

The Role of Sentence Repetition in Foreign Language Learning
- Sentence Repetition Processes by Japanese EFL Learners -

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Chapter 1

Introduction

Pursuing Practical Communication Skills

There has been a growing expectation for English education in Japanese secondary schools to develop students' basic, practical communication skills. This is evident in the recent educational guidelines. The educational guidelines, which are put forth by the government, emphasize teaching English communication in the classroom. Teachers have been expected to shift from traditional grammar and reading comprehension-oriented teaching to more communication-based teaching. In fact, there have been a number of changes in English teaching methodology in junior high schools (JHSs), but this has not necessarily been the case in senior high schools (SHSs).

The catchphrase “practical communication abilities” has become widely used in the field of English education in Japan. Not all Japanese teachers of English (JTEs), however, seem to have a common understanding of the term. The term “communication” can be easily associated with “one-shot English conversation” consisting of formulaic expressions, such as giving or asking directions to/for foreigners, ordering food at a restaurant, shopping at a shop. This type of English usually contains an information gap between the speaker and listener, or at least there is a message which is supposed to be conveyed from one to the other. Although we can certainly consider these types of exchanges within practical communication abilities, the definition of the term communication should not be limited to such conversational abilities heavily dependent on formulaic expressions. While such patterned expressions are useful, they surely do not give learners the English abilities they will need in various real-world situations in which they will need to make the most of their grammar and vocabulary to talk about more complicated topics.

Criticism against the Structure-Oriented Approach

There have been complaints that few Japanese people have a good command of English in spite of six years of English instruction in school. One reason for this, it is often pointed out, is because teachers spend too much time with the grammar-translation method and structure-oriented practice. Those who attribute the shortcomings in Japanese proficiency in English to the English education system tend to think SHS students will never attain “practical communication abilities” as long as structure-oriented exercises such as repetition or imitation take precedence over communicative activities.

One assumed reason for such a high level of distrust in the structure-oriented approach is the dissatisfaction with the application of the Oral Approach in English education in Japan. It is also known as the *Audio Lingual Method* (ALM), which dominated academic language programs in the United States during in the 1950s and 1960s (Wong & VanPatten, 2003). The method was originally used by the United States Army language programs, where their intensive communicative sessions were very successful. The programs consisted typically of two sessions: 1) a practice drill and memorization session of situational-based dialogue; and 2) a conversation session with a native speaker (Krashen & Terrell, 1983).

In particular, the techniques used in the drill sessions were also popular in English education in Japanese secondary schools at that time. The two main instruction skills of ALM applied in Japanese classrooms were first Mimicry-Memorization Practice (imitation and memorization of sentences containing syntactic patterns through repetition drills), followed by Pattern Practice (a series of pattern drills to manipulate structures and vocabulary in a sentence until those manipulations become unconscious habits). The premise of these activities was that language learning was basically the result of habit formation, and this habit formation was best developed through extensive drilling (Wong & VanPatten, 2003). The popularity of ALM, however, came to an end with the appearance of a new theory, Cognitive Code Learning Theory. This theory, based on

Chomsky's Generative Grammar, emphasizes that perception and awareness of language rules precede the use of the rules (Ellis, 1990). In addition, there was growing criticism by psycholinguists that mechanical drills do not make the learner engage in form-meaning connections, therefore achieving poor results. Too often students simply repeated sentences in the drill without understanding what they were saying (Krashen & Terrell, 1983). The persistent criticisms against these repetition drills are still making some JTEs cast doubt on the effectiveness of repetition or imitation on the development of L2 ability.

Enthusiasm for the Communicative Approach

Expectations for "practical communication abilities" also reveal another argument. Some say that JHS and SHS teachers should incorporate more interactive and creative activities into classroom instruction. Those who are interested in these methodologies believe the negotiation of meaning promotes language acquisition; therefore, interaction among the students or between the students and the teacher is crucial. They argue that most communication in the real world takes place with the aim of conveying messages or exchanging information in interaction. Consequently, they feel that classroom activities should also have similar purposes. In other words, they contend that activities which are not related to actual use outside the classroom mean nothing. This is why repetition drills are not appealing to them. In real-world communication, no one prepares a script for you about what to say point by point, or, except in very limited situations, no conversation takes place where there is no one you talk to. Those who support interactive and creative activities claim that repetition exercises are boring and not useful for the development of learners' communicative abilities because they believe such drills are teacher-centered and not directly related to "the learner's own personal experiences" (Nunan, 1991, p. 279).

Furthermore, we find a great deal of enthusiasm toward developing practical

communication abilities in the Course of Study, too. The phrase “fostering a positive attitude toward communication through foreign languages” was clearly stipulated for the first time in the government’s Course of Study revised in 1989. Since then, English education in Japan has shifted its goal from grammar-based education to communication-oriented education. At the Ad Hoc Council on Education launched by the Nakasone Cabinet, this pursuit was adamantly advanced. The second report submitted by the council in 1986 clearly criticized the emphasis that had been placed on grammar and reading comprehension instruction in Japanese secondary education (Erikawa, 2007).

To sum up the main points above, the expectations and criticism of Japanese English education can be stated in the following two ways. First, a lot of teachers and educators in Japan still do not believe that repetition drills are beneficial, since it is highly possible that drills do not make learners pay attention to meaning; therefore, the structures memorized through such drills are not utilized in actual communication. Second, interactive or creative activities are recommended as a substitute for repetition drills.

On the other hand, it must be asked whether in fact drills like repetition and imitation play no role in foreign language development. Furthermore, it should be clearly ascertained whether communicative activities are always highly motivating and successful as is written in the Course of Study. I suspect that these two points still have much room for discussion. Below, I will present some of the pertinent arguments.

From Mechanical Drills to Meaningful Drills

First of all, repetition drills can be very meaningful activities if the “learners’ attention is paid both to form and meaning rather than on cues alone” (Yamaoka, 2006, p. 8). Considering this line of thought, we must ask why repetition drills were exposed to a lot of criticism and lost popularity rapidly within twenty or thirty years. One major reason is because it is highly possible for learners to neglect meaning while focusing only on the

targeted form during the task. Furthermore, some believe that the sentences or phrases learned through these drills will not transfer to communicative competence.

It does seem natural for learners to pay little attention to meaning if the sole purpose of the task is simply to manipulate the structure slightly or to change the tense as quickly as possible. Perhaps more important, when learners are expected to respond promptly to the cue, they quickly learn that focusing on form is all that is required of them.

However, what would happen if a few seconds were deliberately added before the learners were about to respond? The learners would have to try their best to remember the targeted sentence so that it would not disappear from memory. Moreover, if the length of the sentence were beyond the learners' memory capacity, parroting or mechanical repetition would not be available. McDade et al. (1982) report that their pre-school age subjects accurately imitated sentences that they had actually understood even if the repetition was postponed. In contrast, accurate delayed repetition did not occur if they had not comprehended the sentence. Similarly, second language (L2) learners would choose to pay attention to both form and meaning (maybe subconsciously) in a situation where rote memorization was not available because of the length and memory span of the sentence. That is, they would be compelled to keep the sentence in memory longer and more accurately. In this way, repetition drills, once criticized as meaningless, can be meaningful drills if they are used carefully.

From the point of view of Japan's disadvantaged environment for learning English, Yamaoka (2006) emphasizes the effectiveness of imitation and repetition practice in English classrooms in Japan. He claims that in an environment where learners are exposed a lot to the target language, they have abundant opportunities of language exemplars with respect to both token (total number of words used in a text) and type frequency ("type" being the number of different kinds of words used in a text). This is, however, not the case in an input-poor foreign language learning environment like Japan.

In order to compensate for their environmental disadvantages, Yamaoka argues that learners should be exposed to as many examples as possible to learn how to form natural-sounding sentences, and they should be encouraged to recognize the importance of repeated experience. In a situation where learners have limited exposure to the target language, it seems unreasonable to expect implicit learning to occur.

Practice in repetition also may be effective to fill the gap between learners' receptive skills (reading/listening) and their productive skills (speaking/writing). Experienced JTEs probably have already recognized that targeted structures or rules taught during class do not soon appear in their students' free production, even if the structures and rules have been clearly understood by students. This means, as far as Japanese learners of English are concerned, target structures or grammar may be picked up and understood in reading/listening exercises, but the same points are not necessarily used in production. In other words, we may say that it takes quite a long time for students' explicit knowledge (formal and conscious knowledge of language) to transfer to implicit knowledge (subconscious knowledge of language).

When we speak to someone, we do not have a script (except when we make a prepared speech). Thus, we cannot predict what kinds of things might come up in daily communication. Additionally, daily conversation involves a back and forth relationship among the participants; when it is your turn to respond, long pauses before speaking can make the conversation awkward. Therefore, the ability to choose appropriate words and phrases on the spot is indispensable for continuing communication. In fact, it requires a lot of time and energy to develop English productive skills. If the classroom is the only learning environment for most Japanese learners, teachers should provide as many opportunities as possible for their students to encounter the same expression, practicing it repetitively. Students who are encouraged to speak freely in communicative activities without the basics (i.e., a certain amount of grammar and vocabulary) are usually at a loss about how to express their message in English. In order to avoid such a situation, they

should be encouraged to accumulate as many structures and phrases as possible by practicing the same structure through imitation and repetition before they move on to self-expression activities. Above all, adequate time for repetition drills should be given to students so that what they have learned will be fully internalized. Accordingly, it seems most advisable for communicative activities including self-expression to come after the repetition drill stage.

Productive skills are generally smaller than receptive skills whether it is the learner's first language (L1) or L2. It is assumed that the gap between these two skills in learners of English as a foreign language (EFL) are larger than that in learners of English as a second language (ESL) since EFL learners have far fewer opportunities to use English on a daily basis. In order to narrow the gap between productive and receptive skills, it is necessary for learners to use the same expression repeatedly until it has become fully internalized. Consequently, we can say that repetition drills play an important role in the "procedualization" of knowledge (DeKeyser, 2007).

Possible Limitation of Communicative Activities

Next, I would like to discuss the problem or the limitation communicative activities seem to have. By the 1980s, the trend in methodology in L2 education had moved from ALM including pattern practice to the *Communicative Approach* (CA). The premise of the latter methodology is that learning should take place "through interaction in the target language" (Nunan, 1991, p. 279). Shirai (2008) explains that behind the trend was the notion that language is in nature creative and people are able to create infinite sentences with the combination of vocabulary and grammar. Can this notion, however, be applied to Japanese EFL learners whose learning opportunities are limited to classroom language instruction? Are "creative" or "interactive" activities sufficient enough for the development of Japanese learners' productive skills?

As mentioned above, it usually takes quite some time for Japanese learners, who

learn English mainly through formal instruction, to use the grammar they have been taught “fast and with a low error rate” (DeKeyser, 2007, p. 3) in productive activities. It is highly possible that Japanese learners at the pre-intermediate level do not have enough underlying grammar and vocabulary to cope with most communicative activities. Some people may think that essential grammar and vocabulary for communication can be learned during communicative activities through a trial and error process. However, task-based instruction, which originated within communicative language teaching, can discourage learners from paying attention to structure because learners only need to get the gist of the message and then make themselves understood in English. In other words, structure and form are subordinate aspects in this case.

Nunan (1991) states that one of the characteristics of CA is to provide opportunities for learners to focus, not only on language, but also on the learning process itself. In spite of this, if the emphasis on information transmission and exchange goes too far, there will be few opportunities for the learners to pay attention to structure, which may result in inefficient grammar processing.

In view of the points above, it seems quite difficult for EFL learners who have a limited amount of input outside the classroom to improve their productive ability only through interactive activities. Interaction, in itself, is not enough. A task which can implicitly encourage learners to attend to form is vital.

Purpose of This Dissertation and Outline of Each Study

I suggest that the following two kinds of activities should be employed more positively in current Japanese classroom instruction.

- (1) Repetition-related activities as a preliminary stage with the aim of narrowing the gap between reception stage and self-expression stage
- (2) Structure-oriented activities to encourage learners to pay more attention to grammar in processing

Teachers should be encouraged to rethink their teaching methodology. They should be reminded of the importance of repetition drills without excessively depending on “naturalistic exposure to and use of language” (Skehan, 2003, p. 1), since repetition drills can serve as a bridge between students’ comprehension and production.

In this dissertation, I will focus on sentence repetition (SR) tasks and will investigate whether SR can play both roles of (1) and (2) together for the development of students’ productive skills in the classroom. For this purpose, I will make an attempt to confirm that SR is a cognitive task involving semantic, grammatical, and syntactic processing—not a simple rote memorization task—for Japanese EFL learners.

On the surface, SR might give the impression that it is easier than shadowing (i.e., an activity in which students repeat back a phrase or sentence while they are listening to it). But SR, unlike shadowing, is not performed in parallel with the model sound. The fact that in SR there is a slight interval between when the sentence is heard and when it is reproduced, in itself, could increase cognitive load.

I will report the results of one survey and five experiments I conducted to investigate the process of SR as follows:

Study 1: The results of a survey on 261 junior and senior high school JTEs on actual conditions of oral/aural activities in the classroom.

Study 2: The results of a study conducted on 29 Japanese university students to investigate the possibility of accurate SR without comprehension.
(Accompanied by content recall in L1)

Study 3: The results of an oral sentence composition task by the same participants as in Study 2, with a comparison of the results of Study 2.

Study 4: The results of another SR task conducted at the same time as Study 2 for a more-detailed analysis of “addition” and “substitution” errors. (Not accompanied by content recall in L1)

Study 5: The results of a study conducted on 11 Japanese high school students to investigate the possibility of accurate SR without comprehension.

(Accompanied by content recall in L1)

Study 6: The results of comparison of another SR task with a one-minute impromptu speech by 22 Japanese high school students and 15 Japanese university students.

Finally, I will review the results of the various studies in a comprehensive way, and discuss the general tendencies we find in the process of SR by Japanese EFL learners. The overall aim is to demonstrate that SR is a sentence reconstructive task, and to show the validity of SR as one effective teaching/learning method for the development of English productive skills.

Chapter 2

Background

In this chapter, I will review empirical studies, theories, and statements related to the present research. First of all, I will summarize the pro and con positions concerning “drills,” especially what most researchers define as “mechanical drills.” Next, I will summarize another debate over communicative activities. Then, I will outline three repetition-related tasks, Read and Look up, Shadowing, and Sentence Repetition (SR), which have been used in classrooms. Lastly, I will summarize the historical background of SR and its current status as an assessment tool in second language acquisition (SLA) research.

1. The Debate over Drills: The Pros and Cons

1.1 Opposition

In the 1950s, a new approach called *Audiolingualism* emerged in place of the grammar-translation method, which had been the mainstream of foreign language teaching methodology. Audiolingualism was originally employed in the United States Army Language Program. The program, based on behaviorism, mainly consisted of two sessions: dialogue-drill sessions and conversation sessions. The intensive courses in the Army Language Program were very successful.

Later, a more established methodology to teach foreign languages was developed from Audiolingualism. It was called the *Audio Lingual Method*. The Audio Lingual Method (ALM) emphasized repetition and memorization. Students usually practiced a particular structure until they could produce it spontaneously. This methodology did bring about drastic reforms in language teaching in the United States at that time (Krashen & Terrell, 1983). ALM was also introduced in Japan as the *Oral Approach* after World War II

(Shirai, 2008). However, its popularity declined with the advent of *Communicative Language Teaching* (CLT). Yet, mechanical drills continue to be popular, and regarded as effective, for L2 learning and acquisition (Aski, 2005; Wong & VanPatten, 2003).

It is also true, however, that quite a lot of teachers and educators in Japan still have doubts about the effectiveness of mechanical drills. Some argue that the drills are simply passive routines and not productive activities; that is, they are not the kind of activities in which students have some message they want to convey, or have an opportunity to speak in their own way (e.g. Tatsumi, 1994). Others argue that activities that do not involve interaction are not meaningful. They believe that tasks such as “dialogue memorization,” “dialogue practice in pairs,” “questions & answers in English” are all nothing but “demonstration” of what has been taught, and have nothing to do with learning (e.g., Yoshida, 1996). In their opinion, meaningful activities are limited to interactive or communicative activities, not repetition drills. For instance, Shiozawa (1997) claims that repetition drills, unless the content of the material is related to the learners’ own experience, are not beneficial; learners do not pay much attention to meaning (or message), unless the content of the new material is relevant to the learners’ established knowledge. He argues that using materials that are unrelated to the learners’ experience or knowledge does not encourage them to attend to meaning or to process the input. Consequently, opponents of drills are skeptical about the usefulness of repetition drills with respect to the involvement of comprehension.

Krashen and Terrell (1983) argue that a pattern sentence, which is memorized as a unit, is beneficial neither to language *acquisition* (i.e., an implicit and subconscious knowledge acquired by using language for communication in a natural way) nor to language *learning* (i.e., explicit and conscious knowledge, or formal knowledge of language which can be gained through formal teaching). At best, pattern sentences might help learners acquire more input by managing “premature” conversations. This view is based on Krashen’s *Input Hypothesis*: Language is acquired via comprehensible input and

the most important element of any teaching program is input. It is true that speaking is a primary goal of most language learners, but speaking in itself is not absolutely essential for language acquisition according to Input Hypothesis. Therefore, memorization or partial memorization of sentences is not Krashen and Terrell's concern. They claim that "spoken fluency will emerge on its own" (p. 56).

Wong and VanPatten (2003) also sharply criticize drills. They say that drills are not beneficial for foreign language acquisition, or the development of fluency. They argue that drills should be discarded from a list of instructional practices. They clearly state that not only mechanical drills but "meaningful" and "communicative" exercises (Paulston & Bruder, 1976) are activities that focus only on form and are not valid for language acquisition.

Paulston and Bruder (1976) introduce three types of drills: mechanical drills, meaningful drills, and communicative drills. They admit that mechanical drills involve complete control of the response in which students may not comprehend the stimulus in spite of their correct response. At the same time, however, Paulston and Bruder claim that "immediate reinforcement of the right response" by mechanical drills provides "a very necessary step in language learning" (p. 6). Their view that mechanical drills are meaning-uninvolved activities is the same as that of Wong and VanPatten (2003), although Paulston and Bruder's position that drills should be used in the classroom in order to automatize the use of manipulative patterns is different from Wong and VanPatten's.

Wong and VanPatten repeatedly state that their concern is only with mechanical drills. They do not include meaningful and communicative drills in their definition of "drills." Interestingly, in one part of their paper, they suggest that meaningful and communicative activities can be useful for "skill development" as long as the activities are truly meaning-based and involve communication of information. In another part, however, they mention that there is no research on the necessity or utility of meaningful

drills and communicative drills, and therefore “such drills are not particularly useful and certainly are not necessary” (p. 417). Consequently, their ambiguous position toward meaningful and communicative drills has led some researchers such as Lever, Rifkin, and Shekhtman to question their true stance on the matter (DeKeyser, 2007).

Both Krashen and Terrell, and Wong and VanPatten clearly state that drills are not necessary or useful for language acquisition. Wong and VanPatten emphasize that acquisition is input-dependent and output is “something that can influence how learners perceive language and thus interact with input data” (p. 415). Processing input data always involves comprehension but output practice in itself does not necessarily involve attention to meaning or comprehension. If the assumption that no category of drills involves meaning is correct, drills cannot be input even for other students. They claim, “given that learners bring internal mechanisms to the task of acquisition that operate on that input, of course drills would be suspect as the initial and/or essential ingredient for internalizing a linguistic system” (p. 409).

Similarly, Aski (2005) argues that learners should have opportunities to process accessible input and understand the connections between forms and their meaning; on that point, she believes mechanical drills are inadequate. She holds four reasons for her claim. First of all, the same old format in most drills and pattern practice can make learners practice in the same way. Secondly, drills do not encourage learners to notice the context in which rules are applied. Thirdly, mechanical activities in which learners are required to manipulate multiple rules at once can prevent them from noticing formal features. Finally, a situation in which learners need not understand the meaning can also prohibit them from attending to form-meaning connections.

As described above, drills have the possibility of being meaning-uninvolved activities. Because of the non-interactive and non-communicative characteristics of drills, there is still a lot of opposition to the use of this technique.

1.2 Approval

1.2.1 Drills as Meaning-related Activities

In contrast to those who oppose the use of drills, Leaver et al. (2004) claim that in all language learning activities, repetition and associative memory are the two main ways to put information into long-term memory. Yet, associative memory depends on learners' current schema and cannot be used all the time; therefore, repetition plays an important role. They refute Wong and VanPatten's (2003) following claim in reference to learning Russian: "The role of drills cannot change depending on language. Drills are no more necessary for Russian than they are for Spanish or English" (p. 416). In response to Wong and VanPatten, Leaver et al. (2004) argue that there are more difficulties in teaching and learning Russian than assumed, and that the finding of just one experiment with merely twenty-two participants "cannot be used to justify an approach to teaching Russian without grammar drills" (p. 127). Because of the complicated verbal system of Russian, acquiring some complicated aspects of Russian is assumed to be very late without direct help. Since Russian involves a different alphabet and has little Latinate basis, Leaver et al. argue that comprehensible input provided only in the classroom is simply not adequate for learners to learn complicated Russian verb-conjugation rules, and to internalize them. The case of aspect in Russian is "rarely resolved without direct instruction, including explication and controlled practice" (p. 127). They insist that "these forms are generally acquired through a combination of direct instruction, classroom practice (meaningful and communicative drills), and subsequent study abroad" (p. 127). By their collective experiences of teaching Russian, Leaver et al. are convinced that "grammar drills play an essential role in the Russian-language curriculum precisely in the preparation for communicative language performance at levels beyond intermediate-mid" (p. 129).

Leaver et al.'s (2004) concerns are more than a matter of teaching Russian. They dispute Wong and VanPatten's negative view about grammar drills in the overall foreign

language curriculum. Leaver et al. argue that “the goal of many foreign language instructors is to lay a foundation upon which learners can build and ultimately attain the highest levels of communicative language performance” (pp. 128-129). “To lay a foundation” means to accumulate underlying grammar and vocabulary. It is essential for learners to depend on meaning and attend to form-meaning connections when they internalize what has been taught. In this sense, drills can be used as meaning-involved activities. The foundation built in formal instruction will surely help learners achieve a high level of language performance.

1.2.2 Grammar Automatization through Repetition

Krashen’s Input Hypothesis claims that “listening comprehension and reading are of primary importance in the language program, and the ability to speak (or write) fluently in a second language will come on its own with time” (Krashen & Terrell, 1983, p. 32). Yet, considering the English learning environment in Japan (i.e., lack of the amount of English input, limited opportunities of using English, and the circumstance that most Japanese learners start learning English around or just before puberty), it may well be difficult to apply the hypothesis into English education in Japan directly.

Acquiring a foreign language implicitly through natural input seems possible in an ESL environment. On the other hand, such acquisition can hardly be expected in an EFL environment. Some arrangements involving the learners’ cognitive function should be introduced in order to transform input into *intake* effectively (SIG on SLA, 1994). Repetition drills could be effective as a teaching/learning method to compensate for the disadvantages that an EFL environment holds. Once students accumulate basic grammar structures and learn to use them almost automatically, they may perform better and with more confidence during self-expression activities.

Here again, I will introduce other opinions from JTEs and Japanese educators. Satou (1998) argues that it is very effective to use the pattern practice technique in the

classroom to ensure a sufficient amount of practice for the students. Oka (1995, 2004) is concerned that the lower-level language processes of students are not sufficiently automatic, and yet students are often encouraged to speak freely in communicative activities. It seems natural for students to be confused in that situation. Oka suggests that communicative activities should be introduced on a step-by-step basis, starting with imitation/repetition, then pattern practice to automatize grammar or structures they have just been taught, and finally to more advanced communicative practice.

In SLA research, there is no consensus on what role explicit knowledge (i.e., “learned” knowledge referred to in Krashen’s Input Hypothesis) plays in acquisition. The first position, *the non-interface position*, rejects the possibility of explicit knowledge transforming into implicit knowledge (i.e., subconsciously “acquired” knowledge in natural input), while the second position, *the strong-interface position*, claims that explicit knowledge can become implicit knowledge. Between these two positions, there exists a weaker form of the non-interface position, and *the weak interface position*. In the weak interface position, the possibility of explicit knowledge becoming implicit knowledge is accepted with some limitation (Ellis, 2005).

VanPatten (1996) argues that practice plays a role in transforming declarative/explicit knowledge to procedural/implicit knowledge, but it happens only when learners use grammar rules in “comprehension,” not in output practice. This view is often difficult for Japanese learners to agree with since they must have seen or heard of people who became advanced learners of English through their additional independent efforts (i.e., output practice outside the classroom). In the present circumstances, few Japanese people have a good command of English with six-years of instruction in school. This fact makes the Japanese believe that comprehension-centered learning is insufficient. In fact, most L2 teachers and learners believe that practice in production is crucial for developing L2 proficiency (Muranoi, 2007).

According to Levelt’s production model (1989), when a speaker produces

language orally, he/she has to pass through three stages: Conceptualizer, Formulator, and Articulator. The first stage Conceptualizer conducts message generation and message monitoring; the second stage Formulator conducts grammatical and phonological encoding of preverbal message; and the third stage Articulator is responsible for executing the phonetic plan “through retrieving chunks of internal speech” (Muranoi, 2007, p. 55). For L1 speakers, the first stage involves highly controlled processing, although the second and the third stages are “largely automatic, demanding very little executive control” (Muranoi, 2007, p. 55). In contrast, most L2 speakers are supposed to pass through the stages of Formulator and Articulator with great attention because their target grammar has not been fully automatized. Therefore, this second stage Formulator should be proceduralized. That is, learners grammatical/phonological encoding should be conducted “fast and with a low error rate” like “behavioral routines” (DeKeyser, 2007, p. 3). Through classroom instruction, teachers should seek to facilitate formulating component in order to develop learners’ spontaneous productive skills (Muranoi, 2007). In this sense, we can expect that repetition drills are beneficial for grammar proceduralization.

Littlewood (1980) argues that in foreign language learning, when a learner needs to communicate through the foreign language, he/she must search consciously for words in most of the situations he/she encounters. One reason for this is that “many of the lower-level processes are not sufficiently automatic” and another is that “communicative needs often arise for which the learner does not yet have forms available” (Littlewood, 1980, P. 441). In order to automatize the lower-level processes and to accumulate as many forms available in production as possible, intentional repetition practice using the same text may be indispensable in foreign language learning.

2. Meaning-oriented Communicative Approach

2.1 Approval

Most of those who claim that mechanical drills like pattern practice are not helpful in developing language ability are in favor of the *Communicative Approach* (CA). The Communicative Approach emphasizes the goal of acquiring practical communication abilities (SIG on English Education, JACET, 2005). *Communicative Language Teaching* (CLT) is a methodology that was established based on CA. The characteristics of Communicative Language Teaching are:

- 1) Learning to communicate through interaction in the target language
- 2) The introduction of authentic texts into the learning situation
- 3) The provision of opportunities for learners to focus, not only on language, but also on the learning process itself
- 4) An enhancement of the learner's own personal experiences
- 5) An attempt to link classroom language learning with language activation outside the classroom (Nunan, 1991)

Among these elements, concepts such as the importance of interaction in the classroom, the enhancement of attitudes toward a more conscious understanding of the learning process (i.e., negotiation of meaning), and the provision of similar situations to their actual use, have in particular attracted a lot of teachers and educators. Interaction refers to an action in which people try to convey a message or information. If the speaker's message is not clearly understood by the hearer, the interaction is unsuccessful. The speaker might have to paraphrase what he/she said more simply if the hearer does not understand the message well. Or the speaker might have to ask questions to find out what the hearer does not understand. Empirical research in SLA has proved that such negotiation of meaning has an important role in language acquisition (See Muranoi, 2006, 2007). Yet, we also have to keep in mind that the priority is always placed on meaning transfer in interactive tasks.

Littlewood (1980) states that:

the [meaning-focused] activity becomes more creative and the language less predictable. What is now most important is not so much *what* language students use, as that they find some language which will convey their messages effectively. In order to encourage this focus on the exchange of meanings, the teacher may often decide to withhold grammatical correction, at least until after the activity (p. 444).

Findings in empirical studies can encourage L2 teachers to use various meaning-focused practices that require negotiation of meaning. It is not clear, however, whether those interactive activities involving negotiation also affect syntactic development (Muranoi, 2007). During interactive activities, learners do not have to be too concerned about what form they use, since a message with some grammar mistakes is still understandable. Wong and VanPatten (2003) argue that “learners do not learn to use forms and structures to express meaning by first practicing them. Instead, learners acquire those forms and structures by consistently using them in communicative situations in which they are required” (p. 416).

2.2 Opposition

We have seen the potential advantages of communicative activities. Muranoi (2007) says that interaction can elicit learners’ pushed output and promote their L2 acquisition. For those whose learning opportunities are limited mainly to the classroom, output practice through interactive tasks in the classroom might be more motivating and immersive than individual-based repetition practice. Interactive tasks may also encourage students to take a more active role during class, and also make them feel less anxious about making mistakes in conversation (SIG on English Education, JACET, 2005). As Oka (1995, 2004) mentions, however, what can students do if they do not have enough underlying grammar to complete the communicative task the teacher prepared? Will

students be able to speak *freely* though they do not have a sufficient amount of internalized grammar? In such a situation, the teacher usually thinks that lowering the students' anxiety and motivating them to speak during the interactive task is all that is necessary for the success of the activity. But are these the only matters they have to be concerned about?

