meaning of the question that had been asked (Example 27).

**Example 28** (Stimulated recall transcript)

027 R: (Why did you pick up the baby here?)

028 *Yuji*: (It’s because I thought if I listened to the radio, it was too noisy to take care of the babies.)

029 R: Oh, he chose the baby because listening to the radio disturbs babysitting.

030 N: Wow, you understand very well. Sugoi (unbelievable).

Sub-task 7 and Sub-task 8 were easily completed as well. In Sub-task 9, although most of the participants had trouble with understanding this sub-task, *Yuji* instantly moved the boy beside the mailbox to receive a letter without extra support from the speaker. Likewise, in Sub-task 10, *Yuji* understood the literal meaning of what had been said, and then successfully spotted the letter under the mailbox. After that, a sheet of paper asking *Yuji* whether he would stay with the babies or go out with his friend was given to *Yuji* and he responded to the extended conversation in English.

**4.2.6.3 *Yuji*: Task C**

*Yuji* did not perform better in Task C than in Task A and Task B. He did not give many backchannelling cues during Task C, but gave frequent continual signals (Rost & Ross, 1991) to the native speaker in the form of “O.K.” That is, after taking notes of the individual pieces of information, *Yuji* was likely to show understanding by saying, “O.K.”, to inform the NS that the NS could proceed to the next piece of information.

Firstly, when *Yuji* was asked if he wanted to buy shoes, he rejected the NS’s proposal saying, “I don’t want shoes.” Then, after hearing, “We will go on Sunday, March the 17th”, *Yuji* wrote in Japanese, “Morning of Sunday”, which partially matched the utterance. Next, *Yuji* was asked where he would go shopping, but he continued to take notes without responding. This question
was carried over to the fourth piece of information. The third piece of information, as to the meeting place, was not written down because Yuji judged for himself that this information was not important, although it was actually an important message. After confirming the shopping place again, for the fourth piece of information the NS said, “We will leave Arume at nine twenty in the morning” and Yuji wrote the two numbers, “9,12”. Stimulated recall revealed that Yuji actually did not understand what these two numbers represented.

Yuji started to tune into the task and showed high comprehension of the following four pieces of information. After hearing the fifth piece of information, Yuji wrote in Japanese, “coming back at four”, which was close to what had been said. Then, after hearing the sixth piece of information, Yuji wrote in Japanese, “coming back by six.” Yuji indicated in stimulated recall that this message was meant for his parents. He was the only one who understood the word “parents”. Yuji’s notes for the seventh piece of information, which said in Japanese, “going with friends by car” were again almost what had been said. Finally, after hearing the eighth piece of information, Yuji requested a repetition for the first time in the entire task performance, and wrote in Japanese “shoes at the price of 6,750 Yen”, which was perfectly correct.

Example 29 (Yuji’s notes)

- morning of Sunday
- Chatan[place] or Nago[place]
- 9, 12
- coming back at four
- coming back by six
- going with friends by car
- shoes at the price of 6,750 Yen

4.2.6.4 Summary of Yuji

There were characteristic features of Yuji’s listening performance. Firstly, as he mostly understood the literal meaning of the utterances, his listening comprehension was to a great extent automatically processed while engaging in Tasks A & B. Hence, his listening comprehension
hardly came to his attention, due to unconscious processing. However, it was assumed that he needed to rely occasionally on controlled processing to complete Task C, because he had difficulty with this task. Secondly, he mainly relied on linguistic knowledge to comprehend the utterances. Thus, non-linguistic cues contributed to comprehension of the text to a small content. Yuji processed acoustic input at the sentence level, while the other participants for the most part processed acoustic input at the lexical and phrase level. Yet reliance on linguistic knowledge twice resulted in false interpretation. Thirdly, irrespective of misinterpretation, Yuji successfully completed the sub-tasks. It was assumed that he used every available contextual cue and good guessing to complete the sub-tasks. These characteristics were in part consonant with those of good listeners identified in Rubin’s study (1975). Fourthly, in spite of high listening performance in Task A and Task B, Yuji did not perform better in Task C. According to the observation, he did not take notes of one important message included in Task C. Also he did not ask questions of the speaker, even though he may not have understood the utterances well. This study could not identify the specific reasons for Yuji’s poor performance in Task C.

4.3 SUMMARY

The participants in this study were all classified as basic level learners according to the ACTFL listening guidelines (1999). All the participants, as basic level learners, had in common similar features of listening comprehension. On the other hand, individual participants demonstrated idiosyncratic features of listening comprehension on the basis of language proficiency, affective factors, social relationship (Japanese learner vs. native speaker of English), and background knowledge. Distinctive features of listening comprehension derived from gender difference were not identified in this study.

The participants were more likely to pay selective attention to an individual known word(s) and to combine them in a way that made sense to the participants. Most of the participants did not have sufficient structural knowledge to process whole sentences. Therefore, they tended to interpret the acoustic input at the word or phrase level. When the tasks requested them to choose a particular
concrete referent, selective attention to an individual word(s) contributed to the successful completion of the task. However, when the tasks demanded that they comprehend the whole sentence or several sentences, they were likely to come across difficulties. “Beginning learners, lacking a critical mass of lexical knowledge, are forced to allot most of their attention to specific word meanings and parsing the input into basic constituent structure” (Rost & Ross, 1991, p.262). In other words, selective attention to an individual word(s) is similar to “segmentation” (Peters, 1983; Pica et al., 1996), whereby learners can extract content words from prior utterances for isolation or incorporation into a follow-up response.

When the participants had difficulties with understanding of the utterances, non-linguistic cues such as gestures and visual aids (pictures) were in most cases conducive to comprehension of what had been said.

The native speaker attempted to accommodate listening problems with modified interaction. Repetition appeared to be the most effective speech modification for the junior high students in this study. On the other hand, the speaker’s elaboration containing redundant information was not so effective for the participants, presumably due to additional processing of the acoustic input. Paralinguistic cues provided by the speaker, mostly in the form of phonological stress, contributed to comprehension when the stress was on key word(s).

Interpretation of the same utterances varied from one participant to another. Many had “slips of the ear”. Although the participants heard the same text, their interpretation varied depending on their personal background knowledge. The meaning may not be in the text, but may be something which is be constructed by the listener, based on different knowledge sources (Buck, 1995). When the participants lacked linguistic knowledge to comprehend the utterances, interpretation derived from personal experiences and knowledge compensated for this. However, stimulated recall revealed that interpretation based on personal experiences and knowledge in most case resulted in misunderstanding. For example, when the participant (Jun) was not aware of
contradictions in the course of listening, misinterpretation continued and resulted in a critical mistake. Peterson (2001, p.91) argues that poor listeners “are less able to revise their schemata when faced with contradictory information.” On the other hand, the good listener (Yuji) noticed contradictions in his interpretation in the course of listening by utilizing contextual cues and ‘good guessing’ (Rubin, 1975), and then successfully completed the task. Background knowledge positively contributed to comprehension, but also at times interfered with comprehension.

High level students (Yuji, Risa) for the most part automatically processed the acoustic input by understanding the literal meaning of the utterances. Automatic listening processing was unavailable to the listener’s consciousness or the researcher’s observation. However, it was assumed that these high level students needed to rely on controlled processing during Task C performance, because they sometimes had difficulties with comprehension of Task C. Generally, for most of the participants in this study, listening comprehension included controlled processing. That is, listening was consciously processed with some degree of linguistic or non-linguistic support from the speaker, the context or the listener’s strategies. Controlled processing was accessible to the participant’s report and the researcher’s observation.

Affective factors influenced listening comprehension. Nervousness (Kota, Risa) distracted concentration on listening and then led to poor performance or misunderstanding by the speaker. On the other hand, cautiousness (Risa, Miki) did not lead to critical misunderstanding. Risa in particular attempted to maintain coherence of the information in Task C, while the others were not much concerned about the coherence of the whole discourse. Further, the active listener (Eri), who had had personal contact with another native speaker, sometimes made misinterpretation even though she frequently provided backchannelling cues. On the other hand, the less active listener (Miki), who often remained silence, conveyed implicit signals of non-understanding to the speaker. When the listener did not indicate appropriate signs of understanding, the speaker sometimes did not make the most of the listener’s signs to facilitate listening comprehension. Although the interests and motivation of listeners have been shown to be crucial for listening comprehension
(Brown & Yule, 1983; Anderson & Lynch, 1988), this study could not examine the extent to which the interests and motivation of the listeners affect listening comprehension. As the native speaker and researcher were present with the participants, and as the interaction and students’ reports were also recorded, all the participants were considered to have actively participated in the listening tasks.

The social relationship between the listeners and the speaker also affected listening comprehension. The participants (Risa, Miki) reported in their interviews that they felt nervous about interacting with the native speaker of English. Furthermore, familiarity with the native speaker prompted Eri to provide frequent backchannelling cues. However, a significant effect of gender on listening comprehension was not identified in this study.

There were obvious differences of listening performance according to task type. In Task A and Task B, a large quantity of interaction between the speaker and the listener was identified, while in Task C a limited amount of interaction took place. Many variables such as distractors, amount of visuals aids, gestures, and repetition appeared to affect differences in the participants’ performance according to listening task type. Difficulties with respect to task type will in great deal be discussed in the next chapter.

In summary, both bottom-up processing and top down processing took place for all the participants. Automatic processing and controlled processing of the listening input seem to depend on language proficiency and task (text) difficulty. Interpretation of the listening text varies from one listener to another, therefore the listeners’ mental images appeared to be very personal and idiosyncratic. Affective and social aspects affect listening comprehension processes as well. L2 listening comprehension is a fairly complex process. Therefore it needs to be accounted for by many variables such as the listener’s linguistic knowledge, past experiences, familiarity with a native speaker, the speaker’s listening cues, context, text type, current feelings, status difference, and intelligence.
4.4 OVERVIEW OF CASE STUDIES

Table 4.1 below sets out a summary of the major findings as related to research foci and cross-referenced against each of the individual participants in the study.

<table>
<thead>
<tr>
<th>1. Features of bottom-up listening processing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kota</strong> (S4) low level male</td>
</tr>
<tr>
<td>• was likely to pay selective attention to individual known words.</td>
</tr>
<tr>
<td>• hardly processed large chunks of acoustic input at the sentence level or even at the phrase level.</td>
</tr>
<tr>
<td>• sometimes used paralinguistic cues to complete the tasks.</td>
</tr>
<tr>
<td><strong>Miki</strong> (S14) low level female</td>
</tr>
<tr>
<td>• tended to pay selective attention to individual words.</td>
</tr>
<tr>
<td>• lacked the basic linguistic knowledge for listening comprehension.</td>
</tr>
<tr>
<td><strong>Jun</strong> (S7) intermediate level male</td>
</tr>
<tr>
<td>• was likely to pay selective attention to individual known words.</td>
</tr>
<tr>
<td>• did not easily understand some sub-tasks due to a lack of structural knowledge.</td>
</tr>
</tbody>
</table>
### 1. Top-down listening processing

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| Eri (S13) | intermediate female | • was likely to pay selective attention to individual known words, thus likely to process the utterances at lexical level.  
• sometimes understood the literal meaning of the utterances. |
| Yuji (S11) | high level male | • was likely to process a larger segment of the utterances (at the sentence level).  
• mostly comprehended the literal meaning of the utterances so that he was likely to process the utterances unconsciously (automatic processing). |
| Risa (S18) | high level female | • comprehended the literal meaning of the utterances so that a part of listening comprehension was processed unconsciously (automatic processing). On the other hand, sometimes needed to pay selective attention to individual words (controlled processing). |

### 2. Features of top-down listening processing

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| Kota | low level male | • was likely to construct the interpretation based on his prior experiences, but this in most cases resulted in making false interpretations.  
• often used visuals to compensate for a lack of his linguistic knowledge. |
| Miki | low level female | • often relied on the speaker’s gestures and visuals to comprehend the utterances. |
| Jun | intermediate male | • was likely to make false interpretation based on his world knowledge and past experiences. |
| Eri | intermediate female | • was likely to rely on world knowledge or personal experiences.  
• often received support from visuals and the speaker’s gestures. |
| Yuji | high level male | • used contextual cues or co-text information to correct his errors in comprehension.  
• activated a variety of background knowledge, and this led to successful completion of the listening tasks. |
| Risa | high level female | • sometimes needed to rely on the speaker’s gestures or visuals to comprehend the utterances. |

### 3. Distinctive listening strategies use to complete listening tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| Kota | low level male | • was likely to monitor his comprehension by moving the concrete referents rather than using verbal strategies.  
• sometimes simply repeated previously known words.  
• mainly relied on the speaker’s gestures and visual aids to understand the utterances. |
| Miki | low level female | • did not very often clarify comprehension problems with listening.  
• was likely to use implicit strategies and waited for contextual cues or other non-verbal cues to supplement her lack of linguistic knowledge. |
### 4. Interactive features of listening with the native speaker

| **Jun**    | Intermediate level male | - frequently gave explicit indication of understanding or non-understanding of the utterances while engaging in the tasks.  
|            |                          | • often inquired about unknown words or requested repetition.  
|            |                          | • made frequent inferences based on world knowledge.  
| **Eri**   | Intermediate level female | • frequently requested repetition when she did not understand what had been said.  
|           |                          | • often responded to individual known words verbally.  
|           |                          | • showed a greater variety of strategies use than any other participant.  
| **Yuji**  | High level male | • did not demonstrate the use of various strategies because he had few problems with the listening tasks. Thus, most of his unconscious listening strategies use was not available for the investigation.  
| **Risa**  | High level female | • often requested repetition or clarified unknown words.  
|           |                          | • unconfidently repeated the previous words or murmured them.  

| **Kota**  | Low level male | • mainly received much support for listening from speaker’s gestures and paralinguistic cues or visual aids such as concrete referents.  
|           |                | • did not very often request repetition and clarify unknown utterances.  
| **Miki** | Low level female | • in most cases did not request repetition. However, her signals of non-understanding were perceived properly by the speaker.  
| **Jun**  | Intermediate level male | • had a plenty of interaction with the speaker.  
|           |                          | • frequently requested repetition or clarified unknown utterances.  
| **Eri**  | Intermediate level female | • had a larger amount of interaction with the speaker.  
|           |                          | • provided frequent backchanneling cues to indicate that she was following the speaker, so that the interaction was collaborative.  
| **Yuji** | High level male | • had less frequent repetition of the utterances because he understood most of the literal meaning.  
|           |                          | • did not very often attempt to clarify what he did not understand.  
| **Risa** | High level female | • felt nervous about communicating with the native speaker, so that her lack of confidence interfered with listening comprehension.  
|           |                          | • actively clarified her comprehension problems or requested repetition.  

### 5. Problems with completion of listening tasks

| **Kota**  | Low level male | • was, in the initial stage, too nervous to concentrate on what had been said. This led to many errors in understanding.  
|           |                | • lacked basic linguistic knowledge to understand what had been said.  

### Chapter Four: Description of Results

#### 6. Features of listening according to task type differences

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Gender</th>
<th>Task A and B</th>
<th>Task C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kota</strong></td>
<td>low level</td>
<td>male</td>
<td>had a large quantity of interaction</td>
<td>had less interaction</td>
</tr>
<tr>
<td><strong>Miki</strong></td>
<td>low level</td>
<td>female</td>
<td>showed frequent silence</td>
<td>demonstrated much better performance</td>
</tr>
<tr>
<td><strong>Jun</strong></td>
<td>intermediate</td>
<td>male</td>
<td>had a large quantity of interaction</td>
<td>had less interaction</td>
</tr>
<tr>
<td><strong>Eri</strong></td>
<td>intermediate</td>
<td>female</td>
<td>had a large quantity of interaction</td>
<td>had less interaction</td>
</tr>
<tr>
<td><strong>Yuji</strong></td>
<td>high level</td>
<td>male</td>
<td>performed very well</td>
<td>did not perform better</td>
</tr>
<tr>
<td><strong>Risa</strong></td>
<td>high level</td>
<td>female</td>
<td>had a large amount of interaction</td>
<td>had less interaction</td>
</tr>
</tbody>
</table>

#### 7. Features of listening according to gender and status difference

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Gender</th>
<th>Task A and B</th>
<th>Task C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Miki</strong></td>
<td>low level</td>
<td>female</td>
<td>did not actively show her understanding</td>
<td>often kept silent</td>
</tr>
<tr>
<td><strong>Jun</strong></td>
<td>intermediate</td>
<td>male</td>
<td>was likely to misunderstand the utterances</td>
<td>often could not correct his misinterpretation</td>
</tr>
<tr>
<td><strong>Eri</strong></td>
<td>intermediate</td>
<td>female</td>
<td>provided frequent signals of understanding</td>
<td>showed indecisiveness or excessive cautiousness</td>
</tr>
<tr>
<td><strong>Yuji</strong></td>
<td>high level</td>
<td>male</td>
<td>did not have many problems</td>
<td>misunderstood some of sub-tasks</td>
</tr>
<tr>
<td><strong>Risa</strong></td>
<td>high level</td>
<td>female</td>
<td>showed indeciveness or excessive cautiousness</td>
<td>felt uncomfortable interacting</td>
</tr>
</tbody>
</table>

---

**Notes:**
- Miki, low level female, did not actively show her understanding or non-understanding. Thus her correct understanding of the utterances was once considered by the speaker to be non-understanding.
- Often kept silent, so that the speaker needed repetition and elaboration.

- Jun, intermediate level male, was likely to misunderstand the utterances due to his careless interpretation.
- Often could not correct his misinterpretation and redirect it.

- Eri, fem. intermediate level male, provided frequent signals of understanding, but some of them resulted in false interpretation of the utterances.

- Yuji, high level male, did not have many problems with comprehension. However he misunderstood some of sub-tasks in Task C because he did not attempt to request repetition and clarify what he did not understand.

- Risa, high level female, showed indeciveness or excessive cautiousness so as not to make errors.
- Felt uncomfortable interacting with the speaker in a face to face situation.
<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Gender</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kota</td>
<td>low level</td>
<td>male</td>
<td>showed nervousness due to a lack of confidence in his ability to understand the native speaker so that this interfered with comprehension.</td>
</tr>
<tr>
<td>Miki</td>
<td>low level</td>
<td>female</td>
<td>often remained silent presumably because she did not have confidence in her listening ability to understand the native speaker</td>
</tr>
<tr>
<td>Jun</td>
<td>intermediate level</td>
<td>male</td>
<td>did not show much nervousness and hesitation. Thus his listening comprehension was not affected by the presence of the native speaker.</td>
</tr>
</tbody>
</table>
| Eri    | intermediate level | female | had a closer relationship with that native speaker so that she actively requested repetition or clarified the unknown words.  
had a larger amount of interaction as compared with other participants. |
| Yuji   | high level | male    | had confidence in his language ability so that he was not influenced by the presence of the native speaker. |
| Risa   | high level | female  | felt nervous communicating with the native speaker in a face to face situation so that this interfered with her listening comprehension. |
NOTE
Please see print copy for Chapter 5 examples, as none of the Japanese characters used have come across in the PDF version of this file.
CHAPTER FIVE
INTERPRETATION OF RESULTS

5.1 INTRODUCTION

This chapter illuminates specific aspects of listening which emerged from the description of the data in Chapter Four. While Chapter Four yielded in-depth descriptive analysis of listening comprehension for six participants, this chapter mainly concerns the analysis of the five areas of research focus as follows: 1) listening strategies, 2) effects of speakers’ speech modifications and non-linguistic cues on listening comprehension, 3) differences in comprehension and strategy use according to listening task type, 4) interactive features of listeners and speakers, 5) difficulties with L2 listening. A total of 1,475 transcript units of stimulated recall and task interaction observation for the selected six participants were identified. When necessary, the nineteen participants were examined and a total of 2,775 transcript units of stimulated recall and task interaction observation was utilized for the analysis.

Data analysis proceeded through the following stages. After coding all the units of stimulated recall and listening task interaction, listening strategies were classified in comparison to the established categories mentioned below. The revision of categorization was recycled until satisfactory categories were established. Following the analysis of six participants in the sample, other students (N=13) were also examined to ensure that the strategies identified in the sample group were consistent with those of the entire population. It was found that the strategies identified in the sample group approximately represented the entire population (except ‘faking’ found from S12).
5.2 LISTENING STRATEGIES

This study defines strategy, according to O’Malley and Chamot (1990), as “the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information” (p.1) because there is a confusion in the literature about the distinction made between strategies, technique, process, tactic, and skill. The term ‘strategies’ has been used to refer to ‘technique’ (Stern, 1983), ‘tactic’ (Seliger, 1984), ‘sub-skill’ (Richards, 1983), and ‘process’ (Stein, 1999), while some studies have too broad a definition of strategies (Bachman, 1990; Bachman & Palmer, 1996).

The present study explored listening strategies in interactive settings. Within the category of listening strategies, ‘recalling’ and ‘non-understanding’ were identified as new findings. The remaining listening strategies were modified and synthesized on the basis of the previous studies (Rubin, 1975; O’Malley & Chamot, 1990; Oxford, 1990; Rost & Ross, 1991; Vandergrift 1996, 1997a, 1997b). The listening strategies were divided into metacognitive strategies, cognitive strategies, and social/affective strategies (Chamot & Kupper, 1989; O’Malley & Chamot, 1990; Vandergrift, 1996, 1997a). A cognitive strategy is like a worker who tries to complete a given task, while a metacognitive strategy is like the supervisor who tells the worker what to do, keeps an eye on the worker, and then inspects the completed product. Social/affective strategies are associated with the affective and social aspects of learners. According to Rost (2002), these three categories have been considered to be “the most widely agreed-upon classes of language use strategies” (p.154).