Itou (1999) points out that current English classes in junior high schools (JHSs) in Japan tend to have too much emphasis on encouraging students' "positive attitude" toward communication, output activities through "interaction," and "comprehensibility" rather than accuracy. He warns that this tendency can make students pay less or little attention to grammatical accuracy. He generally agrees with the idea of encouraging and developing students' basic, practical communication abilities. However, he believes that current ideas and methods are a little too excessive. According to Oka (1995), teachers and researchers who have excessively relied on CLT are again acknowledging the role of vocabulary and grammar. This trend holds true of English education in Japan. Increasing opportunities to let students use English in class is preferable, although "conversation" they practice in class cannot necessarily transfer to "communication" outside of class (Oka, 1995). Oumi's claim (1998) is similar to Oka's. He claims that most interactive activities currently done in class are nothing but "chatting," which does not seem to accelerate language development.

As demonstrated above, many educators and teachers in Japan are concerned about the insufficiency of internalized grammar of Japanese learners of English. Spontaneous interaction in class is not necessarily successful without learners' internalized grammar. Before providing students with self-expression tasks, teachers have to provide as many opportunities as possible for students to practice reproducing what they have learned (Kubono, 2003; Takahashi, 2000; Yanase, 2003). An additional phase, reproduction, should be provided to students. In this way, students can make sure they have completely understood the target grammar, and they can "reconstruct" the structure

on their own during this reproduction phase. The assumption that meaningful communication is impossible without underlying grammar means that drills are not incompatible with practical communicative abilities. In fact, what is gained in repetition drills can be an important basis of communicative abilities (Yoneyama, 1995).

3. Repetition-Related Activities Practiced in the Classroom

Oral reading is an activity which has been relatively popular in high schools (SHSs) and JHSs in Japan, though the purpose for which oral reading is used or the time spent per lesson varies. Tsuchiya (2004) claims that oral reading should not be limited to confirming the students' understanding of the text. He claims that oral reading should also be used to provide students more time to become very familiar with the targeted structures so that they can eventually utilize them in self-expression activities. Actually, an activity in which students have to read the text aloud on their own is a good exercise, since vocalizing the text involves phonological processing or grammatical processing according to circumstances. Tsuchiya suggests that oral reading, in which the students read the same text repetitively, is definitely an appropriate activity as a preliminary step to subsequent communicative activities, though oral reading in itself cannot be defined as a communicative activity. Another possible advantage of oral reading as a post-reading activity is that the students can pay attention to meaningful chunks of the text while reading. It may be easier for them to memorize useful expressions or structures in the text if they attend to meaning through oral reading practice.

What seems to be more effective in memorizing the text is to reproduce the text without looking at it, since the student has to pay attention to meaning in order to keep a rather long sentence or phrase in memory for some time. Therefore, if internalizing target structure or grammar is the goal, only oral reading seems to be insufficient. Oral reading followed by reproduction practice without the aid of the original text seems more effective in memorizing sentences.

Now let us outline the three main repetition-related tasks that are used in classrooms: (1) Read and Look up, (2) Shadowing, and (3) Sentence Repetition (SR). These three tasks are all reproductive repetition tasks without the aid of the text.

Read and Look up is a task in which students first start reading the text silently (usually a sentence or a meaningful chunk at a time) when the teacher gives them the cue “Read.” Then, when the teacher gives them another cue “Look up” the students look up and say the sentence. Depending on the length, rote memorization is possible. In general, a longer sentence or a chunk is more difficult to reproduce. In order to memorize a sentence, the student has to utilize more than visual information (i.e., word sequence). They normally have to comprehend the meaning of the sentence, or context information of the whole text. If the teacher wants to make sure that students have memorized a particular target as a result of semantic processing, he should prepare a sentence or a phrase whose length does not allow rote memorization, and one which consists of a meaning chunk.

Shadowing is a “verbatim repetition of acoustically present messages” (Darò & Fabbro, 1994); that is, it is an activity in which one repeats or copies what the speaker says like a shadow just after one hears it. The student is supposed to catch every word and reproduce it without delay. This technique has been commonly used as a basic training method at institutes for interpreters, as a preliminary step toward simultaneous interpretation. Recently, it has been attracting more attention as a teaching method to enhance students’ communicative competence. Tamai (1992, 1997, and 2003) demonstrates that shadowing is effective in developing listening ability, a strong incentive for JTEs to use this technique in their classes.

Shadowing can also enhance the acquisition of English prosody, the rhythmic and intonational aspects of English. Words or phrases received by the brain phonetically through repetitive shadowing practice can be remembered for a longer period than those learned simply through rote memorization. Kadota (2007) suggests that shadowing can be

effective in automatizing phonological perception and internalizing newly instructed items. Automatization of phonological perception can then contribute to establishing an English phonological database in long-term memory. Internalization of newly instructed items is expected to be attained by overt rehearsal of the same text. The effect of shadowing on automatization of phonological perception has been demonstrated, although the effect of shadowing on language internalization has not been demonstrated yet. The second possibility is supported mainly by psycholinguistic knowledge and learners' experiences.

Sentence repetition (SR) is a task similar to shadowing in that the learner has to repeat the model sound as correctly as possible. The only difference between these two tasks is whether there is a pause before repeating the cue sentence. It is highly possible that the presence or absence of a pause before reproducing the cue sentence does differentiate the degree of cognitive load. Making the preliminary remark that further research on the process of SR is necessary, Kadota (2007) suggests that SR plays a different role from shadowing in language learning. He also suggests that SR contributes to the internalization of newly instructed items more than shadowing does.

Nevertheless, some think that shadowing is more difficult than SR because shadowing has to be performed in parallel with the model sound. However, the fact that there is a slight delay between when the sentence is heard and when it is reproduced can increase cognitive load in SR. It is true that SR can be a simple rote memorization exercise under certain conditions, similar to Read and Look up, but it still has the possibility to be a cognitive and reconstructive task. For this reason, a sentence whose length does not allow rote memorization should be provided for the students in SR tasks. The length of the pause before repeating the sentence can also influence the accuracy of repetition.

SR, as well as Read and Look up and shadowing, is a task which already exists in classrooms, although it seems to be less popular than oral reading. One possible reason

is that some teachers are not aware of the process of SR. They do not think that SR is an activity which can involve semantic and syntactic processing as well as phonological processing. As long as they perceive SR to be just a rote memorization exercise, they will feel less inclined to use this activity in their classes. Another possible reason is that there has been strong opposition to drills among some teachers. Drills can easily make students bored. Although repetition of the same text does enhance frequency, it also decreases the variety of materials teachers can provide for the students. Furthermore, repetition drills are certainly not communicative activities. Nevertheless, they can be valuable *pre-communicative* activities.

As long as the textbook serves as the main learning material in the class, teachers should seek effective teaching methods which make the most of the textbook. SR exercises can be carried out easily without any additional preparation by the teacher. It can be conducted just with the textbook and speech model.

With respect to the effectiveness of SR on internalization of newly instructed items, there have hardly been any empirical studies in SLA research. Instead, SR has been adopted as a measuring technique to assess language acquisition or language development.

4. SR (EI) as a Means of Measurement of Language Acquisition

4.1 Historical Background of SR

SR, or commonly referred to as elicited imitation (EI) in language acquisition research, has been used as a technique for language testing in mainly three areas: L1 development (e.g. Ambridge & Pine, 2006; Corrigan & DiPaul, 1982; McDade et al., 1982; Valian & Prasada, 2006), L1 neuropsychology (e.g. Devescovi & Caselli, 2007; Mattes, L. J., 1982; Sturmer et al., 1993), and L2 acquisition (e.g. Eisenstein et al., 1982; Ellis, 2005, 2006; Erlam, 2006; Gallimore & Tharp, 1981; Graham et al., 2008; Hamayan et al., 1977; Henning, 1983; Munnich et al., 1994; Naiman, 1974; Perkins et al., 1986;

Scott, 1994; Swain & Merrill, 1974; Tarone, 2009).

In L1 development research, McDade et al. (1982) demonstrate that their four and five-year-old subjects were able to accurately repeat sentences that they did not understand as long as imitation was immediate. However, the subjects had difficulty in accurately repeating sentences that they did not understand if the imitation was delayed. The researchers claim that the degree of availability of STM can affect the participants' repetition, thereby challenging the validity of EI as a measurement of children's expressive grammar.

Valian and Prasada (2006) argue that children are sensitive at age two to the conceptual relation between the direct object and the verb. It was easier for their two-year-old subjects to imitate sentences with predictable direct objects (e.g., The cat is eating *some food*.) than with unpredictable direct objects (e.g., The cat is eating a *sock*.). The finding of this study clearly shows the children were not treating the sentence merely as an unstructured list of unrelated words, and sustains the validity of EI as a measurement of children's language development. Ambridge and Pine's (2006) results also provide support for the use of EI for assessing children's grammatical knowledge that may appear only infrequently in natural production.

Another role of EI in L1 research is to identify children with language problems and to "determine the nature and severity of language disorders" of those children (Devescovi & Caselli, 2007). Mattes (1982) argues that an EI task can be used to get a detailed descriptive analysis of responses produced by children with communication handicaps. Sturmer et al. (1993) also suggest that an EI task could be a very efficient strategy to deal with both language and articulation problems in preschool children. The findings of this study, however, also recommend that further replication studies should be conducted to increase the validity of EI.

In SLA research, Gallimore and Tharp (1981) carried out both longitudinal and cross-sectional studies on Hawaiian American children. They conclude that EI reflects

knowledge of grammar, short-term memory and knowledge of vocabulary. Radloff and Hallburg (1991) developed a Sentence Repetition Test (SRT) as a more efficient substitute for an existing oral interview test, in order to estimate the bilingual proficiency profile of a community. It premises that the more sentences a person can repeat accurately, the higher his or her L2 proficiency is. Hatfield et al. (2007) claim that there is no single test that can be used as the only deciding factor in language development needs assessment, yet the results from SRT can provide important information on the L2 abilities of members of a speech community.

EI has also been used to collect data that reflect L2 learners' performance. Perkins et al. (1986) investigated whether derivational complexity, that is, "the psychological complexity of processing the sentence" (Brown & Hanlon, 2004, p. 155), can determine item difficulty in an SR task. Their 50 ESL participants experienced difficulties in processing adverbials, in compounding and reduction of clauses, and in using non-finite adverbials. They conclude that as the sentences become longer, the items increase in difficulty; seven to eight syllables seems to be the threshold for ESL learners for accurate repetition. This study demonstrates the availability of SR as an effective measurement of ESL/EFL learners' overall English proficiency. The findings by Graham et al. (2008) with approximately 400 ESL learners in an intensive English program in the U.S. demonstrate high correlations between the EI test scores and the other four more conventional methods of measuring oral language proficiency. They conclude that EI is a highly reliable way of measuring a single trait of oral language use.

Ellis (2005) attempted to establish operational definitions of L2 explicit and implicit knowledge using a battery of five tests including EI. He claims that an oral narration test, a timed grammaticality judgment test, and EI can provide a valid measure of L2 implicit knowledge. Erlam (2006) also suggests that EI is a likely measure of implicit language knowledge, arguing the task is reconstructive and requires participants to process language stimuli rather than repeat verbatim.

4.2 Debates over SR (EI)

As summarized above, SR has been used as a useful measurement of language acquisition and language development. The basic assumption of SR is that “if a given sentence is part of a person’s grammar, it will be relatively easy to repeat; if it is not part of the person’s grammar, it will be difficult” (Gass & Mackey, 2007, p. 27). It is true, however, that not all researchers agree with this assumption.

The first point of controversy is the possibility of rote repetition. Slobin and Welsh (1968) state, from an examination of their two-year-old subject ‘Echo’ for nearly three months, that “sentence recognition and imitation [by children] are filtered through the individual’s productive linguistic system” (p. 17). Still, they also claim that Echo will perfectly imitate ungrammatical or anomalous sentences if they are short enough for her to hold an auditory image in short-term memory (STM). This means that it is possible for children to parrot model sentences which do not exceed their STM without noticing semantic or syntactic deviancy. McDade et al. (1982) also suggest the possibility of parroting in EI, saying “subjects were able to accurately repeat sentences that they did not understand as long as imitation was immediate,” compared to the results of delayed imitation in the same study. Naiman (1974) demonstrates that some of his first and second grade subjects, who were native English-speaking children attending a French immersion program, were able to imitate structures they are rarely able to produce spontaneously. He argues that it is still not clear whether EI can reflect the subjects’ spontaneous capacity even if their sentence recognition is filtered through their linguistic system.

There has been a growing expectation that EI will prove to be effective as a measurement to assess language development. However, there are still some questions to be answered. As long as grammatical sentences are used, it is difficult to determine why a subject succeeded in accurate repetition. He or she might have succeeded in the repetition because of an outstanding memory and parroting, or because of semantic and

grammatical processing. In order to avoid the possibility of interpreting EI as rote memorization, some researchers prefer to use ungrammatical sentences as well as grammatical sentences in the same study (e.g. Ellis, 2005, 2006; Erlam, 2006; Munnich et al., 1994). That is, examples of subjects' self-correction of ungrammatical parts in EI reassure the researchers that EI is reconstructive.

The second controversial point is uncertainty about how long a sentence should be to make simple rote imitation unattainable. Gass and Mackey (2007) suggest that if the length of a model utterance exceeds a hearer's working memory capacity, mere rote memorization after only one listening to the cue is impossible. However, they do not give an indication of the specific length of a sentence which goes beyond rote memorization. Vinther (2002) states in her review paper on EI that "the last word has not yet been said about the exact ideal length of the stimulus" (p. 69), although she generally agrees with the view that EI is an effective technique for language testing. In fact, further studies seem necessary to determine the relationship, such as between the ideal length of the stimulus and the subjects' L2 proficiency, and between syntactic complexity of stimulus and their L2 proficiency (Gass & Mackey, 2007; Jessop et al., 2007; Vinther, 2002).

Results of experiments also vary depending on the stimulus sentence and testing environment (e.g., the condition under which the experiment takes place, or the age of subjects). As a result, not a few researchers are still concerned about the reliability and the validity of EI (Bley-Vroman & Chaudron, 1994; McDade et al., 1982; Vinther, 2002).

4.3 Need of Further Research into the Process of EI

Taking into account the data above on SR (EI), we can see that it has not been completely established as an adequate measurement. It has some advantages and also some challenges. Without careful preparation regarding the subjects' proficiency and the purpose of the study, it might be difficult for the researcher to interpret the results demonstrated in SR studies and testing. That is, it must be clearly ascertained whether an

accurate repetition was due to perfect parroting or sentence reconstruction involving semantic and syntactic processing. The process of SR needs to be investigated in more detail from various aspects. Data analyses based on between-subject variance and also within-subject variance are important. The majority of studies on SR have involved ESL settings with rather advanced learners. Few studies have involved Japanese EFL learners. As far as I know, no studies on the process of EI by Japanese intermediate (or lower-intermediate) EFL learners have been conducted.

The purpose of this dissertation is to further validate the process of EI or SR by Japanese intermediate EFL learners. (Hereafter I will use the term SR except when I review the empirical EI studies.) As emphasized in Chapter 1, English education in SHSs in Japan should increase the amount of in-class output practice. In addition, tasks that can enhance transfer from students' receptive skills to productive skills should be highlighted more. If the results of SR tests by Japanese EFL learners confirm that SR is a reconstructive task involving semantic and syntactic processing, I will then consider how this technique can be utilized in classrooms, particularly in SHS classrooms.

Chapter 3

Study 1

3.1 Research Background

As the first study, I conducted a survey of 261 junior and senior high school JTEs to clarify the current state of oral/aural output activities in English classes in Japan. As I mentioned in Chapters 1 and 2, my teaching experience and what I have been told and observed so far give me the impression that senior high school (SHS) teachers (especially teachers in academic high schools) tend to spend little time on reproduction-related activities in class. Indeed, there seems to be less output activities in SHS classes than junior high school (JHS) classes. It seems that SHS teachers' primary concern is giving students as much input as possible. Making sure students thoroughly comprehend the materials appears to be the main goal of SHS teachers. Therefore, it is highly unlikely that the students' receptive knowledge will transfer to their productive knowledge without the students' intentional effort. Productive knowledge is generally smaller than receptive knowledge. The gap between these two skills in Japanese EFL learners is considered to be even larger. In order to narrow the gap between the two skills, students clearly need plenty of output practice in class. Consequently, in this dissertation, my aim is to illustrate and emphasize the importance of repetitive output practices.

Before the importance of repetitive activities is discussed, however, it should be confirmed whether or not the actual conditions of oral/aural output activities in current English classes are really the same as my experiential observations. If indeed we can clearly demonstrate an insufficiency of output activities in current SHS classes, we will be able to argue the possibility of SR as an effective repetition-related activity in class.

For this reason, I conducted a survey on the present state of oral/aural output activities in both JHS and SHS English classes. This survey was conducted from July to

August 2008. The questionnaire on the implementation of oral/aural output activities in English classes was collected from 261 JTEs in total (JHS: 148, SHS: 113). The respondents consisted of teachers engaged in teaching English either in JHS or SHS. Some of those surveyed in the study had joined workshops on English teaching that were held during that period. No distinctions were made regarding teaching experience or the type of school (private or public) in which the teachers were engaged.

Although the number of teachers involved was insufficient for a definitive survey, I am content that I was able to collect responses from teachers with various backgrounds, and from various areas. While it is hard to reach detailed conclusions just from the results gained in the present survey, I believe that a significant amount of information was revealed through this survey. The findings from this survey confirmed that the current situation of English teaching in Japanese secondary schools was about the same as what most teachers and I had perceived. I will summarize the results of the question items one by one and discuss each in turn.

3.2 Results and Discussion

Q 1: Do you regularly conduct oral/aural output activities in your English class (regardless of the time spent on one or more activities)?

In answer to this question, all 148 JHS teachers answered yes, while 107 SHS teachers (95%) answered yes and six (5%) of them answered no. The respondents were allowed to answer yes as long as they judged that they regularly conduct some aural/oral output activities in class, regardless of the time spent per class or the kinds of activities.

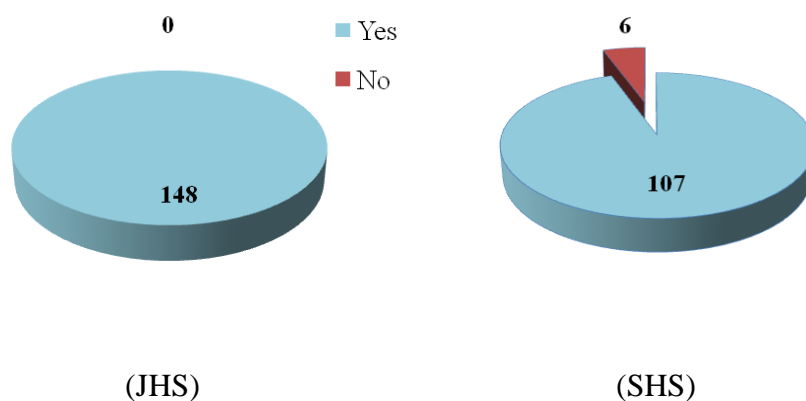


Figure 1. Allocation of the response to Q1.

Five percent of SHS teachers answered that they do not conduct regular practice in oral/aural output activities. This fact reveals that there are some English classes in SHS in which the students have no chance to speak during one period. It appears that the goal of “fostering a positive attitude toward communication through foreign languages,” stipulated explicitly in the government’s Course of Study for English education in secondary schools (<http://www.mext.go.jp/english/shotou/030301.htm>) has not completely become pervasive in the view of all SHS teachers.

Q2: (Only for those who answered yes in Q1) How long do you usually spend on aural/oral output activities per class?

The respondents were allowed to give a rough estimate of the time spent. The results demonstrated that the average time spent on aural/oral output activities in class was longer in JHS (approximately 19 minutes) than in SHS (approximately 12 minutes) as expected ($p = .000$).

Table 1. *Descriptive Statistics of Mean Length of In-class Output Activities per Class*

<i>Stage</i>	<i>N</i>	<i>Mean (minutes)</i>	<i>SD</i>
JHS	143	18.73	8.80
SHS	104	12.35	8.19

The average length of one period in Japanese secondary schools is 50 minutes, so the result from JHS teachers means that in general more than one-third of one period is spent on aural/oral activities in JHS classes. In contrast, only one-fourth of one period seems to be spent on aural/oral activities in SHS classes. However, we need to make a more careful interpretation concerning the differences in mean length of output activities spent between JHS and SHS classes. A mere comparison of the average time spent in class can give us the impression that all JHS teachers have more positive attitudes to aural/oral output activities than SHS teachers do. If we, however, take a closer look at the distribution (Figure 2), we can see that some JHS teachers spend more than 20 minutes (some spend over 30 minutes) on output activities, while others spend less than 10 minutes. It is obvious that on average SHS teachers spend less time on aural/oral output activities than JHS teachers do. It is not necessarily appropriate, however, to suggest that all JHS teachers have a positive attitude to aural/oral output activities in class.

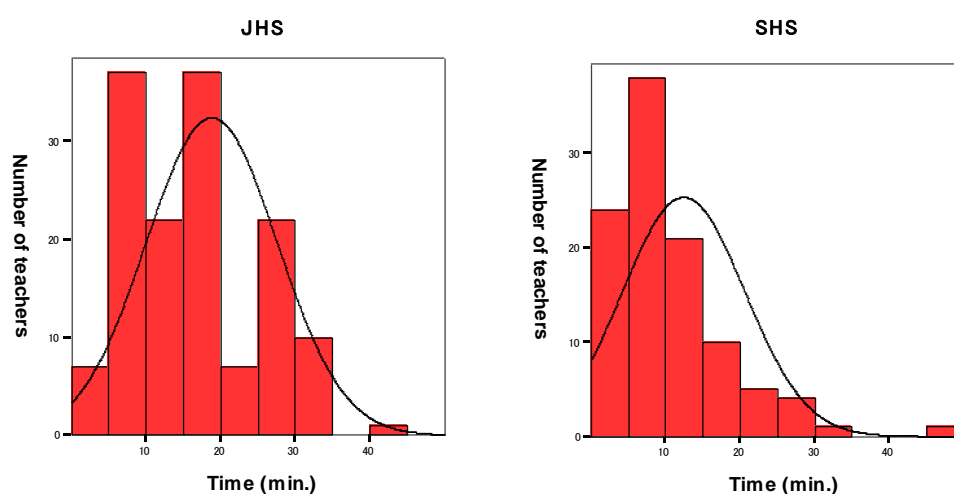


Figure 2. Distribution of time spent on output activities.

Q3 (a): Please choose all relevant activities you “regularly” do (regardless of time spent at one time) from options printed in the questionnaire.

The respondents were then asked to choose the activities they regularly do out of 13 options I prepared (See Figure 3, or Appendix 1 for more information). The criterion for the definition of “regularly” was not explicitly written on the questionnaire. It was all left to the respondents’ individual judgment.

As a result, the activity with the highest usage rate out of 13 activities among JHS teachers was chorus reading, followed by buzz reading, individual reading, parallel reading, recitation, Read and Look up, and [sentence] repetition. (Hereafter “repetition” instead of SR will be used in this chapter.) These seven activities were chosen by more than 50% of JHS teachers as the activities that they regularly do in class. The top four activities belong to the category of oral reading. It is notable that the majority of JHS teachers conduct reproduction-enhancing activities, such as recitation, Read and Look up, and repetition, along with regular oral reading.

Table 2. *Activities that More Than 50 % of JHS Teachers Chose*

<i>Activities</i>	<i>(%)</i>
chorus reading	99.32
buzz reading	86.49
individual reading	80.41
parallel reading	69.59
recitation	64.86
Read and Look up	60.14
repetition	52.03

In contrast, there were only three activities chosen by more than 50% of SHS teachers: chorus reading, individual reading, and parallel reading (in descending order of usage rate). No reproduction-enhancing activities demonstrated more than 50% usage rate. This result is dissimilar to that of JHS teachers. The majority of SHS teachers conduct only a few kinds of oral reading in their 10 to 15 minute aural/oral output practice, and they seem less willing to conduct reproduction practice in class. Or it is possible that they cannot afford to add reproduction-related activities to regular oral reading in their limited time for output practice.

Table 3. *Activities that More Than 50 % of SHS Teachers Chose*

<i>Activities</i>	<i>(%)</i>
chorus reading	86.73
individual reading	66.37
parallel reading	50.44

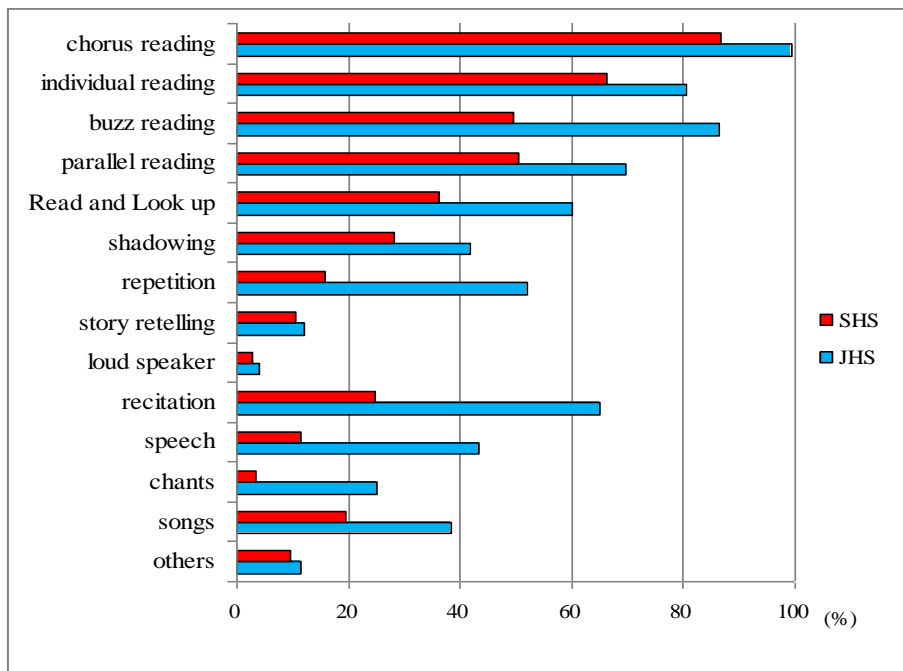


Figure 3. Distribution of output activities chosen in Q3 (a).

With a closer look into the three repetition-related activities, Read and Look up, shadowing, and repetition, we notice that shadowing is relatively popular among JHS teachers. Shadowing can give the impression of being a little too difficult for JHS students to do, and the usage rate is actually below 50%. Nevertheless, the rate is much higher than the rate among SHS teachers. The usage rates of three repetition-related activities among SHS teachers are all lower than 40%. Repetition is the least popular among the three activities. Thus, the results explicitly demonstrate the lack of output practice in SHS classes. In particular, compared to JHS teachers, little enthusiasm is shown for repetition-related activities among SHS teachers. It is highly possible that quite a lot of SHS teachers are not aware of the usefulness of repetition. As this paper intends to illustrate, repetition is not simply form-focused pattern practice, but rather a meaning-based task.

Table 4. *Usage Rate of Repetition-related Activities*

<i>Activities</i>	<i>JHS (%)</i>	<i>SHS (%)</i>
Read and Look up	60.14	36.28
repetition	52.03	15.93
shadowing	41.89	28.32

In addition, the number of activities chosen per teacher was also different between the two groups of teachers. JHS teachers chose an average of seven activities, while SHS teachers chose an average of four activities. These average numbers also emphasize that JHS teachers are more willing to combine reproduction-enhancing activities with regular oral reading exercises, while SHS teachers are rather reluctant to add reproduction-enhancing activities to oral reading exercises, unlike JHS teachers.

Table 5. *Mean Number of Activities Chosen per Teacher*

<i>Number of Activities</i>	
JHS	6.85
SHS	4.16

Q3 (b): (Questions only for SHS teachers) In which of these subjects do you usually use the activities that you chose in Q3 (a)? Please choose all relevant subjects from the six subject titles below.

The results demonstrated that about half of the SHS teachers were in charge of either English I or English II (or both). In the current Course of Study, either Oral Communication (OC) I or English I has to be taken as a compulsory subject, while the other subjects are electives. There is also a regulation that Aural/Oral Communication II should, in principle, be taught after Aural/Oral Communication I, and English II after English I (<http://www.mext.go.jp/english/shotou/030301.htm>). It is common for public academic SHSs to establish OCI, English I, English II, Reading, and Writing as the subjects for foreign language education in their schools. The extremely low number for OCII shows that few high schools establish OCII as one of the subjects for foreign language education. It should also be noted that private SHSs have more flexibility in establishing new subjects (other than the six subjects stipulated in the Course of Study). Teachers who were in charge of a subject that was not listed on the questionnaire were asked to choose ‘Others’ and write down the title of the subject in parentheses.

The number of teachers who were in charge of either Reading or Writing (or both) was relatively small (23.35 % and 25.66 % respectively). Reading and Writing classes do not necessarily involve aural/oral output activities, if the definitions stipulated in the Course of Study are literally adhered to. English I and English II are subjects in

which the four skills, reading comprehension, speaking, writing, and listening, are supposed to be developed in balance. Both Reading and Writing, on the other hand, are supposed to focus on developing specific skills: reading comprehension or writing. If we take into account that the number of teachers who were in charge of Reading or Writing was relatively small, and that more than half of all the teachers were in charge of either English I or English II, there seems to be little justification for the lack of aural/oral output activities in SHS classes.

Table 6.

Numbers of Subjects that SHS Teachers are in Charge of in the 2008 Academic Year

English I	59	Reading	29
English II	55	Writing	23
OCI	33	Others	6
OCII	5		

Table 7. *Objectives of Individual Subjects* (A portion)*

<i>Subject</i>	<i>Objectives</i>
English I	To develop students' basic abilities to understand what they listen to or read and to convey information, ideas, etc.
English II	To further develop students' abilities to understand what they listen to or read and to convey information, ideas, etc.
Aural/Oral Communication I	To develop students' basic abilities to understand and convey information, ideas, etc.
Aural/Oral Communication II	To further develop students' abilities to organize, present and discuss information, ideas, etc.
Reading	To further develop students' abilities to understand information, the writer's intentions, etc. by reading English
Writing	To further develop students' abilities to write down information, ideas, etc. in English in accordance with the situation and the purpose

*Excerpt from “The Course of Study for Foreign Languages” in “the Ministry of Education, Culture, Sports, Science and Technology (MEXT)” (<http://www.mext.go.jp/english/shotou/030301.htm>)

Q 4: Please choose up to three activities on which you focus your efforts in teaching English. Also please choose any relevant reasons from the options printed in the questionnaire.