In this study a listening strategies inventory was devised and included 15 categories which were divided more specifically into 25 sub-categories (see Table 5.1). Within this inventory, metacognitive strategies include advance organizer, selective attention, and comprehension monitoring. Comprehension monitoring was divided into L1 (that is, Japanese) and nonverbal, as
there was a distinct frequency difference between the two according to language proficiency. Cognitive strategies include global reprise (Rost & Ross, 1991), specific reprise, uptaking (Vandergrift, 1997b), good guessing (Rubin, 1975), inferencing, elaboration, recalling, transfer, and non-understanding. Several categories were divided into more specific sub-categories when critical differences between languages (L1 & L2), or verbal and nonverbal were recognized. Self-talk (O’Malley & Chamot, 1990), faking (Vandergrift, 1997b), and self-reinforcement (O’Malley & Chamot, 1990) constitute social/affective strategies (although Vandergrift (1996, 1997a) included “asking for help to interlocutor”, such as requests of repetition and clarification in socio/affective strategies, this study included these requests in cognitive strategies as global reprise and specific reprise).

This study developed a new listening strategy inventory which focused directly on listening behaviors in interactive settings. Care was taken to eliminate learning strategies which were not related to listening traits (for discussion of listening strategies analysis, see also Section 3.8.2). Although interviews and questionnaires before and after listening task implementation revealed a variety of strategies such as referencing (using the dictionary for comprehension afterwards), and self-management (understanding one’s condition in advance), the strategies indirectly related to the listening tasks were not included (except ‘advance organizer’, which affected task performance of all tasks).

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metacognitive strategies</strong>: involve thinking about listening process, planning for listening, monitoring and evaluating listening task.</td>
<td></td>
</tr>
<tr>
<td>1. Advance organizer</td>
<td>Clarifying the objectives of an anticipated listening task and proposing strategies for handling it.</td>
</tr>
<tr>
<td>2. Selective attention</td>
<td>Deciding in advance to attend to specific aspects of the listening task and ignoring irrelevant distractors, maintaining attention while listening.</td>
</tr>
</tbody>
</table>
## Cognitive Strategies

Cognitive Strategies: involve interacting with the material to be learned, manipulating the material mentally or physically, and applying a specific technique to a listening task.

<table>
<thead>
<tr>
<th>3a. Comprehension monitoring (L1)</th>
<th>Checking, verifying or correcting one’s understanding at the local level using L1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b. Comprehension monitoring (Nonverbal)</td>
<td>Checking, verifying or correcting one’s understanding at the local level using nonverbal method.</td>
</tr>
<tr>
<td><strong>Cognitive Strategies:</strong></td>
<td><strong>involve interacting with the material to be learned, manipulating the material mentally or physically, and applying a specific technique to a listening task.</strong></td>
</tr>
<tr>
<td>4a. Linguistic inferencing</td>
<td>Using known word(s) in an utterance to guess the meaning of unknown word(s).</td>
</tr>
<tr>
<td>4b. Paralinguistic inferencing</td>
<td>Using tone of voice and/or paralinguistics to guess the unknown preceding utterances.</td>
</tr>
<tr>
<td>4c. Kinesic inferencing</td>
<td>Using facial expressions, body language, and hand movements to guess the unknown preceding utterances.</td>
</tr>
<tr>
<td>4d. Extralinguistic inferencing</td>
<td>Using contextual cues and concrete situational referents to guess the unknown preceding utterances.</td>
</tr>
<tr>
<td>4e. Between parts inferencing</td>
<td>Using information beyond the local sentential level to guess the meaning.</td>
</tr>
<tr>
<td>5a. Personal elaboration</td>
<td>Elaborating the utterances on the basis of one’s experiences and applying this to the context referred to.</td>
</tr>
<tr>
<td>5b. World elaboration</td>
<td>Elaborating the utterances using world knowledge and applying it to the context referred to.</td>
</tr>
<tr>
<td>6. Recalling</td>
<td>Repeating or mumbling the preceding utterances to reconstruct meaningful interpretation.</td>
</tr>
<tr>
<td>7. Transfer</td>
<td>Using knowledge of one language (e.g., cognates) to facilitate listening in another language.</td>
</tr>
<tr>
<td>8a. Global reprise (Verbal)</td>
<td>Listener asks for outright repetition, rephrasing or simplification of preceding utterances, using L1 or L2.</td>
</tr>
<tr>
<td>8b. Global reprise (Nonverbal)</td>
<td>Listener asks for outright repetition, rephrasing or simplification of preceding utterances, using kinesics.</td>
</tr>
<tr>
<td>9a. Specific reprise (L1)</td>
<td>Listener asks a question referring to a specific word, term or fragment that was not understood in the previous utterances, using L1.</td>
</tr>
<tr>
<td>9b. Specific reprise (L2)</td>
<td>Listener asks a question referring to a specific word, term or fragment that was not understood in the previous utterances, using L2.</td>
</tr>
<tr>
<td>10a. Uptaking (Verbal)</td>
<td>Listener uses verbal signals to the interlocutor to continue, signaling that he or she understands using L1 or L2. This includes minimum responses such as “Uh-huh”.</td>
</tr>
<tr>
<td>10b. Uptaking (Nonverbal)</td>
<td>Listener uses non-verbal signals to the interlocutor to continue, signaling that he or she understands.</td>
</tr>
</tbody>
</table>
**Chapter Five: Interpretation of Results**

<table>
<thead>
<tr>
<th>11a. Non-understanding (Verbal)</th>
<th>Listener uses verbal signals to inform the interlocutor that he or she does not understand.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11b. Non-understanding (Nonverbal)</td>
<td>Listener uses nonverbal signals to the interlocutor that he or she does not understand.</td>
</tr>
<tr>
<td>12. Good guessing</td>
<td>Listener uses whole contextual cues or test-wiseness to reach the correct answer. Incidental understanding is included.</td>
</tr>
</tbody>
</table>

**Social/Affective Strategies**: involve affective control to assist a listening task and self-encouragement for further listening.

| 13. Self talk | Reducing anxiety by using mental techniques that make one feel competent to complete listening tasks. |
| 14. Faking | Listener uses uptaking signals or noncommittal responses in order to avoid seeking clarification. |
| 15. Self-reinforcement | Providing personal motivation by arranging rewards for oneself when listening comprehension is successful. |

The frequency of listening strategies used by individual participants in three tasks (A, B, and C) was counted (Table 5.2). A total of 251 strategies from six participants was identified. The use of particular strategies which led to misinterpretation was also counted in order to yield a detailed description of the results.

**Table 5.2: Listening strategies (frequency) [Number in parenthesis indicates misinterpretation]**

(Males: Kota, Jun, Yuji, Females: Miki, Eri, Risa)

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Kota</th>
<th>Jun</th>
<th>Yuji</th>
<th>Miki</th>
<th>Eri</th>
<th>Risa</th>
<th>Total.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metacognitive Strategies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Advance organizer</td>
<td>Identified throughout all the tasks in all subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Selective attention</td>
<td>Identified throughout Task C in all subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3a. Comprehension monitoring (L1)</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>12 (5%)</td>
</tr>
<tr>
<td>3b. Comprehension monitoring (Nonverbal)</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>15 (6%)</td>
</tr>
<tr>
<td><strong>Cognitive Strategies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a. Linguistic inferencing</td>
<td>6 (4)</td>
<td>4 (2)</td>
<td>0</td>
<td>3 (3)</td>
<td>1</td>
<td>1</td>
<td>15 (6%)</td>
</tr>
<tr>
<td>4b. Paralinguistic inferencing</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>4c. Kinesic inferencing</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>14 (6%)</td>
</tr>
<tr>
<td>4d. Extralinguistic inferencing</td>
<td>Identified throughout Task A &amp; B in all subjects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4e. Between parts inferencing</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>8 (3%)</td>
</tr>
<tr>
<td>5a. Personal elaboration</td>
<td>2 (2)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>0</td>
<td>2 (2)</td>
<td>0</td>
<td>6 (2%)</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Strategy Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>5b. World elaboration</td>
<td>0</td>
</tr>
<tr>
<td>6. Recalling</td>
<td>0</td>
</tr>
<tr>
<td>7. Transfer</td>
<td>1</td>
</tr>
<tr>
<td>8a. Global reprise (Verbal)</td>
<td>0</td>
</tr>
<tr>
<td>8b. Global reprise (Nonverbal)</td>
<td>2</td>
</tr>
<tr>
<td>9a. Specific reprise (L1)</td>
<td>1</td>
</tr>
<tr>
<td>9b. Specific reprise (L2)</td>
<td>5</td>
</tr>
<tr>
<td>10a. Uptaking (Verbal)</td>
<td>0</td>
</tr>
<tr>
<td>10b. Uptaking (Nonverbal)</td>
<td>0</td>
</tr>
<tr>
<td>11a. Non-understanding (Verbal)</td>
<td>1</td>
</tr>
<tr>
<td>11b. Non-understanding (Nonverbal)</td>
<td>4</td>
</tr>
<tr>
<td>12. Good guessing</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social/affective strategies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Self-talk</td>
<td>0</td>
</tr>
<tr>
<td>14. Faking</td>
<td>S12’s strategy use was not counted.</td>
</tr>
<tr>
<td>15. Self-reinforcement</td>
<td>2</td>
</tr>
</tbody>
</table>

| Total (frequency)                     | 39 42 17 44 62 46 251 |

Care was taken to avoid confusion caused by including a strategy into two different categories. However, a sequence of behaviors was sometimes counted in different categories, (e.g., verbalization of non-understanding, “I don’t know.”, accompanied by shaking head was counted separately as ‘verbal non-understanding’ and ‘nonverbal non-understanding’). Additionally, uncountable strategies such as advance organizer, selective attention and extralinguistic inference, which frequently took place throughout the tasks, were not counted.

The overall view of the numerical data in Table 5.2 shows that female students used a larger number of strategies than male students (males; N=98, females; N=152). This result is consistent with the results of the previous studies (Oxford & Nykos, 1989; Kang, 1997). Moreover, female students used a greater variety of strategies than male students. Most listeners used fewer metacognitive strategies than cognitive strategies, which echoes the results of other studies (Chamot & Kupper, 1989; Bacon, 1992b; Vandergrift, 1996; Kang, 1997).
Representative examples and extreme examples are explained separately in the following sections and the reasons for classification of each category are fully discussed below.

5.2.1 Advance Organizer [Adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Advance organizer refers to clarifying the objectives of an anticipated listening task and proposing strategies for handling it. In all of the tasks (A, B, and C), the participants made use of advance organizer strategy. For Task A and B, the participants were made aware of the objectives to complete the stories by choosing the felt-made pictures relevant to what had been said or to solve the problems which arose in the stories. The objective of Task C was for the participants to selectively attend to the information which was relevant to the shopping appointment. During the practice of note-taking for Task C, the strategy of selective attention was suggested to the participants. Accordingly, the participants used selective attention strategy as explained below.

5.2.2 Selective attention [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Selective attention refers to deciding in advance to attend to specific aspects of the listening task, ignoring irrelevant distractors and maintaining attention while listening. The participants selected the information “in terms of what they find most interesting, important, or comprehensible” (Anderson and Lynch, 1988, p.11) and maintained their attention while listening. This strategy was used by the all the participants only in Task C. The participants were provided in advance with the directions to focus on the key information. During the note-taking practice, it was found that several participants translated into Japanese the entire amount of information given by the native speaker. Accordingly, the participants were expected to focus only on the relevant information and to ignore irrelevant distractors. For example, the listeners retrieved selected information from the explanation of the shopping appointment and wrote this down in Japanese as
shown in Example 30.

Example 30 (translation in English is in parenthesis)
(Jun’s notes)
NIKE shoes
Jasco in Chatan or San-A in Nago
(Sunday, May, 17th
6,750 (6,750 Yen)

5.2.3 Comprehension monitoring (L1) [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Comprehension monitoring (L1) refers to checking, verifying or correcting one’s understanding at the local level using L1. The participants checked their understanding of the preceding utterances at the local (word or phrase) level and verbalized in Japanese to check whether their comprehension was correct in order to proceed to the following sub-tasks. ‘Evaluation’ (O’Malley & Chamot, 1990, Vandergrift, 1996, 1997a) is included in this category because a sequence of monitoring contains checking, then evaluating, and correcting. All of the participants, except Yuji, employed this strategy using their L1 (Japanese). Self-monitoring carried out by the participants during the listening tasks included expression of uncertainty about their understanding (Risa) and verbalizing during checking the objects to be selected (Kota, Jun, Eri, Miki). There was no comprehension monitoring in English (L2) presumably because a lack of L2 proficiency made it difficult for the students to self-monitor in an L2. Example 31 indicates that Risa, the high level student, attended to the discourse topic following the storyline, while Kota, the lowest level student monitored his comprehension by paying selective attention to the preceding utterances (Example 32).

Example 31 (Extract from Risa’s Task A transcript: sub-task 10)
24 N: [Long pause] The dog takes your bag and runs away with your bag…with your bag. [N makes a gesture of ‘taking the bag and running away.’]
25 Risa: (It ran, didn’t it?)
26 N: It runs off of the beach.
5.2.4 Comprehension monitoring (nonverbal) [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Comprehension monitoring (nonverbal) refers to checking, verifying or correcting one’s understanding at the local level using a nonverbal method. The nonverbal approach to monitoring comprehension was used by three participants (Kota, Miki, Jun). Low level students (Miki, Kota) frequently employed this nonverbal strategy to check their understanding of what had been said (value is 7 for Kota, 5 for Miki). For Task A and Task B, low level students were more likely to check their understanding by moving the concrete objects selected in order to ensure that their interpretation was appropriate. However, Task C did not include any nonverbal comprehension monitoring, presumably because there were no referents to be selected, as in the felt-made pictures in Task A and B. This suggests that employment of this strategy depends on task type. Example 33 reveals that Kota touched the picture to be selected and examined the native speaker’s face. The native speaker reinforced Kota’s action by nodding.

Example 33 (Extract from Kota’s Task A transcript: sub-task 4)
005 N: You are wearing sunglasses. You are wearing sunglasses.
006 N: (Kota touches girl’s sunglasses, then puts other sunglasses on the face of the boy. Kota is examining N’s face and N nods slightly.) OK.

5.2.5 Linguistic inferencing [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Linguistic inferencing refers to using a known word(s) in an utterance in order to guess the
meaning of an unknown word(s). The analysis of stimulated recall revealed that most of the participants, except 
Yuji, adopted this strategy, although observed interaction did not reveal the internal processes of listeners, such as inferencing. The data indicated that 
Yuji, a student with the highest proficiency did not appear to retrieve a known word(s) from LTM to construct the meaning of an unknown word(s) because he, for the most part, understood the literal meaning of what had been said. Interestingly, linguistic inference strategies used by these participants occasionally led to wrong interpretations of the unknown word(s). For example, 
Kota made four wrong inferences out of six; 
Jun, two out of four; and 
Miki, all of three. Example 34 accounts for a misinterpretation which 
Miki made, based on a known word.

**Example 34** (Extract from Miki’s Task B stimulated recall transcript)

058 Miki: (There was a letter inside the mailbox. So I thought I would look inside.)

059 R: (Why did you think so?)

060 Miki: (Because he said, “look”).

061 R:

(Oh, he said, “look for”. [Actually N said “Look for the letter in the postbox.”] But you heard “look”. So you thought you would look into the mailbox.)

[Miki didn’t know the meaning of “look for”.

5.2.6 **Paralinguistic inferencing** [adapted from O’Malley and Chamot (1996), Vandergrift (1996, 1997a)]

Paralinguistic inferencing refers to using tone of voice and/or paralinguistics such as stress and intonation to guess the unknown preceding utterances. Paralinguistic inferencing took place when the participants utilized the stressed words to infer what had not been understood. 
Kota and 
Miki adopted this strategy. Although the repeated key words, which were numerous observed throughout the tasks, may have held some degree of stress, they were not included, as these phonological features were hardly recognizable (see also Section 3.5.2). Example 35 illustrates how 
Miki induced meaning from the word stressed by the native speaker.
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Example 35 (Extract from Miki’s Task B transcript: sub-task 5)
018 N: You shake hands with one of the babies. (N makes a gesture of ‘holding hands’ with his hands. *Miki* has two babies hold hand in hand.)
019 N: You shake hands. (Italics indicates stressed word)
020 Miki: You?
021 N: You shake hands with one of the babies. (*Miki* touches the girl [you].) You shake the hand. (And then she places one baby on the arm of the girl.)
022 N: OK.

5.2.7 Kinesic inferencing [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Kinesic inferencing refers to using facial expressions, body language, and hand movements to guess the unknown preceding utterances. Nonverbal cues provided by the speaker were used to guess the meaning of what had been said. Nonverbal cues included gaze direction, hand movement, pointing at the referent, imitation of human or animal movement and movement of the speaker’s mouth. This strategy was identified among most of the participants, except for *Yuji*. Low level participants (*Miki* and *Kota*) specifically relied on nonverbal signals to construct reasonable meaning (frequency; five for *Kota*, six for *Miki*) because there was a gap between their L2 knowledge and what had been said during the tasks. Only one kinesic inference strategy was identified in Task C. This indicates that the speaker used a lesser quantity of nonverbal cues in Task C. Example 36 shows how *Miki* understood the meaning of a bird from the gesture of the native speaker.

Example 36 (Extract from Miki’s Task B stimulated recall transcript: sub-task 2)
018 Miki: (I didn’t know the meaning of the word.)
019 R: [Miki chooses the bird.] (How did you know the answer here?)
020 Miki:

(I knew the answer by looking at his gesture of *flying*.)
021 R: (Then, you didn’t know the meaning of *bird*?)
022 Miki: (No, I didn’t.)

5.2.8 Extralinguistic inferencing [adapted from O’Malley and Chamot (1990), Vandergrift
Extralinguistic inferencing refers to using contextual cues and concrete situational referents to guess the unknown preceding utterances. Here ‘extralinguistic’ (Krashen, 1982) does not refer to general nonverbal and contextual information. These aspects were more precisely divided in other categories (e.g., kinesic inference, world elaboration). Concrete referents, as in the felt-made pictures in Tasks A and B, were conducive to inferring what was not understood. Visual aids such as felt-made pictures were not present, however in Task C. It was assumed that a lack of concrete referents increased the difficulty of Task C. The comment made by Miki suggests that felt-made pictures in Tasks A and B contributed to understanding of the tasks.

Example 37 (Extract from Miki’s comment in Type 2 questionnaire)

(I felt it was easy to understand unknown words by using the [felt-made] pictures.)

5.2.9 Between parts inferencing [adapted from O’Malley and Chamot (1996), Vandergrift (1996, 1997a)]

Between parts inferencing refers to using information beyond the local sentential level to guess at the meaning. The utterances were understood in the whole discourse beyond the microscopic sentence level. Between parts inferencing is identical to ‘co-text’, in which listeners connect what has already been said previously with what is being said now (Brown & Yule, 1983). In this study, the participants inferred what followed in relation to what had already been said. In Example 38, Jun made the wrong interpretation reflecting on the previous topic of shopping.

Example 38 (Extract from Jun’s Task C stimulated recall transcript)

(Following the topic of shopping)
020 R: Then what did you think you heard?
021 Jun: I thought I bought six clocks.
022 N: “I said, ‘six o’clock’.”
5.2.10 **Personal elaboration** [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Personal elaboration refers to elaborating utterances on the basis of one’s experiences and applying this to the context referred to. The participants elaborated on the spoken information based on their own experiences or beliefs in the way it made sense to them. Elaboration strategies include prior knowledge outside of the text or the context, while inferencing strategies include the information within the text or the context. In this study all of the participants’ elaboration led to false interpretation of what had been said. Likewise, Example 39 shows that Jun interpreted the story based on his belief about how he thought he would probably act if he were in the situation being referred to.

**Example 39** (Extract from Jun’s Task A stimulated recall transcript: sub-task 9)

035 Jun:  
(Naomi told me to swim. And she asked me if I would swim with her. But I couldn’t swim, so I thought I needed this [float]).

036 R: (Jun moves the boy under the parasol.) Why were you taking a rest under the parasol at that time?

037 Jun:  
(Because I couldn’t swim, I thought I would take a rest under the parasol rather than go to the sea if I were in the situation.)

5.2.11 **World elaboration** [adapted from O’Malley and Chamot (1996), Vandergrift (1996, 1997a)]

World elaboration refers to elaborating the utterances using the world knowledge and applying it to the context referred to. World elaboration was used to predict the outcomes or an unknown word(s) on the basis of world knowledge. World elaboration is concerned with world knowledge, whereas personal elaboration connects what is spoken with personal matters. As with personal elaboration, stimulated recall revealed that the participants’ elaboration based on world knowledge
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led to misinterpretation of the story. All of the participants constructed false meaning out of their own world knowledge. In Example 40, Eri interpreted the story based on her knowledge about the world.

Example 40 (Extract from Eri’s Task A stimulated recall transcript: sub-task 5)

012 Eri: “walking”
    (I was going to bring the flying bird. But he said “walking”, so I found another bird left. So I chose the other bird.) (Pause)
013 Eri: I felt that it was strange for the bird to walk.
014 R: Why did you feel it was strange?
015 Eri: (I mean in Okinawa we often see flying birds, but we don’t see walking birds that often.)

5.2.12 Recalling [new category]

Recalling refers to repeating or mumbling the preceding utterance(s) to reconstruct meaningful interpretation. The participants attempted to recall by mumbling what was previously spoken. Mumbling was an attempt to “organize into meaningful units the sounds which entered the echoic memory” (Underwood, 1989, p.2). Mumbling appeared to be conducive to the understanding of how listeners construct reasonable meaning out of sounds. However, for technical reasons the voices of the participants were too low to be audio-recorded. Risa especially employed the strategy of mumbling with high frequency (N=6). Employment of this strategy may depend on individual learning style, although this assumption was not confirmed in this study.