Among JHS teachers and SHS teachers, chorus reading was the only activity whose usage rate exceeded over 50%. It seems to be natural for teachers to start a series of in-class output activities with chorus reading. The particular activities a teacher emphasizes, however, can vary depending on his/her own experiential perspectives and preferences toward English teaching. Therefore, the results for Q4 are not unusual. Even

so, the overall tendency seen in the results for Q4 were quite similar to that of Q3. That is, the main activities chosen by JHS teachers and SHS teachers were different from each other. As for the JHS teachers' response, the usage rates of two kinds of reproduction-related activities, recitation and Read and Look up, were both over 20%. In contrast, no reproduction-related activities gained over 20% usage rate among SHS teachers.

In fact, the amount of target vocabulary and grammar per page is much smaller in JHS textbooks than in SHS textbooks. In addition, current textbooks for JHS typically use plenty of dialogues as teaching material, especially for grade 1 and grade 2 (i.e., the 7th grade and the 8th grade respectively), while most textbooks for SHS use mainly narrative text. These differences imply that JHS teachers can encourage students to memorize all the text on a page as long as the task difficulty is within the students' capacity. JHS teachers may challenge the students to recite the target text right after chorus reading and/or buzz reading practices, skipping repetition drills. That seems to be one of the reasons why recitation is relatively popular among JHS teachers. Considering the difficulty level of SHS textbooks, however, SHS teachers would find it extremely difficult to do the same thing with SHS students. To memorize all the text on a page would be too demanding for students. More to the point, memorization need not be a major concern for SHS teachers; that is, SHS teachers need to emphasize the stage of "reproduction" as opposed to "memorization."

Table 8. *Activities that More Than 20 % of JHS Teachers Chose*

<i>Activities</i>	<i>(%)</i>
chorus reading	55.41
buzz reading	35.14
individual reading	27.70
recitation	25.00
Read and Look up	23.65

Table 9. *Activities that More Than 20 % of SHS Teachers Chose*

<i>Activities</i>	<i>(%)</i>
chorus reading	57.52
individual reading	38.94
parallel reading	24.78
buzz reading	23.89

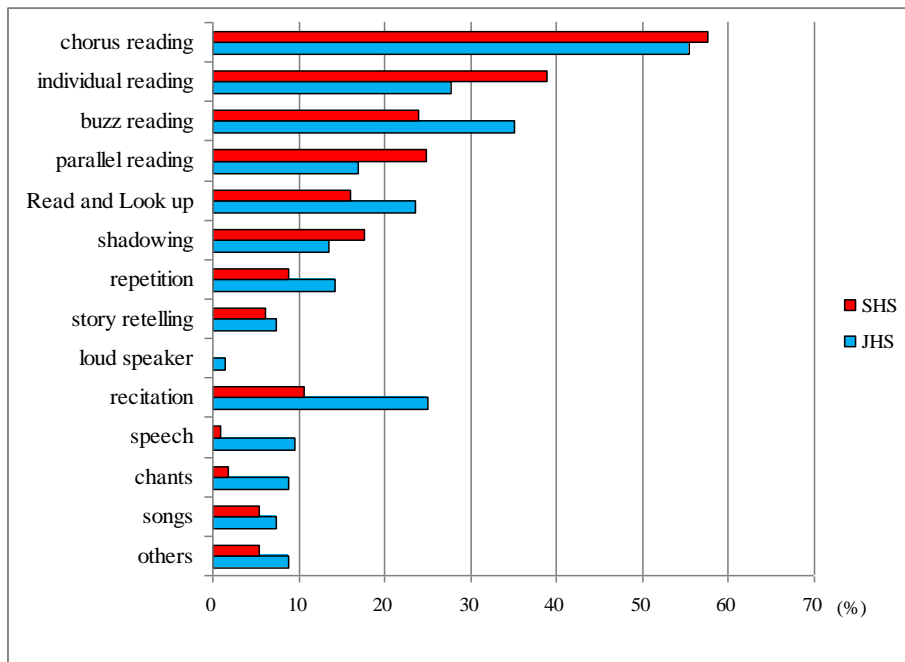


Figure 4. *Distribution of output activities chosen in Q4.*

Lastly, I will summarize the teachers' responses to the question regarding why (or with what purposes) they chose those three activities to focus their efforts in teaching English. My discussion will concentrate exclusively on the three repetition-related activities: Read and Look up, shadowing, and repetition.

As for their reasons for emphasizing Read and Look up, JHS teachers' responses and SHS teachers' responses were quite similar. The results demonstrate that the majority of teachers emphasize Read and Look up in class for the purpose of getting the students to memorize vocabulary, phrases, or a sentence as a unit.

Similar to Read and Look up, the most popular reason to emphasize repetition was to get the students to memorize learned items in class. This tendency was especially obvious among SHS teachers, although repetition in itself is preferred by only a few teachers. Nonetheless, at least those who use repetition frequently in class obviously expect that repetition will help students learn vocabulary and important structure by making them memorize a sentence as a unit. Another major reason for the use of repetition was to improve students' listening comprehension, probably because repetition practice involves listening to the model sound.

The reasons for emphasizing shadowing were slightly different from the reasons for emphasizing Read and Look up or repetition. Because of the task's characteristics in which students have to keep up with the pace of the model sound, the reasons to use this task seem to vary depending on the teacher. In general, teachers would rather use shadowing for the purpose of development of speech perception than for the purpose of memorization.

On closer examination, the most popular and the second most popular reasons for the use of Read and Look up contain the term *memorize*. We can see that the teachers are trying their best to help students memorize the target material. It is also interesting that about 30% of JHS and SHS teachers, who answered that they frequently use Read and Look up, believe English prosody can be familiarized through this task. Read and

Look up, however, does not usually involve a model sound. Students are supposed to read a sentence in the textbook silently, and then look up and reproduce it. The only sound involved during the task is the student's own speech. Since no sound model is presented, it is uncertain whether the task of Read and Look up can help students become accustomed to English sound characteristics.

The findings also show that four out of 10 SHS teachers who emphasize repetition expect students' listening comprehension to be improved by repetition. In addition, two SHS teachers also expect that English prosody can be learned through repetition. It is true that repetition does involve model sound unlike Read and Look up. Students first have to listen to the model sound either from the CD or read by the teacher. It is doubtful, however, whether students can afford to pay close attention to English prosody or sound characteristics during repetition. If we assume that learners have to conduct semantic and syntactic processing during repetition, it is difficult for them to attend to phonological characteristics as well. These results seem to reflect teachers' belief that repetition is somewhat equivalent to rote repetition.

A relatively large number of teachers think that shadowing can familiarize English prosody, as well as improve students' listening ability. As Kadota (2007) and Tamai (1992, 1997, and 2003) suggest, shadowing can be effective in automatizing phonological perception. Tamai demonstrates that shadowing improved his subjects' listening ability after a certain amount of training. The findings of these empirical studies seem to provide a strong motivation for both JHS and SHS teachers to use shadowing in their classes.

Table 10. *Reasons to Emphasize Each Activity*

		<i>Read and Lookup</i>		<i>shadowing</i>		<i>repetition</i>	
		<i>JHS</i>	<i>SHS</i>	<i>JHS</i>	<i>SHS</i>	<i>JHS</i>	<i>SHS</i>
	<i>Reasons to Use the Activity</i>						
1	No particular reason	0	0	0	0	0	0
2	To get students to memorize vocabulary and expressions learned	16	10	2	5	8	4
3	To warm-up students	7	4	1	5	2	4
4	To get students to memorize a sentence as a unit	22	15	6	6	16	7
5	To perk the lesson	7	4	2	6	2	1
6	To familiarize English prosody	11	6	8	6	9	2
7	To improve students' listening ability	3	2	7	9	4	4
8	To develop students' speaking ability	4	4	0	2	3	1
9	Others	1	2	1	0	1	0
In Total		71	47	27	39	45	23
Total number of teachers who chose the activity in Q4		35	18	20	20	21	10

Note. The numbers in the table refer to actual number.

3.3 Conclusion

The results from Q1 to Q4 clearly demonstrate that output activities that are expected to transfer “knowledge about a skill” to “the ability to use the skill” (DeKeyser, 1998) are lacking in SHS English classes. A further category of activities, repetition-related activities, should be utilized more often to fill the gap between learners’ receptive knowledge and their production knowledge. Repetitive tasks such as text

reproduction can be a good solution to compensate for the disadvantages Japanese EFL learners face.

Above all, we have to keep in mind that only a small number of teachers out of 261 teachers in the survey focus their efforts on repetition-related activities in teaching English. Among the three activities of Read and Look up, shadowing, and repetition, repetition was the least popular among SHS teachers. It seems imperative to confirm that repetition of a sentence as a unit is a cognitive task involving semantic, grammatical, and syntactic processing, and not a simple rote memorization task. With such confirmation, it is highly likely that more teachers will be encouraged to use repetition-related activities.

Chapter 4

Study 2

4.1 The Purpose of This Study

In the previous chapter, I reported that only 15.93% of SHS teachers conduct sentence repetition (SR) in their English classes on a regular basis and far fewer, just 8.85%, put special emphasis on the task. Among JHS teachers, the results for the first category (SR on a regular basis) were substantially higher, 52.59%, but only marginally higher, 14.19%, in the second category (special emphasis on the task). It is doubtful, however, whether all 52.59% understand the process of SR as a reconstructive task, since most sentences in JHS English textbooks are short enough to allow students to memorize a sentence simply as an acoustic image.

Memorizing a useful phrase or sentence is in itself very important in learning. However, it is quite important for students to pay close attention to meaning instead of simply the sound of the phrase or sentence. In an SR task, there should be a slight interval between when the sentence is heard and when it is reproduced. This greatly lessens the possibility of a rote response. Furthermore, a longer sentence increases the degree of cognitive load because of the amount of information students must take in prior to responding. That is, in an SR task, students are required to process the sentence semantically, grammatically as well as phonologically because of the slight interval between hearing and repeating; plus, the difficulty in processing a sentence generally increases with the length of the sentence.

In contrast to the situation in JHS, the low popularity of SR in SHS classes implies that the process of SR is not widely understood. On the questionnaire, not a few SHS teachers added comments that they cannot spare enough time on oral output activities because of the limited amount of class time; however, they did recognize the

need for more oral output. The results of Study 1 also showed that most SHS teachers currently spend only about 12 minutes per class on aural/oral related activities. Furthermore, the activities that SHS teachers do conduct in class are limited to just a few kinds of oral reading. Oral reading activities alone, however, seem sorely insufficient to improve students' productive skills. At this time, few SHS teachers seem inclined to conduct more reproduction-related activities, including SR, on a regular basis. There seems to be an urgent need to convince SHS teachers to spend more time for oral output practice and repetition-related activities, but this will most likely not become reality until more teachers are aware of the benefits of such activities.

SR can serve as a bridge between the stage of comprehension and the stage of self-expression. To demonstrate this point, I conducted the first experiment. The results of this study confirmed that SR by Japanese intermediate-level learners was clearly a cognitive task, involving meaning, grammatical, and syntactic processing. It was not a simple rote memorization task. This chapter is a revised version of Ota (2009a). Below, I will reorganize the findings in Ota (2009a) and discuss the results in more detail.

4.2 Research Question

Is an English SR task by Japanese intermediate-level EFL learners a simple rote memorization task or a cognitive task involving grammatical and syntactic processing?

4.3 Method

4.3.1 Participants

The participants for this investigation were 29 undergraduate and graduate students in the faculty of education at a university in Tokyo. Twenty-six of the participants were majoring in English Education (as a foreign language) and three were majoring in other fields. The experiment needed to be carried out on an individual basis outside the classroom in the presence of the researcher. In that respect, I asked for the

cooperation of the university students participating in the study. Furthermore, I judged that the process of SR by Japanese learners with a higher English proficiency than SHS students should also be studied in this dissertation, with the assumption that learners with a higher proficiency would process a sentence more semantically and grammatically.

All the participants for this study were recruited by the present researcher. Although the participants varied in their majors, grades and ages, all of them were considered to be at an appropriate level to take part in the task. The breakdown of the participants is described in the following table. More detailed background information of each participant is added in Appendix 4.

Table 11. *Breakdown of Participants*

	<i>Major</i>	<i>Grade</i>	<i>N</i>
Undergraduates	English Education	Freshman	8(1)
		Sophomore	8(2)
		Junior	6
	Various	Various	3
Graduates	English Education	1 st	4(1)
Sum	-	-	29

Note. The parentheses represent the number of returnees included. Returnee in this case refers to a student who has studied abroad.

4.3.2 Materials

The test consists of 14 CD-recorded sentences of increasing length. Half of the sentences are simple sentences and the other half are center-embedded sentences. The 14 sentences were made by the present researcher and were recorded by a male native speaker. The difficulty of the sentences was considered to be appropriate for the material of this study.

1. Mike is studying for the test.
2. The picture he painted was beautiful.
3. She has lived here for three years.
4. The girl dancing on the stage is Mary.
5. It's easy for some people to learn languages.
6. The fact that you're a doctor surprised me.
7. The teacher asked the students to move the desks.
8. The dictionary I bought yesterday is useful to me.
9. English is used by many people as a common language.
10. The boy invited to the party came with his friends.
11. Lucy and I decided to go to Tokyo together next winter.
12. The teacher who always tells a joke to us got angry.
13. The mother told her children not to forget to lock the door.
14. An old woman sitting between Bob and me suddenly began to cry.

Figure 5. Sentence repetition stimuli.

4.3.3 Procedure

The experiment was carried out on an individual basis outside the classroom from the middle of November to the middle of December 2008. The participants were asked to repeat each sentence to the best of their ability after each presentation. They were also asked to recall the content of the sentence in Japanese after each repetition. The aim was to determine which of the following allows for precise repetition: 1) the students' superior parroting skill; or 2) the students' superior semantic and syntactic processing skill. Each sentence was presented just once. A sufficient time interval for English repetition and Japanese recall of the content was provided before the following sentence stimulus was heard. All the utterances including the warm-up stage were

recorded.

4.3.4 Variables

In order to investigate the effects of sentence length and sentence type on the degree of SR accuracy, repetition rates (RRs) were determined to be the dependent variable and sentence length and sentence type to be the independent variables for a two-way repeated ANOVA. As for the comparison between RR and degree of content recall, I decided not to do a statistical analysis due to the difficulty of deciding the number of idea units in each sentence.

4.3.5 Questionnaire and Interview

After the experiment, the script with the 14 sentences used for the SR task was distributed to the participants. They were asked to read the script to confirm comprehension in regard to any unfamiliar words and grammatical points. A questionnaire was added to this survey to see if the participants had experience living abroad and/or if they had obtained any English education qualifications, such as TOEFL/TOEIC, and the EIKEN.¹ Next, an interview of approximately five minutes in length was held to get the participants' general feedback on how they evaluated themselves on the SR and recall tasks.

4.3.6 Scoring

All the scoring was conducted by the researcher. In order to measure SR skill in terms of accuracy, the number of words the participants repeated correctly was divided by the total number of words in each sentence.

¹ EIKEN is an English proficiency test produced by STEP (the Society for Testing English Proficiency, Inc.) and has been widely adopted among Japanese junior and senior high schools.

$$\text{RR (\%)} = \frac{\text{The total number of words repeated correctly}}{\text{The total number of words in a sentence}} \times 100$$

The calculated rate was converted to a percentage. To receive a perfect score, the participants had to repeat each word in the sentence, and the words had to be correctly sequenced with all bound morphology present. For example, if a participant said “The teacher asked the *student* to move the *desk*” for the stimulus “The teacher asked the students to move the desks,” the participant received 7 points out of 9, or 77.78 % accuracy. Words that were incorrectly pronounced or unnecessarily added during repetition were not targeted for deduction of points in calculation. Only omitted words were targeted in determining the RR.

The participants’ recalled data in Japanese were classified into three categories by the researcher’s holistic evaluation: Correct, Insufficient and Wrong. It was difficult for the researcher to decide the number of idea units in each sentence since some information could be omitted or be redundant in Japanese recall. It is possible that some participants did not bother to translate the information into Japanese in detail even if they were aware of minor omissions (e.g., 「生徒 (*seito*)」 instead of 「その生徒達 (*sono seito-tachi*)」 for “the students” or 「人々 (*hitobito*)」 instead of 「多くの人々 (*ooku no hitobito*)」 for “many people”). Many of these minor omissions can be considered customary when translating between the two languages. Therefore, the researcher decided not to quantify the degree of recalled content and instead evaluated in a general, less strictly literal fashion. When the participants were judged as having understood the content of a sentence well enough, the recalled content was considered correct. But if any major information was omitted, the recalled data was considered insufficient. If more than half the content was dropped, it was considered wrong.

Moreover, by widening the permissible range of Correct, the responses of some

participants which had been classified as Insufficient were reclassified as Correct. In this second evaluation, the recalled data were judged Correct as long as they included all significant information, even if the participants did not mention the information that does not necessarily have to be recalled in Japanese (e.g. 「一緒に (*issho-ni*) “together” in Sentence 11, 「私にとって (*watashi-ni-totte*)」 “to me” in Sentence 8, 「私達に (*watashi-tachi ni*)」 “to us” in Sentence 12), or even if they interpreted article, tense, pronoun, place or time incorrectly.

	Evaluation I	Evaluation II
Correct	If all the major information is covered	Same as Evaluation I
Insufficient	if any major information is omitted	Same as Evaluation I
Wrong	If more than half of the information is dropped	Same as Evaluation I
Exception of deduction of points	<p>1) Deletion of concepts that articles or plurals have: e.g., 「<u>その</u>生徒達」 → 「生徒」</p> <p>2) Deletion of concepts that adjectives have: e.g., 「<u>多くの</u>人々」 → 「人々」 「<u>一部の</u>人々」 → 「人」)</p>	<p>Other than Evaluation I:</p> <p>1) Deletion of the information that does not necessarily have to be recalled in Japanese so precisely e.g., 「一緒に」 (together) 「私にとって」 (to me) 「私達に」 (to us)</p> <p>2) Incorrect interpretation of articles, tense, pronouns, place or time</p>

Figure 6. Evaluation criteria for Japanese recall data.

4.4 Results

4.4.1 Quantitative analysis of RR

4.4.1.1 Descriptive statistics of RR

Before comparing RR with the degree of content recall, the effects of sentence length and sentence type on the degree of SR accuracy were examined. Although the total

number of syllables in each sentence and sentence construction familiarity were not strictly controlled, mean RRs gradually declined as the sentences became longer, and mean RRs of simple sentences were higher than those of center-embedded sentences except in the case of nine-word sentences. In particular, mean RRs of center-embedded sentences drastically declined at eleven-word and twelve-word sentences.

Table 12. *Descriptive Statistics of RR*

<i>Number of words</i>	6	7	8	9	10	11	12	<i>Mean (%)</i>
Simple sentences	96.55	94.09	87.07	81.61	85.17	84.64	76.44	86.51
(SD)	(8.19)	(15.04)	(16.86)	(18.85)	(18.64)	(13.11)	(21.60)	(9.96)
Center-embedded sentences	93.10	91.81	76.29	90.80	81.03	64.26	66.38	80.53
(SD)	(15.12)	(18.08)	(22.74)	(14.57)	(23.04)	(21.99)	(18.83)	(12.31)
Mean (%)	94.83	92.95	81.68	86.21	83.10	74.45	71.41	83.52

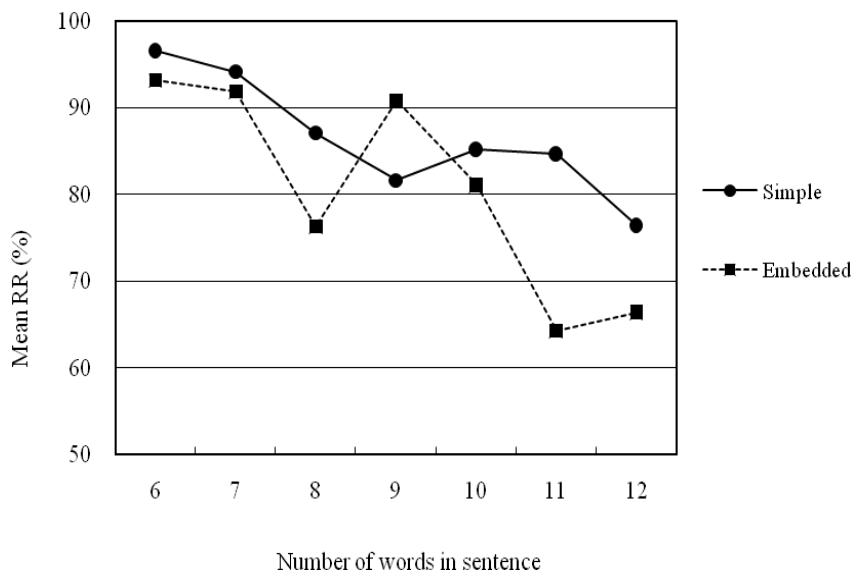


Figure 7. Mean RR by sentence length and sentence pattern.

4.4.1.2 Results of two-way repeated ANOVA

For further analysis, all RRs were submitted to a two-way repeated ANOVA in

order to investigate the effect of sentence length and sentence type on SR accuracy. There were significant main effects for sentence length ($F(6, 168) = 16.755$, $MSe = 263.375$, $p = .000$) and also for sentence type ($F(1, 28) = 13.787$, $MSe = 263.501$, $p = .001$). A statically significant interaction was also seen ($F(6, 168) = 5.875$, $MSe = 205.966$, $p = .000$), although this result needs to be interpreted carefully.

Table 13. *The Results of a Two-way Repeated ANOVA for RR*

<i>Source</i>	<i>df</i>	<i>Sum of Square</i>	<i>Mean Square</i>	<i>F Value</i>	<i>p Value</i>
Between -subjects	28	41803.766	1492.992		
Sentence length	6	26476.452	4412.742	16.755	.000
Error	168	44247.013	263.375		
Sentence type	1	3632.914	3632.914	13.787	.001
Error	28	7378.016	263.501		
Length * Type	6	7259.772	1209.962	5.875	.000
Error	168	34602.280	205.966		
Sum	405	165400.213			

The interaction seems to be mainly attributed to a significant mean RR difference between Sentence 7 (a 9-word simple sentence) and Sentence 8 (a 9-word embedded sentence) ($p = .007$), and also between Sentence 11 (an 11-word simple sentence) and Sentence 12 (an 11-word center-embedded sentence) ($p = .000$). Between corresponding sentences of the same length, simple sentences were always easier to repeat than center-embedded sentences except in the case of 9-word sentences (Sentences 7 and 8). The result that the participants performed SR better in Sentence 8 (an embedded sentence) than in Sentence 7 (a simple sentence) is probably because of the participants' greater familiarity with contact clauses than had been expected. Meanwhile, a significant

mean RR difference between 11-word sentences (Sentences 11 and 12) is due to the sharp decline of mean RR in Sentence 12. One explanation for this phenomenon is that 10 words might be the maximum number of words that can be remembered at one time regardless of one's grammatical or syntactic competence.

Nevertheless, the results from the statistics reinforce the idea that as the sentences become longer, the task difficulty increases, and embedded sentences are generally more difficult to repeat than simple sentences. In addition, the task difficulty may increase drastically when sentence length goes beyond 10 words.

4.4.2 Quantitative comparison between RR and degree of content recall

4.4.2.1 Evaluation 1

Mean RRs of the participants classified into three categories were calculated separately as follows.

With respect to Sentence 1, the responses of all participants were classified as Correct and mean RR of Sentence 1 in Table 14 is equal to overall mean RR in Sentence 1. As shown in Table 14, overall mean RR in each category was quite different, and overall mean RR of Correct was the highest of the three. Owing to the unbalanced number of the participants classified into each category and the extremely small number of the participants in Wrong, no statistical procedure was conducted in order to investigate whether there is a significant difference among categories.

Table 14. *Mean RR of Each Category by Sentence*

<i>Recall</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>
Correct	96.6	100	99.4	98.4	95.4	92.0	84.6	91.9	90.5	90.5	95.5	67.3	85.6	83.3
	(29)	(14)	(23)	(23)	(19)	(14)	(26)	(11)	(19)	(19)	(4)	(5)	(18)	(4)
Insufficient	-	86.7	77.1	84.4	78.1	72.5	66.7	93.5	75.0	72.9	82.2	66.5	65.8	67.8
	-	(15)	(5)	(4)	(8)	(10)	(2)	(17)	(10)	(7)	(24)	(22)	(10)	(22)
Wrong	-	-	57.1	31.3	43.8	40.0	33.3	33.3	-	40.0	100	31.8	16.7	33.3
	-	-	(1)	(2)	(2)	(5)	(1)	(1)	-	(3)	(1)	(2)	(1)	(3)

Note. The parentheses represent the number of participants classified into each category.

Table 15. *Comparison of Mean RR of Each Category*

<i>Recall</i>	<i>Mean RR</i>
Correct	90.7
Insufficient	76.1
Wrong	41.9

With respect to mean RR of Wrong in Sentence 11, there was one participant who could not recall the content at all except the part “Lucy and I” in spite of her perfect repetition. This result leaves us with the possibility that she managed to repeat the sentence through her good memory without actually understanding it. The participant, however, appeared to be pondering what to say or how to describe the content, but did not add any further information in the end.

Despite the participant showing such a result, mean RRs of the participants classified into Correct in each sentence were generally higher than those classified into Insufficient, and mean RRs of the participants classified into Wrong were the lowest. To summarize, the participants with a larger amount of recall also demonstrated better

repetition performance. This finding indicates that there seems to be a positive relationship between SR accuracy and involvement of semantic and syntactic processing during the task by Japanese intermediate-level EFL learners.

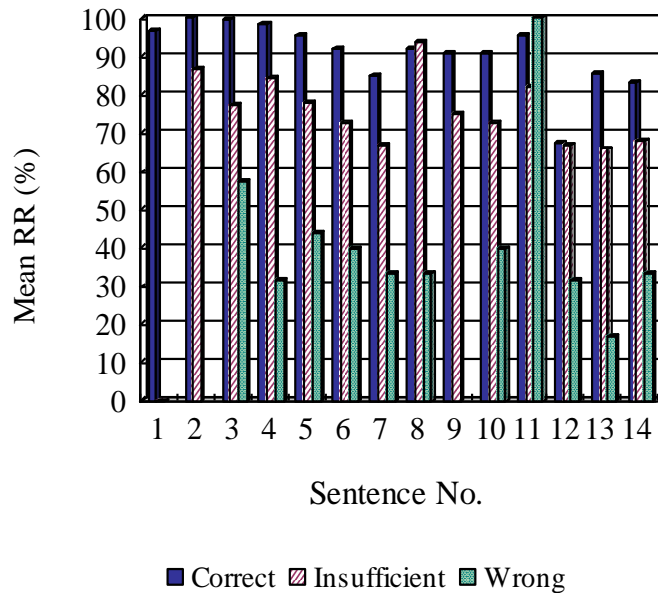


Figure 8. Comparison of overall mean RR of each category in each sentence (1).

4.4.2.2 Evaluation 2

After widening a permissible range of Correct, mean RRs of the participants classified as Correct exceeded those of the participants in Insufficient by 22 percent. The result reinforces the idea that the participants with a better RR tended to recall more in Japanese, too. As far as the participants in this study are concerned, it seems that they performed repetition by paying attention to the meaning and structure of the sentence.

Table 16. Mean RR of Each Category by Sentence

Recall	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Correct	96.6 (29)	96.3 (27)	99.4 (24)	97.0 (25)	93.5 (23)	91.4 (16)	84.6 (26)	94.0 (26)	89.5 (20)	90.0 (21)	90.9 (17)	69.5 (25)	82.5 (21)	78.7 (9)
Insufficient	-	50.0 (2)	71.4 (4)	87.5 (2)	71.9 (4)	68.8 (8)	66.7 (2)	77.8 (2)	74.4 (9)	68.0 (5)	73.6 (11)	31.8 (2)	66.7 (7)	65.7 (17)
Wrong	-	-	57.1 (1)	31.3 (2)	43.8 (2)	40.0 (5)	33.3 (1)	33.3 (1)	-	40.0 (3)	100 (1)	31.8 (2)	16.7 (1)	33.3 (3)

Note. The parentheses represent the number of participants classified into each category.

Table 17. Comparison of Mean RR of Each Category

Recall	mean RR
Correct	89.6
Insufficient	67.2
Wrong	41.9

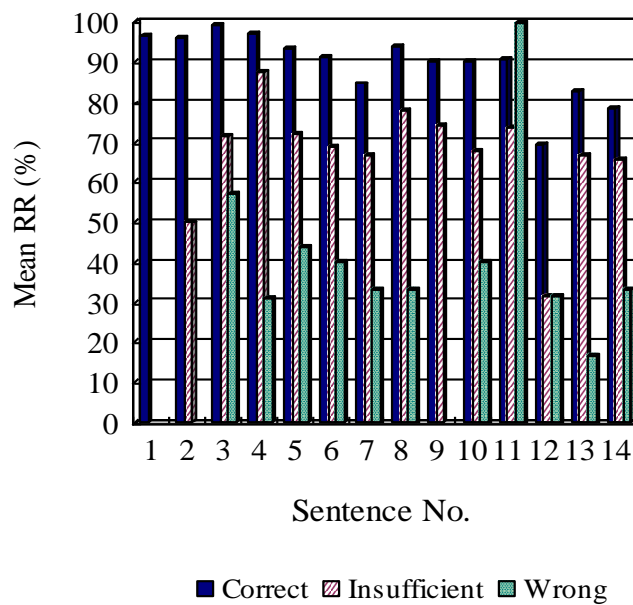


Figure 9. Comparison of overall mean RR of each category in each sentence (2).