5.2.13 Transfer [adapted from O’Malley and Chamot (1990), Vandergrift (1996, 1997a)]

Transfer refers to using knowledge of one language (e.g., cognates) to facilitate listening in another language. The knowledge gained from Japanese was utilized to comprehend what had been said in English. When there were phonological cognates (e.g., borrowed words from English) between L1 and L2, the participants were likely to induce equivalent meaning of L2 from the knowledge of a borrowed word in the L1. For example, both Kota and Jun inferred the meaning of the postbox from “post” (Japanese), a borrowed word from English which was phonologically
similar and held the same meaning (Example 41).

Example 40 (Extract from Kota’s Task B transcript: sub-task 10)
058 N: Where is your mailbox? Where is your letter box or your **postbox**?
059 Kota: Post…post…(Kota is looking for something.) (This?) (Kota spots the mailbox outside the board.)
060 N: And you find under the postbox a letter. (Kota chooses a letter.) (N nods.)

5.2.14 **Global reprise (verbal)** [adapted from Rost and Ross (1991)]

Global reprise (verbal) refers to asking for outright repetition, rephrasing or simplification of preceding utterance, using L1 or L2. The requests for overall repetition of the preceding utterances took place when there was a gap between current comprehension and the spoken language. Numerical data for this strategy indicate that 17 out of a total of 19 strategy uses were identified exclusively in Task C. This evidence suggests that Task C was relatively incomprehensible for the participants, due to task type difference. Additional numerical evidence is that Kota and Miki, low level students, did not employ this strategy, but they instead employed a nonverbal, non-understanding strategy, which was “socially less risky” (Rost and Ross, 1991) to avoid facing embarrassment. Global reprise identified in the L1 numbered just two cases, probably because the native speaker did not understand Japanese. Thus, a distinction between L1 and L2 was not explicitly made. The participants mainly said “one more”, in English to request repetition (Example 42).

Example 42 (Extract from Yuji’s Task C transcript)
019 N: And if you see shoes you like, maybe you should bring 6,750 (six thousand five hundred and fifty) Yen.
020 Yuji: One more.
021 N: 6,750 Yen. (Yuji writes down the information.)

5.2.15 **Global reprise (nonverbal)** [adapted from Rost and Ross (1991)]

Global reprise (non-verbal) refers to asking for outright repetition, rephrasing or simplification of
preceding utterance, using kinesics. The participants used global reprise strategy mainly by sticking out their index finger, indicating that the speaker was requested to repeat what was previously said (Example 43). This nonverbal strategy may be a hand gesture characteristic of Japanese learners. Interestingly, a Papua New Guinean colleague of the researcher misinterpreted the same gesture as a sign of understanding. Another Sri Lankan colleague took it to mean, “I don’t agree with you.” The native speaker who had lived in Japan for five months up to this study may have been familiar with the Japanese hand gestures. Total frequency of strategy use was just six, and all of them were identified in Task C.

Example 43 (Extract from Kota’s Task C transcript)
015 N: You can ask two or three of your friends to come with us.
016 N: (Kota thinks and then sticks out his index finger.) Once more? You can ask two or three friends to come with us.

5.2.16 Specific reprise (L1) [adapted from Vandergrift (1997b)]

Specific reprise (L1) refers to asking a question which refers to a specific word, term or fragment that was not understood in the previous utterance, using the L1. The participants gave selective attention to particular preceding known word(s) or phrase(s) and then repeated the same word(s) or asked questions with regard to the particular word(s) or phrase. It was difficult to distinguish between repetition of specific word(s) and questions about specific word(s). Thus, these two types of reprises were combined into one category. Frequency difference of this strategy use between L1 and L2 was distinct as well. The numerical comparison of global strategy use and specific strategy use shows that the participants used more specific strategies (N=46) than global strategies (N=25). This tendency may have caused “a loss of a broader orientation to the discourse topic” (Rost & Ross, 1991, p.263). The preceding word(s) was for the most part directly translated into Japanese. This type of strategy was not included in “Translation”, as found in O’Malley and Chamot (1990) and Vandergrift (1996,1997a), since the participants attempted to give selective attention to a specific word(s) and repeat the word(s), rather than merely translate the specific word(s). Specific reprise in the L1 was employed by most of the participants, except for Yuji. Example 44 shows how Jun repeated the specific word spoken in the preceding utterances.
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Example 44 (Extract from Jun’s Task B transcript: sub-task 1)
006 N: You see the picture of the red sofa on the door. [N makes a gesture of ‘showing something is hanging on the door’].
007 Jun: (Picture?)

5.2.17 Specific reprise (L2) [adapted from Vandergrift (1997b)]

Specific reprise (L2) refers to asking a question referring to a specific word, term or fragment that was not understood in the previous utterance, using L2. The participants were more likely to repeat or ‘echo’ (Hatch, 1978) the specific known word(s) or ask questions regarding the specific word in the preceding utterances. They repeated higher-frequency content words such as nouns and verbs (Buck, 2001, p.17). This evidence is congruent with the finding of Kang’s (1997) study about Korean middle school students (7th grade to 9th grade) which reported that they often used familiar words in TV commercials as vocabulary cues. Vasseur et al. (1996, p.75) note that a reprise is for a listener “an efficient way of reconstructing, piece by piece…by guiding his interlocutors to those items which are a problem.” Yiji did not employ this strategy, while the rest of the participants to a varying degree did use the strategy. Frequency (N=18) of Eri’s specific strategy use (L2) exceeded that of the other participants. This extreme value may be due to her own learning style, although this study did not identify its causal relationship. Some of Eri’s strategy uses were not explicitly discernible from ‘faking’ (Table 5.1). Observed interaction and stimulated recall did not reveal whether Eri’s frequent repetition of the preceding word indicated her understanding or whether she just pretended to comprehend what had been said. Alternatively, her reprise may have played the role of ‘comprehension check’ or an indication of ‘non-understanding’ (Vasseur et al., 1996, pp.83-88). Most of the participants repeated or queried in English a single preceding word, irrespective of L2 proficiency difference as in Example 45.

Example 45 (Extract from Eri’s Task A transcript: sub-task 10)
042 N: The dog takes your bag in its mouth. (N makes a gesture of ‘biting the bag’.)
043 Eri: Mouth?
044 N: Mouth...in its mouth and runs away. It runs with your bag.

5.2.18 Uptaking (verbal) [adapted from Vandergrift (1997b)]

Uptaking (verbal) refers to using verbal signals to the interlocutor to indicate that he or she understands the utterances, using L1 or L2 and includes minimum responses such as “Uh-huh”. The participants provided the native speaker with verbal ‘continuous signals’ (Rost and Ross, 1991) as backchanneling cues to indicate that the listeners understood what had been said so that the speaker could proceed to the next utterance. This strategy included “O.K.” (approximately 50%), “Uh-huh” (L1 & L2), “Oh, yeah” (L2), and answers for the which-question (sub-task 6 in Tasks A & B). Kota and Miki, low level participants, did not adopt this strategy at all. Unlike both of them, Yuji, who had the least strategy use, employed uptaking strategy with relatively high frequency (N=6). Eri’s frequency (N=11) of strategy use was far greater than the others. Interestingly, 6 out of 11 of Eri’s strategy uses were found to be just an indication that the speaker could continue to speak, even though she did not understand what had been said. Almost half of the uptaking took place in Task C. This may be because Task C, with few contextual clues, required the listeners to provide the speaker with more uptaking cues, while in Tasks A and B, placing the felt-made pictures in the proper places suggested that the speaker could move on to the next sub-tasks. In Example 46, Eri provided an uptaking signal even though she did not understand what had been said.

Example 46 (Extract from Eri’s Task A transcript: sub-task 9)
026 N: You want to go swimming.
027 Eri: Uh-huh. (English)
028 N: But you can’t swim.
029 Eri: (Eri chooses the dog.) Dog’s...play. (Eri is expected to choose the float.)
030 N: But your friend, Ken says, “Oh, come swimming...come swimming.”

5.2.19 Uptaking (nonverbal) [adapted from Vandergrift (1997b)]

Uptaking (nonverbal) refers to using non-verbal signals to the interlocutor to indicate that he or she
understands. Only nodding was observed as a listener’s nonverbal, uptaking signal. For the same reason as above, in Task C the participants constantly needed to indicate to the interlocutor by nodding that they understood the utterances (frequency in Task C was 6 from a total of 8). Risa’s responses with nodding were far beyond the others in number (N=5). This may be because her nervousness, found in the follow-up interview, made her overreact to the speaker. Similarly, Kota and Miki, low level students, did not use uptaking strategy. This may be because the listeners with less confidence in their L2 ability did not attempt to indicate understanding. Furthermore, ‘maintaining eye contact,’ which has been shown to indicate understanding (Rost, 1994) mainly in Western cultures, was not frequently observed in this sample group.

5.2.20 Non-understanding (verbal) [new category]

Non-understanding (verbal) refers to using verbal signals to the interlocutor to indicate that he or she does not understand. The utterances of non-understanding were expressed mostly in the L1, except for “No” in English (frequency 2) uttered by Eri. No previous empirical study has included this strategy use in the typology of listening strategies, presumably because non-understanding has been considered to be an ineffective strategy, following the tradition of SLA research which has pursued effective learning strategies to facilitate L2 acquisition (e.g., Rubin, 1975). This study, however, considers that a non-understanding strategy is an effective cue to indicate to the interlocutor that there exists a gap in understanding to be filled. Interestingly, none of the male students revealed their non-understanding verbally. The female participants were more likely to say in Japanese, “I don’t know”, “Huh?”; “Umm”. These verbal signals were often accompanied by kinesics such as shaking the head, a puzzled face, waving the hand, and a request for repetition with a finger. As shown in Example 47, Eri revealed her non-understanding accompanied by the gesture.

Example 47 (Extract from Eri’s Task A transcript: sub-task 10)
N: It runs away from the beach. It runs off of the beach. (N repeats the gesture of ‘running away’.)

N: Away.

Eri: (Eri is holding the dog and places the dog further away from the bag.) (Eri shows a gesture of non-understanding with her hand.) No, no. (English)

5.2.21 Non-understanding (nonverbal) [new category]

Non-understanding (nonverbal) refers to using nonverbal signals to the interlocutor to indicate that he or she does not understand. Nonverbal signs of non-understanding employed by the participants included shaking the head, waving the hand, thinking, a long pause, imitating the speaker’s gesture, and moving irrelevant referents. Most of the participants except Yuji employed this strategy. Frequency of Miki’s strategy use was especially prominent (N=17). The characteristic feature of Miki’s non-understanding kinesics was mainly implicit gestures such as silence, a confused look and thinking, often without being accompanied by overt gestures (Example 48). In other words, Miki used “wait and see strategy” (Bremer et al., 1996) until time and developments in the interaction gave further clues to meaning. Another possible explanation would be that Asian students are generally reluctant to challenge teachers (Wu, 1993). Unlike Miki, Eri and Jun used explicit gestures, such as shaking their heads and waving their hands. Due to his nervousness at the outset of the first task (Task B), Kota revealed his non-understanding by moving irrelevant objects.

Example 48 (Extract from Miki’s Task A transcript: sub-task B)

027 N: (Miki is thinking.) Which do you want to do? Listen to the radio or play with the babies? 028 (Miki imitates N’s gesture and is thinking.) Play? (She says less confidently.)

5.2.22 Good guessing [adapted from Rubin (1975)]

Good guessing refers to using whole contextual cues or test-wiseness to reach the correct answer. In this study, this strategy was concerned with test wiseness, good judgment and incidental understanding which was sometimes not related to the preceding utterance. For example, for the problem solution in both Task A and Task B, Yuji found the solutions before the directions for
problem solution were given (Example 49). In Task A, despite Yuji’s misunderstanding, he incidentally gained the correct answer by making the most use of all the contextual cues and test wiseness. Yuji’s characteristics are consistent with the ‘good guesser’ as a good learner, found in Rubin’s study (1975). Another example was that in Task B, Eri incidentally found the letter in the problem-solving sub-task, irrespective of her non-understanding.

Example 49 (Extract from Yuji’s Task A transcript: sub-task 9)
013 N: Naomi says, “Let’s go swimming.” But you say, “I can’t swim.” (Yuji has the boy wear the float. Yuji responded in advance, as the directions requested. So a sheet of paper with the directions was not given to him.)

(Extract from Yuji’s Task A stimulated recall; sub-task 9)
028 R: “I didn’t give him a sheet of paper [with directions].” He chose the float before receiving the paper. [The directions request him to have the boy wear the float.]
029 N: “OK.”
030 R: (Why did you choose the float here?)
031 Yuji:
   (Since he said I couldn’t swim, I thought I needed the float.)

5.2.23 **Self talk** [adapted from O’Malley and Chamot (1990)]

Self talk refers to reducing anxiety by using mental techniques that make one feel competent to complete listening tasks. Risa verbalized her emotional status and attempted to avert negative aspects in order to comprehend what had been said (Example 50). Likewise, Risa talked to herself in a ‘comprehension monitoring strategy’. This characteristic feature of her behavior may be due to her cautious personality.

Example 50 (Extract from Risa’s Task C transcript)
021 N: From the top? From the top? [N makes a gesture of ‘top’.] From the beginning?
022 Risa: (Oh no. I am nervous.) Once more. [Risa sticks out her index finger.]

5.2.24 **Faking** [adapted from Vandergrift (1997b)]

Faking refers to using uptaking signals or noncommittal responses in order to avoid seeking
clarification. S12, the lowest level student in the entire population, frequently pretended to understand what had been said by quietly moving the wrong objects, which were not referred to, so that she remained polite and did not challenge the speaker. Her comments in the questionnaire after the task revealed that she wanted to finish the task as soon as possible. She attempted to get through the task by hiding her non-understanding. Accordingly, she expected the contextual cues and any nonverbal clues to assist in her comprehension.

5.2.25 Self-reinforcement [adapted from Oxford (1990)]

Self-reinforcement refers to providing personal motivation by arranging rewards for oneself when listening comprehension is successfully completed. The participants gave themselves positive evaluation for their performance and encouraged themselves to continue the task. All of the participants except Miki used the self-reinforcement strategy with low frequency (mostly one or two). This strategy, which was initially classified as evaluation was reclassified as self-reinforcement because the participants who showed most concerns about their performance revealed a great delight when they made the correct interpretation. This strategy was associated more with affective aspects than evaluative aspects. The strategy use associated more with evaluation was included in comprehension monitoring. In Example 51, Kota verbalized in Japanese his self-reinforcement for his understanding.

Example 51 (Extract from Kota’s Task B transcript: sub-task 2)
021 Kota: In the window? [Kota holds the bird again and is thinking.]
022 N: Where is the window? Which one is the window?
023 Kota: *(Oh, this is it!)* [Kota places the bird in the window.]

5.2.26 Summary

This section illuminates some unique findings which are different from previous studies or similar findings which echo the previous findings. The highest level student (Yuji) appeared to use the fewest strategies (N=17). This finding is different from other studies (Murphy, 1985; Vandergrift, 1996, 1997a) which reported that good learners used a larger number of strategies. This is because the highest level student comprehended for the most part the literal meaning of the utterances, thus
unconscious strategy use was not available. Some studies (e.g., Vandergrift, 1997a) reported a variety of strategies beyond the language tasks. Consequently the students with high L2 proficiency demonstrated a larger number of strategies. As mentioned before, in this study only the strategies observed or reported during the listening tasks were included. Therefore, a limited number of strategies were uncovered, and the data showed mixed results. The students at intermediate level used the largest number of strategies within each gender (Eri, N=62; Jun, N=42). It was assumed that personal background and learning style may have affected the quantity of strategies, although this study did not identify a causal relationship.

Listening strategies found in this study were more comprehensive and exhaustive than the previous studies. “Recalling” and “non-understanding” were new findings in this study. Listening strategies adopted by good listeners as well as poor listeners were included in the inventory of listening strategies, although SLA studies have traditionally attempted to uncover listening strategies employed exclusively by good listeners. Moreover, this study divided a category into nonverbal and verbal, or L1 and L2 when there was a distinct difference between these aspects, which other studies have not differentiated. Furthermore, the strategies which were not associated with listening behaviors were eliminated to make a distinction between this study and other studies (Vandergrift, 1996, 1997a; Kang, 1997) which attempted to apply learning strategies directly to listening strategies.

Another interesting finding was that some of the strategies used led to misinterpretation. For example, all of the personal and world elaboration strategy uses resulted in misinterpretation. About half of the linguistic inferencing strategy uses were shown to be misunderstanding as well. At the individual level, approximately half of the uptaking (verbal) used by Eri was found to be misunderstanding. As Rubin (1994) and O’Malley et al. (1989) argue, this may be accounted for by the assumption that the participants abandoned bottom-up-processing and relied solely on top-down processing (schema). That is, they did not use bottom-up processing and top-down processing effectively. On the other hand, Yuji misinterpreted an utterance once, but managed to complete the task. Accordingly, Yuji’s inference was classified as ‘good guessing’.
There were some distinct features of listening strategies identified according to language proficiency and individual difference. Low level students (Kota, Miki) were more likely to employ nonverbal strategies such as comprehension monitoring (nonverbal), non-understanding (nonverbal) and kinesic inferencing. High level students (Yuji, Risa) tended to use uptaking (verbal) strategies to show understanding to the speaker. Furthermore, distinctive features of listening strategies characteristic of individual listeners were also identifiable. In fact, listening strategies use may be accounted for by the idiosyncrasies of individual students. For example, Eri used numerous uptaking strategies (N=11) and specific reprise (L2) strategies (N=18), while Miki adopted a great deal of nonverbal non-understanding strategies (N=17). Good guessing used by Yuji (N=5) exceeded that of the other participants. Moreover, there were specific strategy uses which were used by particular students (e.g., faking by S12, self-talk by Risa). These idiosyncratic strategy uses may be explained better by learning style, intelligence, affective factors and personal background. However, frequency of listening strategies may not necessarily mean that a given strategy use was characteristic of a particular participant. “Repeated use of a strategy may just be a sign that the learner is continuing to use a given strategy unsuccessfully” (Cohen, 1998, p.148).

5.3 EFFECTS OF SPEAKER’S SPEECH MODIFICATIONS AND NONVERBAL CUES ON LISTENING COMPREHENSION

In this study, verbal and nonverbal cues provided by the native speaker were central to the enhancement of listening comprehension when there was a gap between the listener’s current understanding of the utterance and what had been said. This study uncovered a great deal of ‘speaker’s cues’, which can be defined as including speech modifications and nonverbal cues provided by the speaker. Speech modifications (Pica, et al., 1987) included elaboration, repetition, paralinguistic cues, and simplification. Pauses and enunciation were not included because the utterances made by the native speaker in this study generally held the features of slower, clear speech, and long pauses for the students to complete the tasks, that is, the speech characteristic of foreigner talk (Hatch, 1983) and teacher talk (Chaudron, 1988). Nonverbal cues correspond to speaker’s cues identified in kinesic listening strategies. Further, confirmation checks, clarification
requests, and comprehension checks found in studies of speech modifications (e.g., Pica et al., 1987) were not frequently identifiable in this study, presumably because the participants did not have sufficient L2 proficiency to understand such modifications.

Speaker’s cues provided by the speaker were only recognizable where there was an understanding problem in the course of the tasks. Accordingly, a limited number of speaker’s cues were detected for the high level students, while a great deal of speaker’s cues had an effect on the comprehension of the low level students. Due to the limited number of speaker’s cues identified in the sample group, the examination of speaker’s cues was extended to the entire population. The listening tasks were confined to those in which the participants engaged for the first time. First, the numerical data gained from the entire population will be examined, and then the in-depth qualitative analysis of six selected students will be attempted.

This section is concerned with the effects of speech modifications and non-verbal cues provided by the speaker on listening comprehension. Therefore, when a particular cue(s) by the speaker contributed to completion of a sub-task, this was recorded. For example, when the listener completed the sub-task due to the speaker’s kinesics, it was recorded as K(kinesics), even though other speaker’s cues had been provided by the speaker before this. It was difficult to identify the single most effective cue because at times several cues affected listening comprehension simultaneously. For this reason, several speaker’s cues were sometimes included in the same cell. However, care was taken to pursue the most effective cue, using the data gained from listening task observation and stimulated recall. The definition of individual speaker’s cues is mentioned after the analysis of the numerical data.

A total number of effective speaker’s cues were calculated. 116 out of a total of 190 sub-tasks for 19 students were counted as the units which received some degree of additional assistance from the speaker verbally or/and nonverbally, as shown in Table 5.3. 74 sub-tasks (out of 190), on the other hand, were completed with full understanding of the literal meaning of the utterances. Thus, these sub-tasks did not contain any additional support from the speaker. The results did not yield
significant difference in type of speaker’s cues according to L2 proficiency. This may be due in part to homogeneity of the population which comprised the students in the same grade. It was difficult to compare the effect of speaker’s cues identified among the participants with high L2 proficiency due to the small value of speaker’s cues. The types of speaker’s cues which had effects on completion of sub-tasks indicated remarkable differences in number. Repetition was found to be the most effective speaker’s cue for all the participants. Moreover, a close analysis of speaker’s cues revealed that most of the cues identified in ‘paralinguistic cues’ (Brown, 1990) were repeated content word(s) with phonological stress.