4.4.3 Qualitative error analysis

4.4.3.1 Error tendency by sentence

In this section, some interesting and noteworthy errors will be introduced and discussed sentence by sentence. The correct wording is printed in brackets and participants' errors are italicized in brackets.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
1	Mike is studying for the test.	Simple	24	96.6	100	66.7

Note. Complete Repetition = The number of participants who performed complete repetition.

RR = Mean reproduction rate.

This is a six-word sentence with present progressive form. The mean RR was extremely high, and more than 80% of the participants repeated this sentence perfectly. The errors demonstrated here all involved the function words. There were three deletions of [the], two substitutions of [a] for [the], and one deletion of [for].

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
2	The picture he painted was beautiful.	Embedded	22	93.1	100	33.3

This is also a six-word sentence with a contact clause in the subject. The mean RR was also extremely high, and nearly 80% of the participants repeated this sentence perfectly. Participant 6 tried to reproduce the contact clause by using the present participle, [**Picture ... painting is beautiful*]. Participant 10 read, [**The picture he*

drawn ... is beautiful], and commented that she actually wanted to use the past tense [drew], not [*drawn*]. Participant 18 could not reproduce the contact clause and uttered, [**The picture is painted beautiful*]. These error examples suggest that SR, which requires immediate sentence reproduction, utilizes learners' grammatical and syntactical knowledge.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
3	She has lived here for three years.	Simple	24	94.1	100	42.9

This is a seven-word present perfect sentence. The mean RR was also extremely high, and more than 80% of the participants repeated this sentence perfectly. Four incomplete repetition examples out of five were involved in present perfect form [*has lived*]; one substitution of [*lived*], one substitution of [*lives*], and two substitution of [**has lit*]. Also, there was one example of substitution of [*there*] for [*here*].

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
4	The girl dancing on the stage is Mary.	Embedded	20	91.8	100	25

Sentence 4 is a sentence involving postmodification of present participle. Sentence 4 was actually supposed to be a seven-word sentence corresponding to Sentence 3, although an 8-word sentence was prepared because of the researcher's mistake in preparation. However, the result was not an unexpected one; therefore, it was determined to adopt the data as they were. Participants 4 and 18 failed completely to reproduce the

embedded present participle phrase. If we take into account that both participants are university freshmen, and that one of them is a non-English education major, it is highly possible that the level of English proficiency might be a significant factor in immediate sentence processing.

Interestingly, Participant 17, a returnee sophomore, interpreted the girl’s name [Mary] in the sentence as [*married*]. She also recalled this part [*married*] in Japanese. The error was produced only by this participant. The sentence pattern in Sentence 4 – “The girl/boy/man/woman etc. + present participle + object + is/are + noun” – seems to be relatively common in textbooks and teaching/learning materials used in Japanese secondary schools.

Consequently, this sentence pattern should be familiar to average Japanese EFL learners. The structure, however, might not necessarily appear in conversational English very often. The participant lived in Britain and the United States for nine years in total, and most of her English learning was done in an ESL environment. The participant can be labeled as a quasi-native and her extended overseas experience might have made her reproduce *married* instead of [Mary].

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
5	It’s easy for some people to learn languages.	Simple	13	87.1	100	37.5

Sentence 5 was prepared as an eight-word sentence, counting “It’s” as one word. This sentence contains a formal subject. Four participants mistakenly reproduced [*some languages*]. Two errors are attributed to word order errors (e.g., [*It’s easy for people to study some languages*]). They judged “some” as the word to describe “a category” of languages rather than “a certain quantity” of people. It is possible that a language

without any modifier is less familiar to them than “languages” with a modifier (e.g., foreign languages, many languages).

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
6	The fact that you’re a doctor surprised me.	Embedded	6	76.3	100	12.5

Sentence 6 was also prepared as an eight-word sentence. This is a sentence involving appositional clause. Sentence 6 was repeated correctly by only six of the participants. Overall the head noun “the fact” and the predicate “surprised me” were relatively well repeated. In contrast, the embedded clause “that you’re a doctor” was not completed well. It is notable that five participants reproduced [*is/was surprised*]. This error represents the fact that Japanese EFL learners usually encounter a “person + be + surprised” sentence (e.g., We were surprised at the news) more frequently than “inanimate subject + surprise + object” sentence (e.g., The news surprised me).

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
7	The teacher asked the students to move the desks.	Simple	9	81.6	100	33.3

This is a nine-word simple sentence. There were only nine participants who were able to repeat the sentence completely, though the main error here was deletion of –s in [students] or [desks]. In addition, there were two examples of substitution of [**ask to*] for [asked]. This may well be attributed to the participants’ mishearing; the two

participants probably misinterpreted “asked [æskt]” as two separate words, “ask” and “to.” At least with respect to “ask + person + to infinitive” structure, almost all the participants repeated the structure well. It seems that at least the participants in this study are well accustomed to the “ask + person + to infinitive” structure.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
8	The dictionary I bought yesterday is useful to me.	Embedded	14	90.8	100	33.3

This is a nine-word sentence with a contact clause in the subject. Despite being a relatively long sentence, Sentence 8 was repeated well. The most remarkable error was substitution of [*for me*] for [*to me*]. Japanese EFL learners get a lot of exposure to the “It is + adjective + for person + to verb” structure in written form in English class. Therefore, the “adjective + for + pronoun” pattern (e.g., “difficult for me,” “easy for him,” and “important for us”) has probably become a kind of formulaic expression for them. It seems to be natural that they would prefer [*useful for me*] to [*useful to me*] under such a time-pressured task. There were only two participants who failed to repeat the contact clause “The dictionary I bought yesterday.” One of them just substituted [*borrow*] for [*bought*]. The other 27 participants demonstrated complete repetition, at least for the contact clause part.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
9	English is used by many people as a common language.	Simple	11	85.2	100	40

Sentence 9 is a 10-word sentence in passive voice. The most outstanding errors were deletion of [*by*] and substitution of [*for/as many people*] for [*by many people*]. Two participants did not reproduce a chunk of [*by many people*] completely. Passive voice [*English is used*] was repeated accurately by all but two participants. This was not the case, however, with “*by + agent*.” Actually passive voice is taught carefully in most classes, but sentences including “*by + agent*” seem to be less familiar, at least as productive knowledge, to the participants in this study.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
10	The boy invited to the party came with his friends.	Embedded	9	81.0	100	20

Sentence 10 is a 10-word sentence involving postmodification of past participle in the subject. The sentence has two verbs, “invited” and “came,” although “invited” has to be interpreted as a past participle here. However, Participants 10, 18 and 20 failed to catch the main verb “came.” Participants 18 and 20 did not mention “came” in their Japanese recall, either. It is highly likely that these two participants interpreted “invited” as the past tense main verb. Another interesting error is that many participants deleted a preposition [*to*], though most of them correctly recalled the chunk of “the boy invited to the party” in Japanese (i.e., 「パーティに招待された男の子 (*party-ni shoutai-sareta*

otokonoko]). They clearly understood the concept of “to” in Japanese, despite the fact that they could not reproduce the concept in English. This phenomenon seems to demonstrate the lack of their productive knowledge.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
11	Lucy and I decided to go to Tokyo together next winter.	Simple	5	84.6	100	45.5

This is an 11-word simple sentence. Although there were only five participants who repeated the sentence completely, the majority of errors were the deletion of [together]. This phenomenon was demonstrated by 23 out of 24 participants who did not achieve complete repetition. In Japanese recall, 「一緒に (*issho-ni*)」 equivalent to “together” was also dropped by quite a lot of the participants. The connotation of “together” can be conveyed with the plural subject “Lucy and I,” which seems to explain why the participants deleted “together.” Furthermore, there were eight substitution errors such as [*next year*], [*this winter*], or [*next weekend*] for [next winter], and several lexical errors were also seen. In contrast, there were few errors involving the “subject + decide + to infinitive” structure. It seems that at least the participants in this study are already well accustomed to the “subject + decide + to infinitive” structure.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
12	The teacher who always tells a joke to us got angry.	Embedded	1	64.3	100	18.2

This is an 11-word sentence with a relative clause in the subject. Mean RR of Sentence 12 was the lowest of all the sentences. Most participants seemed to have had difficulty in repeating accurately the center-embedded relative clause [who always tells a joke to us]. It is noteworthy that there were two participants who reproduced [*is angry*] instead of [got angry]. It is highly possible that they use “be + angry” phrase more frequently than “get angry” phrase on a daily basis, which made them choose [*is angry*] instead of [got angry] in this task, too. What is more noteworthy is that six participants, Participants 2, 8, 7, 11, 22 and 24, changed the word order from [tells a joke to us] to [*tells us a joke/jokes*]. This also could be evidence that what was taking place in their mind during the task was not mere rote memorization but sentence reconstruction.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
13	The mother told her children not to forget to lock the door.	Simple	6	76.4	100	16.7

This is a 12-word simple sentence. Because of its length, Sentence 13 also proved to be difficult for the participants to repeat. Unlike the prevalence of substitution errors found in several of the previous sentences, the major errors demonstrated in Sentence 13 were deletion errors. This is probably because this sentence contained too

much information to be converted into English under the time constraints. The word “forget” was deleted by most of the participants in English repetition, although the concept of the word was correctly recalled in Japanese: 「ドアの鍵をかけ忘れないように (door-no kagi- wo kakewasurenai-youni)」(= not to forget to lock the door) . Similar to the case of “invited to the party” in Sentence 10 above, this phenomenon also implies that learners at this level cannot necessarily translate all the messages kept in mind into English on the spot. The phenomenon confirms the idea that formulating an English sentence instantly requires grammatical competence and vocabulary on the part of the learners.

No.	Sentence stimulus	Sentence Type	Complete Repetition	RR (%)	Max (%)	Min (%)
14	An old woman sitting between Bob and me suddenly began to cry.	Embedded	0	66.4	91.7	25

This is a 12-word sentence involving postmodification of present participle. The most salient example of substitution errors was [*The old woman*] for [An old woman]. This example indicates that Japanese EFL learners tend to prefer “the + noun” to “a/an + noun” in production. Another salient substitution was [*Bob and I*] for [Bob and me]. Those participants must have mistakenly chosen the nominative case [*I*] instead of [me], probably because they knew the main verb of the sentence would come next. Moreover, other examples of substitution, [*started*] for [began], and [*crying*] for [to cry], could be further evidence that the participants did process the sentence semantically and grammatically.

In fact, there were four returnees among the participants for this study. Remarkably, all four returnees substituted [*started*] or [*start*] for [began]. What they have in common is the experience of living in the United States for several years.

Because of their long stays in the U.S., the four returnees must have preferred [*started*] or [*start*] over [*began*]; [*started*] is customary in American English in this case.

4.5 Discussion

The results of a two-way repeated ANOVA conducted to investigate the effect of sentence length and sentence type on SR accuracy demonstrated in general that as the sentences become longer the task difficulty increases, and center-embedded sentences are more difficult to repeat than simple sentences. There were, however, some cases in which the participants demonstrated relatively better repetition despite the length or complexity of the sentence. For example, the relatively high mean RR of Sentence 8 (i.e., a 9-word embedded sentence) can be attributed to the fact that the contact clause was more familiar to the participants than had been expected. Conversely, mean RR of Sentence 6 was rather low, probably because the sentence includes an appositional clause and also an inanimate subject. These findings suggest that there might be another factor – learners’ familiarity with the sentence construction – in the ease or difficulty of SR besides sentence length and sentence complexity.

More importantly, a quantitative comparison between RR and the degree of content recall has shown that repetition accuracy is dependent on the degree of comprehension of the targeted sentence. This suggests that learners’ grammatical and syntactical knowledge does play a major role in successful repetition.

Not surprisingly, the higher the university grade level was, the more the participants’ mean RR in each group increased. Participant 18, a non-English major freshman, showed the lowest overall mean RR of all the participants. There is a strong indication that the results of the SR task in this study point to the participants’ level of English proficiency, especially the degree of their automatized procedural knowledge. Repetition practice in conveying a message in L2 while thinking of grammar rules “allow the restructuring of declarative knowledge in ways that make it easier to proceduralize

and allow the combination of co-occurring elements into larger chunks that reduce the working memory load” (DeKeyser, 1998). Most English majors have more opportunities to engage in the practice of using English both in and out of the classroom than non-English majors.

The findings from a detailed error analysis also provide many valuable insights and observations. In Sentence 9, for example, Participant 1 substituted [*a lot of*] for [many]. Participant 13 changed the word order and reproduced [*English is used as a common language for many people*] instead of [English is used by many people as a common language]. Both examples give us clear evidence that SR is a sentence reconstruction task. Considering overall error tendency in this study, the majority of errors, with the exception of deletion, were paradigmatic errors. In contrast, the number of syntagmatic errors was far fewer. As mentioned earlier, there were six participants who changed word order in Sentence 12. They were in fact unsuccessful in verbatim repetition of that part, although they managed to form a meaningful and grammatical substitute (i.e., [tells a joke to us] → [*tells us a joke/jokes*]) that has a similar meaning to the original under such an instantaneous processing condition. Keeping their English learning background and academic qualifications in mind, it is highly possible that the participants who demonstrated these syntagmatic errors are developmentally more advanced (from the perspective of L2 acquisition) than those who did not.

In the interviews, the majority of participants commented that what they did first was to get the gist of the sentence and to imagine the scene visually. Indeed, the visualized image in their mind would have been a great help in reproducing the sentences. Such a brief understanding, however, could sometimes cause inappropriate word choice at the stage of formulating a sentence (e.g., [*next to*] instead of [between] in Sentence 14). It is assumed that even if there is a clear image or message that exists in their mind, it can still be difficult to formulate an equivalent English sentence instantaneously.

4.6 Conclusion

This study, using 29 participants with 14 sentences of increasing length, has aimed to investigate whether an SR task by Japanese intermediate level learners is a simple rote memorization task or a task involving grammatical and syntactic processing. The findings have demonstrated that higher sentence repetition accuracy in English is generally accompanied by more recall in Japanese, and all participants who demonstrated complete repetition were able to accurately comprehend the meanings of the sentences in Japanese. The findings proved that it would be very difficult for Japanese intermediate-level EFL learners to perform SR without comprehension. From these findings and the demonstrated error tendencies, we can conclude that an SR task is a cognitive task, and does not allow for rote imitation.

Nevertheless, the findings of this study should be reconfirmed. Additional studies in this area should verify whether or not SR by lower-proficiency learners (i.e., SHS students) would also involve semantic processing as in the case of the intermediate-level university learners in this study. Studies on the process of SR by Japanese learners at lower proficiency-levels will be dealt with in Chapter 5 and Chapter 6.

Chapter 5

Study 3

5.1 Purpose of This Study

In Study 2, I investigated whether an English SR task by Japanese intermediate-level learners is a simple rote memorization task or a cognitive task that involves semantic and grammatical processing. Twenty-nine university undergraduate and graduate students completed a 14-sentence repetition task and a Japanese recall task. The results demonstrated that higher SR accuracy in English was generally accompanied by more recall in Japanese. In fact, all participants who performed complete, accurate repetition were also able to recall accurately the meanings of the sentences in Japanese. It was confirmed that it would be very difficult for Japanese intermediate-level EFL learners to perform SR without comprehension.

In Study 3, I will make comparisons between the data of the SR task covered in Study 2 and the data of an oral sentence composition (OC) task collected from the same participants for Study 3. This study aims to reconfirm the process of SR, which involves semantic and grammatical processing, by comparing the SR data with the OC data.

5.2 Research Question

Will the substitution, insertion, and deletion errors that participants made in the previous SR task also be made by the same participants in an OC task?

5.3 Method

5.3.1 Participants

The participants for Study 3 were 27 of the 29 undergraduate and graduate students from a university in Tokyo who had participated in Study 2. Therefore, the

number of participants for this study was fewer than the last study by two. In all, 25 of the participants were majoring in English Teaching as a foreign language and two were majoring in other fields.

Table 18. *Breakdown of Participants*

	<i>Major</i>	<i>Grade</i>	<i>N</i>
Undergraduates	English Education	Freshman	8(1)
		Sophomore	7(1)
		Junior	6
	Various	Various	2
Graduates	English Education	1 st	4(1)
Sum	-	-	27

Note. The parentheses represent the number of returnees included.

5.3.2 Material

Fourteen Japanese sentences, all of which are Japanese translations of the original script for Study 2, were used. In order to avoid the possibility that the participants still remembered the English script used in Study 2, there was approximately a three-month interval between Study 2 and this study. All the translations into Japanese were completed by the present researcher. Similar to the test format for Study 2, the 14 Japanese sentences were printed all together in a sheet.

1. Mike is studying for the test.
2. The picture he painted was beautiful.
3. She has lived here for three years.
4. The girl dancing on the stage is Mary.
5. It's easy for some people to learn languages.
6. The fact that you're a doctor surprised me.
7. The teacher asked the students to move the desks.
8. The dictionary I bought yesterday is useful to me.
9. English is used by many people as a common language.
10. The boy invited to the party came with his friends.
11. Lucy and I decided to go to Tokyo together next winter.
12. The teacher who always tells a joke to us got angry.
13. The mother told her children not to forget to lock the door.
14. An old woman sitting between Bob and me suddenly began to cry.

Figure 10. English target sentences in SR task (Reprinted).

1. マイクはテストのために勉強しています。
2. 彼が描いた絵は美しかった。
3. 彼女はここに3年間住んでいます。
4. ステージの上で踊っている女の子はメアリーです。
5. 言語を学ぶことが易しい人もいる。
(=一部の人にとっては言語を学ぶことは易しい)
6. あなたが医者であるという事実は私を驚かせた。
7. 先生は生徒達に机を移動するように頼んだ。
8. 昨日買った辞書は私には使いやすい。
9. 英語は共通言語として多くの人に使われている。
10. パーティに招待された男の子は友達と一緒に来た。
11. ルーシーと私は、来年の冬と一緒に東京に行くことに決めた。
12. いつも私達に冗談を言う先生が怒った。
13. その母親は子供たちに、ドアのカギをかけ忘れないように言った。
14. ボブと私の間に座っていたおばあさんがいきなり泣き始めた。

Figure 11. Japanese target sentences in OC task.

5.3.3 Procedure

Similar to Study 2, the experiment was carried out on an individual basis outside the classroom from the beginning of February to the middle of March 2009. Thus, there was nearly a three-month interval between Study 2 and this study.

A piece of paper on which 14 Japanese sentences were written was distributed to the participants. The participants were asked to orally translate each Japanese sentence into an English sentence, right after they had read it. No break or interval between sentences was prepared by the researcher during the task. After the participants had started the translation task, they had to complete the task in one stretch to the end.

However, no strict time limit was given to the participants. Instead, they were encouraged to give their English translation just as soon as they had come up with an equivalent to the Japanese sentence. If the participants stopped speaking in the middle of producing a sentence, or if they said “I have no idea,” the researcher instructed them to move on to the next sentence. All the utterances including the warm-up stage were recorded.

5.3.4 Analysis

All the sound transcription and analyses were conducted by the present researcher. For this study, two kinds of data were used: transcribed data of the SR task in Study 2, and the newly transcribed data of this OC task. The two kinds of data collected from the same participant were compared sentence by sentence. Identical errors that a participant made in both tasks and also utterances that a participant produced correctly in both tasks were classified into mainly the following four categories, according to the characteristics of utterances.

- 1) Ungrammatical substitution and deletion errors
- 2) Grammatical substitution and word-order change errors (Correct production in OC task)
- 3) Correct repetition and correct production
- 4) Distinctive errors of individual participants

5.4 Results and Discussion

5.4.1 Ungrammatical substitution and deletion errors

The comparison of the two kinds of data collected from the same participants demonstrated several common features. First of all, I will summarize ungrammatical substitution and deletion errors demonstrated in common in both tasks. Here are three notable error examples.

Examples of ungrammatical errors

1. Substitution of [*I*] for [me] in ‘Bob and me’ (Sentence 14): 9 cases
2. Deletion of [*to*] in ‘The boy invited to the party’ (Sentence 10): 4 cases
3. Substitution of [*for*] for [by] in ‘by many people’ (Sentence 9): 3 cases

In particular, the substitution of [*Bob and I*] for [Bob and me] was the most frequent phenomenon. This was followed by the deletion of the preposition [*to*] between the past participle [invited] and the noun phrase [the party], and the substitution of [*for many people*] for [by many people]. Interestingly, all of the nine participants who incorrectly had substituted [*Bob and I*] for [Bob and me] in the SR task also uttered the same phrase in the OC task. In other words, none of those who incorrectly had reproduced [*Bob and I*] was able to produce [Bob and me] in the OC task, either. Because the participants’ repetition patterns and production patterns were similar to each other, we can again see support for SR as a reconstructive task that utilizes learners’ grammatical and lexical knowledge.

As the second and third examples demonstrate, however, there were several cases in which participants were able to produce [invited to the party] or [by many people] in the OC task correctly though they had not managed to do so in the SR task (6 out of 10 participants, and 9 out of 12, respectively). This finding points to the possibility of parroting in SR tasks. On the other hand, it is possible to interpret these findings in another way. That is, the participants probably have declarative knowledge (knowledge of grammar rules) and they managed to exercise this knowledge to make a sentence in the OC task, though such declarative knowledge was not sufficient for the participants to succeed in accurate repetition. The knowledge that seems to be necessary in a time-pressured SR task is automatized or subconscious knowledge, rather than declarative knowledge that needs learners’ careful attention.

Table 19. *Examples of Ungrammatical Errors*

Example of errors	Original	× → ×	× → ○	○ → ○	○ → ×
Bob and <i>I</i>	Bob and me	9	0	5	7
invited the party	invited to the party	4	6	11	3
<i>for</i> many people	by many people	3	9	13	3

Note. “×” corresponds to “incorrect” and “○” to “correct.” These symbols are also used in Tables 20 and 22.

5.4.2 Grammatical substitution and word-order change errors (Correct production in OC task)

5.4.2.1 Substitution errors

The examples introduced here are the ones classified as substitution errors, because the utterances were different from the original text in the SR task. Therefore, an “×” in the following table (Table 20) refers to “substitution” errors in the SR task, not “ungrammatical” errors.

Examples of Grammatical substitution

1. [*for*] instead of [to] in “useful to me” (Sentence 8): 6 cases
2. [*study*] instead of [learn] in “to learn languages” (Sentence 5): 4 cases
3. [*started*] instead of [began] (Sentence 14): 2 cases

All of the six participants who had reproduced [*for me*] in the SR task also used the same phrase in the OC task. There was no one who produced [to me] in the OC task though they had reproduced [*for me*] in the SR task. This is the same phenomenon as the case of [*Bob and I*]. In contrast, 12 out of 15 participants who had repeated [to me] correctly in the SR task did not translate the phrase in the same way in the OC task. They uttered [*for me*] instead. This is probably because the participants did not have to process

the very last part of the sentence in careful regard to semantics and grammar because the phonological information of [to me] must have still remained in their memory. It is highly possible that in the SR task the 12 participants repeated [to me] instead of [for me] rather subconsciously. After all, 18 participants out of 27 (about 63%) who took part in Study 3 uttered [for me] in the OC task. This fact clearly indicates that an “adjective + for + person” pattern is far more familiar than an “adjective + to + person” pattern to the participants in this study.

The next substitution example, [study] instead of [learn], was demonstrated by five participants in total in the SR task. Four out of five of the same participants chose [study] in the OC task, too. This fact is another significant example illustrating that the utterances the participants had demonstrated in the SR task were related to their semantic and lexical processing. In contrast, more than 70% of the participants who had repeated [learn] correctly in the SR task also used the same word in the OC task. To sum up, as far as the participants for this study are concerned, the choice of a verb, “study” or “learn,” seems to depend on the participants’ preference.

There were two participants, both of whom were returnees from the U.S., used [started] instead of [began] in both tasks. Focusing solely on the OC task data, we find that the frequency of utterances of “began” and “started” was about the same. It seems that the participants’ familiarity with each word is almost the same.

Table 20. *Examples of Grammatical Substitution*

Example of substitution	Original	× → ×	× → ○	○ → ○	○ → ×
<i>for me</i>	to me	6	0	3	12
<i>study</i>	learn	4	1	14	5
<i>started</i>	began	2	2	6	5

5.4.2.2 Examples of word-order change errors

Next, I will bring up one example of word order change. As mentioned in Study 2, there were six participants who changed the word order of [tells a joke to us] in Sentence 12 in the SR task. Although their utterances in the SR task were not exactly the same, what their utterances had in common was the change of object order; that is, the indirect object “us” preceded the direct object “a joke/jokes.” In the OC task, only one participant out of the six demonstrated the same utterance. The participant actually has a quite different background from other participants, in terms of his English learning background, career and academic qualifications. Strictly speaking, he should be labeled as an advanced level learner. All the other five participants did not produce the same expression.

Other than the six participants mentioned above, Participant 1 had performed correct repetition [tells a joke to us] in the SR task, but uttered [*tells us jokes*] in the OC task. Although these two utterances were not identical, he (re)produced grammatical expressions in both cases, just changing the order of the two objects. Participant 5 (re)produced the same expression, [*tells jokes to us*]. There is no external criterion to measure the participants’ precise English proficiency in Studies 2 and 3, although their English proficiency is considered to be relatively high. Both Participants 2 and 5 are returnees from the U.S. As the characteristics of this error (word-order change) demonstrate, for most of the participants in this study, the structure “tell + something + to + somebody” and “tell + somebody + something” have not been automatized well enough to be used in production.

Table 21. *Examples of Word-order Change Errors*

Participant No.	Reproduction in SR	Production in OC
2	<i>tells us jokes</i>	<i>tells us jokes</i>
7	<i>told us a joke</i>	<i>*say a joke to us</i>
8	<i>tells us jokes</i>	<i>*tells a joke</i>
11	<i>tells us a joke</i>	<i>*make joke</i>
22	<i>tell(s) us (a) joke</i>	<i>*tells joke</i>
24	<i>told us jokes</i>	<i>*talks us a joke</i>
1	<i>tells a joke to us</i>	<i>tells us jokes</i>
5	<i>tells jokes to us</i>	<i>tells jokes to us</i>

5.4.3 Correct repetition and production

Strictly speaking, we cannot determine the reason for accurate repetition by a participant only with the data of the SR task; that is, we cannot definitely determine whether accurate repetition was the result of extremely good parroting or the result of semantic and grammatical processing during the task. On the other hand, we can arrive at a more definite determination of which of these allowed precise repetition if the data of the SR task is compared with the data of the OC task. As for [invited to the party], 78% of the participants who had succeeded in accurate repetition in the SR task uttered this same phrase in the OC task. As for [by many people], 81% of those who had repeated the phrase accurately uttered it in the OC task. It seems logical to assume that those participants performed accurate repetition in the SR task because their grammatical knowledge on the target structure was already proceduralized and thus had no difficulty in (re)producing it, rather than because they were good at parroting.

In contrast to the first two examples, however, the next two examples show the opposite tendency. That is, only 42% of those who had succeeded in repeating [Bob and

me] in the SR task were able to say it in the OC task. It is possible that the phrase “somebody and *I*” was already quite familiar to the participants as a kind of formulaic expression. If this assumption is correct, it seems natural for them to prefer [*Bob and I*] to [Bob and me] when asked to repeat the sentence. It is also possible that they almost subconsciously chose the nominative case [*I*] instead of [me], because they had understood the main verb would come after that.

The fourth example [*for me*] is in itself grammatical, and “adjective + for + somebody” and “adjective + to + somebody” can be interchangeable in most cases, including in Sentence 8. The twelve participants who correctly repeated the phrase in the SR task but uttered [*for me*] in the OC task prioritized [*for me*] under free composition, since they probably are more accustomed to [*for me*] than [to me].

Table 22. *Examples of Correct Repetition and Production*

Example of Error	Original	× → ×	× → ○	○ → ○	○ → ×
*invited the party	invited to the party	4	6	11	3
* <i>for</i> many people	by many people	3	9	13	3
*Bob and <i>I</i>	Bob and me	9	0	5	7
<i>for me</i>	(useful) to me	6	0	3	12

5.4.4 Distinctive errors of individual participants

Lastly, I will introduce some of the distinctive errors demonstrated in common in both tasks by the same participant. The first sentence is an utterance from the SR task, while the second sentence is the corresponding sentence from the OC task. The number in parentheses refers to the participant number.

1. Misuse of [*joke*] as a verb

The word “joke,” which was supposed to be used as a noun in the sentence, was

mistakenly used as a verb by two participants. Both of them had forgotten that the word “tells” was in the original script.

Sentence 12

e.g. The teacher who always jokes got angry.

A teacher who always ... jokes ... got angry. (15)

The teacher who always te ... who always joke to us got angry.

The teacher who always ... who always jokes on us got angry. (13)

2. Insertion of [is] after [who]

Participant 13 uttered [*who is*] in both tasks. Participant 13 seems to have the habit of pronouncing [*is*] right after “who” subconsciously.

Sentence 12

e.g. The teacher who is always ... *talk* to ... tells ... joke to us got angry.

The teacher who is always ... say joke ... was get angry. (25)

3. Substitution of [*floor*] for [*stage*]

This is an interesting phenomenon because the participant not only had substituted the word [*floor*] for [*stage*] in the SR task, but uttered [*floor*] again even when he had the opportunity to read the Japanese translation 「ステージ」 (= “stage” in Japanese) in the OC test script.