Taking into consideration this evidence, repetition made by the speaker was most crucial for listening comprehension for the participants in this study. The entire population in this study can be classified as basic level according to ACTFL (American Council for the Teaching of Foreign Languages) listening guidelines (1999). Thus, the evidence found in this study was consistent with the findings of other studies (Chaudron, 1983a; Pica, Young & Doughty, 1987) which reported that repetition had the greatest effect on listening comprehension for basic level listeners.

Kinesics, mostly in the form of gestures, was the second effective speaker’s cue.

Table 5.3: Distribution of effective speaker’s cues according to language proficiency

<table>
<thead>
<tr>
<th>Language proficiency</th>
<th>Kinesics</th>
<th>Repetition</th>
<th>Paralinguistics</th>
<th>Elaboration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level</td>
<td>10</td>
<td>17</td>
<td>9</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>% (within group)</td>
<td>(27%)</td>
<td>(46%)</td>
<td>(24%)</td>
<td>(3%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>Intermediate level</td>
<td>17</td>
<td>36</td>
<td>8</td>
<td>5</td>
<td>66</td>
</tr>
<tr>
<td>% (within group)</td>
<td>(26%)</td>
<td>(54%)</td>
<td>(12%)</td>
<td>(8%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>High level</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>% (within group)</td>
<td>(15%)</td>
<td>(77%)</td>
<td>(8%)</td>
<td>(0%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>63</td>
<td>18</td>
<td>6</td>
<td>116</td>
</tr>
<tr>
<td>% (within total)</td>
<td>(25%)</td>
<td>(54%)</td>
<td>(16%)</td>
<td>(5%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

Elaboration, on the other hand, was shown to be least effective for completion of the listening tasks. This evidence was congruent with the finding of another study (Derwing, 1989) as well. Junior
high school students at basic level may “need to reach a certain minimum level of proficiency” (Anderson & Lynch, 1988, p.51) before they can take advantage of elaboration as redundant information.

Two tables (Table 5.4 & 5.5) are divided into Task A and Task B which the participants engaged in during the first round, because the tasks engaged by the participants in the second round had some degree of effect of ‘task familiarity’ (Plough & Gass, 1993) resulting from the tasks in the first round (see also Section 3.7.8.2). The sections divided by two double lines mean that two students for each task (S3 and Risa (S18) for Task A, and Yūji (S11) and S17 for Task B) at the top belong to high level students, eleven students (S1-16 for Task A, S2-S19 for Task B) in the center belong to the intermediate level, and two students for each task (S5 and S12 for Task A, and Kota (S4) and Miki (S14) for Task B) at the bottom belong to the low level students. This language ability classification was made for this study’s convenience according to task performance, listening test scores, and the participants’ English teacher’s advice. Sub-task 11 was not included because the participants were occasionally assisted by the researcher in extended free conversation. The symbols (e.g., U, R, K, P, E) in the tables are explained below.

The explanation and abbreviation of individual cues are exemplified in the following.

(1) **R** (Repetition): repetition of the entire preceding sentence(s), or the phrase(s). Repetition of the word(s) stressed by the speaker is classified as paralinguistics

(2) **E** (Elaboration): elaboration of the previous utterance without simply repeating the same preceding utterance.

(3) **P** (Paralinguistics): the speaker’s phonological stress, intonation, tone. This includes the repetition of the key word(s) with phonological stress. Simplification such as a small unit of utterance composing of two or three words (which were assumed to have some degree of stress), is also included.

(4) **K** (Kinesics): includes gaze direction, hand movement, pointing at referent, imitation of human or animal movement, movement of the speaker’s mouth.

(5) **U** (Understanding): understanding of the literal meaning of the utterances without additional
Table 5.4: **Task A**: Type of effective speaker’s cues for task completion (e.g., sb1: sub-task1)  
(divided by double lines, top: high level, middle: intermediate level, bottom: low level)

<table>
<thead>
<tr>
<th>subtask</th>
<th>sb1</th>
<th>sb2</th>
<th>sb3</th>
<th>sb4</th>
<th>sb5</th>
<th>sb6</th>
<th>sb7</th>
<th>sb8</th>
<th>sb9</th>
<th>sb10</th>
</tr>
</thead>
<tbody>
<tr>
<td>S3</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R/K</td>
</tr>
<tr>
<td>Risa(S18)</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td>R/K</td>
</tr>
<tr>
<td>S1</td>
<td>R/P</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>E/K</td>
<td>K</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>K</td>
<td>R/K</td>
<td></td>
</tr>
<tr>
<td>S9</td>
<td>R</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>K</td>
<td>R/K</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>R</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>K/R</td>
<td>U</td>
<td>R</td>
<td>E/R</td>
<td>K/R</td>
<td></td>
</tr>
<tr>
<td>Eri(S13)</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>R/K</td>
<td>R/E</td>
<td></td>
</tr>
<tr>
<td>S16</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td>R/P</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R/K</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>R</td>
<td>U</td>
<td>R/P</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>E/R</td>
<td>K</td>
<td></td>
</tr>
<tr>
<td>S12</td>
<td>K</td>
<td>R</td>
<td>R</td>
<td>K</td>
<td>U</td>
<td>U</td>
<td>K</td>
<td>R</td>
<td>K</td>
<td></td>
</tr>
</tbody>
</table>

NB: R: Repetition, P: Paralinguistics, K: Kinesics, E: Elaboration, U: Understanding

Table 5.5: **Task B**: Type of effective speaker’s cues (e.g., sb1: sub-task 1)  
(divided by double lines, top: high level, middle: intermediate level, bottom: low level)

<table>
<thead>
<tr>
<th>student</th>
<th>sb1</th>
<th>sb2</th>
<th>sb3</th>
<th>sb4</th>
<th>sb5</th>
<th>sb6</th>
<th>sb7</th>
<th>sb8</th>
<th>sb9</th>
<th>sb10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yuji(S11)</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
</tr>
<tr>
<td>S17</td>
<td>R/P</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
</tr>
<tr>
<td>S2</td>
<td>K/E/P</td>
<td>R</td>
<td>U</td>
<td>K</td>
<td>K</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
</tr>
<tr>
<td>Jun(S7)</td>
<td>K/P</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R/K</td>
<td>K</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>K/P</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>K</td>
<td></td>
</tr>
<tr>
<td>S15</td>
<td>U</td>
<td>U</td>
<td>R/P</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>U</td>
<td>R/E/K</td>
<td>R/K/P</td>
<td></td>
</tr>
<tr>
<td>S19</td>
<td>R/P</td>
<td>U</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td>R/K</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Kota(S4)</td>
<td>K/R/P</td>
<td>R/P</td>
<td>K/P</td>
<td>R</td>
<td>K/R/P</td>
<td>R</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Miki(S14)</td>
<td>K/R/P</td>
<td>R/P</td>
<td>U</td>
<td>U</td>
<td>R/P</td>
<td>R/K</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>

NB: R: Repetition, P: Paralinguistics, K: Kinesics, E: Elaboration, U: Understanding

The results shown in Table 5.4 and 5.5 indicate that high level students demonstrated more U (full understanding without additional support from the speaker) than low level students. Furthermore, the results also indicate that speaker’s cue type was more closely interrelated with type of sub-task, as well as type of task, than with L2 proficiency of the listeners. The summary of speaker’s cues
between sub-tasks and Tasks A or B shows that speaker’s cues were more often related to the distinctive features within the tasks and between the tasks. For example, the effective speaking cue in Sub-task 10 of Task A was K(Kinesics) or R(Repetition), while the most effective speaker’s cue identified in Sub-task 1 of Task B overall was R (repetition), K (kinesics) and P (paralinguistics). This issue will be discussed in more detail below.

5.3.1 Effective speaker’s cues within tasks

As mentioned above, all speaker’s cues found in sub-task 1 of Task B included paralinguistic cues. This evidence can be accounted for by the characteristics of this sub-task. The baseline description of sub-task 1 in Task B was “There is a picture of a red sofa on the door”. Firstly, many participants were confused by the choice of the distractors such as the picture of a boy and the red sofa, which were placed together with the framed picture of a red sofa. Thus, the native speaker needed to clarify the differences between them by repeating the utterance. Once this problem was solved, the listeners faced another problem in that they had to place the framed picture of the red sofa in the proper place. Therefore, the speaker stressed the location by saying “On the door”, using the gestures. Accordingly, for Sub-task 1, three effective speaker’s cues, ‘repetition’ (R), ‘kinesics’ (K) and ‘paralinguistics’ (P) were identified in many participants. On the other hand, sub-task 6 in Task B was comprehended, using different speaker’s cues. The baseline story here was “Do you like to play with babies or listen to the radio?” Some students had a problem with understanding the meaning of “or”, so that the native speaker needed to repeat what was being requested by making a gesture of “comparing the two” with both hands. Accordingly, R (repetition) and K (kinesics) were coded for this sub-task. The comparison of these two sub-tasks suggests that there were different types of effective speaker’s cues provided by the speaker within the same sub-task. Moreover, even at the level of smaller units of discourse, the speaker’s cues which were effective for listening comprehension were identified. At more microscopic level, the detailed analysis may need to be undertaken. However, this type of study is beyond the scope of the present study.
5.3.2 Task type, speaker’s cues and listener’s signals

Another summary (Table 5.6) for six case studies participants indicates that speaker’s cues and listener’s signals (backchannelling cues and reprise) interacted with each other for increased comprehensibility, and that interactive features of listening varied according to task type. For example, the speaker provided poor listeners with a variety of speaker’s cues to assist comprehension, while good listeners received less cues from the speaker. Through the observation of task performance, it was noted that there were obvious differences in interactive features between Task A (or B) and Task C (Task A and Task B were considered to be the same type). Accordingly, speaker’s cues and listener’s signals were counted to compare Task A (or B) with Task C. Either of Task A or Task B taken by each participant in the first round was counted because the task (A or B) which was conducted in the second round yielded a different result due to task familiarity. Speaker’s cues were counted on the basis of listening task observation. They included repetition, gestures, elaboration and paralinguistics.

In order to count ‘listener’s signals’ (Pica, 1991) from among the listening strategies (Table 5.2), this study differentiated on the basis of researcher’s observation between listening strategies which directly interacted with speaker’s cues and those which indirectly interacted with speaker’s cues. However, other studies (e.g., Pica et al., 1996) did not attempt to specify the type of listener’s responses related to speaker’s input. In this study, non-understanding, global reprise, specific reprise, comprehension monitoring, uptaking and recalling, which were considered to directly affect speaker’s cues, were included (it was assumed that these strategies were observable by the speaker, thus affected the speaker’s support). Inferencing, elaboration, transfer, good guessing, self-talk and self-reinforcement which were considered to indirectly affect speaker’s cues, thus were not accessible to the speaker, were excluded (it was assumed that these strategies were not observable by the speaker).

Table 5.6: Distribution of speaker’s cues and listener’s signals according to task type (letters in parenthesis indicate task type)
Chapter Five: Interpretation of Results

5.3.3 Task type, interaction, language proficiency, and individual differences

In this study the listener and the speaker interacted with each other differently to increase comprehensibility according to task type. The comparative summary in Table 5.6 above indicates that there was an obvious difference in frequency of speaker’s cues and listener’s signals between Task A (or B) and Task C. For example, with Kota, a large number of speaker’s cues (N=55) and listener’s signals (N=12) were identifiable in Task B while, in Task C, there was a distinct decline in frequency of speaker’s cues (N=3) and listener’s signals (N=2). Other students yielded similar results. This result is also obvious from a comparison of the means for speaker’s cues and listener’s signals between Task A (B) and Task C. Mean speaker’s cues (N=26) and mean listener’s signals (N=14.3) for Task A or B are considerably greater than their counterparts in Task C (mean speaker’s cue: N=5.3; mean listener’s signal: N=10.8). This result could be explained from two perspectives. From the speaker’s perspective, in Task C the listeners did not provide many backchannelling cues so that the speaker could not monitor their comprehension, which resulted in a reduced number of speaker’s cues, while in Task A (or B) the listener’s selection of pictures and contextual cues prompted the speaker to provide additional verbal and non-verbal listening cues. From the listener’s perspective, in Task C the lack of speaker’s cues discouraged inquiry and requests for repetition. In Task A (or B), on the other hand, the speaker’s frequent repetition of utterances and gestures prompted the listener to provide more backchannelling cues.

The assumption made above was also confirmed by an e-mail reply from the native speaker as to

<table>
<thead>
<tr>
<th>Speaker/listener/task</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kota</td>
</tr>
<tr>
<td>Speaker’s cues (Task A or B)</td>
<td>55 (B)</td>
</tr>
<tr>
<td>Listener’s signals (Task A or B)</td>
<td>12 (B)</td>
</tr>
<tr>
<td>Speaker’s cues (Task C)</td>
<td>3</td>
</tr>
<tr>
<td>Listener’s signals (Task C)</td>
<td>2</td>
</tr>
</tbody>
</table>
the reason why he did not repeat and elaborate the text in Task C. It showed evidence that the utterances provided by the speaker were prompted by the students’ feedback.

(Researcher’s e-mail)
Through the analysis of the note-taking task, I noticed that you did not repeat yourself that often. Was it because in normal conversation you don’t repeat yourself where necessary? (Sent, 14 March, 2002)

(Native speaker’s e-mail)
In response to your questions
1) I didn’t repeat myself and give redundant information because in normal conversation, you don’t usually repeat yourself. I only repeated myself when the students asked for the information again. This would be consistent with normal conversation.
2) I paused in between speaking so that the students could process and transcribe the information that I had given. Also, I would continue when the student prompted me to do so (Received 16 March, 2002).

Another view is, as pointed out by the native speaker in this study, that the difference might have been caused by authenticity of task type. That is, Task C was much closer to the material used in real life than Task A and Task B were. This may partially account for difficulty with listening in everyday conversation.

According to Table 5.6, interactive features of listening found in this study were contingent upon individual differences of the participants. An interesting result was that Yuji and Risa, the highest level students in each gender, provided more listening signals in Task C than in Task A (or B). This may be because a lack of contextual cues and speaker’s cues in Task C required them to actively provide backchannelling cues and demanded inquiry or requests for repetition to enhance comprehension. The largest value (N=26) of Risa’s listening signals in Task C, however, may be an indication of her psychological state, as she frequently expressed her nervousness during the tasks. Moreover, it is plausible that the low level students (Kota, Miki) received a large number of speaker’s cues. Speaker’s cues (N=55) for Kota in Task B were especially high. On the other hand, the results show that the high level students received a small ratio of support. For example, speaker’s cues in Task B for Yuji were only ‘2’, while the equivalent in Task A for Risa was ‘12’. 
A relatively large number of speaker’s cues for Eri (N=33) may have been caused because the speaker was prompted to provide more feedback in response to Eri’s frequent backchannelling cues (N=29). However, the specific reason for Eri’s frequent listening signals (N=27 for Task A, N=16 for Task C) could not be identified. The possible explanation is that she had the longest contact with a native speaker (different from the speaker in this study) during the practice of an English recitation contest. Thus, she may have been familiar with native speakers. As discussed above, the effect of interactional features on listening comprehension need to be considered from multiple perspectives such as language proficiency, task type, familiarity with the speaker and affective factors.

5.3.4 Summary

Approximately half of the sub-tasks (mean: 54%) were completed with repetition of a word(s). Thus, it was found that repetition was the most effective speaker’s cue for comprehension. Kinesics, mainly in the form of gestures, was the second most effective listening cue (mean: 25%). Elaboration was found to be the least effective listening cue (mean 5%). There seemed to be no major difference in effective speaker’s cue type according to language proficiency. Rather, types of effective speaker’s cue were interrelated with the characteristics of sub-tasks within tasks as well as the tasks themselves.

The results indicated that speaker’s cues and listener’s signals interacted with and influenced each other. The speaker was prompted by the listener to provide additional speaker’s cues, and at the same time the listener’s responses and understanding increased in response to the speaker’s cues. The relationship between speaker’s cues and listener’s signals was proportionate. The data obviously suggest that low level students received a large amount of support from the speaker, while high level students received less support. Also, idiosyncratic features of interactive listening for individual students (Eri, Risa) were identifiable in the comparison of speaker’s cues.
and listener’s signals.

Most SLA research has been concerned with the effects of input modification (e.g., Chaudron, 1983a) or speech modifications (e.g., Long, 1983a) on listening comprehension from the speaker’s perspective. From the listener’s perspective, listening strategies have been investigated to pursue an effective strategy to enhance comprehension (e.g., Murphy, 1985). In the studies of speech modifications, “the learner is seen as passive recipient, rather than as one actively involved in the process of establishing communicating meaning” (Faerch & Kasper, 1986, p.262). With some exception (e.g., Pica et al., 1996), there is little research as to how and to what degree the interplay between speaker’s cues (speech modifications and non-linguistic cues) and listener’s signals (listening strategies) enhance or interfere with listening comprehension through interaction. It is imperative that further research should include more comprehensive analysis of listening comprehension in interactive settings and take into consideration the interplay of speaker’s cues and listening strategies.

### 5.4 DIFFICULTIES WITH L2 LISTENING

This section is concerned with difficulties with listening which the participants in this study experienced as L2 learners. Tracking down processing problems has the pedagogic potential to create awareness of misunderstandings and non-comprehension for teachers and researchers (Lynch, 2002). Difficulties with L2 listening in this study refer to speech rate and pauses, pronunciation discrimination, vocabulary, structure, meaningful chunk size, task type difference, social relationship, and affective factors. The analysis was mainly grounded in the data for the six case studies participants gained from the task interaction observation and the stimulated recall. The numerical data, however, did not reveal much about the participants’ difficulties with L2 listening due to a small value. Thus, the data gained from the questionnaire (Type 2) and follow-up interview after the listening tasks were also utilized to analyze difficulties with listening which were experienced by the participants in the entire population (N=19).
5.4.1 Peculiar features of listening

The analyzed data showed that peculiar features of listening which were different from the other language skills made L2 listening difficult. Yiji and Risa, high level participants, commented in their stimulated recall of Task C that the non-recursive processing characteristic of listening made the listening task more difficult (Example 52). That is, listening takes place in real time with no chance of review and processing, while in reading the reader faces, “a permanent written text” (Buck, 2001, p.3).

Example 52 (Risa’s stimulated recall, Task C)

020 Risa: Sunday

(For example, after hearing Sunday in the beginning, I had to connect it with what time. So this made it difficult to write down what I heard.)

021 R:

(Then, in normal conversation the native speaker continues to speak. So it is very difficult to understand in normal conversation, isn’t it?)

022 Risa: (Otherwise in normal conversation), the sentences will be inconsistent, if the listener does not connect in her mind what was spoken before with what is spoken at this moment.)

Redundancy in the form of elaboration, characteristic of spoken language, did not contribute very much to completion of sub-tasks. Rather, the observation indicated that elaboration appeared to distract understanding of what had been said, presumably because the participants had not yet reached “the certain minimum level of proficiency” (Anderson & Lynch, 1988, p.51) at which they could take advantage of the redundancy. They were likely to be more confused when the speaker detailed the description. Therefore, redundancy may have added to the listeners additional cognitive load in that it provided more language to process.

5.4.2 Speech rate and pauses
Speech rate was considered along with pauses because the passage with frequent pauses is likely to be spoken at a lower speech rate (Griffiths, 1991). Five participants reported in the questionnaire (Type 2) that one of the difficulties with the listening task was the speed of speaking. WPM (word per minute) of the speaker in this study was calculated from the uninterrupted part of the utterances which did not have an unfilled pause (silence) and frequent gesture uses. The speech rate of normal speed of English ranges from 165-180 wpm (Griffths, 1991). For example, Kota listened to 78 words for 45 seconds, thus it was calculated as 104 wpm. Accordingly, ‘wpm’ of the utterances for each participant varied as follows; Kota (104 wpm), Miki (79wpm), Jun (109wpm), Yuji (157wpm), Risa (160wpm) (wpm for Eri was not calculated because the utterances spoken for her were too short, due to her frequent interruption). Although the results indicated that the speaker spoke more slowly for the low level students, and faster for the higher level students, it was difficult to conclude that the speaker regulated his speech rate according to L2 proficiency. The complete utterances included, for the most part, frequent gesture use or long pauses by the speaker and interruption from the listeners in the form of asking questions or showing signs of non-understanding. Therefore, it was difficult to measure in the interactive setting the average wpm of the complete utterances for each participant, while it might be easier to measure wpm of the utterances recorded on tape in transactional settings. Moreover, as the wpm measured for each participant above did not include interruptions or longer pauses, it is conceivable that the wpm shown above was much faster than the rest of the utterances.

According to the native speaker in this study, he enunciated the utterances for the participants to complete the tasks. Even for the note-taking in Task C, the speaker included sufficient pauses so that the participants completed note-taking. The spoken features of the texts in this study chiefly contained slower, clear speech which was characteristic of foreigner talk (Hatch, 1983) and teacher talk (Chaudron, 1983b, 1988). Therefore, it is hardly conceivable that the speech rate and pauses caused the participants much difficulty with the task performance.

5.4.3 Pronunciation discrimination and mishearing
All the participants, across language proficiencies, demonstrated difficulties with discriminating the pronunciation in Task C. Transformation of sounds, characteristic of spoken language, led to difficulties in discrimination of the sounds. For example, when ‘come with us’ [Kəm/wiːð/əs] was pronounced in the sentence, “you can ask two or three friends to come with us”, it sounded [kamwðəs]. That is, the [i] sound dropped due to elision and two sounds were linked as in [ðəs] due to liaison between the final sound of ‘with’ and the front sound of ‘us’. Therefore, Miki wrote in her notes, ‘kanbosuasu’ [kənbəsə]. Many of the participants also had difficulties with understanding more than one digit number (e.g., March 17, 6,750 Yen). The participants did not report on difficulties with sound discrimination in Task A and Task B. The observation and stimulated recall used in these two tasks were not accessible to the pronunciation perceived by the participants, while in Task C the students’ notes revealed mishearing. Thus, it was difficult to determine that difficulties with pronunciation discrimination did not take place in Task A and Task B. Rather, difficulties with pronunciation discrimination appeared to lie in mishearing on the basis of the students’ experiences and prior knowledge. For example, after hearing in Task B, “The dog comes into the house”, Kota thought he heard “doghouse” by connecting the known words, ‘dog’ and ‘house’. Likewise, in Task B, Jun misunderstood that he heard “post” (cognate in Japanese) after hearing “postbox.” It can be assumed that difficulties in pronunciation discrimination are associated with misinterpretation caused by the listener’s background knowledge.