Sentence 4

e.g. The girl dancing on the floor is Mary.

The girl ... the girl dancing on the floor is Mary. (1)

4. Substitution of [*said to*] for [told] and change of word order

This participant substituted [**say joke*] for [tells a joke] in Sentence 13, too. It is highly possible that the participant regularly uses “say” in production whenever he is supposed to convey the meaning of “to speak.”

Sentence 13

e.g. The mother *said to* the children not to forget to the lock the door.

The mother *said to* her children not to forget to ... the ... lock the door. (26)

5. Insertion of *to* before [not]

Similar to the second example, we can presume that the pattern “verb + object + to-infinitive” is a formulaic expression for this participant. Therefore, the participant probably cannot help but utter [*to*] right after the object.

Sentence 13

e.g. The mother told her children *to* not to *walk out* the door.

The mother said to children *to* not forget the lock ... The mother said children to not forget the ... forget to lock the key. (21)

6. Change of word order

When two things or two persons are combined with the conjunction “and,” the first person pronoun is usually placed after “and.” This participant, however, seems to have the habit of putting the first person pronoun before “and.”

Sentence 14

e.g. *The old woman sat ... sat between ...sat between me and ... suddenly began to cry.*

The elderly woman who sit on ... who sit between I and Bob suddenly began to cry. (13)

As demonstrated above, the tendency to replicate the same distinctive errors in both the SR task and the OC task cannot be interpreted as a coincidence. On the contrary, the identical errors that appeared in both tasks should be interpreted to mean that what learners are doing during the SR task is sentence reconstruction, regardless of the degree of completion. It seems obvious that learners have to utilize their interlanguage in order to reproduce the sentence they have heard.

5.5 Discussion

Several substitution, deletion, and insertion errors in the SR task were also replicated by the same participants in the OC task. This indicates that the semantic and grammatical processing that learners are using to repeat a sentence is quite similar to the processing that learners are using to produce a sentence. Therefore, the identical errors that participants made in both the SR and OC tasks can reassure us that SR is not a simple rote memorization task.

A further analysis also demonstrated that there were plenty of cases in which the participants produced a word or a phrase correctly in the OC task though they had not been able to reproduce the same part in the SR task. In fact, the number of these cases was larger than the reverse phenomenon (i.e., accurate reproduction in SR but errors in OC). This fact implies that the SR task used in Study 2 was more demanding than the OC task in Study 3. One possible reason is that the time pressure is stricter during the SR task compared to that of the OC task. Another possible reason involves the characteristics of

repetition. That is, repeating a sentence requires learners to reproduce the original text as precisely as possible. In other words, the variety of ways to express the message is limited in an SR task. Unless the target phrase or structure in a sentence is fully automatized in the learner's mind, it is very difficult for the learner to repeat (to be exact, reproduce) immediately what he/she has just heard. Consequently, we can say that SR is a task which requires the learner's instantaneous grammatical processing.

5.6 Conclusion

In this study, I dealt with two different kinds of data collected from the same participants over an approximate three-month period. I made a comparison of error tendencies between the data of an SR task and that of an OC task. In addition, I included examples of correct responses that the participants had demonstrated in both tasks in the analysis. I analyzed the data from four different points of view: 1) Ungrammatical substitution and deletion errors, 2) Examples of grammatical substitution and word-order change, 3) Correct repetition and production, and 4) Distinctive errors of individual participants. The assumption in this analysis was that repeating a sentence is not simply a rote memorization task, but rather a sentence construction process. If this assumption is indeed true, the participants should demonstrate similar error tendencies in both the SR task and the OC task.

As a result, several substitution, insertion, and deletion errors demonstrated by the participants in the SR task were again found in the same sentences produced by the same participants in the OC task. These findings support the assertion that the process of repeating a sentence without looking at written text is similar to the process of producing a sentence on one's own. Moreover, analyzing the participants' errors and correct utterances in the two tasks reconfirms the process of SR.

A closer examination of each distinctive error of individual participants provided us with a lot of insightful information about the learners' interlanguage. Analyses such as

these can provide teachers with useful information about the progress of their students at different developmental stages.

The results of this study have proved that SR conducted by Japanese intermediate-level learners involves their grammatical and lexical knowledge, and that the complete repetition of a sentence relies on the degree of automatization of grammatical knowledge.

Chapter 6

Study 4

6.1 The Purpose of This Study

In Study 2 and Study 3, I investigated the process of SR by Japanese intermediate-level EFL learners. By comparing English RRs (repetition rates) with the degree of Japanese recall (Study 2), and by comparing the errors in SR tasks with the errors in OC tasks (Study 3), I was able to confirm the process of SR as a cognitive activity. The findings proved that, at least for intermediate- and advanced-level learners, it would be very difficult to perform accurate repetition without understanding a sentence.

In this chapter, I will summarize and discuss the results of an additional experiment that was conducted at the same time as Study 2. The analysis and discussion on Study 4 are also based on the premise that SR is not a rote memorization task but a sentence reconstruction task.

The purposes of this study are to analyze new SR data more qualitatively and to discuss what is revealed by the substitution and insertion errors that the participants made.

6.2 Method

6.2.1 Participants

The participants for this investigation were the same 29 participants as Study 2, since Study 2 and Study 4 were conducted successively on the same day. The participants consisted of twenty-five undergraduate and four graduate students at a university in Tokyo. Based on the assumption that learners with a higher English proficiency than senior high school (SHS) students would process a sentence more semantically and grammatically in an SR task, undergraduate and graduate students were chosen as

subjects for these studies. Although the participants varied in their majors, grades and ages, all of them were considered to have higher English proficiency than average SHS students. The breakdown of the participants is described in the following table.

Table 23. *Breakdown of Participants*

	<i>Major</i>	<i>Grade</i>	<i>N</i>
Undergraduates	English Education	Freshman	8(1)
		Sophomore	8(2)
		Junior	6
	Various	Various	3
Graduates	English Education	1 st	4(1)
Sum	-	-	29

Note. The parentheses represent the number of returnees included.

6.2.2 Material

The test consists of 10 CD-recorded sentences. The meanings of the 10 sentences are interrelated to one another in that they form an episode as a whole. All the sentences were made by the present researcher. The aim was to activate the participants' semantic processing during SR. The sentences varied in length, although all the sentences consisted of at least nine words. Nine words is generally considered to be at or beyond the threshold for simple rote memorization because of the memory span required. The difficulty of the sentences was considered to be appropriate for the material of this study.

1. Bob had lots of things to do over the weekend.
2. He had to stay home with his little brother on Saturday.
3. On Sunday he went to the station in his car to see his friend.
4. He began running when he saw his friend, Mike.
5. Mike said, "I haven't done lunch yet, and I'm very hungry now."
6. "Let's go to the restaurant you told me about last month."
7. They waited thirty minutes to get seats at the restaurant.
8. All the dishes they ate there were really good.
9. Bob suddenly noticed he had lost his car key somewhere.
10. "Don't worry. I'll help you look for your key," said Mike.

Figure 12. Sentence repetition stimuli.

6.2.3 Procedure

The experiment was carried out on an individual basis outside the classroom from the middle of November to the middle of December 2008. The participants were asked to repeat each sentence to the best of their ability after each presentation. Study 2 and Study 4 were conducted successively with a few-minute break in between.

In Study 2, the participants were asked to recall the content of the sentence in Japanese after each repetition, although in Study 4 no Japanese recall was required. The participants were only asked to repeat each sentence. This meant that the participants could simply attempt to process the sentences phonetically, or they could attempt to process the sentences semantically and grammatically, too. A sufficient time interval for English repetition was provided before the following sentence stimulus was heard. All the utterances including the warm-up stage were recorded.

6.2.4 Questionnaire and interview

After the experiment, the script with the 10 sentences that were used for Study 4 was distributed to the participants. They were asked to read the script to confirm comprehension in regard to any unfamiliar words and grammatical points. A questionnaire was added to this survey to see if they had experience living abroad and/or if they had obtained any English education qualifications, such as TOEFL/TOEIC, and the EIKEN. Next, an interview of approximately five minutes in length was held to get the participants' general feedback on how they evaluated themselves on the SR task.

6.2.5 Analysis

I decided to focus on a qualitative analysis in this study. Below, I will analyze each sentence on how correctly the original sentence was copied, and how frequently substitution or insertion errors occurred. Then, I will discuss what seemed to have caused the participants to make those errors. Prior to conducting the experiment, error examples that were expected to occur in the SR task are listed in the following table.

Table 24. *Possible Substitution and Insertion Error Examples*

No.	<i>Substitution</i>		<i>Insertion</i>	
	<i>Original</i>	<i>Possible error</i>	<i>Original</i>	<i>Possible error</i>
1	lots of	<i>many / a lot of</i>		
2			stay home	stay [<i>at</i>] home
3	in his car	<i>by car</i>		
4	running	<i>to run</i>		
5	done	<i>eaten / had</i>		
	and	<i>so</i>		
6			the restaurant you told me about	the restaurant [<i>which / that / *where</i>] you told me about
7			thirty minutes	[<i>for</i>] thirty minutes
8	really	<i>very</i>		
9			noticed he lost his car key	noticed [<i>that</i>] he lost his car key
10	said Mike	<i>Mike said</i>	help you look for	help you [<i>to</i>] look for

6.3 Results and Discussion

6.3.1 Examples of substitution and deletion errors by sentence

1. Bob had lots of things to do over the weekend.

As for the repetition of [lots of], most of the participants reproduced [*a lot of*] instead of [lots of], as was anticipated. Only five participants (Participant 5, 8, 17, 21, and 22) accurately repeated [lots of]. Three of these five participants were returnees.

Table 25. *Breakdown of Repetition of [lots of]*

<i>Example of error</i>	<i>N</i>
lots of	5
<i>a lot of</i>	20
<i>*lot of</i>	3
\varnothing	1

Note. The first example listed in each table refers to the original text.

As for the repetition of [had], about two-thirds of the participants reproduced the present tense [*has*] instead of the past tense [had] in the original text.

Table 26. *Breakdown of Repetition of [had]*

<i>Example of error</i>	<i>N</i>
had	10
<i>has</i>	19

The first error example indicates that [*a lot of*] seems to be far more familiar than [lots of] to average Japanese EFL learners, at least at the intermediate level. The number of participants who reproduced [lots of] was five in total: three returnees and two other participants who are at a higher university grade level. [a lot of] is probably more familiar to learners who get English exposure mainly from in-class instruction. It seems, however, that learners who have had significant exposure to English outside the classroom are much more accustomed to [lots of]. The second error example indicates the possibility that the participants are much more familiar with the present tense pattern “have + things + to do” than with the past tense pattern “had + things + to do.”

2. He had to stay home with his little brother on Saturday.

As indicated in the pre-experiment list of possible errors, I had expected that some of the participants would produce [stay *at* home] instead of [stay home]. A low number of participants, only four, did exhibit this error. What was most surprising, however, was that more than half of the participants failed to reproduce accurately the phrase [stay home]. It can be assumed that the meaning chunk [stay home] has not been automatized yet in their grammatical knowledge, and that is why they could not repeat the phrase correctly.

Table 27. *Breakdown of Repetition of [stay home]*

<i>Example of error</i>	<i>N</i>	<i>Note (Errors included)</i>
stay home	9	stayed home (1)
<i>stay at home</i>	4	stayed at his home (1)
* <i>stay + φ</i>	8	
Others	8	*had a stay (1), has stayed (1), had said (1)

In addition, there were six participants who substituted [*has to*] for [had to]. This tendency was dissimilar to that in Sentence 1 in which the participants preferred the past tense [had to] to the present tense [*has to*].

Table 28. *Breakdown of Repetition of [had to]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
had to	14	
<i>has to</i>	6	
<i>*has a</i>	4	
<i>*has + \varnothing</i>	2	
Others	3	has stayed (1), had said (1), \varnothing (1)

3. On Sunday he went to the station in his car to see his friend.

I had expected that [in one's car] would be unfamiliar to average Japanese intermediate learners. I also had expected that the participants would substitute [*by car*] for [in his car] if they were processing the meaning of the sentence in the SR task. In fact, there were only three participants who were able to repeat [in his car], and only two participants substituted [*by car*] for [in his car]. Actually, about half of the participants failed to reproduce the notion of [in his car] in English. In addition, it should be noted that several participants incorrectly expressed the notion of [in his car], even though they comprehended that part. These results seem to be directly related to the length of the sentence. Sentence 3 consists of 14 words, and [in his car] is located in the middle of the sentence. It is highly possible that most of the participants failed to maintain the notion of [in his car] in mind until the time when they were allowed to repeat the sentence.

Table 29. *Breakdown of Repetition of [in his car]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
in his car	3	
<i>by car</i>	2	
<i>*with his car</i>	3	
<i>*on his car</i>	3	
\varnothing	15	
Others	3	<i>*\varnothing + his car (2), by train (1)</i>

4. He began running when he saw his friend, Mike.

The phrase [began running] was repeated correctly by the majority of the participants. This result can be partly attributed to the length of the sentence, since Sentence 4 is one of the shortest sentences of all the sentence stimuli for Study 4. Also, the fact that the phrase [began running] is placed at the beginning of the sentence must have made the sentence easier for the participants to repeat. There were two participants who substituted [*began to run*] for [began running]. This substitution clearly demonstrates that at least these two participants did process the sentence semantically.

Table 30. *Breakdown of Repetition of [began running]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
began running	23	
<i>began to run</i>	2	
Others	4	\varnothing (2), was running (1), <i>*began to running</i> (1)

5. Mike said, “I haven’t done lunch yet, and I’m very hungry now.”

For the expression [haven’t done lunch], I expected that in production the verb

form “have + eaten” or “have + had” would be more familiar to average Japanese learners than “have + done.” However, there were fewer cases of [*haven't eaten*] or [*haven't had*] than expected. Moreover, nearly half of the participants either failed to repeat [haven't done] correctly or uttered it ungrammatically. Thirteen participants were unable to reproduce the present perfect tense spontaneously. We can say, with respect to productive knowledge, the use of present perfect tense has not been completely acquired by those who could neither repeat [haven't done] nor substitute another expression.

Table 31. *Breakdown of Repetition of [haven't done]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
haven't done	10	
<i>haven't eaten</i>	2	
<i>haven't had</i>	4	
<i>*haven't + lunch</i>	5	
Others	8	hadn't done (1), hadn't eaten (1), hadn't had (1), *haven't have (1), *haven't has (1), happened to eat (1), \varnothing (1)

As for the conjunction [and], the only substitution example was [*so*], which was given by six participants. The six participants who uttered [*so*] at least understood the semantic relationship between the coordinate independent clauses: [I haven't done lunch yet] and [I'm very hungry]. These two clauses can be interpreted as having a cause-and-effect relationship. Consequently, we can understand why some participants substituted [*so*] for [and].

Nine participants did not add a conjunction between the two independent clauses. Among the nine, seven participants were able to reproduce the two clauses, but two participants were able to keep only one of the two clauses in mind.

Table 32. *Breakdown of Repetition of [and]*

<i>Example of error</i>	<i>N</i>
and	14
<i>so</i>	6
\varnothing	9

In addition, the number of participants who dropped [very] in [I'm very hungry now] was unexpectedly large. Except for one participant who substituted [*really*] for [very], and another participant who completely deleted the last clause [I'm very hungry], all the other participants who failed to repeat the original text accurately dropped [very]. It is possible that the phrase [I'm hungry] was already an internalized formulaic phrase to most of the participants.

Table 33. *Breakdown of Repetition of [very hungry]*

<i>Example of error</i>	<i>N</i>
very hungry	6
<i>hungry</i>	21
<i>really hungry</i>	1
\varnothing	1

6. "Let's go to the restaurant you told me about last month."

There were 13 cases of deletion of [about] in the contact clause [the restaurant you told me about], and two cases of substitution of [*talked*] for [told]. If these 15 cases are included, 25 participants in total repeated the contact clause without adding any relative pronoun. This tendency corresponds to the results of Study 2. In Study 2, there were two sentences that included a contact clause. Both of the sentences demonstrated

higher RRs than other sentences: 93.1% and 90.8 % respectively. It is obvious that the contact clause is a very familiar structure to Japanese intermediate-level learners.

An error example mentioned above, the deletion of the preposition [about], needs to be discussed in more detail here. Thirteen participants failed to repeat, or more precisely, *reproduce* the preposition [about]. It is easier to understand this error if we look solely at the primary meaning of the sentence (i.e., Let's go to the restaurant you told me about). A preposition that is supposed to be placed at the end of a sentence, like [about] in this sentence, is relatively difficult for Japanese learners. One reason for this is because the preposition at the end of a sentence is usually not translated in Japanese. Consequently, it is quite likely that the preposition [about] in Sentence 6 was neglected by many participants. In order to acquire this type of grammatical structure, explicit instruction might not be enough. Learners also need a lot of exposure to sentences that end with a preposition so that they can learn the rule implicitly. It may well take some time for learners to be able to produce this type of sentence freely in production.

Table 34. *Breakdown of Repetition of [the restaurant you told me about]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
the restaurant you told me about	10	
the restaurant <i>that</i> you told me about	2	
*the restaurant you told me + \varnothing	13	*restaurant you told me (1)
the restaurant you <i>talked</i> about	2	
the restaurant + \varnothing	2	

There were 14 participants who were able to place [about] at the end of the sentence correctly. The 14 participants consisted of four graduates (100 %), four juniors (57.1 %), five sophomores (62.5 %), and one freshman (10.0 %). Unfortunately we don't have clear information about the current English proficiency of the 29 participants.

Nevertheless, we can see the tendency that the higher the university grade level is, the higher the rate of correct repetition of [about] is within the groups. This result indicates that whether or not they reproduced the preposition [about] at the end of a sentence can be an index of the participants' English proficiency, especially the degree of automatization of their grammatical knowledge.

As for the slightly higher RR of sophomores compared to juniors, it should be noted that the sophomore participants included two returnees, who both reproduced [about], whereas there are no returnees among the junior participants.

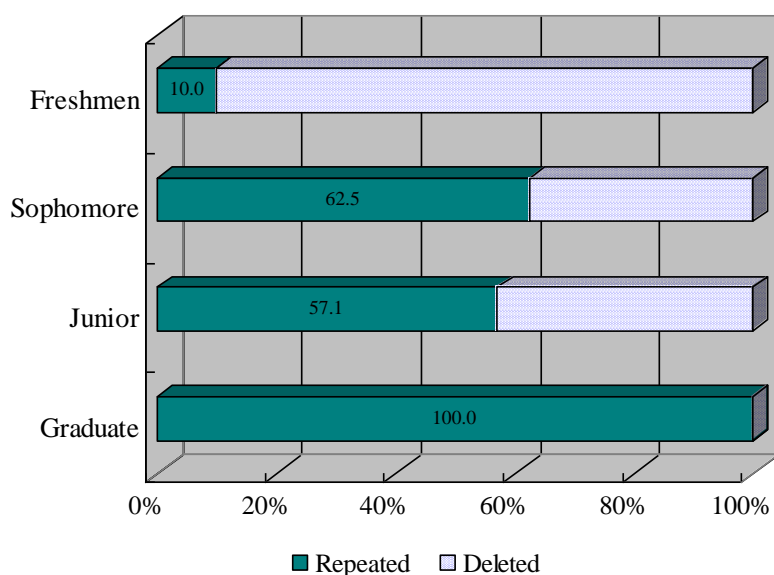


Figure 13. Correct RRs of [about] by grades.

7. They waited thirty minutes to get seats at the restaurant.

The preposition [for] before [thirty minutes] can be omitted when it is placed after a verb, as illustrated in Sentence 7. However, in formal instruction in Japan, it is common for teachers to instruct the students that [for] is used to show length of time so it should be placed before the words that express time. Teachers also give students a lot of example phrases such as “for ten minutes,” “for five days,” or “for two weeks.” In this study, some insertion cases of [for] before [thirty minutes] were expected, although only

seven participants inserted [for] in the sentence.

Table 35. *Breakdown of Repetition of [waited 30 minutes]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
waited 30 minutes	10	waited 30 minute (1)
waited <i>for</i> 30 minutes	6	
waited 3 minutes	3	
wait 30 minutes	2	wait 30 minute (1)
Others	8	needed 30 minutes (1), *waited to 3 (1), waited for 3 minutes (1), *waiter 30 minutes (1), \varnothing (3)

8. All the dishes they ate there were really good.

There were no cases in which a relative pronoun [*which/that*] was inserted in the contact clause: [All the dishes they ate there]. Twenty-five participants were able to reproduce the contact clause, but four participants failed to reproduce it. They were all freshmen. Similar to the results of Study 2 and of the other sentences in Study 4, the mean RRs of sentences with contact clauses were relatively high. It is assumed that most of the participants who took part in both of the studies have already acquired the use of contact clauses.

Next, I will focus on the last two words in the sentence: [really good]. Seven participants substituted [*all*], [*so*], or [*very*], for [really]. Twenty-six participants correctly repeated [good], and only three participants substituted [*delicious*] for [good]. The high RR for [good] seems to be because the word is located at the very end of the sentence and the phonological information of the word clearly remained in mind.

Table 36. *Breakdown of Repetition of [really]*

<i>Example of error</i>	<i>N</i>
really	20
<i>all</i>	3
<i>so</i>	1
<i>very</i>	3
φ	2

Table 37. *Breakdown of Repetition of [good]*

<i>Example of error</i>	<i>N</i>
good	26
<i>delicious</i>	3

9. Bob suddenly noticed he had lost his car key somewhere.

Most of the participants inserted [*that*] at the beginning of the subordinate clause; namely, they placed it right after the main verb [noticed]. Only one participant repeated the original sentence as it was. It is obvious that most of the participants for this study prefer to add [*that*] before starting a subordinate clause. In free speech, they are probably accustomed to putting [*that*] right after the main verb as a kind of pause in order to save a little time until they have decided what to say next.

Table 38. *Breakdown of Repetition of [noticed he had lost his car keys]*

<i>Example of error</i>	<i>N</i>
noticed + S + V ~	1
noticed <i>that</i> S + V ~	23
noticed + φ	5

Another notable error example is the word sequence of [car keys]. It is assumed that few Japanese learners are accustomed to the expression [car keys]. Ten participants managed to reproduce the correct word sequence, although nine of the ten substituted [*car key*] for [car keys]. Only one participant, who was one of the returnee participants, correctly repeated the phrase. One possible reason for the prevalence of the singular form “key” is that sound linking occurred between [-s] in [keys] and [s-] in [somewhere], which made it difficult for the participants to recognize the presence of the plural form [keys]. Another possible reason is that the use of the word [key] in the plural form is not so familiar to average Japanese FEL learners.

Table 39. *Breakdown of Repetition of [keys]*

<i>Example of error</i>	<i>N</i>
keys	1
<i>key</i>	23
\varnothing	5

In addition, there were only three participants who correctly repeated the past perfect tense [had lost] in the subordinate clause. Most of the participants who managed to reproduce the subordinate clause substituted the simple past tense [*lost*] for the past perfect tense [had lost]. This is probably because students have few chances to use the past perfect tense in their free speech/writing though they know the rule. This seems to be why they subconsciously chose the past tense [*lost*] instead of the past perfect tense [had lost].

Table 40. *Breakdown of Repetition of [had lost]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
had lost	3	
<i>lost</i>	16	
\varnothing	7	
Others	3	left (1), *roses (1), to lost (1)

10. “Don’t worry. I’ll help you look for your key,” said Mike.

I expected that some of the participants would prefer “help + object + *to* + infinitive” to “help + object + infinitive.” The results demonstrated, however, that several participants failed to reproduce the structure correctly. This signifies that, regardless of the presence or absence of [*to*] in the structure, about half of the participants for this study probably have not acquired the “help + object + (*to*) + infinitive” pattern at the productive level.

In addition, there were five participants who substituted [*find*] for [look for]. It is clear that those who uttered [*find*] at least understood the meaning of that part in the sentence.

Table 41. *Breakdown of Repetition of [help you look]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
help you look	6	
help you <i>to</i> look	4	
help you <i>find</i>	5	
\varnothing	6	
Others	8	help to look (1), *help you said (1), help + \varnothing (1), help you search for (1), help to find (1), looking for (1), *look help for* (1), help for (1)

Table 42. *Breakdown of Repetition of [look for]*

<i>Example of error</i>	<i>N</i>	<i>Note</i>
look for	11	
<i>find</i>	6	
<i>search for</i>	1	
\varnothing	9	
Others	2	look (1), said (1)

6.3.2 Comparison of RRs between Study 2 and Study 4

As mentioned earlier, Study 4 was conducted after Study 2 with a few-minute break in between. Before starting the experiment, the participants were informed that the experiment would consist of two parts: Part 1 and Part 2. In Part 1 (Study 2), the participants were asked to recall the content of the sentence in Japanese after each repetition. In Part 2, however, no recall in Japanese was required. The participants were only asked to repeat the sentence. Therefore, the decision whether to process the sentence just phonologically or to process it semantically and grammatically as well as

phonologically was left to the participants.

In order to assess the correlation between the RRs in Part 1 and the RRs in Part 2, a statistical analysis was performed using Pearson's correlation coefficient. The result showed a significant correlation between the RRs in Part 1 and Part 2 ($r = .912^{**}$, $p < .01$). This means that the way of processing the sentences in Part 1 and Part 2 were very similar to each other, regardless of the presence or absence of the subsequent Japanese recall task. The results have proved that the participants tend to get the meaning of a sentence in order to succeed in precise repetition, even if the subsequent recall is not required.

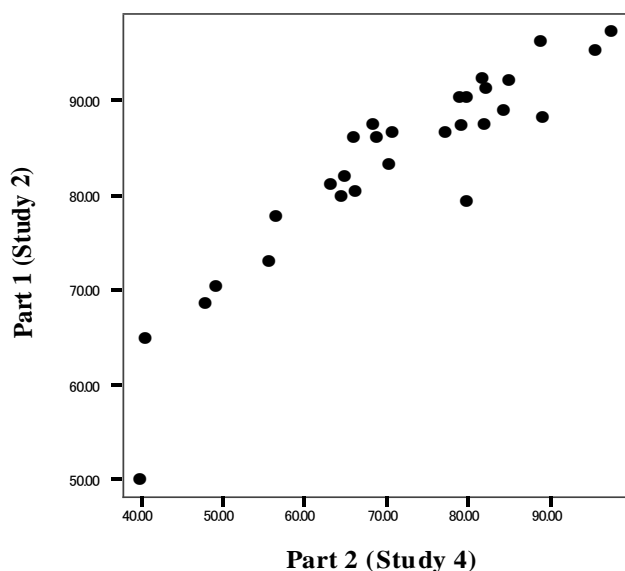


Figure 14. Correlation between RRs in Part 1 and RRs in Part 2.

6.3.3 Results of the interviews

When the participants were asked whether the presence or absence of the subsequent Japanese recall task had some impact on their repetition difficulty or on their sentence processing style (i.e., whether they just focused on sound information of a sentence, or they attended to both sound and meaning of the sentence), most of them responded that the presence or absence of the Japanese recall task had little impact on

their repetition performance. This implies that their listening style was about the same in Part 1 and Part 2. They also commented that what they were doing while listening to a sentence was not necessarily a precise translation into their L1. Instead, they were trying to maintain the content of the sentence as a “visual image” in mind; they were not just focusing on the sound. Additionally, some participants responded that SR in Part 2 was somehow easier than Part 1 because in Part 2 the sentences are interrelated to one another in that they form an episode as a whole.

Interestingly, not a few participants commented that they sometimes were unable reproduce a sentence that *they thought* they had completely understood. If this is true, it means that they at least succeeded in comprehending a sentence, although they failed to reproduce the sentence. In other words, only understanding a sentence did not always lead to an accurate and precise repetition.

It is likely that SR requires learners’ automatized, namely, proceduralized grammar. What an SR task requires is the ability of participants to reconstruct a sentence instantaneously, making the most of their lexical and grammatical knowledge. Accurate sentence repetition seems to have to do with not only the amount of learners’ lexical and grammatical knowledge but also the degree to which the target grammar is automatized.

6.4 Conclusion

In this chapter, I summarized and discussed the results of Study 4. In order to reconfirm the process of SR by Japanese intermediate-level learners, a qualitative analysis of substitution, insertion, and deletion errors in an SR task was conducted.

The results show that the participants made various types of substitution and insertion errors that have similar meanings to the original text. This is significant in that it indicates that in most cases the participants first of all try to process a sentence semantically. Then, they try to choose the appropriate words and grammar to convey the meaning of the sentence, with the help of the visual image they keep in mind. In some

cases, however, they do not succeed in reproducing the original sentence, owing to their lack of grammatical knowledge and/or insufficient automatization of the knowledge. Therefore, we can conclude that SR is the result of instantaneous semantic and grammatical processing of a sentence.

Chapter 7

Study 5

7.1 The Purpose of This Study

Thus far, I have analyzed the data of SR tasks collected from Japanese intermediate-level EFL learners in order to confirm the process of SR. The findings of the last three studies have demonstrated that it would be very difficult for Japanese intermediate-level EFL learners to perform accurate SR without understanding the meaning of a sentence. That is, precise repetition of a sentence owes a lot to a learner's own lexical and grammatical knowledge. If a learner does not have sufficient grammar or vocabulary, or that grammar or vocabulary has not been fully automatized, SR accuracy is diminished.

In the following study, the process of SR by senior high school (SHS) students will be examined. It is assumed that SHS students have less grammatical and lexical knowledge than university undergraduate (UG) students. Taking this into consideration, we need to ask whether SHS students will demonstrate similar tendencies to UG students when they repeat a sentence. Furthermore, will it be possible for SHS students to repeat a sentence without understating it? If rote memorization is impossible, how much will their grammatical and lexical knowledge influence their SR performance?

This study aims to investigate whether the process of SR by Japanese intermediate-level learners holds true with Japanese pre-intermediate-level learners.