5.4.4 Vocabulary, structure and meaningful chunks

As nine participants (out of 19) reported in the questionnaire (Type 2) that the vocabulary used was difficult, vocabulary was assumed to be central to comprehension of the utterances. The knowledge of key words in the tasks, such as “shake hands”, “run away” and “mailbox”, actually contributed to or interfered with the completion of the tasks. On the other hand, even if the participants understood the key words, they were more likely to construct an inappropriate interpretation. As mentioned before, because of a lack of the structural knowledge Kota mistakenly derived “doghouse” after hearing two separate words in the sentence. Moreover, a
tendency identified among the participants was for them to attend to the individual known word(s) so that most of them could not process the whole sentence, although Yuji was more likely to process the whole sentence. This evidence raises the issue that, for L2 listening, not only knowledge of vocabulary, but also a meaningful chunk size in which the L2 listeners can decompose the acoustic input, is critical. “The listeners interpret the spoken text as a meaningful chunk rather than a string of individual words” (Rost, 1994, p.22). Most of the participants had difficulties in comprehending the whole structure due to a lack of structural knowledge. Thus, extending the size of the meaningful chunk in which the listener can decompose the listening input appropriately may be critical for enhancement of listening ability.

5.4.5 Social relationship, gender and affective factors

Social relationship and affective factors across all the participants led to difficulties with listening comprehension to a varying degree. Firstly, difficulties with listening comprehension brought about by gender difference between the speaker and the participants were examined. In this study the sample group (3 males and 3 females) were equally divided according to gender in order to examine the effect of gender on listening comprehension. However, this study did not uncover difficulties with listening associated with gender difference between the speaker (male native speaker) and female students. According to the follow-up interviews and stimulated recall, the female students did not report on difficulties with listening comprehension caused by gender difference when they were asked about this issue. Nor did observation indicate any significant difference of task performance between male students and female students. The female participants were not embarrassed by the settings in which they were interacting with the male speaker. Rather, according to the comparison of listening strategies between males and females (Table 5.6), female students provided more cooperative responses to the native speaker when compared to male students (listeners’ signals were, mean: 11 for males, mean: 20 for females). However, two female students, Miki and Risa became nervous due to the fact that they were communicating with a native speaker of English in their L2. On the other hand, the observation
indicated that *Eri*, who had more familiarity with the native speakers due to personal contacts, appeared to feel less nervous during the task performance.

The observation suggested that a one to one setting in which the participants were interacting with the native speaker appeared to place an emotional burden on task performance, presumably because most of the students had less confidence in their L2 listening ability. Most of the students, except a few female students (S13 (*Eri*), S16), remained polite, without asking many questions or clarifying their problems, as if they had been sitting an examination. However, this study did not explore the other interactive settings, such as student and student, or, female and female relationship in which social status is equal, which has been reported to produce more interaction (e.g., Varonis & Gass, 1985). Therefore, the argument that the students interacted less with the native speaker, and thus listening comprehension was interfered with remained an assumption.

This study showed that affective factors brought about difficulties with L2 listening as well. Affective factors here do not refer to the mental burden which gender and social relationship bring to listeners. Most of the participants (17 out of 19) reported in their stimulated recall that in the initial part of the tasks they had concerns about their ability. Once they achieved a sense of success by completing several sub-tasks, most of them appeared to demonstrate better performance in the subsequent sub-tasks. As described before, *Kota*'s nervousness had a negative effect on listening comprehension. In Task B, *Kota* moved several felt-made objects without attending to what was being said, because, as he reported in his follow-up interview, he was very nervous. Once *Kota* completed several sub-tasks, he settled down and started to tune into what had been said. Likewise, *Risa*, who did not like a face to face situation with strangers, spent a longer time completing the tasks in order to avoid careless mistakes. *Risa*'s silence and indecisiveness were sometimes misunderstood by the speaker as non-understanding. On the other hand, *Eri* gave frequent signs of understanding to the speaker, but many of *Eri*'s feedback were found to be misinterpretation. Moreover, the observation revealed that the participants performed better in the second task, due to familiarity with the speaker and the listening task. This evidence seems to
suggest that gaining a sense of success in task performance is very crucial for beginning L2 listeners.

5.4.6 Difficulties associated with task type difference

In this study difficulties which emerged from task performance were closely related to the characteristics of task types (Brown, 1986, 1989). Difficulties associated with task type will be discussed only briefly here because Chapter Four contained an in-depth description of task performance.

5.4.6.1 Task A

The participants for the most part came across difficulties with completion of Sub-task 8, Sub-task 9, and Sub-task 10. The reasons for these difficulties may be that, from Sub-task 1 to Sub-task 7, the participants could complete the sub-tasks by attending to an individual key word(s) which corresponded to the single object to be selected. On the other hand, Sub-task 8 requested the participants to move the coke bottle from the boy to the girl by understanding, “You ask your friend, Naomi (Ken), ‘Give me your coke.’” Not only the knowledge of individual words, but also the knowledge of two structures, ‘ask person + command’ as well as ‘give person + object’ were necessary. In Sub-task 9, the NS needed to elaborate the utterances using several different descriptions because the participants did not know the word, “float” to be selected. However, elaboration in most cases did not have the positive effect that the speaker expected. In Sub-task 10, although most of the participants understood that the spoken text referred to “dog” and “bag”, they did not know what they should do with these two words because they had no knowledge of the words “run away” (baseline text is “The dog takes your bag and runs away with it”).

5.4.6.2 Task B

All the participants who undertook both Task A and Task B reported that Task B was more difficult
than Task A. Most of them faced difficulties in Sub-task 1, Sub-task 5, Sub-task 9 and Sub-task 10. Each of these will be discussed. In Sub-task 1, after hearing, “There is a picture of the red sofa on the door”, most of the participants first confused the framed picture of the red sofa with distractors such as the picture of a boy or the red sofa, because they paid selective attention to a single key word, “picture” or “the red sofa”. Another problem which the participants faced was that they needed to place the framed picture of the red sofa in the appropriate location, “on the door”. Thus, Sub-task 1 contained two different types of demands, which made it difficult for the listeners to complete this sub-task. Additionally, one of the TESOL graduate students who observed the task performance in ‘peer debriefing’ (Lincoln & Guba, 1985) claimed that a framed picture is not usually hung on a door. However, stimulated recall indicated that the participants were not concerned much about where the picture should be displayed and the picture itself was one third of the width of the door. In Sub-task 5, the participants had difficulty understanding of “shaking hands”. It was expected, from the researcher’s teaching experience, that the junior high school students would know the words, “shaking hands” because the researcher and other teachers (whom the researcher observed) often encouraged the students to shake hands with the native speaker (ALT) when they introduced themselves to each other. It was found later that the participants’ English teacher had never used the expression “shaking hands” in the classroom.

Two other sub-tasks demanded more complicated comprehension. In Sub-task 9, after hearing, “The postman comes. He has a letter for you. Where do you take it from?”, the participants received the directions asking them where they should go to receive something in this situation. The participants were requested to move the boy (girl) beside the mailbox. Since selective attention to the individual word did not lead to the completion of this sub-task (although a few participants got a clue from the word, ‘letter’), the text needed to be comprehended by an understanding of the structures or by using extralinguistic cues. Thus, the speaker needed to repeat or elaborate on the utterances as in “The mailman has given you a letter. Where do you get the letter from? Where is your mailbox? Where is your postbox?” As most of the participants did not know the words “mailman”, “mailbox”, and “postbox”, there were few linguistic clues to
the completion of the sub-task. Although three high level students (S11 [Yuji], S18 [Risa], S17) understood the literal meaning of the utterances, for some poor listeners gestures and attention to a known word or a cognate eventually contributed to completion of this sub-task. Likewise, in Sub-task 10, after moving the boy (girl) beside the mailbox, the participants were requested to find the letter in the mailbox. The speaker elaborated on the text as follows: “You get the letter from the mailbox. So you have to look in the mailbox.” As in Sub-task 9, attending to an individual word did not lead to completion of this sub-task. Repetition and elaboration, accompanied by gestures, were needed to complement a lack of L2 knowledge of the listeners.

5.4.6.3 Task C

All the participants who undertook Task C reported in stimulated recall that Task C was the most difficult to comprehend. It was considered that seven factors brought about difficulties with Task C. Firstly, unlike Task A and Task B, in Task C, as concrete referents and visual aids were not available to the listeners, it was difficult to compensate for a lack of L2 knowledge. Secondly, from the speaker’s perspective, although in Task A and Task B, moving the concrete referents enabled the speaker to monitor the listeners’ comprehension, in Task C it was more difficult to monitor the listeners’ comprehension because there were no concrete referents. Thirdly, the context of Task C was more abstract and took place in the future, while Task A and Task B contained the concrete objects and the present tense (‘here and now’ context). “Visual environment provides extra dimension of information.” (Brown & Yule, 1983, p.85). Fourthly, the speaker hardly utilized any gestures to provide additional nonverbal cues. Therefore, the listeners needed to rely mainly on their linguistic knowledge. Fifthly, the speaker did not repeat or elaborate the utterances as he did in Task A and Task B. The number of utterances provided by the speaker was reduced considerably as compared to those of Task A and Task B. Sixthly, the listeners did not provide many backchannelling cues to indicate their understanding or non-understanding. Moreover, the listeners took notes in Japanese so that the speaker did not know what they had written. Therefore, the speaker scarcely knew whether or not they
comprehended the utterances or needed more speaker’s verbal and non-verbal support. This seems to suggest that the listeners are responsible for feedback to utterances spoken to them (Buck, 2001). Lastly, it can be assumed that the text of Task C may have required the listeners to decode a larger chunk of word(s) or, sometimes, structures, while in Task A and B, selective attention to an individual word(s) often led to successful completion of the tasks. Further, it was pointed out in peer debriefing (graduate TESOL class at Meio University) that note-taking skill caused the participants extra difficulty. They were asked in stimulated recall whether it was difficult for them to listen to the utterances and take notes at the same time. However, they did not report much difficulty with this problem. The observation indicated that sufficient pauses were included so that note-taking was completed. Moreover, the practice in note-taking before Task C was considered to have familiarized the participants with note-taking skills. Therefore it is not likely that this factor affected difficulty in completing Task C.

5.4.7 SUMMARY

Peculiar features of listening, such as non-recursive processing, made it difficult for the participants to comprehend the texts. Elaboration is more likely to have placed cognitive overload on the listeners. As the speech found in this study on the whole included long pauses and slower speech, speech rate and pauses did not appear to bring about difficulties with L2 listening for most of the students. The analysis of Task C revealed that some problems with discrimination of sounds were due to transformation of sounds or multiple digit numbers. Mishearing appeared to be more associated with misinterpretation based on the listener’s background knowledge.

The knowledge of key words was crucial for completion of the tasks. Additionally, most of the participants had a lack of structural knowledge. Therefore, the participants had difficulties with some sub-tasks requiring them to understand language structures. Extending the meaningful chunk size that listeners can decompose was considered to be central to the understanding of complex utterances. Moreover, gender did not appear to affect the listening comprehension of the
female participants. Rather, some students reported that they were nervous about interacting with a native speaker of English in the L2 because of a lack of confidence in their L2 listening ability. Thus, affective factors mostly due to nervousness (Kota, Risa), affected listening comprehension. However, once the participants had a sense of success, they demonstrated considerably better performance.

A great number of listening difficulties were associated with the characteristics of task types. In Task A and Task B, distractors, the knowledge of key words and structure affected listening comprehension. In Task C, seven factors influenced listening comprehension for the participants.
6.1 INTRODUCTION

The purpose of this study was to investigate the nature of listening in interactive settings and the characteristics of listening comprehension processes for junior high school students in Japan. The major motivation of this study was to seek insights into learning and teaching of listening which would promote communicative English ability for junior high school students in Japan. The previous two chapters included descriptive analysis of listening comprehension and strategies for the six case study participants and the in-depth interpretation of several key themes. This chapter highlights two key themes; 1) the collaborative nature of interactive listening, and 2) characteristics of listening comprehension processes for Japanese junior high school students. The chapter concludes with implications for classrooms and future research directions.

Recapping the major findings, the present study uncovered some distinctive features of interactive listening demonstrated by junior high school students. Firstly, the listeners as well as the speaker were found to play vital roles in collaboratively completing the listening tasks. Secondly, repetition by the speaker was found to be the most effective cue for basic level listeners. Thirdly, differences in physical settings and contexts according to listening tasks affected listening comprehension. Fourthly, the study generated a comprehensive inventory of listening strategies, including 25 types of strategies on the basis of metacognitive, cognitive, and social/affective categories. Lastly, characteristic features of listening such as selective attention and inference based on visual aids and gestures were identified among the Japanese junior high school students in this study. It is hoped that the listening strategies and comprehension processes found in this study will significantly contribute to L2 interactive listening research as they extend the research of Rost and Ross (1991) and Vandergrift (1997b), which have been the only available research of
interactive listening by major researchers.

6.2 JOINT CONSTRUCTION OF MEANING IN INTERACTIVE LISTENING

A key finding in this study was that the meaning of the utterances was collaboratively constructed by the listeners and the speaker in interactive settings. That is, the listeners and the speaker actively cooperated to increase comprehensibility for the listeners so that the tasks could be completed. This finding has significant implications for the pedagogy of ESL teaching and Japanese classrooms.

6.2.1 Contribution of listener/s

The findings in the present study suggest that the participant listeners played an important role in collaborating with the participant speaker to increase comprehensibility in two respects. One of the listeners’ contributions to comprehensibility in the interaction was that in this study they constantly provided backchannelling cues of understanding or non-understanding to prompt the speaker to modify the utterances and provide necessary non-verbal cues. The listener’s backchannelling cues such as indication of non-understanding (e.g., “No”, confused face) in most cases made the speaker aware that he needed to provide further assistance for the listeners. However, as the backchannelling cues found in this study were more likely to be implicit responses to the speaker’s utterances, the speaker at times seemed to be confused. Furthermore, the native speaker, due to the nature of task, reported that a lack of listener’s backchannelling cues in Task C led to a reduced amount of speaker’s support.

Another contribution of the listeners in this study was that they actively requested the speaker to repeat the preceding sentence or the specific word(s). Request for repetition was an indication of more active and conscious involvement by the listeners in the collaborative construction of meaning. In this study the listeners primarily requested repetition with one word (e.g., “One
more.”) or hand gestures. There were some cases in which the listeners seemed to request clarification of an ambiguous utterance by repeating the preceding word (e.g., specific reprise strategy) with rising intonation. However, it was not clear whether repetition of the specific word(s) was intended to clarify the part which was not understood, or just showed unwillingness to interrupt the speaker’s utterances. Nevertheless, it seemed that these explicit requests by the listeners clearly made the speaker aware of the problematic part of the utterances and helped the speaker to provide appropriate assistance for the listeners. This suggests that explicit indication of problems by listeners would contribute to collaborative construction of meaning more effectively than implicit backchannelling cues.

6.2.2 Contribution of the speaker

One of the major characteristics of interactive listening found in this study was the notion of being ‘supportive’. The analyzed data indicated that the speaker repeated, clarified, simplified and elaborated the utterances, and provided paralinguistic cues and non-verbal clues when the listeners had problems with completion of the tasks. In other words, most of the participants, who lacked L2 knowledge, needed to gain support from the speaker or the contextual cues.

Speaker’s verbal support

Speaker’s verbal support in this study was frequently observed in the form of speech modifications including repetition and paralinguistic cues. The evidence that repetition by the speaker was most effective for comprehension echoes that of other studies (e.g., Pica et al., 1987). Two possible explanations could be made about this evidence. One explanation is that from the speaker’s view, repetition of particular words made the utterance more salient (Gass, 1997). Another explanation is that from the listener’s view, repetition provided increased processing time and increased amount of input for listeners (Ellis, et al., 1994). It appeared that repetition added to redundancy, which helped to increase comprehensibility. On the other hand, the findings in this study showed that
elaboration by the speaker was the least effective, presumably because it provides more language to be processed for beginning level students. This evidence is consistent with that of Derwing’s study (1989). Furthermore, the speaker’s paralinguistic cues, which put phonological stress on key word(s), was mostly conducive to completion of the sub-tasks. It was also evident that longer pauses and slower and simplified speech used by the native speaker throughout the task sessions, as in the speech of ‘teacher talk’ (Chaudron, 1988), also contributed to the completion of the tasks.

**Speaker’s non-verbal support**

The analyzed data indicated that the speaker effectively provided non-verbal cues for the listeners to complete the tasks. Most of the listeners in this study, who lacked L2 knowledge, needed to rely on the speaker’s non-verbal cues to infer what had been said. Non-verbal cues found in this study included imitation of animal and human action, gaze direction and pointing at the referent with the hand. The speaker constantly resorted to the use of gestures when comprehension problems took place while engaging in Task A and Task B. On the other hand, during Task C implementation, the speaker was not able to provide many non-verbal cues for the listeners. This is most likely because Task C did not include any action or concrete referents which the native speaker could use to convey the message, while both Task A and Task B included plenty of actions or visual aids included in the stories which the speaker could use to compensate for the lack of a listener’s understanding. This suggests that the effects of non-verbal cues on comprehensibility are in part contingent on task type. Nevertheless, when non-verbal cues in this study were properly employed by the speaker, these cues considerably assisted the listeners to increase comprehensibility.

**Speaker’s scaffolding**

Another characteristic of interactive listening in this study is that the native speaker was ‘scaffolding’ (Bruner, 1978) development of listening ability for low level learners through collaboration and support. That is, the advanced level speaker (native speaker) provided verbal and non-verbal support for less advanced learners (students) in the learners’ developmental process.
in order to arrive at the appropriate meaning. It may be argued that this relates to Vygotsky’s (1978) notion of ‘the zone of proximal development’, the level of performance which a learner is capable of when there is support from interaction with a more advanced interlocutor. Similarly, literature about speech modifications (Pica et al., 1987) has shown that the linguistic support from native speakers or advanced speakers contributes to promotion of listening comprehension for less advanced learners. It would follow from the above discussion that the native speaker can play a vital role in increasing comprehensibility for the students in interactive settings.

There has been harsh criticism that ALTs (native speakers) in Japan have not contributed markedly to improvement in the language ability of students, although a huge expenditure has been made on the JET program (Moore & Lamie, 1996), for which the native speaker in this study was part. Yet the findings in this study provide a useful insight into how ALTs can play a crucial role in promoting listening comprehension in the classroom by scaffolding language development for junior high school students.

6.3 CONTEXTUAL SUPPORT

Physical setting

The analyzed data in this study seem to indicate that the physical setting of interactive listening contributed to understanding of the utterances. Felt-made pictures and the picture boards in Task A and Task B visually supported the listeners in inferring what had been said. Selecting the concrete referents in Task A and Task B enabled the speaker to monitor the understanding of the listeners and this made it possible for the speaker to provide appropriate support for them. This suggests that in some interactive settings, listeners and speaker can make the most of contextual clues to increase comprehensibility. This finding is supported by the lack of interaction in Task C. This issue will be discussed in more detail in the next section which deals with task type.

Task type

One of the key findings in this study was that task type brought about various interactive features
between the speaker and the listeners. The observed data indicated that the listeners and the
speaker had a larger amount of interaction while performing Task A or Task B. On the other hand,
little or no interaction was observed in Task C. The possible explanation for this difference, as
pointed out by Krashen (1982), may be that the immediate context (the here and now context) in
Task A and Task B made it easier for beginning level learners to complete the tasks (Task A and
Task B), whereas in Task C the speaker conveyed information regarding the future and more
abstract events in the less immediate context. However, it was difficult to judge whether, from the
speaker’s view, reduction of gestures and speech modifications in Task C was caused by fewer
listeners’ responses or, from the listeners’ view, a lack of speaker’s support discouraged the listeners
from providing responses, or this was caused by task type (story-completion task v. note-taking
task). This study provides only inconclusive evidence for this assumption. Comprehensibility in
the light of context difference (e.g., immediate context vs. non-immediate context) and task type
needs to be investigated in further empirical studies.

The analyzed data showed that the major difficulties with listening in interactive settings were
closely associated with task type. As discussed before, most of the participants reported that Task
C was the most difficult of the three tasks. Although it was assumed that three types of text (Tasks
A, B and C) provided by the speaker had approximately equivalent degree of difficulty, task type
affected the comprehension of the participants.

To sum up the above discussion, the main characteristic of interactive listening is the joint
construction of meaning between a listener and a speaker. The collaborative nature of interactive
listening is similar to the concept of the interactional perspective of ‘communication strategy’
(Tarone, 1981). The distinction between interactive listening and communicative strategy is that
the former emphasizes reception and the latter emphasizes production (see also Section 2.6.3). In
this study, the listeners implicitly or explicitly provided backchannelling cues for the speaker or
requested that the speaker repeat the preceding utterances or clarify the ambiguous section. In
response to these listeners’ behaviors, the speaker modified, simplified or repeated the utterances or
provided non-verbal cues and paralinguistic cues. However, it can be argued that this collaborative nature of interactive listening rests on the premise that a listener and a speaker constantly make mutual efforts to increase understanding between them. Interactive listening would often demand from both the speaker and listener “the appropriate degree of patience, perseverance, and co-operation” (Bremer et al., 1996, p.199). As external factors, context and task type also affected the development of interactive listening.

This study uncovered the interrelationship between the listeners and the speakers in order to increase comprehensibility of the spoken discourse. SLA research has been mainly concerned with how speakers make the input comprehensible for listeners, in the research areas of speech modifications (e.g., Pica et al., 1987), recasting (e.g., Swain, 2000b), focus on form (e.g., Long, 1996), with some exceptions (e.g., Bremer, et al., 1996; Pica, et al., 1996). Faerch and Kasper (1986) criticize these speaker-focused studies; “the learner is seen as passive recipient, rather than as one actively involved in the process of establishing communicating meaning” (p. 262). On the other hand, listening strategies research (e.g., Vandergrift, 1997b) has not been concerned about how speakers support listeners to promote comprehensibility. As mentioned above, the nature of interactive listening is collaborative. This issue was also addressed in Chapter Five. The interrelationship between a listener and a speaker in the collaborative discourse needs to receive more attention in further studies.

6.4 KEY FEATURES OF LISTENING COMPREHENSION PROCESSES FOR JAPANESE JUNIOR HIGH SCHOOL STUDENTS

The previous discussion centered on the nature of interactive listening identified in this study. This section discusses the characteristic features of listening demonstrated by Japanese junior high school students in this study. There may be a potential transfer of these findings to basic level learners of English in similar contexts.
6.4.1 Listening strategies

Listening strategies inventory

The inventory of listening strategies in this study was modified and synthesized on the basis of metacognitive, cognitive and social/affective categories (O’Malley et al., 1990; Vandergrift, 1996, 1997a) which included strategies of interactive listening found in the studies of Rost and Ross (1991), and Vandergrift (1997b). This study generated a more comprehensive and focused inventory of listening strategies than those of previous studies (e.g., Rost & Ross, 1991; Vandergrift, 1997b). Listening strategies were deliberately divided into L1, L2, verbal, and non-verbal and included strategies used by good listeners as well as poor listeners, although applied linguistic researchers traditionally have pursued strategies used exclusively by good listeners (e.g., Rubin, 1975). Some strategies which were irrelevant to listening tasks were eliminated, whereas the previous studies (e.g., Vandergrift, 1997a) included strategies irrelevant to listening activities. Furthermore, this study identified two new listening strategies, ‘recalling’ and ‘non-understanding’.

Contingency of listening strategies

The analyzed data showed that the strategy use of the participants was contingent on various factors. Firstly, the strategy use of the participants varied according to the L2 proficiency of the listeners. For example, low level listeners (Miki, Kota) tended to employ non-verbal strategies such as comprehension monitoring (non-verbal), non-understanding (non-verbal), and kinesic inferencing. On the other hand, the evidence that the high level students (Yuji, Risa) frequently employed uptaking strategies (verbal) echoes similar findings by Vandergrift (1997b). Secondly, affective factors influenced the strategy choice of the participants. For example, due to her caution, Miki often kept silent and employed frequent non-understanding (non-verbal) strategies. Thirdly, familiarity with the native speaker (social factor) seemed to prompt the listener (Eri) to provide frequent uptaking strategies and specific reprise (L2) strategies. Lastly, as discussed in Section 6.3.4, task type affected the selection of listening strategies. This study, however, did not identify
great gender difference in terms of listening strategies, although the participants were divided according to gender. Thus, it may be concluded that in this study listening strategies were contingent on L2 proficiency, affective factors, social factors and task type.

**Effective listening strategies**

The analyzed data also showed that effective strategy uses varied according to task type, speaker, L2 proficiency and affective factors. Cohen (1998) also argues that effective strategies in a given context would not be always applicable to other contexts because effective strategy uses are contingent on various factors. Thus, it would be difficult to determine the effective strategies which can be generalized to other contexts. However, several effective strategies identified in this study seemed to be common to all the participants. Firstly, effective strategies were contingent on task type. For example, in this study kinesic strategies were successful in Tasks in A and B, but not C. Secondly, as discussed in Section 6.2.1, explicit strategies seemed to prompt the speaker to provide necessary assistance more effectively than implicit strategies. The listeners’ explicit strategies, such as requests for repetition and clarification in most cases conveyed the need for assistance to the speaker, while the speaker was sometimes confused and unable to interpret the implicit strategies.

A number of strategy researchers (e.g., Mendelsohn, 1995) argue that strategy uses should be brought to the consciousness of learners. It can be argued that the effectiveness of strategies may be affected more by various factors in a given context unless listeners consciously use strategies with the intention of enhancing learning. This seems to suggest that raising the learner’s awareness of strategy use is likely to lead to successful strategy uses in order to enhance comprehensibility. Furthermore, conscious uses of strategy would be strengthened by enhancement of the learner’s motivation (O’Malley et al., 1990). Yet this is not to say that ineffective strategies used by poor listeners should be ignored. Ineffective strategies help to diagnose the problems of poor learners of L2, which is also a sub-aim of this study.
6.4.2 Other characteristic features of listening comprehension processes

Selective attention

The analyzed data showed that the listeners paid selective attention to an individual known word(s) and interpreted the acoustic input in the way that made sense to them, with one exception (high level student, Yuji). Frequent uses of specific reprise strategy (L2) in this study ensured that the listeners paid selective attention to preceding word(s) and attempted to interpret the utterances. The listeners in this study tended to process a small chunk of acoustic input at the lexical level. This evidence is consistent with that of the previous studies (e.g., Rost & Ross, 1991). It was also evident that selective attention to a particular concrete referent in Task A or Task B mostly resulted in successful completion of the sub-tasks. However, the participants’ selective attention to micro parts of text often failed to capture the macro part of the discourse.

Controlled processing and automatic processing

From a different view, low level students relied on controlled processing, where interpretation of listening consciously took place with support from the speaker and other contextual cues. On the other hand, high level students tended to rely on automatic processing, where the acoustic input was unconsciously comprehended with little support from the speaker and the context, when their listening ability was sufficient to complete the task. However, these high level students mainly relied on controlled processing to complete Task C because their listening ability and understanding of the L2 was not sufficient to complete Task C. Generally L2 listeners proceed from controlled processing to automatic processing as their listening ability advances. Yet it appears that the position of listeners on a continuum from controlled processing to automatic processing is decided by the difficulty of the listening task (text).

Inference

The participants across L2 proficiency made inferences to interpret the listening texts when they
had problems with completion of the task. That is, all the participants used top-down processing to interpret the texts. The analysis of listening strategies showed that the participants retrieved previous knowledge and actively engaged in interpretation of the text. The listeners also relied markedly on speaker’s gestures to infer what had been said. Similarly, visual aids such as felt-made pictures assisted the listeners to infer the utterance. The available data indicated that the listeners made a variety of interpretations, although they listened to the same text. This evidence echoes Buck’s (1995, 2001) claim that meaning is not something in the text that the listener has to construct, but it is constructed by listener in an active process of inference and hypothesis building, drawing on the listeners’ background knowledge.

### Interactive processing

As discussed above, all levels of listeners used to a varying degree both bottom-up processing and top-down processing. This suggests that bottom-up processing and top-down processing interacted with each other in order for the participants to comprehend the listening texts. When the participants lacked linguistic knowledge (bottom-processing) of the L2, they were likely to rely on inferences (top-down processing). Less effective listeners made false interpretations on the basis of their previous knowledge so that they needed greater support from the native speaker in order to complete the tasks. On the other hand, an effective listener (Yuji) made an error in interpretation in the first place, but reoriented the interpretation with little help from the speaker and succeeded in completion of the listening task. This evidence is consistent with Chamot and Kupper’s (1989) study claiming that effective listeners are more likely to use both bottom-up processing and top-down processing effectively.

### What makes input comprehensible?

SLA research has been interested in what makes input comprehensible. Rost (2000, 2002) argues that second language learning is made possible in part through speech modifications made by
native speakers and in part through strategies employed by learners. Similarly, and in a broader sense, the evidence in this study suggests that for beginning level listeners ‘comprehensible input’ (Krashen, 1982, 1985) is partially made available with the support of verbal and non-verbal cues from the speaker and the contextual cues as well as through listening strategies, although this is not the only way of making the input comprehensible (e.g., the input could be made comprehensible by checking the dictionary).

6.5 Model of interactive listening for beginning level learners

Figure 6.1 model of interactive listening for beginning level learners
Figure 6.1 summarizes the processes of interactive listening for beginning level learners identified in this study. The whole process is considered in the dimension of context. This model focuses on collaborative processes between the listener (a learner) and the speaker (tutor, that is, a native speaker or a language teacher). During the collaborative processes of interactive listening, the listener provides the speaker with backchannelling cues to indicate understanding or non-understanding or requests repetition and clarification. In response to these, the speaker repeats and simplifies (including pauses) utterances, or provides non-verbal cues and paralinguistic cues to increase comprehensibility or to solve comprehension problems. Interaction between the listener and speaker collaboratively continues until communicative goal is achieved (in some cases a listener may fail to arrive at understanding of meaning).

In actual life, spoken language will not be understood when the listener becomes a passive interlocutor or an ‘eavesdropper’ (Nunan, 1999), without providing the speaker with appropriate backchannelling cues and without requesting repetition or clarification. On the other hand, understanding between interlocutors will not be achieved when the speaker does not provide appropriate verbal and non-verbal support to help the listener to comprehend the utterances.

Several internal variables of the listener affect the above interactive feature of listening. Interactive features of listening are more likely to be affected by the listener’s internal variables such as L2 proficiency and affective factors as well as speaker familiarity (this study could not confirm whether or not other variables such as personality, learning style and motivation affected task performance).
Comprehension in interactive listening is enhanced through interaction between bottom-up processing and controlled processing. In bottom-up processing, decoding of the acoustic input takes places from a smaller unit (sound) to a larger unit (discourse). In top-down processing, inference or interpretation of the acoustic input takes place on the basis of background knowledge (schema) or inference. Automatic processing and controlled processing usually occur within bottom-up processing (Peterson, 2001). The controlled processing and automatic processing of a listener are likely to be dependent upon task and text difficulty. For example, if a task is too difficult for an L2 learner, even a proficient listener is likely to rely on controlled processing.

External factors also affect interactive features of listening. Interactive features of listening are to a varying degree contingent on the physical setting (e.g., immediate context), task type (e.g., picture selection task), and social factors (e.g., familiarity with a speaker) surrounding the interactive listening.

6.6 ISSUES ARISING FROM THIS STUDY

Firstly, the generalizability of this study is an issue. The listening strategies found in the study varied according to physical setting, task type, L2 proficiency, affective factors, and social factors. It would be difficult to transfer the listening strategies found in this study to different contexts and new tasks. Furthermore, a number of previous studies have adopted a variety of listening strategy categories. Variance of categories would bring about confusion for language teachers when they apply the findings of the studies to classroom teaching. A robust categorization scheme grounded in solid language theory has not been established, although the categorization of metacognitive, cognitive and social/affective strategies adopted in this study has been widely accepted (Ellis, 1994). Cohen (1998, p.266) argues that “No single strategy will be appropriate for all learners or for all tasks.” However, strategy researchers all agree that strategies should be used consciously by learners. Furthermore, this study found that strategy uses were the most affected by task type.
This may suggest that the investigation of strategy classification according to task type provides a promising insight into the language classroom.

The second issue arising from this study is frequency and variability of listening strategies according to L2 proficiency. Unlike other studies (e.g., Vandergrift, 1997a), this study uncovered a greater variety of strategy use from low level students than from high level students. This evidence is contrary to that of other studies. A possible explanation for this is that only when the listeners had problems with comprehension, listening strategies were identifiable. This is a methodological issue in that unconscious strategy uses adopted by advanced level learners are not observable. As a consequence, low level students in this study, who had more difficulty in completion of the tasks, demonstrated a larger number of strategies.

Thirdly, this study did not show any distinctive difference in listening comprehension and strategy uses according to L2 proficiency, which is also a limitation of the study. Although there was a great difference in L2 ability between the lowest level student (Kota) and the highest level student (Yuji), difference in L2 proficiency between high level students and intermediate level students was not so obvious. This problem stems from a methodological issue regarding the benchmark for defining L2 proficiency level. It can be argued that L2 proficiency has also been decided relatively loosely in other studies. Since the participants in this study had been learning English in the classroom for only three years, it may have been difficult to divide the students more accurately according to L2 proficiency.

6.7 IMPLICATIONS FOR LANGUAGE CLASSROOMS IN JAPAN

Successful interactive listening
This study has shown that interactive listening was successful when the listener and the speaker collaborated to construct meaning, when there was appropriate support from the speaker and context, and also when listening strategies were used effectively. With respect to speaker’s
support, specifically gestures and repetition of the preceding word(s) by a speaker would be conductive to success of the interactive listening for beginning level learners. With respect to context, listening tasks would need to be designed to include a certain amount of visual aids in the immediate context. What would also be important is that both the listener (mostly students) and the speaker (mostly English teachers or ALTs in classroom settings) be required to signal and interpret cues appropriately provided by either of the interlocutors to enhance comprehensibility or to achieve their communicative purposes. Furthermore, curriculum planners and material designers also need to be aware of the collaborative nature of interactive listening in contributing to successful communication. Furthermore, Lynch (2002) argues that “Less skilled L2 listeners are weak at bottom-up level, they need to be helped to rely less on contextual and topical guessing and to rely more on rapid and accurate linguistic decoding” (p.44). Therefore, it goes without saying that increased linguistic knowledge of L2 in order to enhance listening ability is also crucial for students in the English-as-a-foreign-language-context where linguistic input is considerably poor.

**Listening strategies instruction**

Listening strategies instruction would help to increase listening ability, although a number of strategy researchers (e.g., Cohen, 1998) are still reluctant to reach the ultimate conclusion that strategy instruction contributes to long-term learning because effective strategies are contingent on various factors. Therefore, the findings as to listening strategies in this study should be interpreted appropriately according to the learning environment of students. Lightbown (2000) warns that results of SLA research should be applied with caution to classroom situations. To this end, categorization of metacognitive, cognitive and social/affective strategies would provide a very robust classification scheme for listening strategies. The students in this study were more likely to use implicit strategies for solving comprehension problems or to passively respond to the speaker’s utterances without queries. A listener should not be an ‘eavesdropper’ (Nunan, 1999) who passively overhears the utterances. Students should be encouraged to adopt more explicit listening strategies such as enquiring, clarifying the utterances and constantly monitoring their
comprehension. Furthermore, the findings of this study suggest that it is effective to employ specific strategies according to task type (e.g., an extralinguistic strategy is effective for a picture selection task).

Underwood (1989) claims that a majority of language teachers simply test the listening ability of students rather than instruct them in effective listening strategies. This would often be the case in Japanese classrooms of English as well. Further, simply exposing students to a large amount of input as argued by Krashen (1982) is not sufficient to help to increase listening comprehension. Learners also should know how to listen effectively, rather than simply being exposed to a large amount of listening input.

The goal of listening strategies instruction is to bring listening processes to learner’s consciousness (Mendelsohn, 1994). For this reason, listening strategies need to be discussed in the classroom. Students need to be aware of appropriate strategies which suit individual differences and teachers need to encourage and motivate students to employ strategies. Furthermore, systematic guided exercises of listening strategies should be integrated into the classroom syllabus to facilitate autonomous and active listening (Cohen, 1998). Another important pedagogic implication is that listening strategies need to be gradually removed as listening skill improves.

**Utility of ALTs (native speakers)**

The results of this study have shown that the native speaker played a vital role in supporting the students when they had problems with the listening tasks. This evidence provides a useful insight into language classrooms in that ALTs can play a vital role in the classroom in order to improve students’ language ability. There has been harsh criticism of ALTs arguing that the unimportant role of ALTs in the language classrooms does not deserve the huge expenditure for the JET program. Since interaction between the listeners and the native speaker in this study took place in a one to one situation, the findings of this study need to be incorporated in large class sizes and the possible ways of including interactive listening exercises in pair work and group work need to be
A long-term goal of scaffolding involving the native speaker is needed to develop self-directed listeners. In this study, the native speaker provided temporary support to assist the listeners to complete the listening tasks. As Hammond (2001) argues, macro-level scaffolding which has articulated goals enabling the extension of the existing level of listening ability would need to be designed. Ad-hoc solutions to comprehension problems may not lead to long-term success of language learning. Furthermore, scaffolding (speaker’s support and other non-linguistic support) needs to be phased out as language learners become more proficient and autonomous (Mendelsohn, 1998).

In order for such scaffolding to occur, classrooms need to be places where students feel comfortable to show a lack of understanding verbally and non-verbally, or request repetition or clarification. Japanese teachers of English and ALTs collaboratively need to create such a non-threatening atmosphere in order to develop the potential listening ability of students.

**Interactive listening for communication**

Enhancement of interactive listening has the potential to develop the communicative language ability of beginning level students. Listening tasks in this study were moderately controlled for research purposes, although it is acknowledged that interactive listening in natural settings generally has features of two way communication (Ellis, 1994), frequent turn-takings and spontaneity of discourse topic (Buck, 2001). This study was partially able to identify the processes through which understanding between the interlocutors in interactive (communicative) settings is achieved. The findings in this study have also shown that the basic level participants succeeded in achieving the communicative purposes in listening tasks through support from the speaker and context as well as through listening strategies adopted by the listeners. It was also shown in Chapter Two that empirical evidence and a number of applied linguists support the crucial role of listening in communicative settings, especially for beginning level learners. It can
be stressed that listening should not be taken for granted in oral communication. “Listening is hard work, and deserves more analysis and support” (Vandergrift, 1999, p.168). It is my belief that interactive listening plays a vital role in achieving communicative purposes for basic level students in interactive settings, and for this reason interactive listening research needs to receive more attention in the future.

6.8 Directions for future research

There is a growing need to investigate how learning and teaching of interactive listening can contribute to an improvement in communicative language ability. A number of scholars (e.g., Rost, 2002) emphasize the critical role of interactive listening in communicative settings. It is obvious that communication does not take place when a listener does not understand what is being said. Furthermore, a number of SLA scholars (e.g., Krashen & Terrell, 1983) agree that learning of listening should precede that of speaking, and listening should play the most vital role at the early stage of language learning. This concept has been supported in many teaching practices (e.g., Postovsky, 1981). In spite of enormous theoretical and empirical support as to the crucial role of listening for beginning level learners in communicative settings, how learning and teaching of listening will lead to the promotion of communicative language ability has not been fully investigated. To this end, a more robust theoretical framework and stronger empirical evidence of interactive listening are needed in further studies.

The second suggestion for future research is relevant to the first one. The lack of robust listening theories and empirical studies is due to the methodological problem that it is extremely difficult to investigate listening which is an ‘invisible cognitive behavior’. In this respect, the stimulated recall method used in this study was very effective for investigating what the listeners had in mind while engaging in the listening tasks (this is not to say that the stimulated recall method is effective in every context. It was effective in the Japanese context where the students were reluctant to
initiate verbal reports). In this study observation also played a complementary role in verifying what was reported in stimulated recall. Future research needs to seek an appropriate research method suitable for the given context in order to examine L2 listening behaviors.

Finally, the effects of task type on listening comprehension need to further be investigated. The results of this study assumed that the immediate context (here and now) in this study made listening easier for the participants. A number of scholars (e.g., Krashen, 1982) argue that beginning level L2 learners acquire the target language more easily in the immediate context. Thus, although several studies have investigated effects of contextual cues on listening comprehension (e.g., Mueller, 1980, Ginther, 2002), there is a need for further investigation of the comparison between the effect of the immediate context and that of a less immediate context (e.g., future and abstract event) on listening comprehension for beginning level learners.
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NOTE
Please see print copy for Appendices, as none of the Japanese characters used have come across in the PDF version of this file.
APPENDIX I

Listening task (A) transcript

Listening task between a native speaker of English and a student were video-recorded and transcribed for analysis. Listening task is divided into eleven sub-tasks. Transcript is divided after a native speaker makes a long pause or after a student makes a response. Not only spoken language but also gestures and actions are described.

Stressed words are written in Italic letters.

Japanese spoken by the student is underlined.

**Miki (Girl)**

N: Native speaker  Japanese is in [ ].

(Sub-task 1)
001 N: The sun is shining in the sky.  The sun is shining in the sky.  It’s very hot.
002 Miki: (Miki is thinking for a moment.) The sun is in the sky.
003 (Miki places the sun in the sky.)
004 N: OK.

(Sub-task 2)
005 N: You see a bird flying in the sky.  You see a bird flying.
006 N: (Miki places the bird in the sky.) OK.

(Sub-task 3)
007 N: You are happy that you came to the beach.  Your friend, Ken is drinking coke using a straw.  (Miki places coke bottle beside the boy.)

(Sub-task 4)
008 N: You are wearing sunglasses.  You are wearing sunglasses. (Miki has the girl wear sunglasses.)

(Sub-task 5)
009 N: You see a bird walking in the sand.  You see a bird walking in the sand.  A bird is walking in the sand.
010 Miki: Huh? [ ] (Miki places the walking bird in the sand.)

(Sub-task 6)
011 N: You feel like playing something.  Do you want to play with Frisbee or do you with beach ball?  Do you want to play with the Frisbee or the beach ball?
(N makes a gesture of ‘choosing either.’)
012 Miki: Beach ball.  (Miki chooses the beach ball.)

(Sub-task 7)
013 N: OK.  You stop playing with the beach ball.