7.2 Method

7.2.1 Participants

The participants for this investigation were 11 SHS students at a private high school in Tokyo. Six of the participants were seniors, three were juniors, and two were

freshmen (i.e., in the 12th grade, 11th grade, and 10th grade, respectively). All the participants for this study were recruited by a teacher who was working for the school. In spite of the small number of SHS participants, the comparison analysis between UG students' SR performance and SHS students' SR performance can provide us with a great deal of useful insights. The breakdown of the participants is described in the following table.

Table 43. *Breakdown of Participants*

No.	Grade	Qualifications		Opportunities to learn English outside the classroom & Overseas experience
		Eiken (STEP)	TOEIC	
1	12 th	2nd		Lived in Taiwan during 8th-9th grade
2	12 th	Pre-2nd		
3	12 th	3rd		
4	11 th	Pre-2nd		Takes a private lesson taught by an Australian
5	11 th	Pre-2nd		Attends ESS club after school 3 times a week
6	11 th	2nd	730	
7	10 th	3rd	390	
8	10 th	Pre-2nd	320	
9	12 th	2nd	510	Listens to an English conversation program on the radio every day
10	12 th	-		Takes an English reading class at a private school once a week
11	12 th	Pre-2nd		Takes an English conversation class at a private school once a week

Because of the small number of participants, it would be difficult to generalize the results of this study to all SHS learners. In order to conduct the experiment under identical conditions as previous experiments, and to ensure accurate recording of the participants' utterances, this experiment was also carried out on an individual basis outside the classroom in the presence of the researcher. In that respect, it was difficult to recruit a large number of participants for the experiment because, compared to UG students, SHS students have little free time. Nevertheless, I decided to analyze the data of the 11 participants and to try to summarize the overall tendencies of pre-intermediate-level learners.

7.2.2 Materials

The test consists of 11 CD-recorded sentences of increasing length. In order to investigate the effects of sentence length and sentence type on the degree of SR accuracy, and for the purpose of comparative analysis with the previous studies, four embedded sentences were added to seven simple sentences. The 11 sentences were made by the present researcher and were recorded by a male native speaker. To facilitate a comparison of the results of the SHS students' RRs with those of undergraduate and graduate (UG/G) students' RRs, several sentences that were the same as or similar to the sentences used in Study 2 were incorporated into the test material of this study. The difficulty of the sentences was adjusted to the pre-intermediate-level.

1. They speak Chinese.
2. He doesn't eat vegetables.
3. She gave her baby milk.
4. I made cookies for my father.
5. The picture he painted was beautiful.
6. She has known him for three years.
7. The girl dancing over there is Mary.
8. It's easy for some people to learn languages.
9. The pictures taken by Nancy are very nice.
10. The teacher asked the student to move the desk.
11. The dictionary I bought yesterday is useful to me.

Figure 15. Sentence repetition stimuli.

7.2.3 Procedures

The experiment was carried out on an individual basis outside the classroom at the end of January 2009. The same procedure as in Study 2 was applied to this study. That is, the participants were asked to repeat each sentence to the best of their ability after each presentation. They were also asked to recall the content of the sentence in Japanese after each repetition. The aim of this study was to examine whether or not it is possible for SHS students to repeat a sentence without understanding the sentence. Each sentence was presented just once. A sufficient time interval for English repetition and Japanese recall of the content was provided before the following sentence stimulus was heard. All the utterances including the warm-up stage were recorded.

7.2.4 Questionnaire and interview

After the experiment, the script on which the 11 target sentences were listed was

distributed to the participants. They were asked to read the script to confirm comprehension in regard to any unfamiliar words and grammatical points. A questionnaire was added to this survey to see if the participants had experience living abroad and/or if they had obtained any formal qualifications in their past English education, such as TOEIC and the EIKEN. An interview approximately five minutes in length was held to get the participants' general feedback on how they evaluated themselves on the SR and recall tasks. They were also asked whether or not they currently have (or have had) any opportunities to learn English other than through formal instruction at their high school.

7.2.5 Scoring

All the scoring was conducted by the researcher. In order to measure SR accuracy, the number of words the participants repeated correctly was divided by the total number of words in each sentence. Then, the calculated rate was converted to a percentage. Words that were incorrectly pronounced or unnecessarily added during repetition were not targeted for deduction of points in calculation. Only omitted words were targeted in determining the repetition rate (RR). All of the criteria for evaluation in this Study were the same as those in Study 2 and Study 4.

$$RR (\%) = \frac{\text{The total number of words repeated correctly}}{\text{The total number of words in a sentence}} \times 100$$

As for the degree of content recall, the same evaluation system adopted in Study 2 and Study 4 was used. Participants' recalled data in Japanese were classified into three categories by the researcher's holistic evaluation: Correct, Insufficient and Wrong. Since some information could be omitted or be redundant in Japanese recall, the researcher decided not to quantify the degree of recalled content and instead evaluated in a general,

less strictly literal fashion. When the participants were judged as having understood the content of a sentence well enough, the recalled content was considered correct. If any major information was omitted, the recalled data was considered insufficient. If more than half the content was dropped, it was considered wrong.

7.3 Results

7.3.1 Quantitative analysis of RR

Following the same procedure as in Study 2, the effects of sentence length and sentence type on the degree of SR accuracy was examined first. In general, as the sentences became longer, mean RRs gradually declined. As for the effects of sentence type on SR performance, no unified tendency was demonstrated in the comparison of the four matched sentences. Between Sentences 4 and 5 (six-word sentences), the mean RR of Sentence 4 (a simple sentence) was higher than the mean RR of Sentence 5 (an embedded sentence). Also, between Sentences 8 and 9 (eight-word sentences), the mean RR of Sentence 8 (a simple sentence) was higher than that of Sentence 9 (an embedded sentence). In contrast to the results of six-word and eight-word sentences, the mean RRs of embedded sentences were higher than those of simple sentences in the comparison of seven-word and nine-word sentences. Therefore, it is difficult to determine whether the sentence type has a big effect on the degree of SR accuracy by pre-intermediate-level learners. It may well be possible that the degree of the participants' familiarity with the structure and vocabulary in each particular sentence influenced their SR accuracy.

Regarding Study 2, we can see a statistically significant main effect for sentence type. However, a careful observation of the data from Study 2 shows us that the difference became remarkable when sentence length surpassed 10 words. In this study, no sentence beyond 10 words was prepared as a sentence stimulus because of the participants' English proficiency level. In order to determine more precisely the effect of sentence type on SR accuracy by pre-intermediate-level learners, longer sentences with

various structures should be presented to participants in a further study.

Table 44. *Descriptive Statistics of RR*

No.	1	2	3	4	5	6	7	8	9	10	11	
Number of words	3	4	5	6	6	7	7	8	8	9	9	Mean RR
Type	S	S	S	S	E	S	E	S	E	S	E	
RR	96.97	90.91	96.36	93.94	75.76	72.73	85.71	71.59	61.36	57.58	72.73	79.60
SD	10.05	12.61	8.09	11.24	20.23	30.94	22.13	18.62	15.26	21.56	28.27	18.09

Note. Type refers to Sentence type: S = a simple sentence, E = an embedded sentence.

RR refers to a mean repetition rate (%).

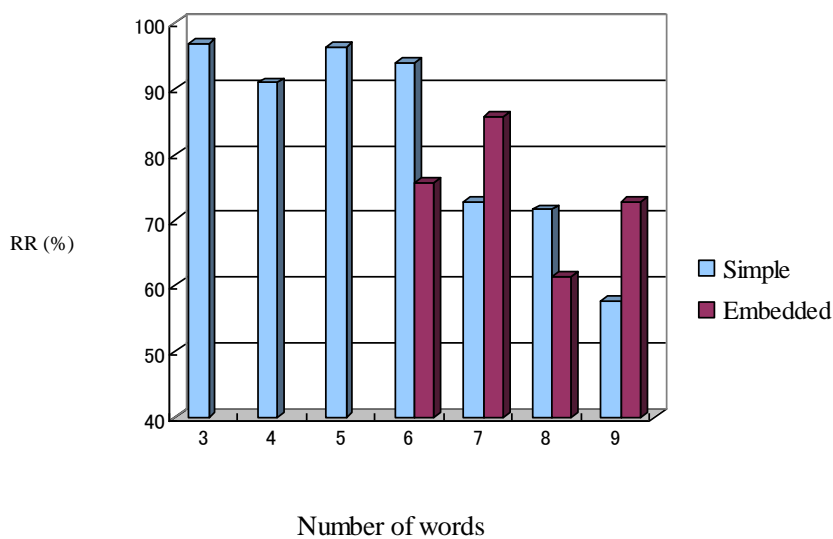


Figure 16. Mean RR by sentence length and sentence pattern.

7.3.2 Quantitative comparison between RR and degree of content recall

Mean RRs of the participants classified into three categories, Correct, Insufficient, and Wrong, were calculated separately. As a result, mean RRs of Correct in

each sentence were generally higher than those of Insufficient; mean RRs of Wrong, in most cases, were the lowest. However, owing to the extremely small number of participants who scored Insufficient and Wrong, we cannot rule out that different results might be demonstrated with a larger number of participants.

Table 45. *Comparison of Mean RR of Each Category*

<i>Sentence</i>	<i>Correct</i>	<i>Insufficient</i>	<i>Wrong</i>
1	100.0 (9)	83.3 (2)	-
2	100.0 (11)	-	-
3	100.0 (9)	80.0 (2)	-
4	98.1 (9)	75.0 (2)	-
5	85.4 (8)	58.3 (2)	33.3 (1)
6	100.0 (3)	85.7 (1)	59.2 (7)
7	93.7 (9)	71.4 (1)	28.6 (1)
8	81.3 (6)	56.3 (4)	75.0 (1)
9	69.6 (7)	46.9 (4)	-
10	80.6 (5)	66.7 (2)	44.4 (4)
11	79.0 (9)	66.7 (1)	22.2 (1)

Note: The parentheses represent the number of participants classified into each category.

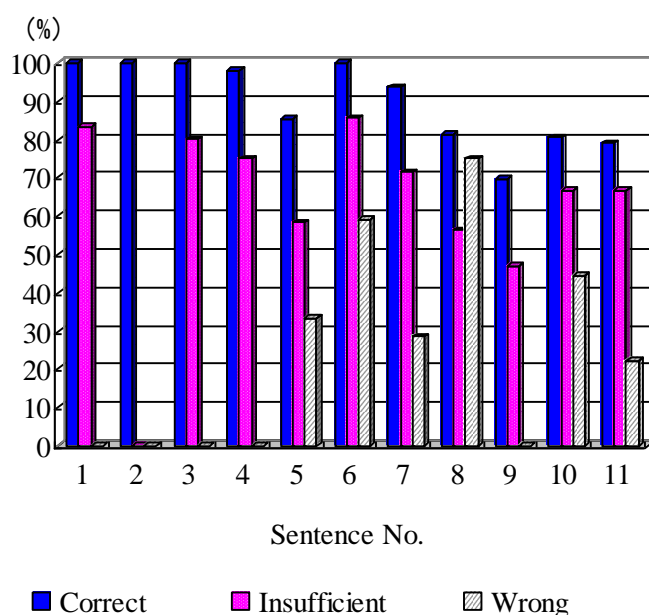


Figure 17. Comparison of overall mean RR of each category in each sentence.

The data of 121 sentences in total were collected from the participants. Out of the 121 sentences, there were two cases in which accurate repetition was not accompanied by perfect recall of the sentence in Japanese. Strictly speaking, in the first example, Sentence 1 [They speak Chinese] was not repeated perfectly by Participant 2 since he mispronounced the subject [They] and pronounced [*dei*] instead. Therefore, his repetition was not technically correct. Nonetheless, this repetition performance was tentatively judged as perfect repetition because it is typical for Japanese learners to substitute [*d*] for [δ] when they pronounce [δ]. In fact, all the utterances that were pronounced [*dei*] instead of [δ ei] in this study were transcribed as [*They*] to be on the safe side. It is important to note that most participants mispronounced [δ ei], but they recalled the word [They] in Japanese correctly. On the other hand, judging from the Japanese recall data of Participant 2 to Sentence 1, we can be nearly certain that he misinterpreted the word [They] as a person's name [*Day*]. In spite of this, to remain consistent with all the other cases of [δ ei] pronounced as [*dei*], the first case example was not excluded from the case examples of accurate repetition.

The second case is an example that demonstrates accurate repetition with incomplete Japanese recall. For Sentence 6 [She has known him for three years], Participant 3 managed to recall the subject [She] and adverbial phrase [for three years] in Japanese. It is highly possible that he repeated [has known him] without understanding.

In addition to the two cases above, there was a third case in which the participant gave nearly accurate repetition, but no Japanese recall. Participant 7 did not recall anything at all after reproducing the sentence nearly perfectly (excluding the deletion of [for] and the substitution of [*language*] for [languages]). It is possible that she failed to understand the sentence but managed to parrot it accurately. However, the fact that the participant tried to correct what she had said: [*It is easy to learn ... it is easy some people to learn language*] certainly leaves the possibility that she processed the sentence semantically.

To sum up, though there were a few cases in which perfect (or nearly perfect) repetition was not accompanied by accurate Japanese recall, the occurrence ratio of such instances was extremely low. For that reason, we can conclude that there seems to be a positive relationship between SR accuracy and involvement of semantic and syntactic processing in SR by the 11 pre-intermediate-level participants.

Table 46. *Examples of Accurate (or Nearly Accurate) Repetition Accompanied by Incomplete (or No) Japanese Recall.*

Participant No.	Sentence No.	Transcribed data	Japanese recall
2	1	They *[Day] ... they speak Chinese.	「デイは中国語を話します」
3	6	She has known him for three years.	「彼女は3年間 ...」
7	8	It is easy to learn ... *it is easy some peo ... ple to learn language.	「 ... 」

7.3.3 Quantitative and qualitative comparison with the results of UG/G students

Next, the SHS students' RRs and the UG/G students' RRs when they repeated the same (or similar) sentences will be compared. In particular, there are six notable cases that can be used for comparison. These six combinations are summarized in the table below. The two sentences in (2) do not share the same verb because the verb [lived] was used in a sentence stimulus for a study that was conducted ahead of the present study. Because of this, [known] was substituted for [lived] in a sentence stimulus for SHS students. As for the difference between [on the stage] and [over there] in (3), [on the stage] was replaced by [over there] so that the sentence could be used as a seven-word sentence in this study. As for the substitution of [student] for [students] and [desk] for [desks] in (5), the singular forms of each noun were adopted because of the comparative difficulty of the SR task; several UG/G students had failed to repeat the plural forms of these words in Study 2.

As a result of comparison analysis, the mean RRs of UG/G students were higher than those of SHS students. If SR were a complete rote memorization task, it would be unusual for the two groups to demonstrate such a difference in RRs. As we can see in the comparison of RRs, however, the results clearly validate that SR does involve learners' lexical and grammatical knowledge.

Table 47. Comparison of RRs of SHS students with those of UG/Gs

	Target Sentence	UD/G	SHS
(1)	The picture he painted was beautiful.	93.1	78.8
(2)	She has <i>lived</i> here for three years.	94.1	-
	She has <i>known</i> him for three years.	-	79.2
(3)	The girl dancing <i>on the stage</i> is Mary.	91.8	-
	The girl dancing <i>over there</i> is Mary.	-	87.0
(4)	It's easy for some people to learn languages.	87.1	71.6
(5)	The teacher asked the <i>students</i> to move the <i>desks</i> .	81.6	-
	The teacher asked the <i>student</i> to move the <i>desk</i> .	-	62.5
(6)	The dictionary I bought yesterday is useful to me.	90.8	72.7

Note: The words that are different from each other are italicized.

UD/G = Undergraduates and graduates ($N = 29$), SHS = Senior high school students ($N = 11$).

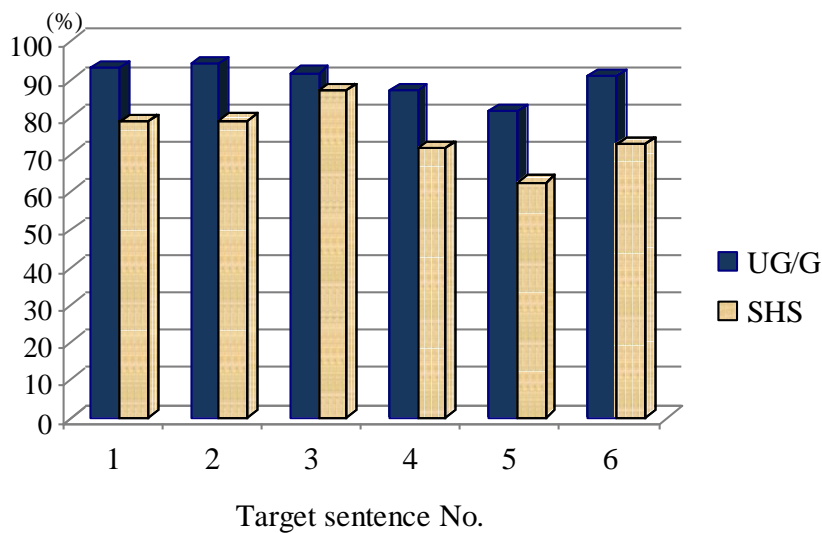


Figure 18. Comparison of RRs of SHS students with those of UG/Gs.

A further analysis on the difference between UG/G students and SHS students in an SR task shows that 5 SHS students out of 11 failed to repeat the present perfect tense in [She has known him for three years], although only 4 UG/G students out of 29 failed to repeat the present perfect tense in [She has lived here for three years]. This case example emphasizes that the 11 SHS students and 29 UG/G students are obviously in a different developmental stage with respect to foreign language acquisition.

Table 48. *Comparison of SHS Students and UG/G Students regarding Grammatical Errors with Present Perfect Tense*

SHS No.	Sentence No.	Transcribed data	Japanese recall
5	6	*She has <i>know</i> him ...	「 ... 」
7	6	*She has ... <i>know</i> ...	「 ... 」
8	6	*She ... <i>know</i> ...	「 ... 」
9	6	*She has <i>no</i> him for three years.	「彼女は彼に3年会っていない」
11	6	*She has <i>know</i> for three years.	「 ... 」
UG/G No.	Sentence No.	Transcribed data	Japanese recall
7	3	*She has <i>lit</i> here for three years.	「彼女は3年間 ... です」
10	3	He <i>lived</i> there for three years.	「彼はそこに3年間住んでいます」
18	3	She ... <i>lives</i> three years.	「彼女は3年住んでいます」
29	3	*She has <i>lit</i> here for <i>treeyears</i> .	「 ... 」

Note. Sentence No. refers to the original number in each study.

The data of SHS students and that of UG/G students show that both committed various grammatical errors. However, SHS students committed far more grammatical

errors. In the data of UG/G students, we can see a general tendency that participants were trying to make a grammatical sentence to the best of their ability. When they had difficulty with a particular sentence, they seemed to focus on saying something grammatically appropriate; that is, they tried to prioritize the subject and the main verb, ignoring modifying words and embedded clauses. In contrast, in the data of SHS students, grammatically and syntactically improper phrases were seen more frequently. This also appears to represent the difference in the amount of productive grammar between UG/G students and SHS students.

Table 49. *Examples of Grammatical errors of UG/G students*

UG/G No.	Sentence No.	Transcribed data	Japanese recall
5	6	*It is easy <i>for starting</i> ... language ...	「××は簡単です」
7	6	*It's easy for some people <i>for some languages</i> .	「言語を学ぶのが楽な人もいる」
11	7	*The teacher <i>ask to</i> the student to move the desks.	「先生は生徒たちに机を移動するよう言った」
19	7	*The teacher <i>ask to</i> students ... to move the <i>desk</i> .	「先生は生徒に机を動かすように指示した」
3	8	*The dictionary I <i>borrow yesterday it's</i> useful for me.	「昨日買った辞書は私にとって便利である」

Table 50. *Examples of Grammatical errors of SHS students*

SHS No.	Sentence No.	Transcribed data	Japanese recall
1	5	*The picture he <i>painins</i> was beautiful.	「彼が描いた絵はきれいだった」
2	5	*The picture he painted beautiful.	「彼は・・・きれいな絵を描きました」
3	5	*The picture is painted <i>by beautiful</i> .	「その写真は美しく描かれています」
4	5	*The picture he <i>was painted</i> (or painting) is very beautiful.	「彼が描いた絵はとてもきれいです」
5	5	*The picture <i>is painting</i> is beautiful.	「そのピクチャーはきれいです」
7	5	*The picture ...	「 ... 」
3	8	*It's easy for some people <i>for*</i> language.	「言語を使って人々と話すのは簡単」
5	8	*It's easy some people <i>to</i> language.	「ことばを話すのは簡単」
8	8	*It's easy for ... <i>learning ... learning</i> language.	「彼らにとって言葉を学ぶのは簡単です」
2	9	*The picture <i>is taken</i> by Nancy ... <i>it was niced</i> .	「絵を持って行ったのはナンシーで、それは良かった」
10	10	*The teacher asked student <i>move raleks</i> .	「先生は子供たちに・・・」

7.4 Discussion

Similar to the case with intermediate-level UG/G students, it seems almost impossible for pre-intermediate-level SHS students to accurately repeat a sentence, in particular a sentence with seven words or more, without understanding the meaning of the sentence.

It is also true that as sentences become longer, the mean RR of participants whose recalled data were classified into Correct gradually decreases. This tendency is particularly evident when the length of a sentence goes beyond seven words. This result

indicates that understanding the meaning of a sentence is not the sole prerequisite for accurate repetition. In other words, even though the participants comprehended the sentence, they were not necessarily successful in repeating the sentence perfectly. Other factors, such as grammar and vocabulary skills, most likely come into play.

The findings have proved that as a matter of first priority it is necessary for learners to understand the meaning of a sentence for accurate repetition. Following this requirement, however, it is additionally necessary for learners to have enough grammar and vocabulary to reconstruct the original sentence instantaneously. If the learner manages to understand the sentence but his/her productive knowledge is insufficient, he/she will not be able to complete accurate repetition.

7.5 Conclusion

According to the results of this study, we can assume that an SR task performed by SHS students is also a sentence reconstruction task that has to involve syntactic and grammatical knowledge. In this regard, the results mirror in many ways the results of the previous SR task performed by UG/G students.

We can conclude that it would be very difficult for SHS learners, who have just moved from the elementary-level to the intermediate-level, to repeat a sentence perfectly without comprehension. However, it is still not clear whether or not learners who are still at the elementary level (i.e., junior high school students) can parrot a sentence phonetically through rote memorization alone.

The results of this study have reconfirmed that an SR task by learners who are at least beyond the elementary level is reconstructive, and that it is highly possible that the degree of SR accuracy represents the learner's English proficiency.

Chapter 8

Study 6

8.1 The Purpose of This Study

The purpose of this study is to reconfirm the results of a survey on Japanese junior high school (JHS) students' speaking ability conducted by the National Institute for Educational Policy Research (NIER) in 2005. I decided to use the same computer-based oral test material that was used in the NIER's survey. This study aims to reexamine the relationship between the ability to repeat a sentence accurately and the ability to express opinions freely within a certain time limit. The participants for this study were senior high school (SHS) and undergraduate (UG) students.

The NIER conducted a survey on approximately 1,000 Japanese JHS third-grade (i.e., ninth grade) students in 2005 (http://www.nier.go.jp/kaihatsu/tokutei_eigo/index.htm). The survey was aimed at finding out whether current efforts to develop students' speaking ability in JHS were having a positive effect. The survey consisted of four sections: Section 1 – to pronounce a word that corresponds to the picture; Section 2 – to repeat a sentence to the best of one's ability; Section 3 – to answer an orally presented *wh*-question [e.g., *Where ~ / What ~*]; and Section 4 – to express oneself orally within one minute on one's favorite season.

In Section 2, six sentences ranging from three to eight words were prepared. More than 80% of the JHS participants repeated three- and four-word sentences successfully, although they performed very poorly with sentences of five words or more. The five-word sentence was repeated correctly by only 37% of the participants, and the seven-word sentence by less than 10%. We can see that three or four-word sentences were easy enough for mere parroting, while longer sentences must have required the students to use their grammatical and syntactic knowledge. In support of this supposition,

the data shows that students who repeated the seven-word and eight-word sentences correctly in Section 2 also performed better in the one-minute speech in Section 4. It seems that the JHS students' ability to repeat longer and more complex sentences precisely and their ability to prepare and deliver their thoughts freely within the time constraints share certain similarities.

On the whole, the findings demonstrate that most JHS third-graders, such as those in this sample, have not acquired fundamental English grammar to a sufficient extent.

8.2 Method

8.2.1 Participants

The participants for this experiment were 15 UG students and 22 SHS students. The fifteen UG participants were students in the faculty of education at a university in Tokyo. They varied both in grade level and major. All the UG students were recruited by the present researcher. Four UG students out of 15 were registered in *Teaching Methods in English I* (a required subject for teacher certification in English for JHS and SHS) in the first semester in 2009. The other 11 UG students were registered in *English Intensive Training Course* at the end of July in 2009. The breakdown of the UG participants is described in the following table.

Table 51. *Breakdown for UG Participants*

Grade	Major	N
Senior	International Education	1
	School Education	1
Junior	European & American Studies	1
	Mathematics	1
Sophomore	European & American Studies	1
	Music	2
Freshman	European & American Studies	7
	Special Needs Education	1
Sum	-	15

The 22 SHS participants were students at a public high school in Gunma Prefecture. Three participants were in the 10th grade and the other 19 participants were in the 12th grade. All 22 SHS participants were recruited by a teacher who was working at the school.

8.2.2 Materials

I used the same computer-based oral test material that was developed and used by the NIER in their survey in 2005. The total amount of time required for the speaking test, including the instructions, was approximately 15 minutes. As stated before, the speaking test consists of four sections. The outline of each section is described in the following table. All the information about the content of the speaking test listed below is a summarized version from the website of NIER (http://www.nier.go.jp/kaihatsu/tokutei_eigo/index.htm).

Table 52. *Viewpoint of Evaluation by Section*

<i>Section</i>	<i>The Viewpoint of Evaluation</i>
1	Accuracy of word pronunciation
2	Accuracy of sentence repetition
3	Appropriateness of response to a sentence-unit question
4	Delivery, length, and relevance to the theme presented

The analysis of this study will focus on the results of Section 2 and Section 4. However, the 15-minute speaking test was already programmed in the PC as one test set. Therefore, the participants had to respond to all the questions from Section 1 to Section 4. In order to concentrate on an analysis of Section 2 and Section 4, more detailed information on Section 1 and Section 3 will be omitted in this dissertation.

Section 2 consists of six sentences of increasing length. The length of sentences ranges from three words to eight words. In general, the longer the sentence, the more complex the structure is.

1. We are students.
2. I don't play basketball.
3. I gave my friends flowers.
4. There are many buildings in Tokyo.
5. I have lived here for five years.
6. When I left my house, it was raining.

Figure.19. Sentence repetition stimuli in Section 2.

In Section 4, the participants are tested on how well they can express their feelings and ideas based on the theme presented in advance. The following is the theme presented to the participants.

Suppose that you are going to talk about “The seasons” with your classmates in English class. Please choose one season that you like, and tell them the reason why you chose that particular season. Also, tell them what you want to do during that season.

You have 30 seconds to prepare before talking.

8.2.3 Procedure

The computer-based speaking test was also carried out on an individual basis like other experiments in the previous studies. For the UG participants, the experiment was conducted during the one-week *English Intensive Training Course* period, at the end of August 2009. The participants individually took the computer-based speaking test after the entire schedule for the day ended. For the SHS participants, the experiment was carried out twice: at the end of July and in the middle of August 2009.

Before the speaking test started, the participants were instructed to put on a headset. All the instructions and questions were presented either on the screen of the PC or through the headset. The participants were reminded that once the test had started, they could not stop the test to go back to the previous question, or move on to a further question at their own pace. All the utterances by the participants were recorded on the PC and also on a portable tape-recorder. The computer-based speaking test took approximately 15 minutes in total.

In Section 2, the participants were asked to repeat the sentence they had heard from the PC after hearing the beep sound. Each sentence stimulus was presented twice in a row before the participants responded.

In Section 4, the participants were asked to talk about the theme presented to them in advance. As was mentioned in 8.2.2, the theme given to the participants was “My Favorite Season.” Thirty seconds were given to the participants so that they could prepare what they were going to talk about. Following this, one minute was given to deliver their speech.

8.2.4 Questionnaire and interview

After the 15-minute speaking test, a questionnaire was added to see if the participants had had experience living abroad and/or if they had obtained any English learning qualification, such as TOEIC or the EIKEN, which would show their current English proficiency. Then, an interview was held to get the participants’ general feedback on how they evaluated themselves on the speaking test. They were also asked how they study English outside the classroom on a daily basis.

8.2.5 Scoring

The computer-based speaking test consists of four sections. This study, however, will focus on the results of Section 2 and Section 4 for analysis.

In order to compare the results of this study with the results of the NIER’s 2005 survey, the evaluation criteria that were adopted in the NIER’s survey were also adopted in this study.

In the NIER’s survey, not only a perfect response (i.e., with no errors) but also a response with a minimal local error was accepted as correct. All the participants who were judged to be in either of these two categories were labeled as “Correct.” Then, the number of participants who were classified into Correct was divided by the total number of participants. Finally, the calculated rate was converted to a percentage and was labeled as “Acceptance Rate.” In accordance with the evaluation system in the NIER’s survey, this study will also use the Acceptance Rate as an index of the degree of the participants’

performance.

$$\text{Acceptance Rate (\%)} = \frac{\text{The total number of participants classified either 1 or 2}}{\text{The total number of participants}} \times 100$$

Table 53. *Evaluation Criteria for Section 2 (Sentence Repetition)*

<i>Type</i>	<i>Category</i>	<i>Criteria</i>
Perfect	1	Accurate reproduction of all the words accompanied by comprehensible pronunciation
Quasi-perfect	2	Accurate reproduction of most of the words sufficient to keep the original meaning of the sentence, accompanied by comprehensible pronunciation
Wrong	3	Incorrect/insufficient reproduction or incomprehensible pronunciation that causes a change in the original meaning of the sentence
Wrong	4	Incorrect/insufficient reproduction or incomprehensible pronunciation that does not convey the meaning of the original sentence
Wrong	5	Utterances except above
Wrong	9	Utterance in Japanese or incomprehensible utterance
No response	0	No utterance

Table 54. *Evaluation Criteria for Section 4 (One-minute Speech)*

<i>Type</i>	<i>Category</i>	<i>Criteria</i>
Excellent	1	Speech in which they talk about their favorite season, the reason why they chose that season, and what they want to do during that season, with additional explanations
Good	2	Speech in which they talk about their favorite season, the reason why they chose that season, and what they want to do during that season
Insufficient	3	Speech in which they only talk about their favorite season and the reason why they chose that season
Insufficient	9	Utterance in Japanese, or incomprehensible utterance
No response	0	No utterance

8.3 Results

8.3.1 Acceptance Rates in Section 2

First of all, I will compare and summarize the Acceptance Rates for the various sentences in Section 2. The UG students demonstrated 100% Acceptance Rates for the sentences with three to six words. They also demonstrated over 80% Acceptance Rates for seven- and eight-word sentences. The SHS students also demonstrated 100% Acceptance Rates in the three-word sentence and the four-word sentence, although the Acceptance Rate drastically declined once the sentence length went beyond five words. Nonetheless, the Acceptance Rates of SHS students were higher than those of JHS students in all the sentences.

Table 55. Comparison of Acceptance Rates in Section 2

Sentence No.	1	2	3	4	5	6
UG	100.0	100.0	100.0	100.0	86.7	93.3
SHS	100.0	100.0	81.8	50.0	18.2	40.9
JHS	94.6	85.9	37.6	32.5	9.1	11.9

Note. The data of JHS students are excerpts from “Tokutei no Kadai ni Kansuru Chousa (Eigo: [Hanasu-koto]) Chousa Kekka (Cyugakkou)” in the website of the NIER. (http://www.nier.go.jp/kaihatsu/tokutei_eigo/index.htm).

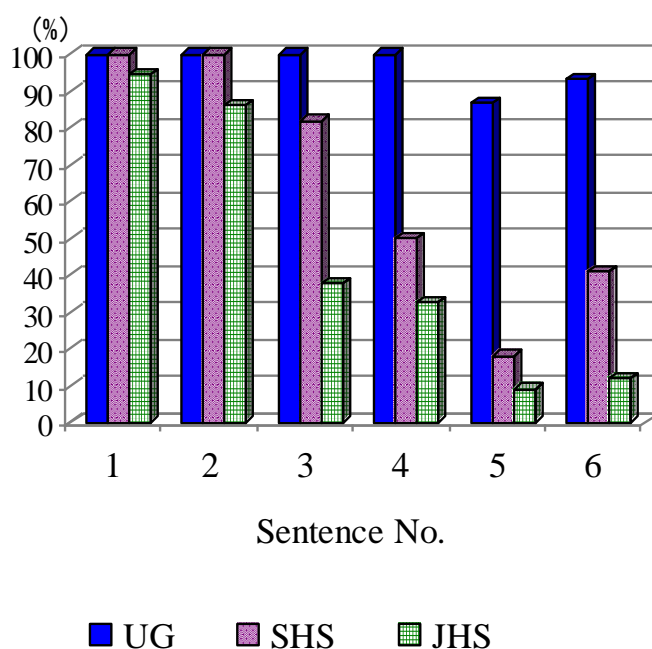


Figure 20. Acceptance Rate by Sentence in Section 2.

Table 56. *The Number of UG Participants of Each Category by Sentence*

Sentence No.	1	2	3	4	5	6
1 (Perfect)	9	15	11	15	13	12
2 (Quasi-perfect)	6	0	4	0	0	2
3 (Wrong)	0	0	0	0	1	0
4 (Wrong)	0	0	0	0	0	0
5 (Wrong)	0	0	0	0	1	1
9 (Wrong)	0	0	0	0	0	0
0 (No response)	0	0	0	0	0	0

Table 57. *The Number of SHS Participants of Each Category by Sentence*

Sentence No.	1	2	3	4	5	6
1 (Perfect)	5	22	8	3	3	4
2 (Quasi-perfect)	17	0	10	8	1	5
3 (Wrong)	0	0	0	10	2	1
4 (Wrong)	0	0	3	1	3	1
5 (Wrong)	0	0	1	0	13	11
9 (Wrong)	0	0	0	0	0	0
0 (No response)	0	0	0	0	0	0

8.3.2 Comparison of the results between Section 2 and Section 4

8.3.2.1 The results of UG students

As summarized in the table below, the number of participants who were classified into Correct (i.e., either Category 1 or Category 2) for Sentence 1 in Section 2 was 15 (100%), and 14 out of the 15 participants (93.3%) were also classified into Correct in Section 4. The same results were demonstrated in the cases of Sentences 2, 3,

and 4. In the case of Sentence 5, the number of participants who were classified into Correct in Section 2 was 13 (86.7%), and 12 out of the 13 participants (92.3%) were also classified into Correct in Section 4. In the case of Sentence 6, the 14 participants who were classified into Correct in Section 2 were all classified into Correct in Section 4 (100%).

These figures indicate that most of the UG participants performed well in both sections of the speaking test. In fact, the speaking test had originally been developed as a comprehensive evaluation of the learning proficiency of JHS students. Because of this, a ceiling effect was observed in the UG students' Acceptance Rates. It seems that the SR task in Section 2 was a little too easy for the UG students.

Table 58. *Relationship of Acceptance Rates between Section 2 and Section 4 (UG)*

Sentence No.	Category 1 or 2 in Section 2 (A)	A/C (%)	Category 1 or 2 in both of Sections 2 and 4 (B)	B/A (%)	B/C (%)	N (C)
1	15	100.0	14	93.3	93.3	15
2	15	100.0	14	93.3	93.3	15
3	15	100.0	14	93.3	93.3	15
4	15	100.0	14	93.3	93.3	15
5	13	86.7	12	92.3	80.0	15
6	14	93.3	14	100.0	93.3	15

8.3.2.2 The results of SHS students

In contrast to the results of UG students, the number of SHS participants who were classified into Correct for Sentence 1 in Section 2 was 22 (100%), but only 13 out of 22 participants (59.1%) were classified into Correct in Section 4. The rates of B/A were relatively similar to one another among Sentences 1, 2, 3, and 4. However, the rate of B/A of Sentence 5 was higher than that of Sentence 4, and the rate of B/A of Sentence

6 was also higher than that of Sentence 5. These results can be summarized as follows:

1. The rate of participants classified into Correct both in Sentences 1 & 2 (of Section 2) and in Section 4
→ Lower than 60%
2. The rate of participants classified into Correct both in Sentences 3 & 4 (of Section 2) and in Section 4
→ Approximately 65%
3. The rate of participants classified into Correct both in Sentences 5 & 6 (of Section 2) and in Section 4
→ 75 % and higher

As the length of a sentence became longer, the relationship of the Acceptance Rates between Section 2 and Section 4 became stronger. This tendency corresponds to the outcome that JHS students demonstrated in the 2005 survey. The findings from this study and from the 2005 study indicate that there seems to be a consistent relationship between the ability to repeat a longer sentence with complex structure and the ability to produce several sentences within a time limit to express ideas freely.

Table 59. *Relationship of Acceptance Rates between Section 2 and Section 4 (SHS)*

Sentence No.	Category 1 or 2 in Section 2 (A)	A/C (%)	Category 1 or 2 in both of Sections 2 and 4 (B)	B/A (%)	B/C (%)	N (C)
1	22	100.0	13	59.1	59.1	22
2	22	100.0	13	59.1	59.1	22
3	18	81.8	12	66.7	54.5	22
4	11	50.0	7	63.6	31.8	22
5	4	18.2	3	75.0	13.6	22
6	9	40.9	8	88.9	36.4	22

8.4 Discussion

The SR task in Section 2 required the participants to process a sentence instantaneously in order to repeat the sentence accurately. In terms of the SHS students, the Acceptance Rate drastically declined once the length of a sentence went over five words. This finding indicates that their lexical and grammatical knowledge, in particular, their productive knowledge, is still insufficient. A similar tendency was also demonstrated by the JHS students in the 2005 survey.

In contrast, almost all the UG students performed the SR task very well. We can say that at least the vocabulary and grammar that appeared in the SR stimuli for this study have already become part of their procedural knowledge. Since there was a ceiling effect on the Acceptance Rates of UG students in Section 2, we could not examine the possibility of a close relationship between the results of Section 2 and those of Section 4 with the UG students' data.

However, with the SHS students' data, a clear relationship was demonstrated between the Acceptance Rates of Section 2 and those of Section 4. As the length of a sentence became longer, the Acceptance Rates of Sections 2 and 4 tended to be closer to each other. It is highly possible that there is a strong relationship between the ability to create and express briefly one's ideas and the ability to immediately repeat a sentence as accurately as possible.

8.5 Conclusion

High Acceptance Rates in the repetition of three- to five-word sentences leave us the possibility that the participants succeeded in accurate repetition by processing the sentences semantically and grammatically. The length of those sentences, however, also enables the participants to parrot the target sentences. The fact that the Acceptance Rates declined after the length of a sentence went over five words, along with other findings that have been demonstrated in the previous studies, clearly shows that most of the SHS

students in this study have a lack of fundamental grammar and vocabulary necessary for sentence (re)construction tasks.

We can conclude that the ability to repeat an English sentence of at least six words and the ability to express oneself freely (albeit briefly) in English are not incompatible. That is, a repetition-related task and a creativity-related task seem to share some similarities in the processes carried out in the mind.

Chapter 9

General Discussion

In this chapter, I will review the results of the studies in this dissertation in a comprehensive manner. Also, I will discuss the general tendencies in the process of SR by Japanese EFL learners.

The overall aim of this dissertation has been to demonstrate that SR is a sentence reconstructive task, and to show the validity of SR as one effective teaching/learning method for the development of English productive skills. In Chapter 1, I suggested that the following two kinds of activities should be employed more positively in current Japanese classroom instruction:

- (1) Repetition-related activities as a preliminary stage with the aim of narrowing the gap between reception stage and self-expression stage
- (2) Structure-oriented activities to encourage learners to pay more attention to grammar in processing

In this dissertation, I focused on SR tasks with the expectation that SR can play both roles of (1) and (2) together for the development of students' productive skills in the classroom.

The Lack of Output Activities in SHS in Japan

The findings from a survey of 261 Japanese teachers of English confirmed that the current state of English teaching in Japanese secondary schools was in general the same as my experiential observations. First of all, the results of the survey revealed that output activities are indeed lacking in SHS English classes. The results also made clear that only a small number of teachers, especially SHS teachers, focus their efforts on repetition-related activities in teaching English. Notably, among the three

repetition-related activities of Read and Look up, shadowing, and repetition, repetition was the least popular activity among SHS teachers.

This tendency seems to be related to the primary concern of SHS teachers in teaching English. The majority of SHS teachers who participated in this survey are teachers who are working at academic SHSs (regardless of school academic level). In Japan, most 3rd grade JHS students (i.e., 9th grade students) who have the intention of going to a university tend to choose an academic SHS, not a vocational SHS. Therefore, it is common for academic SHS teachers to be well aware of their “mission,” which is to help students pass the entrance exam to a university. Traditionally, most university entrance exams in Japan focus on an examinee’s comprehension, not production. This style of entrance exam encourages SHS teachers to provide students with as much input as possible as the main priority, rather than giving them opportunities for output practice. In other words, making sure students thoroughly comprehend the materials appears to be the major goal of SHS teachers. Some academic SHSs are willing to adopt a rather challenging English textbook for the students. In addition, most academic SHS teachers use several supplementary materials along with the textbook in teaching English. These facts clearly indicate that their primary concern seems to be giving students as much input as possible. Consequently, it would be very difficult for those teachers to spare time for repetition practice in class. It is also highly unlikely that the students’ receptive knowledge will transfer to their productive knowledge without the students’ intentional effort outside the classroom.

The General Tendencies in the Process of SR by Japanese EFL Learners

The results of Studies 2-6 clearly reconfirmed that repetition of a sentence as a unit is a cognitive task involving semantic, grammatical, and syntactic processing, and not a simple rote memorization task.

The results of a comparative analysis of the RRs and the amount of Japanese

recall (Study 2) demonstrated that the participants with a larger amount of recall also demonstrated better repetition performance. In addition, there was no case example in which the participant succeeded in the precise repetition of a whole sentence without understanding its meaning to some extent. These findings indicate that there seems to be a positive relationship between SR accuracy and involvement of semantic and syntactic processing during the task by Japanese intermediate-level EFL learners.

The assumption that SR is not a simple rote memorization task but a cognitive task was reinforced by the results of a comparative analysis of the utterances in an SR task and those in an oral sentence composition (OC) task (Study 3). In both the SR task and the OC task, a number of identical errors and correct utterances were observed for the same participants. That is, several errors in the SR task were also found in the same sentences produced by the same participants in the OC task. Such similarities in errors reassure us that SR is a cognitive task that involves semantic and grammatical processing. It is highly likely that SR accuracy is dependent on the degree of comprehension of the targeted sentence.

Technically speaking, however, it seemed difficult to conclude a cause-and-effect relationship between the RRs and the degree of Japanese recall only with the results of Study 2. That is, it was a little premature to determine that SR accuracy was only dependent on the degree of comprehension of the target sentence. There still was the possibility that success of a repetition in English preceded comprehension of a target sentence.

To eliminate the possibility that successful repetition of a sentence preceded comprehension of the sentence, and also to analyze substitution and insertion errors that the participants made more qualitatively, the researcher imposed on the participants in Study 2 for another SR task (Study 4). Study 4 was conducted following Study 2 on the same day. In contrast to Study 2, no recall in Japanese was required in Study 4. The participants were only asked to repeat the sentence. Therefore, the decision whether to

process the sentence just phonologically or to process it semantically and grammatically as well as phonologically was left to the participants. The result of a statistical analysis showed a significant correlation between the RRs in Study 2 and Study 4 ($r = .912^{**}$, $p < .01$). This means that the way of processing the sentences in both Studies 2 and 4 were very similar to each other, regardless of the presence or absence of the subsequent Japanese recall task. The results have proved that the participants first of all tended to grasp the meaning of a sentence in order to succeed in precise repetition under any circumstance. Consequently, the results have justified the interpretation of the results of Study 2. That is to say, it is certain that SR accuracy is dependent on the degree of comprehension of the targeted sentence, but not vice versa.

The results of Study 3 also indicate that although comprehending the target sentence seems to be a *necessary* condition for accurate repetition, it is probably not a *sufficient* condition for success. Interestingly, there were plenty of case examples in which the participants produced a word or a phrase correctly in the OC task, but were unable to reproduce the same part in the SR task. The number of these cases was actually larger than the opposite cases. This fact implies that the SR task used in Study 2 was more demanding than the OC task in Study 3. The strict time pressure and the limitation on ways to express the message in the SR task seem to have made the task more demanding. We can be nearly certain that unless the target phrase or structure in a sentence is fully automatized in the learner's mind, it is very difficult for the learner to repeat the sentence precisely under the time constraints. In other words, SR seems to be a task which requires the learner's instantaneous grammatical processing.

Eisenstein, et al. (1982) conclude from their comparative analysis of the two tasks, a cued production and an elicited imitation (i.e., sentence repetition), that a cued production task allows learners considerable latitude in what they choose to say; in this sense, the results of the production task seem to be dependent on learners' avoidance of forms they are not confident of and their reliance on prefabricated patterns. Although the

OC task adopted in Study 4 in this dissertation was not a completely free production task, the OC task did allow the participants much latitude in the way they translated the Japanese sentences into English. In contrast, in the SR task the participants “had to reconstruct someone else’s grammar and meaning which was sometimes beyond their productive capacities” (Eisenstein, et al., 1982).

Considered from a pedagogical point of view, we can say that it is highly possible that the positive use of SR tasks with the textbook passages students have already studied in class can contribute to the development of students’ productive skills. Otherwise the target structure or grammar might not appear in production until students have become completely confident as to when and how to use it.

From the results of comparative analyses on the RRs by different proficiency groups in Studies 2, 5, and 6 (precisely, in Study 6 the term “Acceptance Rates” was adopted.), we can also draw a conclusion that the accuracy level of an SR task can reveal the language learning process of learners. In Study 2, the higher the university grade level was, the more the participants’ mean RR in each group increased. In Study 5, the mean RRs of undergraduate and graduate (UG/G) students were higher than those of SHS students. In Study 6, the Acceptance Rates of SHS students were higher than those of JHS students. From a comprehensive point of view, such differences in RRs depending on proficiency levels seem to indicate that the results of the SR task can point to the degree of the participants’ automatized procedural knowledge.

Additionally, in an error analysis in Study 2, the majority of errors, with the exception of deletion, were paradigmatic errors, and the number of syntagmatic errors was far fewer. Taking into consideration such factors as English learning background and/or the academic qualification, it is highly possible that the participants who demonstrated these syntagmatic errors are developmentally more advanced than those who did not from the perspective of L2 acquisition.

Major findings in Studies 2 to 6 can be summarized as follows:

- 1) A positive relationship between the amount of the participants' Japanese recall and their English repetition performance
- 2) A clear distinction of accuracy level of English SR performance among different proficiency groups
- 3) A possible relationship between error tendencies that the participants' demonstrate and their English learning background and/or the academic qualification

These findings clearly validate that learners' grammatical and syntactical knowledge does play a major role in successful repetition. In an SR task, learners are required to make more hypotheses about grammatical structures than they would in production by virtue of the fact that they are reproducing language (Eisenstein, et al., 1982).

As a matter of first priority, English education in SHS in Japan should increase the amount of in-class output practice. In particular, tasks that can enhance "transfer from declarative knowledge to procedural skill" (DeKeyser, 2007) should be highlighted more in class. DeKeyser (2007) claims that automatization can take place for L2 grammar rules. Time for reviewing what students learned in class should not be limited to comprehension confirmation. Sufficient opportunities for automatizing grammar rules once learned should also be given to students. An activity in which students vocalize a sentence repeatedly while attending to form-meaning connections should not be viewed simply as "mechanical drills," a term which has been "alternately advocated, demonized, derided" (DeKeyser, 2007). In order to promote grammar proceduralization in class, first of all declarative knowledge of structure should be reinforced through production practice. Production practice need not always be communicative or interactive. Under circumstances in which the amount and the frequency of target language input are limited,

non-interactive, individual-based exercises are also important. Incorporating repetition-related activities like SR into English classes would help students who tend to rely too heavily on certain formulaic phrases pay more attention to grammar, and would also give them the confidence in using newly learned structures and vocabulary in production. SR can offer students opportunities to practice grammar that they *know about* but they *cannot use*. Thus, teachers should be encouraged to rethink their teaching methodology, and more teachers should be encouraged to use repetition-related tasks such as SR.

Chapter 10

Conclusion

General Conclusion

The purpose of this dissertation was to further validate the process of SR (sentence repetition) by Japanese intermediate EFL learners. The reason that I focused attention on SR in this dissertation is because it is highly likely that SR can help to develop learners' fundamental grammar that is necessary in production, and because SR in itself can be an effective task as a preliminary exercise for real-world communication.

In spite of various empirical studies on SR in second language acquisition, the process of SR had not been made completely clear. Therefore, I felt that the process of SR needed to be investigated in more detail from various aspects. I was determined to ascertain the principle reasons behind an accurate repetition by Japanese intermediate EFL learners. More specifically, the aim was to establish whether accurate repetition can be attributed to learners' semantic and syntactic processing or to their perfect phonetic parroting.

I conducted five experiments on the process of SR on Japanese intermediate (including lower-intermediate) EFL learners in this dissertation. I also carried out extensive error analyses of the data collected from a total of 162 participants, from the viewpoint of both between-subject variance and within-subject variance.

The conclusions reached are as follows:

- (1) Repetition of a sentence as a unit by Japanese EFL learners is a cognitive task that involves semantic, grammatical, and syntactic processing. It seems evident that successful SR involves much more than simple rote memorization. It would be very difficult for Japanese EFL learners to repeat a sentence without comprehension.

(2) Repetition of a sentence as a unit by Japanese EFL learners is a sentence construction process. It is highly possible that a lack of lexical and grammatical knowledge will greatly influence SR performance. The degree of automatization of lexical and grammatical knowledge will also determine SR accuracy.

In Study 1, a survey of JHS and SHS teachers was conducted in order to grasp the current situation of oral/aural output activities in English classes. The results revealed that output activities are lacking in current SHS English classes. The results also demonstrated that only a small number of teachers out of 261 teachers in the survey focus their efforts on repetition-related activities. SR, in particular, was less popular than other repetition-related activities among SHS teachers. In order to fill the gap between learners' receptive knowledge and their productive knowledge, and above all, in order to increase the amount of learners' exposure to English with respect to frequency, a further category of activities, that is, repetition-related activities, should be utilized more often. Repetitive tasks such as text reproduction can be a good solution to compensate for the disadvantages Japanese EFL learners face.

In Study 2, whether an SR task by Japanese intermediate-level learners is a simple rote memorization task or a task that involves grammatical and syntactic processing was investigated. The findings demonstrated that higher SR accuracy in English is generally accompanied by more recall in Japanese. The findings proved that it would be very difficult for Japanese intermediate-level EFL learners to perform SR without comprehension.

In Study 3, a comparative analysis of error tendencies between the data of an SR task and those of an OC (oral sentence composition) task was conducted. In addition to error tendencies, examples of correct responses that the participants had demonstrated in both tasks were also analyzed. All the analyses were based on the following four points of view: 1) Ungrammatical substitution and deletion errors, 2) Examples of grammatical

substitution and word-order change, 3) Correct repetition and production, and 4) Distinctive errors of individual participants. As a result, several substitution, insertion, and deletion errors demonstrated by the participants in the SR task were again found in the sentences produced by the same participants in the OC task. These findings support the assertion that the process of SR is similar to the process of producing a sentence on one's own. Also, a closer examination of each distinctive error of individual participants provided us with a lot of insightful information about the learners' interlanguage and about the progress of learners at different developmental stages.

In Study 4, more detailed qualitative analyses of substitution, insertion, and deletion errors in an SR task were conducted. Various case examples, such as when original text was substituted for words that have a similar meaning, were observed in the utterances by the intermediate-level participants. Insertion and deletion errors that do not cause a change in meaning of the original text were also demonstrated. These instances clearly indicate that learners first of all tend to process a sentence semantically. However, only understanding the meaning of a sentence does not necessarily guarantee the success of precise repetition. The fact that there were many participants who could not repeat a sentence even though they understood the sentence suggests that an SR task requires both instantaneous semantic processing of a sentence and expeditious grammatical processing of a sentence.

In Study 5, the results of a reexamination of the process of SR proved that the process of SR by Japanese SHS students is similar to that of Japanese UG/G students. It seems apparent that lower-intermediate learners (i.e., SHS students) also find it very difficult to correctly repeat an orally presented sentence without comprehension. For both intermediate-level learners (i.e., UG/G students) and lower intermediate-level learners, SR is a sentence reconstruction task that involves syntactic and grammatical knowledge. In this regard, the learners' grammatical knowledge and the degree of automatization of grammar have a crucial effect on SR accuracy. It is highly likely that the degree of SR

accuracy represents the learner's English proficiency.

In Study 6, by using a 15-minute computer-based speaking test, the relationship between the ability to repeat a sentence and the ability to produce several sentences freely based on a given topic was examined. The results confirmed a positive relationship between the ability to repeat an English sentence of at least six words and the ability to create and express opinions freely in English within a certain time limit. We can conclude that a repetition-related task and a creativity-related task seem to share some similarities in the processes carried out in the mind.

Pedagogical Implications

SR is a type of repetition drill. Repetition drills have been exposed to a lot of criticism over the years and, because of this, they have fallen out of favor with many teachers. Some argued that learners could easily neglect meaning while focusing only on the targeted form. Others claimed that sentences or phrases learned through repetition drills would not transfer to communicative competence. However, it is highly likely that repetition drills can be practical and beneficial when they are incorporated into in-class teaching in Japanese secondary schools.

A series of studies in this dissertation have proved that the act of repeating a sentence in a target language should no longer be considered simply an act of parroting. On the contrary, repetition of a sentence as a unit does involve the learner's semantic and grammatical processing. A sentence presented orally starts as a meaningful chunk, but then it is split into pieces once it is put into mind. Therefore, learners have to reorganize the pieces of information with regard to meaning and order; that is, they have to reconstruct the sentence so that it becomes a meaningful sentence again. This reconstruction seems to require the utilization of the learners' own vocabulary and grammar. For all these reasons, repetition drills can be carried out to enhance language acquisition in a variety of ways.

Some would say that SHS teachers should focus more on incorporating interactive and creative activities into classroom instruction. While there is certainly a role for such activities, it should be remembered that most interactive and creative activities require fairly advanced ability to choose appropriate words and phrases on the spot. Interactions between two learners who do not have sufficient grammar and vocabulary for such activities tend to rely heavily on formulaic expressions. However, communication which is heavily dependent on formulaic expressions is not always successful.

The results of Study 1 revealed the lack of output activities in current SHS English education. There is a tendency for SHS teachers to concentrate on giving their students as much “written” input as possible, while paying less attention to giving students opportunities to use what they have understood. Such a teaching method, however, will not narrow the gap between the students’ receptive knowledge and productive knowledge.

Taking into account the data and results of Study 2 through Study 6, SHS teachers need to rethink seriously the importance and usefulness of repetition-related activities. In particular, they should incorporate the following into their SHS classroom instruction: (1) repetition-related activities to contribute to narrowing the gap between students’ receptive knowledge and their productive knowledge, which will help shift what students have understood to what they can use in production; and (2) activities to encourage students to attend to grammar without depending heavily on formulaic expressions.

Suggestions for Further Studies

Several limitations of the present studies can be addressed for future studies.

First of all, the results of the studies that were conducted on a relatively small number of participants might not be sufficiently reliable to make generalizations about all

Japanese intermediate-level learners. Testing a large number of participants for each study was hindered by the complicated experimental procedures. That is, in order to ensure accurate recording of each participant's utterances, the series of experiments in this dissertation had to be carried out on an individual basis in the presence of the researcher. In that respect, it was difficult to test a large number of participants at one time.

Secondly, there should have been more precise grouping of the participants in the studies. The participants in Studies 2, 3, and 4 were labeled as Japanese intermediate-level participants. However, there were some participants in these studies who possibly should have been judged to be in a higher or lower proficiency group. A further study with a larger number of homogenized participants will offer more convincing suggestions.

Thirdly, a more precise control of sentence familiarity (in regard to vocabulary, topic and grammatical structure) might have provided different results. Although the difficulty of each sentence stimulus was controlled as carefully as possible considering the level of the participants in each study, there remains the possibility that sentence familiarity might have had an effect on SR accuracy. The results of the analyses demonstrated that some sentences seem to be more difficult than others regardless of their length or complexity. In particular, for SHS students and university freshmen, it is highly possible that the kinds of materials they use in class, for instance, the modality of English (i.e., spoken form or written form) they are usually exposed to, will have an impact on the learners' sentence familiarity. In order to eliminate the possible effects of sentence familiarity, and in order to confirm the validity of all the findings in these studies, continuous studies on the process of SR should be made with a wider variety of sentences.

Lastly, the appropriateness of the various evaluation procedures should be reconsidered. In these studies, all the transcriptions and analyses were conducted by the

present researcher. All the evaluations in terms of SR accuracy and the procedures of extracting errors were conducted based on the researcher's own criteria. Although a focused effort was made to make the evaluation criteria as stable as possible by repetitive observation of the transcribed data, it goes without saying that evaluation by multiple raters would be more reliable. A further study that involves more raters with clearer evaluation criteria will result in more reliable results.

While acknowledging the limitations, this researcher believes that the series of studies in this dissertation have provided significant and beneficial findings about the process of SR. It is hoped that the findings from these studies have provided valuable implications for Japanese teachers of English on how to develop students' English productive skills, making the most of the technique of SR.