(Sub-task 8)
014 N: You are thirsty.  But there are no drinks in the ice box.  There are no drinks in the cooler.
You ask your friend, Ken, “Give me your drink.”  You ask , your friend, Ken, “Give me your drink.” (N makes a gesture of “asking for something.”)
015 N: (Miki touches the ice box and is thinking.) There are no drinks in the cooler.
There are no drinks in the ice box.  But you are thirsty.  So you ask your friend, Ken, “Please give me your drink.” “Ken, give me your drink.” (N makes a gesture of “asking for something”.)
016 N: (Miki moves coke bottle from the boy to the girl.) OK.
017 N: Ken says, “Let’s swim. Let’s go swimming. Let’s swim.” But you say, “I can’t swim. I can’t swim.”

018 N: (Miki receives a paper asking her what she should choose to solve her problem in this situation.) What will you do to go swimming?

019 N: (Miki holds the float.) OK.

020 N: You want to go swimming. What do you choose?

021 N: (Miki is holding the float and thinking.) What do you need to do with that to go swimming? If you want to go swimming, what do you do?

022 N: (Miki seems to be confused.) Ken has…he’s wearing it. What do you do with it?

023 N: (Miki is thinking.) Ken is…Ken is wearing…the float. What do you do with it? You can’t swim.

024 N: (Miki is still holding the float.) You need to wear the float. You need to put on the float. Ken is wearing the float. You need to wear the float.

025 N: (A long pause.) Ken is wearing…Ken is wearing a float. Ken is wearing the float. You need to wear the float.

026 N: (A long pause) You need to wear the float. You need to put the float on. You need to put the float on.

027 N: (Miki is confused.) If you don’t have the float and you go swimming, you will drown. (N makes a gesture of ‘drowning’.) You need something to keep you floating. Keep you floating. So you can breathe. (N makes a gesture of ‘floating’.)

028 N: (Miki returns the float to the place where it was initially placed.) So Ken has a float. Your friend, Ken is wearing a float. (Miki moves the boy to the sea.)

029 N: OK. And you want to go swimming, too. Ken says, “Let’s go swimming.” But you need to have a float because you can’t swim. If you go swimming, you will sink. (N makes a gesture of ‘sinking.’) You need something to help you float. (N makes a gesture of ‘floating’.) To keep your head above the water. So you can breathe. What do you have that will help you float?

030 N: (Miki touches the float again.) What do you have that will help you float?

031 N: (Miki is thinking.) Ken can swim. He can swim. But you can’t. You can’t swim. So you want to go swimming. Ken says, “Let’s go swimming. Let’s go swimming.” But you need something to hold on to…to keep you above the water. (N repeats a gesture of ‘floating’.)

032 N: (Miki touches the girl, but she seems not to know what to do.) If you go swimming, you will sink. Because you can’t swim. (N repeats the gesture of ‘sinking.’) You will sink…and you will drown. (N makes a gesture of ‘drowning.’) Ken can swim. You need…you have to have something that will float your…

033 N: (N touches the girl.) What do you have? What do you have? What do you choose?

034 N: (Miki places the float on the girl.) OK, OK.

(Sub-task 10)

035 N: A dog comes onto the beach. (Miki places the dog in the sand.) The dog takes your bag. The dog takes your bag. (Miki moves the dog beside the bag.)

036 N: And it runs off the beach. The dog takes your bag and runs off the beach. (N makes a gesture of ‘running away’ and Miki is watching his gesture.)

037 N: (Miki moves the dog and the bag out of the beach.) OK.

(Sub-task 11)

038 N: You stop swimming. And you see your bag is gone. You see…you don’t know where
your bag is.

039 Miki: (Miki receives a paper asking her how she will solve her problem in this situation.) I will look for my bag. [ ] (Japanese is translated into English by the researcher.)

040 N: Will you look for it by yourself or with your friend? (English is translated into Japanese.)

041 Miki: With my friend. [ ] (Japanese is translated into English.)

042 N: OK, good.
Stimulated recall transcript

Miki (Girl, Task A)

Students reported on their listening tasks in Japanese and responded to interviews in Japanese. This transcript was translated from Japanese into English.

Self-reports and interviews were conducted after each of sub-tasks. The transcript is divided accordingly.

English words and sentences are included in quotation mark (" "). Stressed words are written in Italic letters.

R: Researcher, N: Native speaker

(Sub-task 1)
001 R: What did you think you heard here? [ ]
002 Miki: I heard the word, “sun”. [sun]
003 R: That’s why you chose the sun. [ ]
004 Miki: I also heard “sky”. [sky]
005 R: That’s why you placed the sun in the sky. [ ]

(Sub-task 2)
006 R: What did you think you heard at that moment? [ ]
007 Miki: “Bird”. [ ]
008 R: There were two birds. Why did you choose the flying bird? [ ]
009 Miki: This bird (walking bird) can’t fly. [ ]
010 R: Then, what did you think he said about the bird? [ ]
011 Miki: He said “flying”. [flying]
012 R: Oh, he said “flying”. That’s why you chose the flying bird. [flying]

(Sub-task 3)
013 R: What did you understand here? [ ]
014 Miki: “Drink”.
015 R: What kind of drink was it? [ ]
016 Miki: Coke.

(Sub-task 4)
017 R: What did you understand at that time? [ ]
018 Miki: I understood almost everything. [ ]

(Sub-task 5)
019 R: Did you know he was talking about the bird? [ ]
020 Miki: Yes. [ ]
021 R: Then, why didn’t you choose the flying bird? [ ]
022 Miki: This bird (walking bird) was the one bird left (to be chosen). [ ]

(Sub-task 6)
023 R: What question did you think you were asked? [ ]
024 Miki: Either of beach ball or Frisbee. [ ]

(Sub-task 7, 8)
025 R: First why did you touch the ice box? [ ]
026 Miki: He said “ice box”. [ice box]
027 R: How did you know the answer for this sub-task? [ ]
028 Miki: Because he said, “give me”. [give me]
029 R: You chose the float in the beginning? Did you understand the situation?
[ ]
030 Miki: I chose it because I couldn’t swim. [ ]
031 R: “You didn’t give any reinforcement such as yes, OK at that time. Why didn’t you do this?”
032 N: “I guess I was unsure she understood the whole situation. Because normally the other students would put it off at the first step.”
033 R: “You suspected that she may not have understood the situation.”
034 N: “Right. That’s why I demanded it precisely.”
035 R: Why were you holding the float for a long time? [ ]
036 Miki: I didn’t know how I should do with the float. [ ]
037 R: “Probably she didn’t understand wear and put on.”
038 N: “I think so, too.”
039 R: Then, why did you return the float to the initial place? [ ]
040 Miki: Mr. Jason kept saying something. So I thought I was wrong. [ ]
041 R: (Miki places the float on the girl.) What did you do this? [ ]
042 Miki: I wanted to have the girl wear the float. [ ]
(Sub-task 10)
043 R: Why did you move the dog beside the bag? [ ]
044 Miki: Because I heard “dog”, “bag”, and “take”. [dog bag take]
045 R: What did you think he talked about at that moment? [ ]
046 Miki: The dog got off the beach with carrying the bag. [ ]
047 R: How did you know this? [ ]
048 S14: For some reason (with no reason). [ ]
049 R: Did you understand the meaning of “run off the beach”? [run off the beach]
050 S14: Does it mean running? [ ]
051 R: Were you looking at his gesture? [ ]
052 S14: Yes, I was looking at it. [ ]
053 R: So you understood with his gesture what he meant? [ ]
054 S14: I didn’t understand what he said. But by looking at his gesture I understood what he meant. [ ]

(Sub-task 11)
055 R: You said you were going to find the missing bag with your friend?
056 S14: Yes.
Listening task between a native speaker of English and a student were video-recorded and transcribed for analysis. Listening task is divided into eleven sub-tasks. Transcript is divided after a native speaker makes a long pause or after a student makes a response. Not only spoken language but also gestures and actions are described.

Stressed words are written in Italic letters.
Japanese spoken by the student is underlined.

**Kota (Boy)**

N: Native speaker, Japanese is in parenthesis [ ].

(Sub-task 1)

001 N: There is a picture of the red sofa on the door. (*Kota* moves a picture of a boy into the room.) (*Kota* moves the red sofa into the room and then moves the stool, canvas stand and the window out of the room.)

002 N: You see a picture of the red sofa…a picture of the red sofa on the door…on the door.

003 N: (*Kota* holds the framed picture of the red sofa.) That’s the picture of the red sofa. And you see it on the door. (*Kota* places the framed picture of the red sofa by the picture of the boy.) You are holding the picture…

004 N: The picture of the red sofa…the picture of the red sofa on the door. It’s hanging on the door. It’s on top of the door.

005 N: (*Kota* shows non-understanding by swaying the body.) It’s OK. Think about it.

006 N: Usually you see pictures on the wall. This time you see a picture on the door.

On the door (N makes a gesture of showing ‘something is on the door.’)

007 Kota: Door? (*Kota* touches the door and looks at N’s face)

008 N: So the picture of the red sofa is on the door (N makes a gesture of ‘picture’.)

009 Kota: (*Kota* moves his head to show non-understanding.) Huh? [ ]

010 N: The picture of the red sofa (*Kota* touches the red sofa.) The picture of the red sofa is on the door (N makes a gesture of showing ‘the framed picture is on the door’)

011 Kota: Picture? [ ] (*Kota* is holding the framed picture of the red sofa.)

012 N: On the door…over the door. (*Kota* touches the door.)

013 N: The picture of the red sofa is on the door (N makes a gesture of ‘picture’. ) (*Kota* is confused and touches the red sofa and the picture of the red sofa by turns.

014 N: The picture of the red sofa (N makes a gesture of ‘picture’. *Kota* touches the picture of the red sofa and immediately N nods.) (N makes a gesture of showing the picture is on something. *Kota* holds the picture of the red sofa.) On the door. (*Kota* places the picture of the red sofa on the door and immediately N nods.)

015 N: OK, very good.

(Sub-task 2)

016 N: You can see a bird flying through the window. You can see a bird (*Kota* holds the bird.)

That’s flying through the window. A bird…flying…and you can see it from the window.

017 N: There is the window in the room…a window (*Kota* moves back the window to the room.)

018 Kota: This is it! [ ]

019 N: And you see a bird…a bird in the window.

020 N: A bird in the window (*Kota* holds a bird and N nods. Then places it by the door.)

021 Kota: In the window? (*Kota* holds the bird again and is thinking.)

022 N: Where is the window? Which one is the window?

023 Kota: Oh, this is it! [ ] (*Kota* places the bird in the window.)

(Sub-task 3)

024 N: A dog comes into the house. Into the room. (*Kota* holds the dog and thinks.) (N points at
the room to show the baby is the room.) (*Kota places it in the room.*)
025 N: A dog is playing with the baby, Aiko. A dog is playing with baby, Aiko. (*Kota moves back one baby and the cradle to the room.*)
(Sub-task 4)
026 N: Another baby, Masako comes into the room (*Kota holds another baby.*) ... comes into the room. (*Kota holds places her in the room.*)
027 N: Good.
(Sub-task 5)
028 N: You like the babies. You shake the hand with one of the babies. You shake a hand with one of the baby.
029 Kota: Hand? [ ] ( is thinking.)
030 N: You pick up the baby and shake its hand. You shake its hand. (N makes a gesture of 'shaking hand' slightly and Kota imitates N's gesture.)
031 N: (*Kota is thinking.*) How many hands do you have? How many hands do you have?
032 Kota: (*Kota moves several things without responding to a question.*)
033 N: Two. So you pick up the baby and you shake its hand. You shake the baby’s hand. (N makes a gesture of 'holding hand' slightly.)
034 N: (*Kota holds two babies and have them shake their hands.*) You shake the baby’s hand.
035 N: OK. The babies are shaking hands. But you are shaking the baby’s hand.
036 Kota: Baby…hands? [ ] (Kota is thinking.)
037 N: You are shaking the baby’s hand. (*Kota holds two babies.*)
038 N: (*Kota holds two babies but is confused about where he should place them.*) You pick up the baby...you pick up the baby and you shake its hand.
039 N: (*Kota places two babies near the window.*) Which is you? (N points at the baby.) Which is you? (*Kota touches the boy.*)
040 N: (N nods.) You pick up the baby and shake its hand. You shake its hand.
041 N: (*Kota brings two babies toward the boy.*) OK. Good.
(Sub-task 6)
042 N: You are tired of playing with the baby. So you put the baby down. You put the baby down on the floor. You put the baby on the floor. (N makes a gesture of ‘putting down’.)
043 N: You stopped holding the baby. You put the baby on the ground.
044 N: (*Kota is holding the babies.*) You put the baby on the ground. You put the baby down. (N repeats a gesture of ‘putting down.’)
045 S: Down? (*Kota puts down two babies on the floor.*) (N nods.)
046 N: Now you can listen to the radio or you can play with the baby. Which do you choose? (N makes a gesture of choosing either.)
047 N: (*Kota chooses both the babies and the radio.*) Do you play with the baby or listen to the radio?
048 N: OK. You are doing both.
(Sub-task 7, 8)
049 N: You hear the telephone ring. You hear the telephone ring. (*Kota chooses the telephone and places it in the room.*)
050 N: It’s your friend on the telephone. Your friend is calling on the telephone. He says that he has received... he got a free concert ticket... a free ticket to the concert.
(Sub-task 9)
051 N: The postman comes. He has a letter for you. He wants to give you a letter.
052 Kota: (*Kota receives the paper asking where you should go in this situation.*) (Kota touches several things but is confused.) Oh, here? [ ]
053 Kota: (*Kota hold the canvas stand and examines N’s face. Then, he returns it.*) This? [ ]
054 N: If you get the letter, where do you get it from? Where do you take it from?
055 N: (Kota is confused.) Maybe your mailbox or postbox? (N’s gaze direction is on the mailbox.)

056 N: (Kota is thinking.) The mailman has given you a letter. Where do you get it from? Where do you get the letter from?

057 Kota: This? (Kota touches the cradle.)

058 N: Where is your mailbox? Where is your letter box or your postbox?

059 Kota: Post…post…(Kota is looking for something.) This? (Kota spots the mailbox outside the board.)

060 N: And you find under the postbox a letter. (Kota chooses a letter.) (N nods.)

(Sub-task 10)

061 N: You have also…you have gotten a free concert ticket…a free ticket to the concert. Your friend called on the telephone. And he said he got a free ticket. Now you have a free ticket to the concert.

(Sub-task 11)

062 N: The concert will start in one hour. You have no time. You have to go to the concert now. What will you do?

063 S4: (Kota receives a paper asking what he will do in this situation.) I will stay.

064 N: You stay? (Japanese was translated into English by the researcher.)

065 Kota: House. (Japanese was translated into English by the researcher.)

066 N: Why?

067 Kota: Because they cry. (Japanese was translated into English by the researcher.)

068 N: OK. Very good.

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**Stimulated recall transcript**

**Kota (Boy, Task B)**

Students reported on their listening tasks in Japanese and responded to interviews in Japanese. This transcript was translated from Japanese into English.

Stimulated recall was conducted after each of sub-tasks. The transcript is divided accordingly. English words and sentences are included in quotation mark (””). Stressed words are written in Italic letters.

R: Researcher N: Native speaker

(Sub-task 1)

001 R: Now can you tell me what you thought during the listening task? [ ]
R: What did you think this was? You chose this (a picture of a boy) first. Why? 
Kota: Because this is a picture. 
R: Here you moved many things. Why did you do this? 
Kota: There was one more picture. I chose a window by mistake, and there was no picture. So I returned the window and I put one more thing (a picture). 
R: I see. You were looking for a picture. 
Kota: Yes, I think so. 
R: Did you understand here he was talking about a picture of red sofa? 
Kota: Yes, I did. 
R: You touched two things here. Why did you do this? Were you confused? 
Kota: Because both a picture (of sofa) and a sofa are sofas. 
R: Both are red sofas. So you confused a picture (of red sofa) with a red sofa. 
Kota: I was confused. 
R: You were confused? 
Kota: Yes. 
R: How did you understand here? 
Kota: Here I understood door and sofa, and also understood a picture. And sofa was unnecessary, so I returned it. 
(Sub-task 2) 
R: Did you understand here what Mr. Jason said? 
Kota: I got it now. (He held a bird. At this point he didn’t know he could see it through the window.) Finally seeing his gesture of window, I understood I could see the bird through the window. 
R: I see. 
Kota: I took baby for bird. 
R: You could hear this (There is a window) then? 
Kota: I could hear. 
R: You understood “bird”? [bird ] 
Kota: Yes, I did. 
(Sub-task 3) 
R: What were you thinking then? 
Kota: This…I could hear “dog” and “house”. So I thought he meant a doghouse. [dog house doghouse ] 
R: Oh, did you? [ ] 
(Sub-task 4) 
R: Did you understand “shake hands”? [shake hands ]
Kota: No, I didn’t.
R: (To native speaker) Did you show it with gesture? You avoided it?
N: “Yeah.”
R: You tried to explain it verbally?
N: “Yes.”
R: What did you think of this then?
Kota: I thought two babies held hand in hand.
R: You thought they held hand in hand. You thought two babies held hand in hand? You

Kota: Yeah.
R: How about now?
Kota: Now I got it.
R: I didn’t understand this then.
R: What did you think this was? (“put the baby down”)
Kota: I thought I sat down (on the sofa).
(R-sub-task 6, 7)
R: Why did you choose two things (baby and radio)?
Kota: I could hear “baby” and “radio”. (Inferring from speaker’s gesture which shows comparison with both hands), I thought I held them up with both hands. [baby radio]
R: Why did you choose two things (baby and radio)?
Kota: I could hear “baby” and “radio”. (Inferring from speaker’s gesture which shows comparison with both hands), I thought I held them up with both hands. [baby radio]
R: Who make a phone call to you?
Kota: I thought that it was a phone call from my girl friend.
R: Oh, a call from your girl friend.
(R-sub-task 9)
R: What kind of letter was this?
Kota: There was a letter in the mailbox.
R: You have to go somewhere. Why did you have to go? What did you think here?
Kota: I thought I would go out on a date (with my girl friend).
R: Going out on a date?
Kota: Yes.
R: Why?
Kota: Well...
R: Who came to your house?
Kota: A person came
R: A person came?
R: Why did you choose a picture?
Kota: Because I didn’t understand.
R: You didn’t understand?
Kota: No.
R: Did you choose a picture because you didn’t understand?
Kota: Yes.
078 R: You understood he was talking about the letter then? 

079 R: Did you understand “mailbox” and "postbox"? [mailbox  postbox]

080 Kota: I knew them. But I wondered where the letter was. [

081 R: Umm. [

(Sub-task 10)

082 R: Why did you choose the baby? (The speaker says “You have a free ticket to the concert.”)

083 Kota: Because I didn’t understand. [

084 Kota: There was a letter under the mailbox. [

085 R: Did you understand the situation then? [

086 Kota: I knew the concert. [

087 R: Did you hear “ticket”? [ticket]

088 Kota: Yes. [

089 R: What kind of ticket? [ticket]

090 Kota: The ticket to the concert? [ticket]

091 R: Did you understand “free ticket”? [free ticket]

092 Kota: Free? [Free?]

(Sub-task 11)

093 R What is the relation between friend and ticket? [

094 Kota: Well…[

095 R: Didn’t you understand this? [

096 R: Your friend got a free ticket and he called you to go to the concert with you. [

097 Kota: He said, “let’s go”. [Let’s go]

098 R: So you were asked what you would do in the end. [

099 Kota: I answered, I wouldn’t go. [

100 R: You understood this here? [

101 Kota: Yes. I understood this with the paper (of instruction). [

102 R: Why did you know you would go out? [

103 Kota: I didn’t understand I would go out. [

104 R: Did you understand you would go to the concert? [

105 Kota: Yes, I did. [

106 R: So you knew you had to decide whether you would go to the concert or stay with the babies? [

107 Kota: Yes, I knew it. [}
Listening task (C) transcript

Kaori

Listening task between a native speaker of English and a student were video-recorded and transcribed for analysis. Listening task is divided into introduction and nine sub-tasks. Transcript is divided after a native speaker makes a long pause or after a student makes a response. Not only spoken language but also gestures and other non-verbal language are described.

Stressed words are written in Italic letters. Japanese spoken by the student is underlined.

N=Native speaker  Japanese is in [ ].

(Introduction)
001 N: Did you still want to buy NIKE shoes?
002 Risa: Huh? [ ]
003 N: Did you still want to buy NIKE shoes?
004 N: (Risa nods.) Yes?
005 Risa: Is he asking me a question? [ ]

(Sub-task 1, Date)
006 N: OK. On Sunday, March the 17th, we will go…after the graduation ceremony. (Risa starts to write down the information, but is thinking.)
007 Risa: This is about time…(Inaudible. Risa is mumbling.)
008 N: (Risa nods.) OK.

(Sub-task 2, place for shopping)
009 N: Did you want to go to Jasco in Chatan or San-A in Nago? Where do you want to go?
010 Risa: Ah…Jasco.

(Sub-task 3, where we meet)
011 N: Jasco. OK. We will meet in front of Arume school. (Risa writes down the information.)
012 N: (Risa is mumbling. Inaudible.)
013: Risa: OK. (Risa nods and then N nods, too.)

(Sub-task 4, departure time)
014 N: And leave to go to Jasco at nine twenty in the morning. We will leave Arume at nine twenty in the morning. (Risa is writing down the information.)
015 Risa: (Risa is mumbling. Inaudible.)
016 N: OK. (Risa nods.)

(Sub task 5, returning time from destination)
017 N: We will leave Jasco at 4pm.
018 Risa: (Risa is mumbling. Inaudible. She seems not to understand what was spoken.)
019 N: (A long pause) We will leave Jasco at four in the afternoon. (Risa is writing down the information, but confused.)
020 N: (Risa sticks out index finger to show ‘one’.) One more time?
021 N: From the top? From the top? (N makes a gesture of ‘top’.) From the beginning?
022 Risa: Oh, I am nervous. [ ] Once more. (Risa sticks out index finger.)
023 N: From the beginning…or the last one?
024 Risa: Ummm.
025 N: From the top (showing the first information.) or this one (showing the present information)? (The information is ordered with the separated papers from top to bottom randomly.)
026 N: Where…OK. (N starts to say the next information, but repeats the present information.) We will leave Jasco at 4pm…four in the afternoon.
027 Risa: Oh, he said, pm. [ pm ] (Risa understands the information and writes it down.) I see. [ ]
028 N: OK? (*Risa* nods.)
(Sub-task 6, message for parents)
029 N: You can tell your parents that you will be back home by six o’clock.
030 Risa: Six? (*Risa* writes down the information.)
031 Risa: (*Risa* is confused and takes time.) Once more.
032 N: Once more? You can tell your parents that you will be back home by six o’clock.
033 Risa: Ah. [ ] (*Risa* writes down the information.)
034 N: (*Risa* nods.) All right?
(Sub-task 7, transportation and friends)
035 N: We will go to Jasco by my car.
036 Risa: My…By car [ ].
037 N: You can invite your friends to come. You can invites two or three friends to come to Jasco with us.
038 Risa: To Jasco. Friends…[ ] (*Risa* is mumbling and writing down the information.)
039 N: OK?
040 Risa: OK.
(Sub-task 8, price of shoes)
041 N: The shoes that I saw were 6,750 Yen. So you should bring…
042 Risa: Six hundred…(*Risa* is mumbling and writing down.)
043 Risa: Once more. (*Risa* sticks out index finger.)
044 N: Once more? Ah…you should bring 6,750 Yen.
045 Risa: Six…seven…shoes (*Risa* is mumbling and writing.)
046 N: OK?
047 Risa: OK.
Please see print copy for Appendix 2
Questionnaire (Type 1) for students (Translation)

Aruke junior high school, Okinawa Name (              )

(This questionnaire is a part of an investigation aimed to examine listening comprehension and strategies of Japanese junior high school students)

Please answer the questions below. Please circle or write your answers. The results of the questionnaire have nothing to do with your grade of English.

1. Are you interested in communicating with a native speaker in English?
   (Please choose one item most relevant to the question)
   A. Highly interested   B. Slightly interested   C. Not interested so much   D. Not interested at all

2. What do you think the most important thing to communicate (speaking and listening) well in English?
   (Please choose the three items most relevant to the question)
   A. Being able to speak English well
   B. Being able to listen to well
   C. Knowledge of words
   D. Knowledge of grammar (arrangement of sentences)
   E. Correct pronunciation
   F. Understanding of life and culture where English is spoken [e.g., America, England]
   G. Not being afraid of making speaking with a native speaker of English
   H. Others (                                                   )

3. Do you have conversations with Mr. Jason (either in English or Japanese) in or out of the classroom?
   (Choose one item most relevant to the question)
   A. Very often   B. Sometimes   C. Less often   D. Never

4. How do you feel when you have conversations with Mr. Jason?
   A. Very happy
   B. Not so happy
   C. Nervous
   D. Afraid of speaking in English
   E. Others (                                                   )
5. In the test you took now, what were the difficulties with answering the questions for listening?  
(Please choose the three most relevant items)

A. Words  
B. Grammar (sentence forming etc.)  
C. English sounds  
D. Speed of speaking was too fast  
E. Less time for answering  
F. No idea of the spoken content before listening  
G. Not familiar with listening test  
H. Nervousness  
I. Others ( )

6. When you took this test, how did you feel? Please explain in the greatest detail?


7. When you learn to listen English, what do you think the most helpful to improve listening skill in the following?  
(Please choose the three items most relevant to the question)

A. Knowledge of words  
B. Knowledge of grammar  
C. Discrimination of sounds  
D. Being accustomed to speed of speaking  
E. Knowledge of life and culture where English is spoken  
F. To know what will be spoken before listening  
G. Frequent pauses  
H. Familiarity of the content which will be spoken in the listening test  
I. Inferring what is spoken in the listening test  
J. Others ( )

8. Do you hold any STEP grade certificate? If so, please choose your STEP grade certificate?

A. Grade 2  
B. Grade sub 2  
C. Grade 3  
D. Grade 4  
E. Grade 5  
F. None
9. When you listen to English, in what occasions do you do so? (Choose any item corresponding to your answer)

A. Only in the classroom
B. Seeing movie (video or theater or TV)
C. Music (CD, tape, TV, radio etc.)
D. News (Radio, TV)
E. Conversation with Mr. Jason
F. Listen to the CD or tape for the textbook at home
G. Others ( )

Thank you for cooperation

Designer Masanori Tokeshi
University of Wollongong, Australia

January, 2002
Please see print copy for Appendix 3
Questionnaire (Type 2) for students (translation of Japanese)

Arume junior high school, Okinawa Name (              )

(This questionnaire is a part of an investigation aimed to examine listening comprehension and strategies of Japanese junior high school students)

Please answer the questions below. Please circle or write the answers. The results of the questionnaire have nothing to do with your grade of English.

1. How much did you think understand listening?

   A. 100%  B. 90%  C. 80%  D. 70%  E. 60%  F. 50%  G. 40%
   H. 30%  I. 20%  J. 10%  K. No understanding at all

2. While you were doing the listening activities with Mr. Jason, in what occasion did you feel the most difficult to understand the instruction in English? Please explain in the greatest detail.

3. When you were successful to complete the story explained by Mr. Jason, in what occasion do you think you were successful? Please explain in the greatest detail (for example, I understood what Mr. Jason explained in English. Mr. Jason repeated the same words)
4. What were the difficulties with engaging in the listening activities
   (Please choose any item relevant to the question)

   A. Speed of speech was too fast.
   B. Words used were difficult.
   C. It was difficult to comprehend English sounds.
   D. It was difficult to ask questions in English when I didn’t understand.

5. How did you feel when you were doing the listening activities?

6. As listening to the CD in English is compared with listening to Mr. Jason in one to one situation, which do you think helpful to comprehend spoken language? (Select one item and give the reason for selection.)

   A. Listening to the CD is more helpful to comprehend spoken English.
   B. Listening to the native speaker in one to one situation is more helpful to comprehend spoken English.
   C. Neither or both methods are not helpful to comprehend spoken English.

   (The reason for choosing A)

   (The reason for choosing B)

   (The reason for choosing C)

Thank you for cooperation. Designer Masanori Tokeshi
University of Wollongong
January, 2002
Appendix IV
Baseline of the Story (Type A, Girl’s version)

Mr. Jason will tell you about a story on Okuma Beach. Please choose an object which corresponds to the story and place it on the plate. You do not have to be concerned about the precise location where the selected object will be placed.

Suppose you are sunbathing on Okuma beach. It was cloudy and cool, then…
The girl’s name is Naomi (The boy’s name is Ken). Then,…the story continues.

You will be asked several questions about what you want to do during the story. (The above explanation will be shown to the students in Japanese.)

1. The sun is shining now. It is very hot.

2. You see a bird flying in the sky.

3. You (The girl) are glad you came to the beach with your friend. The boy (Ken) is drinking Coke using a straw.

4. You (The girl) wear your sunglasses.

5. The bird is walking. But it is noisy and annoying.

6. (The student will be asked whether you want to play beach volleyball or play Frisbee.

7. They stopped playing beach volleyball (Frisbee).

8. You are thirsty. There is no more drinks in the ice box. So you ask Ken to give his drink to you.

9. Ken says, “Let’s swim.” You answer “I can’t swim.” (So what will you choose next? This question is shown in Japanese).

10. Then, a dog comes. The dog takes your bag away. It’s gone with your bag.

11. They find your bag is gone. (So what will you do? This question is shown in Japanese. (The students can answer this question in Japanese.)
APPENDIX V

Baseline of the story (Type B)
Mr. Jason will tell you about a story in your house. Please choose an object which corresponds to the story and place it on the plate. You do not have to be concerned about the precise location where the selected object will be placed.

(Context)
Your sister leaves her baby, Aiko to you and asks you to take care of her. But you have to do the assignment of art. Then...the story continues.
You will be asked several questions about what you want to do during the story.
(The above explanation will be shown to the students in Japanese.)

1. There is a picture of the red sofa on the door.

2. You can see a bird through the window.

3. A dog comes into his house. The dog is playing with the baby, Aiko.

4. Then, another baby, Masako comes into your room.

5. You like the babies. You shake a hand with one of the babies.

6. You are tired of playing with the babies. (The students will be asked in English, “do you want to listen to the radio or play with the baby?”)

7. You stop listening to the radio or playing with the baby.

8. Then, you have a telephone from your friend. Your friend says that he received the free ticket of the concert.

9. The postman comes. You have a letter for you. (So where will you go? This question will be shown to the student in Japanese.)

10. You find a letter under the mailbox. You have a free ticket of the concert in the letter, too.

11. The concert will start in an hour. You have no time. You have to go now. (The student will be asked whether you will stay with the babies or go to the concert in Japanese. The student can answer in Japanese.)

APPENDIX VI
## Listening Task Type C

### Date:
March 17, Sunday, after graduation ceremony

### Time:
- Leave Arume at 9:20 in the morning (For Jusco in Chatan)
- Leave Arume at 1:40 in the afternoon (For San A in Nago)

### How:
using your car

### Place for shopping:
You want to buy NIKE shoes
Choose “Jusco in Chatan”
or “San-A in Nago”

### Returning time
- 4 pm from Jusco in Chatan
- 5pm from San-A in Nago

### Price of:
6,750-EN (students need to bring money.)

### Message
You will return home till six pm

### Where you Meet:
In front of Arume school

### Bring
Your friends: two or three extra seats available in your car.

---

A native speaker of English promised to go shopping with the student after graduation of junior
high school. The student and the native speaker want to buy basketball shoes. (The native speaker knows a good shoes shop.) The whole plan of shopping is left up to the native speaker. The native speaker will explain the detailed schedule of shopping which he considered. The student takes note when he/she hears his explanation. When the student does not understand what is explained, he/she is encouraged to ask questions or show non-understand verbally or non-verbally. The content of the plan is separated into nine pieces and arranged at random order so that the speech is unplanned.

**Things to be considered**

1. The speaker speaks at a natural speed, and then when the student does not understand, the speaker enunciates and speaks at a slower speed.

2. The order of explanation is unplanned and not designated. (Normal speech is spontaneous.) (But it would be better to start with “which store you want to go.”) Spontaneous speech followed by hesitation may improve listening comprehension.

3. The speaker should try to explain the plan with the complete sentences (As it was done in task A and B)

4. The students should be given sufficient time to take notes during each sub-task.

5. The students should be encouraged to ask questions and show understanding or non-understanding by verbal and non-verbal methods.
APPENDIX VII

Listening test script for purposive sampling
(copy of STEP 4th grade administered, 1996 June)

[Part 1] You will hear English sentences. You should choose a picture from 1, 2, 3, and 4 which is most appropriate to what will be spoken.
(There is a practice before answering the questions.)

No.1 Yesterday Steve was sick and couldn’t go to school. He stayed at home and watched TV.
No.2 After school Akira and his friend Tim like to walk home together. They talk about many things.
No.3 Kathy is studying for an important math test. Her grandmother brings her a cup of hot tea.
No.4 Stacy tried to sleep around eight o’clock. She has to wake up early tomorrow. But now she can’t sleep because her sister is listening to music.
No.5 Paul has a dog. He walks in the park with his dog every day. Usually there are other children and dogs.

[Part 2] You will hear dialogues between two persons. You should choose a response from 1, 2, 3, and 4 which is most appropriate to the last sentence of these dialogues. (There is a practice before answering the questions.)

No.6 “What did you buy?”
“I bought” a CD.
“How much was it?”

No.7 “Do you swim every day?”
“Yes, swimming is my favorite sport.”
“Do you also play soccer?”

No.8 “Are you going to the store?”
“Yes, I am.”
“Please remember to buy some butter and eggs.”

No.9 “May I help you?”
“Yes, please. I want to buy a man’s sweater.”
“Men’s sweaters are on the seventh floor.”

No.10 “Hello.”
“Hello, this is Pam. Is Oscar there, please?”
“Oh, hi, Pam. This is Oscar. How’re you doing?”

[Part 3] You will hear English sentences. You should choose an answer from 1, 2, 3, and 4 which is most appropriate to the question. (There isn’t practice for this question.)

No.11 Allison and Susan like music very much. They went to a concert together last Sunday.
Question: Where did Allison and Susan go last Sunday?

No.12 Peter and his friends played baseball yesterday. At noon they ate many hot dogs.
Question: What did Peter play yesterday?

No.13 Alex found a watch on the street. He took it to the police station.
Question: Where did he take the watch?

No.14 Cindy is a university student and studies math. Next year she will start teaching at a high school.
Question: When will Cindy begin teaching?

No.15 Nancy and Jeff play tennis together. They play twice a month in the park.
Question: How often do Nancy and Jeff play tennis?

[Part 4] You will hear dialogues. You should choose an answer from 1, 2, 3, and 4 which is most appropriate to the question for the dialogue. (There is not a practice for this question.)

No.16 “David, did you see Patty in the kitchen?”
“No, she’s in the living room.”
“Thanks.”
Question: Where’s Patty?

No.17 “Lisa, what are you doing on the floor?”
“I’m looking for my eraser.”
“It’s under the table.”
“Oh, thank you.”
Question: Is the eraser on the table?

No.18 “Andy, can you go to the convenience store for me?”
“Sure. What do you want?”
“Milk and sugar, please.”
“All right, Mom.”
Question: What is Andy going to buy at the store?

No.19 “What should we eat for lunch, Mary?”
“Well, how about sandwiches?”
“I like hamburger better.”
“O.K., let’s eat hamburgers.”
Question: What will Mary eat for lunch?
No.20 “Jennifer, I got two tickets for the rock concert.”
   “Oh, did you?”
   “Can you come with me?”
   “Sorry, Jack. I’m too busy.”
Question: Is Jennifer going to the concert with Jack?
<table>
<thead>
<tr>
<th>Task B (observation)</th>
<th>Task B (Stimulated recall)</th>
<th>Task A (observation)</th>
<th>Task A (stimulated recall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8) examine the boy</td>
<td>(Sub-1) literal recall (all the words)</td>
<td>(Sub-1) literal meaning</td>
<td>(Sub-1) literal meaning</td>
</tr>
<tr>
<td>(10) understanding in L1</td>
<td>(Sub-2) literal recall</td>
<td>(Sub-2) literal meaning</td>
<td>(Sub-2) literal meaning</td>
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<tr>
<td>(A-13) good guess</td>
<td>(Sub-5) wrong interpretation</td>
<td>(Sub-3) understood with listening once</td>
<td>(Sub-3) understood with listening once</td>
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<td></td>
<td>hold up baby</td>
<td>(Sub-4) literal meaning</td>
<td>(Sub-4) literal meaning</td>
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<td></td>
<td>previous experience:</td>
<td>(Sub-5) wrong pronunciation discrimination</td>
<td>(Sub-5) wrong pronunciation discrimination</td>
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<td>babies are held in arms.</td>
<td>good guess</td>
<td>good guess</td>
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<td>(Sub-6) deep thinking</td>
<td>could not hear “walking”, but thought the same place (in the sand).</td>
<td>could not hear “walking”, but thought the same place (in the sand).</td>
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<tr>
<td></td>
<td>(listening to radio is disturbing for baby)</td>
<td>(Sub-8) (23) check the ice box where there is something under the box.</td>
<td>(Sub-8) (23) check the ice box where there is something under the box.</td>
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<td></td>
<td>(Sub-8) interpretation friend sends ticket</td>
<td>(Sub-9) (31) I couldn’t swim choose the float.</td>
<td>(Sub-9) (31) I couldn’t swim choose the float.</td>
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<td></td>
<td>sends ticket</td>
<td>(Sub-11) Inference relationship between the postman and telephone call</td>
<td>(Sub-11) Inference relationship between the postman and telephone call</td>
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<td></td>
<td>(Sub-9, 10) good guess</td>
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<td>letter mailbox</td>
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<td>open the mailbox</td>
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<td>find letter</td>
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<td>(Sub-11) Inference</td>
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<td></td>
<td>relationship</td>
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<td>between the postman</td>
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<td>and telephone call</td>
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<tr>
<td>(ST1-1) ling.</td>
<td>(1) on the door…the picture of a red sofa</td>
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<tr>
<td>(ST2-2) ling repetition</td>
<td>(12) You understood it in the window (reconstruct the whole sentence)</td>
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<tr>
<td>(ST3-3) ling.</td>
<td>(23) Sub-5: I held up the baby (shake hands)</td>
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<tr>
<td>(ST4-4) ling.</td>
<td>(28) choose the radio too noisy to take care of the baby</td>
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<tr>
<td>(ST5-5) repetition (S change action.)</td>
<td>(36) My friend would send a ticket.</td>
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<td>(ST6-6) ling.</td>
<td>(53) the connection between the telephone between the postman</td>
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<tr>
<td>(ST7-7) ling.</td>
<td>(ST1-1) ling. &amp; nodding</td>
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<tr>
<td>(ST8-8) telephone call examine picture of boy (take it for a friend?)</td>
<td>(ST2-2) ling.</td>
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<td>(ST9-9) ling.</td>
<td>(ST3-3) ling.</td>
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<td>(10) I see (understanding in L1)</td>
<td>(ST4-4) ling.</td>
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<td>(ST10-11) ling.</td>
<td>(ST5-5) ling. repetition</td>
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<tr>
<td>(ST11-12) ling.</td>
<td>(ST6-6) ling. &amp; question</td>
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<tr>
<td>(13) response</td>
<td>(7) response to question</td>
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<td>(14) OK. finished.</td>
<td>(8) OK.</td>
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<td>(ST7-9) ling.</td>
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<td>(ST8-10) ling.</td>
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<td>(11) (S thinks) repetition</td>
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<td>(12) understanding in L1</td>
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<td>(ST9-13) ling. choose the float before the direction is given</td>
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<td>(14) direction</td>
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<td>(ST10-15) ling.</td>
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<td>(ST11-16) ling. &amp; question</td>
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<td>(17) response</td>
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<td>(18) question</td>
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<td>(19) response in TL</td>
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<td>(20) OK.</td>
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<tr>
<td>(Sub-1,2) almost automatic processing</td>
<td>(9) understand it for the first time (misunderstanding)</td>
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<td>(16) could not hear “walking”, but thought the same place</td>
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<td>(in the sand). test wiseness</td>
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<td>(23) check the ice box where there is something under the box.</td>
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<td>(31) I couldn’t swim choose the float.</td>
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<td></td>
<td>(35) understood the meaning of run away.</td>
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</tbody>
</table>

| Yuji | Listening difficulties |
| Task interaction/observation | Stimulated recall | Questionnaire /interview | Other sources |
| Task interaction/observation | Stimulated recall | Questionnaire /interview | Other sources |
(B-23) Sub-5: I held up the baby (shake hands) (B-53) the connection between the telephone between the postman (A-9) understand it for the first time (misunderstanding) (A-16) could not hear “walking”, but thought the same place (in the sand). test wisdom (C-7) didn’t realize he was asked a question (C-16) not sure about 9 or 12 (Extended interview) (C-36) Mr. Jason did not repeat. (C-40) Since he put pauses, it was all right. (C-47) if he kept speaking (as in the real conversation), I didn’t understand. (Follow-up) (10) the speed was relatively slow. (15) There were some difficult words

Yuji

<table>
<thead>
<tr>
<th>Listening process / strategy</th>
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<tr>
<td>Task C process (observation)</td>
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<tr>
<td>(Intro-1) ling. question</td>
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<td>-------------------------</td>
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<tr>
<td>(2) S: response to question</td>
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<td>(3) confirming with question</td>
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<td>(4) S: response</td>
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<td>(5) OK.</td>
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<tr>
<td>(ST4-11) repeat the first question (1)</td>
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<tr>
<td>(10) OK.</td>
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</tbody>
</table>
| (12) S: response to question | (13) ling. | (19) |}

| (ST5-14) ling. | (15) S: OK. | (22) S: OK. |
| (15) S: OK. | (16) ling. | (23) OK? |
| (16) ling. | (18) OK. | (24) S: OK. |
| (18) OK. | (19) return at four o’clock can be interpreted in two ways; “leaving Chatan at four or getting home at four.” | (20) ask for repetition |
| (19) return at four o’clock can be interpreted in two ways; “leaving Chatan at four or getting home at four.” | (ST7-17) ling. | (24) I was told by parents to be back by six. |
| (ST7-17) ling. | (18) OK. | (NOTE) |
| (18) OK. | (19) return at four o’clock can be interpreted in two ways; “leaving Chatan at four or getting home at four.” | |}

| (20) ask for repetition | (ST8-19) ling. | (7, 11, 15, 18, 23) cue for proceeding to the next |
| (ST8-19) ling. | (20) ask for repetition | |}

| (20) ask for repetition | (10) miss meeting place (didn’t write down) | (20) ask for repetition |
| (10) miss meeting place (didn’t write down) | | (20) ask for repetition |

| (10) miss meeting place (didn’t write down) | (24) I was told by parents to be back by six. | (20) ask for repetition |
| (24) I was told by parents to be back by six. | (NOTE) | (20) ask for repetition |

| (NOTE) | | (20) ask for repetition |

| (20) ask for repetition | | |