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Appendices

Appendix 1:

A Survey to clarify the current state of oral/aural output activities in English classes in Japan

調査ご協力へのお願い

この度、先生方の日々の授業実践における音声指導の取り組みについて調査することになりました。この調査は、英語教育の現状把握とその向上を目的として行うものであり、調査結果は研究以外の目的で使用することはありません。ご理解の上、ぜひともご協力お願いいたします。

☞ 当てはまる校種に○をつけて下さい

⇒ 国立 公立 私立 / 中学校 高校 (* 中高一貫の場合は相当する方に)

◆ 以下の設問にお答え下さい。番号があるものについては、当てはまる番号に○をつけて下さい。

① 英語の授業(放課後・課外活動は含みません)の中に音声活動を取り入れていますか？

1. はい 2. いいえ

② (以下は①で「はい」とお答えになった方へ。「いいえ」とお答えになった方は⑥へ。)

1回の授業で音声活動が占める時間はだいたいどのくらいですか？(概算で結構です。数字を記入してください。)

【 】分の授業時間のうち、だいたい【 】分

③ a. 次の活動の中で、**定期的**に行っているものに全て○をつけて下さい。

(注:ここでの「定期的」とは、頻度に関係なく、月1回でも学期1回でも、実施しているものを指します)

(1) Chorus reading (教師またはテープ・CDの後について生徒が一斉に声を出して読む活動)

(2) Individual reading (生徒が一人ずつ[交代で]声を出して読む活動)

(3) Buzz reading (生徒が各自、自分のペースでモデルなしで読む活動)

(4) Parallel reading/Overlapping (テキストを見ながら、音声に合わせて声を出して読む活動)

- (5) Read and look-up (テキスト内の1フレーズまたは1文を黙読[音読]し、次に顔を上げてテキストを見ずに復唱する活動)
- (6) Shadowing (テキストを見ずに、聞こえてくる英語をできるだけ遅れずに復唱する活動)
- (7) Repetition/Repeating (テキストを見ずに1フレーズまたは1文を聞いた後で復唱する活動)
- (8) Story retelling (読んだまたは聞いたストーリーの内容を自分の言葉で改めて表現する活動)
- (9) Loud speaker (生徒がシャドーイングした英語を他の生徒が書き取る活動)
- (10) Recitation (暗唱)
- (11) Speech
- (12) Chants (リズムにあわせて英語を歌のように発音する活動)
- (13) Songs
- (14) その他 (具体的に記入して下さい: _____)

b. ※高校の先生方のみお答え下さい。(中学校の先生方は④にお進み下さい)

③の a. で○をつけた活動は、主にどの科目の中で実施していますか？該当する科目名に○をつけて下さい。科目名が異なる場合は、その内容に対応する科目に○をつけてください。対応する科目がない場合は、「その他」に科目名をお書き下さい。(複数回答可)

- (1) 英語 I (2) 英語 II (3) OC I (4) OC II (5) リーディング (6) ライティング
- (7) その他 _____

④ ③で選んだ活動の中で、“特に力をいれている(こだわっている活動)”を**最大3つ**挙げ、その番号を表の左端に記入して下さい。また、それらを行う理由・実施頻度について、該当するものに○をつけてください。

※ 選択する活動は3つ以内でしたら、幾つでも構いません。

※ 該当するものがない場合は、「その他」を選択し、具体的に記入して下さい。

番号	その活動を行う理由(複数回答可)	頻度
	1. 特になし 2. 学習した単語・表現を暗記させる 3. 口ならし(口の筋肉を動かす) 4. 英文がそのまま頭に残るようにさせる 5. 授業を活気づける 6. 英語のリズム・発音等を身につけさせる 7. リスニング力をつける 8. 英語での表現力を高める 9. その他 _____	1. 毎日 2. 1日おき 3. 週2回 4. 週1回 5. 月1回 6. 学期1回 7. その他 ()
	1. 特になし 2. 学習した単語・表現を暗記させる 3. 口ならし(口の筋肉を動かす) 4. 英文がそのまま頭に残るようにさせる 5. 授業を活気づける 6. 英語のリズム・発音等を身につけさせる 7. リスニング力をつける 8. 英語での表現力を高める 9. その他 _____	1. 毎日 2. 1日おき 3. 週2回 4. 週1回 5. 月1回 6. 学期1回 7. その他 ()
	1. 特になし 2. 学習した単語・表現を暗記させる 3. 口ならし(口の筋肉を動かす) 4. 英文がそのまま頭に残るようにさせる 5. 授業を活気づける 6. 英語のリズム・発音等を身につけさせる 7. リスニング力をつける	1. 毎日 2. 1日おき 3. 週2回 4. 週1回 5. 月1回 6. 学期1回 7. その他

	8. 英語での表現力を高める	()
	9. その他 _____	

⑤ 授業実践における音声指導全般について、何かコメントやご意見がございましたら、ご自由にお書き下さい。

調査へのご協力ありがとうございました。

Appendix 1:

A Survey to clarify the current state of oral/aural output activities in English classes in Japan (English translation)

This is a survey on the present state of oral/aural output activities in English classes. The results of this survey will be used only for this research. Thank you very much for your cooperation.

☞ Please choose the relevant affiliations.

⇒ National Prefectural (Municipal) Private / JHS SHS

◆ Please respond to the following questions. If a question has more than one option, please circle the number of the option(s) you have chosen.

① Do you regularly conduct oral/aural output activities in your English class?

1. Yes 2. No

② (Only for those who answered yes in Q1. For those who answered no, please move on to ⑥)

How long do you usually spend on aural/oral output activities per class? (You can give a rough estimate of the time spent.)

Approximately 【 】 minutes per 【 】-minute lesson

③ a. Please choose all relevant activities you “regularly” do (regardless of time spent at one time, or frequency) from options printed in the questionnaire.

(1) Chorus reading (An activity in which students repeat altogether after the CD or the teacher)

(2) Individual reading (An activity in which students read aloud by turns)

(3) Buzz reading (An activity in which students read aloud individually at their own pace)

(4) Parallel reading/Overlapping (An activity in which students read passages aloud, overlapping the

model sound)

- (5) Read and look-up (An activity in which students first read a sentence silently and then look up and say it)
- (6) Shadowing (An activity in which students repeat a stream of speech verbatim without looking at the text with a minimum of delay)
- (7) Repetition/Repeating (An activity in which students repeat a sentence/phrase after they hear it without looking at the text)
- (8) Story retelling (An activity in which students tell a story again in their own words)
- (9) Loud speaker (An activity in which one student does shadowing and other students dictate what the student shadowed)
- (10) Recitation (An activity in which students express out loud passages from the text they have studied)
- (11) Speech
- (12) Chants (An activity in which students say or shout out the same words or phrases many times in rhythm to music)
- (13) Songs
- (14) Others (Please write down in detail. _____)

b. (Questions only for SHS teachers) In which of these subjects do you usually use the activities that you chose in Q3 (a)? Please choose all relevant subjects from the six subject titles below.

(1) English I (2) English II (3) OCI (4) OCII (5) Reading (6) Writing

(7) Others _____

- ④ Please choose up to three activities in which you focus your efforts in teaching English. Also please choose any relevant reasons from the options printed in the questionnaire.

No.	Reasons	Frequency
	1. No particular reason 2. To get students to memorize vocabulary and expressions learned 3. To warm-up students 4. To get students to memorize a sentence as a unit 5. To perk the lesson 6. To familiarize English prosody 7. To improve students' listening ability 8. To develop students' speaking ability 9. Others _____	1. Every day 2. Every other day 3. Twice a week 4. Once a week 5. Once a month 6. Once a term 7. Others ()
	1. No particular reason 2. To get students to memorize vocabulary and expressions learned 3. To warm-up students 4. To get students to memorize a sentence as a unit 5. To perk the lesson 6. To familiarize English prosody 7. To improve students' listening ability 8. To develop students' speaking ability 9. Others _____	1. Every day 2. Every other day 3. Twice a week 4. Once a week 5. Once a month 6. Once a term 7. Others ()
	1. No particular reason 2. To get students to memorize vocabulary and expressions learned 3. To warm-up students 4. To get students to memorize a sentence as a unit	1. Every day 2. Every other day 3. Twice a week 4. Once a week 5. Once a month

	5. To perk the lesson 6. To familiarize English prosody 7. To improve students' listening ability 8. To develop students' speaking ability 9. Others _____	6. Once a term 7. Others ()
--	--	---

⑤ If you have any comments or opinions on English education in general, please feel free to express any of these in the blank below.

Thank you for your cooperation.

Appendix 2:

Instructions for SR (Sentence repetition) task in Studies 2 & 4 (UG/G students)

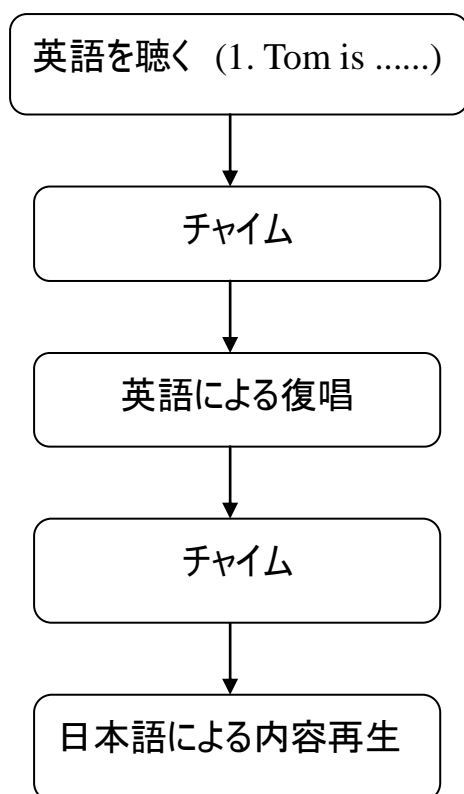
Sentence Repetition (英文復唱) テストの流れ

[Part 1]

CDから、英文が1文ずつ流れます。繰り返しはありません。聞くチャンスは1度だけです。

- ① 最初の英文が読まれた直後、“プー”というチャイムが流れます。そのチャイムを聞いた後で、**今聴いた英文を、覚えている範囲で、できるだけ正確に英語で復唱してください。**
- ② 再び、“プー”というチャイムが流れます。その後、**その英文の内容を、覚えている範囲で、日本語で再生してください。**
- ③ 次の文が流れます。先ほどと同じ要領で、まず、英語による復唱、次に、日本語による内容再生を行ってください。(これが No.1 から No.14 まで続きます)

つまり、



という流れになります。わかりましたか？

では、例題を使って練習してみましょう。

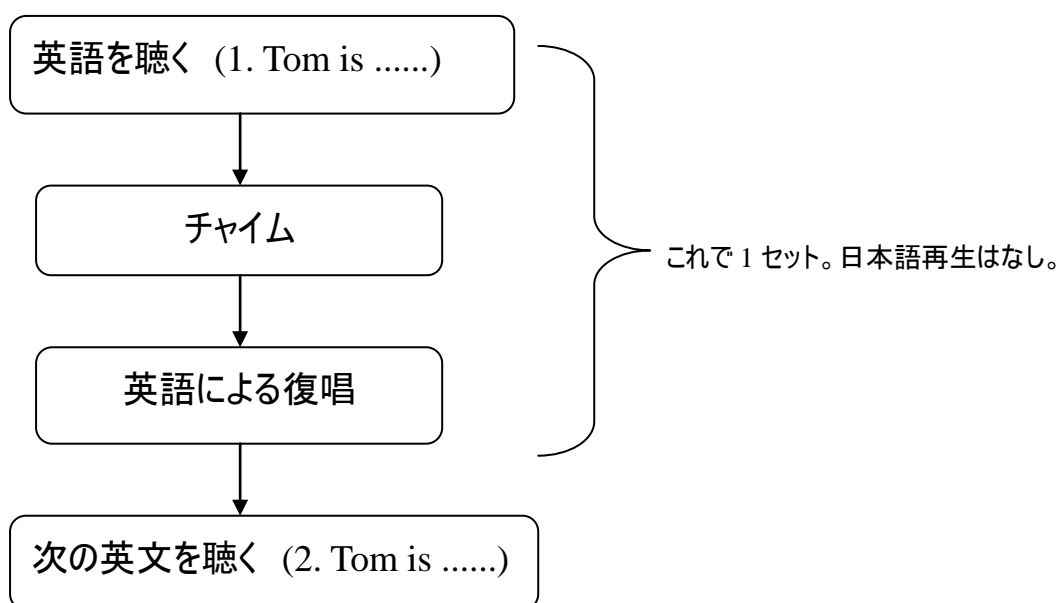
[Part 2]

引き続き、英文が1文ずつ流れます。今回も繰り返しはありません。聞くチャンスは1度だけです。

- ① 最初の英文が読まれた直後、“プー”というチャイムが流れます。そのチャイムを聞いた後で、**今聞いた英文を、覚えている範囲で、できるだけ正確に英語で復唱してください。**
- ② 数秒後、次の文が流れます。先ほどと同様にその直後に“プー”というチャイムが流れますので、それを聞いた後で、英語による復唱を行ってください。(これが No.1 から No.10 まで続きます)

★今回は、日本語による英文の内容再生はありません。

つまり、



このような流れになります。

では今回も例題2つを使って練習し、その後で本番に移ります。

Appendix 2:

Instructions for SR task in Studies 2 & 4 (English translation)

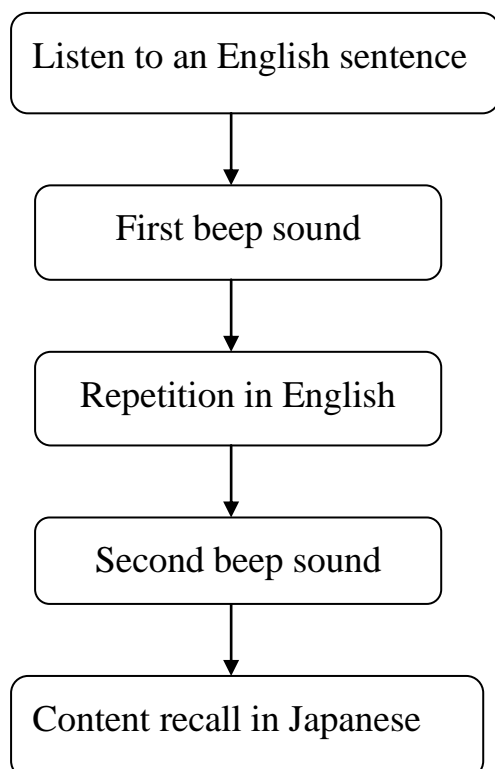
Procedure for the Sentence Repetition Task

[Part 1]

You will hear sentences from the CD. Each sentence will be read only once.

- (1) You will hear a beep sound after the first sentence is read. Please repeat the sentence you have just heard to the best of your ability after you hear the beep.
- (2) You will hear a beep sound again. Just after the beep, please recall the entire content of the sentence in Japanese to the best of your ability.
- (3) After this, you will move on to the next sentence. All the English repetitions and Japanese recalls (until No. 14) will be carried out in the same way as the first sentence.

Flowchart of Part 1



Do you understand? Then, let's get started.

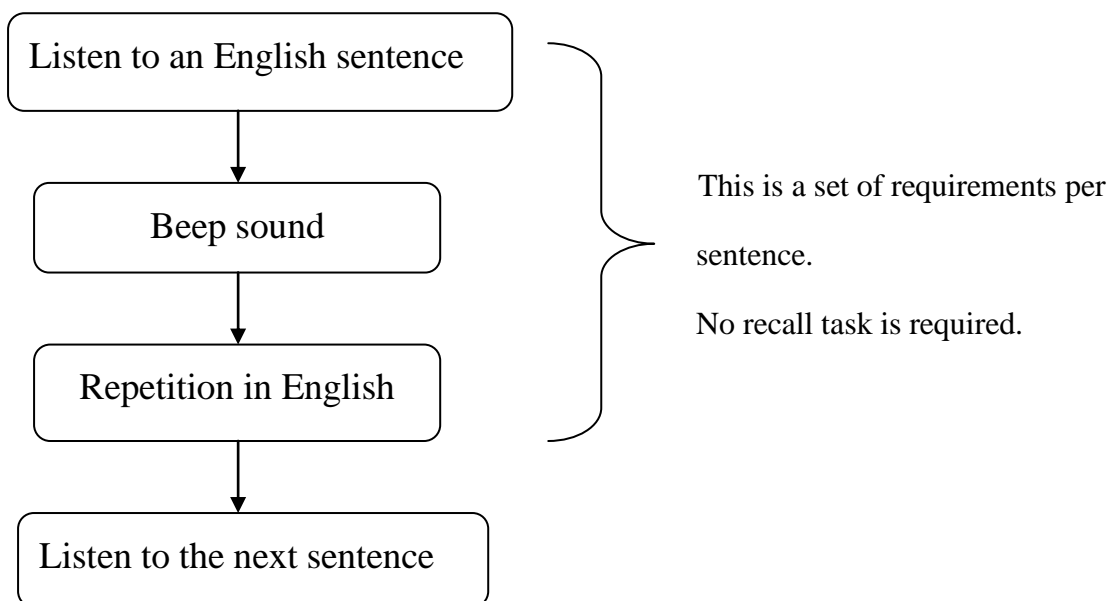
[Part 2]

The same as in Part 1, you will hear English sentences. Each sentence will be read only once.

- (1) You will hear a beep sound after the first sentence is read. Please repeat the sentence you have just heard to the best of your ability after you hear the beep.
- (2) After this, you will move on to the next sentence. You will hear a beep sound after the sentence is read. Please repeat the sentence you have just heard to the best of your ability after the beep. All the other English repetitions (until No. 10) will be carried out in the same way as the first sentence.

★There is no Japanese recall this time.

Flowchart of Part 2



Do you understand?

Then, let's get started.

Appendix 3:

Post-questionnaire in Studies 2 & 4

★Sentence repetition task

お名前 _____

以下の英文は今聴いていただいた文です。

一通り目を通して、意味がわからない単語があればそこにアンダーラインを、読んでも文全体の意味がわからない英文があれば、□ボックスに✓を入れて下さい。もし何もなければ、最後の『特になし』のボックスに✓を入れて下さい。

(Part 1)

- 1. Mike is studying for the test.
- 2. The picture he painted was beautiful.
- 3. She has lived here for three years.
- 4. The girl dancing on the stage is Mary.
- 5. It's easy for some people to learn languages.
- 6. The fact that you're a doctor surprised me.
- 7. The teacher asked the students to move the desks.
- 8. The dictionary I bought yesterday is useful to me.
- 9. English is used by many people as a common language.
- 10. The boy invited to the party came with his friends.
- 11. Lucy and I decided to go to Tokyo together next winter.
- 12. The teacher who always tells a joke to us got angry.
- 13. The mother told her children not to forget to lock the door.
- 14. An old woman sitting between Bob and me suddenly began to cry.
- (意味がわからない語・文は)特になし

(Part 2)

- 1. Bob had lots of things to do over the weekend.
- 2. He had to stay home with his little brother on Saturday.
- 3. On Sunday he went to the station in his car to see his friend.
- 4. He began running when he saw his friend, Mike.
- 5. Mike said, "I haven't done lunch yet, and I'm very hungry now."
- 6. "Let's go to the restaurant you told me about last month."
- 7. They waited thirty minutes to get seats at the restaurant.
- 8. All the dishes they ate there were really good.
- 9. Bob suddenly noticed he had lost his car keys somewhere.
- 10. "Don't worry. I'll help you look for your keys," said Mike.
- (意味がわからない語・文は)特になし

アンケート

英語の学習について次の質問に答えて下さい。

1. あなたは英語を使っている外国で暮らしたことがありますか。

はい いいえ

2. (2ではいと答えた方のみ)国はどこで、滞在期間はいつからいつまででしたか。

国名 _____

滞在期間 _____ 年 月から 年 月までの ヶ月 / _____ 年

3. このテストを受けてみて、思ったことや気づいたことがあれば何でも書いて下さい。

Appendix 3:

Post-questionnaire in Studies 2 & 4 (English translation)

★ Sentence repetition task

Name _____

These are the sentences that you heard in the SR task. Please read all the sentences and confirm that there are no unfamiliar words or grammatical points.

If there are any, place a check mark in the box () for the relevant sentence, and then draw a line under the words or phrases that are unfamiliar to you.

If there are no unfamiliar words or phrases, place a check mark in the box () at the very end.

(Part 1)

- 1. Mike is studying for the test.
- 2. The picture he painted was beautiful.
- 3. She has lived here for three years.
- 4. The girl dancing on the stage is Mary.
- 5. It's easy for some people to learn languages.
- 6. The fact that you're a doctor surprised me.
- 7. The teacher asked the students to move the desks.
- 8. The dictionary I bought yesterday is useful to me.
- 9. English is used by many people as a common language.
- 10. The boy invited to the party came with his friends.
- 11. Lucy and I decided to go to Tokyo together next winter.
- 12. The teacher who always tells a joke to us got angry.
- 13. The mother told her children not to forget to lock the door.
- 14. An old woman sitting between Bob and me suddenly began to cry.
- No unfamiliar words or grammatical points

(Part 2)

- 1. Bob had lots of things to do over the weekend.
- 2. He had to stay home with his little brother on Saturday.
- 3. On Sunday he went to the station in his car to see his friend.
- 4. He began running when he saw his friend, Mike.
- 5. Mike said, "I haven't done lunch yet, and I'm very hungry now."
- 6. "Let's go to the restaurant you told me about last month."
- 7. They waited thirty minutes to get seats at the restaurant.
- 8. All the dishes they ate there were really good.
- 9. Bob suddenly noticed he had lost his car keys somewhere.
- 10. "Don't worry. I'll help you look for your keys," said Mike.
- No unfamiliar words or grammatical points

Questionnaire

Please respond to the following questions.

1. Have you ever lived in a foreign country?

Yes No

2. (For those who answered yes in Q1) Where and how long did you stay there?

Country: _____

Period (Year/Month): From: _____ / _____ to _____ / _____

3. Please write down freely any comments you have on the SR task.

Appendix 4:

Background Information of Participants for Studies 2, 3, & 4 (Excludes No. 17 &

18 for Study 3)

<i>No.</i>	<i>Major</i>	<i>Grade</i>	<i>Age</i>	<i>Qualifications</i>	<i>Overseas Experience & Notes</i>
1	EE	G1	25	-	7 years (Age 2-7) in the U.S.
2	EE	G1	50	1st Level (EIKEN)	Over 20 years of high school teaching experience
3	EE	F	19	-	
4	EE	F	19	2nd	
5	EE	F	19	-	3 years (6-9) in the U.S.
6	EE	F	20	2nd	
7	EE	F	20	3rd	
8	EE	G1	24	TOEIC 880	
9	EE	G1	24	TOEFL 240 (CBT)	
10	EE	F	19	-	
11	EE	S	20	Pre 1st	
12	EE	F	20	-	
13	EE	S	19	Pre 1st, TOEIC 845	
14	EE	S	19	Pre 2nd	
15	EE	S	19	Pre 1st	
16	EE	S	19	2nd	
17	EE	S	19	-	9 years (5-11, 14-17) in the U.K. and the U.S.

18	LE	F	20	Pre 2nd	
19	EE	F	19	2nd	
20	EE	S	20	Pre 1st	
21	EE	S	21	Pre 1st	5 years (12-17) in the U.S.
22	EE	J	21	TOEIC 880	
23	EE	J	20	TOEIC 830	
24	EE	J	21	Pre 1st	
25	EE	J	21	TOEIC 760	
26	EE	J	20	TOEFL 50 (iBT)	
27	EE	J	21	Pre 1st, TOEIC 735	
28	LE	J	21	2nd, TOEIC 575	
29	ME	F	19	2nd	Got 2nd in the 8th grade; Mother is a returnee.

Note. EE = English Education, LE = Lifelong Education, ME = Music education.

G1 = Graduates 1st, F = Freshman, S= Sophomore, J = Junior.

Appendix 5:

Instructions for OC (Oral sentence composition) task in Study 3

- ★ 以下の日本語を一文ずつ英訳して下さい。厳密な時間制限は特に設けませんが、あまり時間をかけずに、思いついた英文をそのまま述べて下さい。

English Translation

- ★ Please orally translate each Japanese sentence below into an English sentence. There is no strict time limit to translate each sentence. However, please try to give the English translation just as soon as you have come up with an equivalent to the Japanese sentence.

1. マイクはテストのために勉強しています。
2. 彼が描いた絵は美しかった。
3. 彼女はここに3年間住んでいます。
4. ステージの上で踊っている女の子はメアリーです。
5. 言語を学ぶことが易しい人もいる。(＝一部の人にとっては言語を学ぶことは易しい)
6. あなたが医者であるという事実は私を驚かせた。
7. 先生は生徒達に机を移動するように頼んだ。
8. 昨日買った辞書は私には使いやすい。
9. 英語は共通言語として多くの人に使われている。
10. パーティに招待された男の子は友達と一緒に来た。
11. ルーシーと私は、来年の冬と一緒に東京に行くことに決めた。
12. いつも私達に冗談を言う先生が怒った。
13. その母親は子供たちに、ドアのカギをかけ忘れないように言った。
14. ボブと私の間に座っていたおばあさんがいきなり泣き始めた。

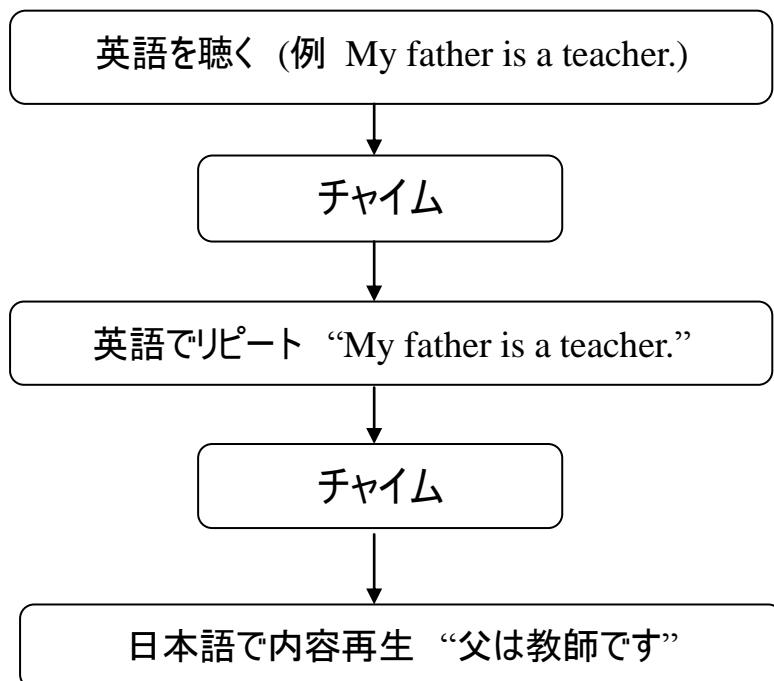
Appendix 6:

Instructions for SR task in Study 5 (SHS students)

Sentence Repetition (英文復唱) テストの流れ

CDから、英文が1文ずつ流れます。繰り返しはありません。聞くチャンスは1度だけです。

- ① 最初の英文が読まれた直後、“プー”というチャイムが流れます。そのチャイムを聞いた後で、**今聴いた英文を、覚えている範囲で、できるだけ正確に英語で復唱して下さい。**
- ② 再び、“プー”というチャイムが流れます。その後、**その英文の内容を、覚えている範囲で構わないので、日本語で再生して下さい。**
- ③ 次の文が流れます。先ほどと同じ要領で、まず、英語による復唱、次に、日本語による内容再生を行ってください。(これが No.1 から No.11 まで続きます)



このような流れになります。では、例題2つを使って練習しましょう。その後で本番に移ります。

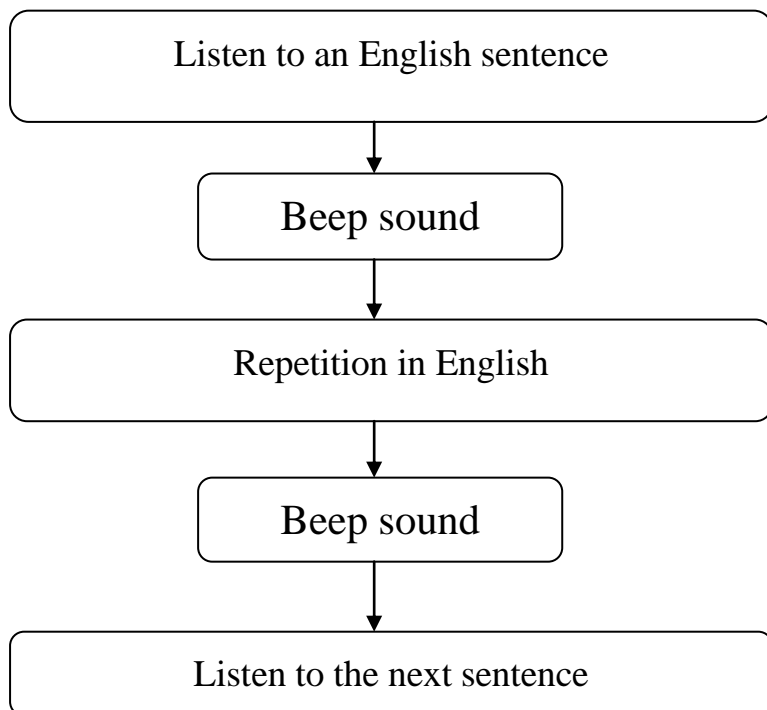
Appendix 6:

Instructions for SR task in Study 5 (English translation)

Procedure for the Sentence Repetition Task

You will hear sentences from the CD. Each sentence will be read only once.

- (1) You will hear a beep sound after the first sentence is read. Please repeat the sentence you have just heard to the best of your ability after you hear the beep.
- (2) You will hear a beep sound again. Just after the beep, please recall the entire content of the sentence in Japanese to the best of your ability.
- (3) After this, you will move on to the next sentence. All the English repetitions and Japanese recalls (until No. 11) will be carried out in the same way as the first sentence.



Do you understand? Then, let's get started.

Appendix 7:

Post-questionnaire in Study 5

Sentence repetition task 事後アンケート

学年: _____ 年 お名前 _____

以下の英文は今聴いていただいた文です。一通り目を通して、意味がわからない単語があればそこにアンダーラインを、読んでも文全体の意味がわからない英文があれば、□ボックスに✓を入れて下さい。もし、何もなければ最後の『特になし』のボックスに✓を入れて下さい。

例題文

- 1. We are students.
- 2. I don't play basketball.

Sentence repetition task

- 1. They speak Chinese.
- 2. He doesn't eat vegetables.
- 3. She gave her baby milk.
- 4. I made cookies for my father.
- 5. The picture he painted was beautiful.
- 6. She has known him for three years.
- 7. The girl dancing over there is Mary.
- 8. It's easy for some people to learn languages.
- 9. The pictures taken by Nancy are very nice.
- 10. The teacher asked the student to move the desk.
- 11. The dictionary I bought yesterday is useful to me.
- (わからない語・文は)特になし

アンケート

★英語の学習について次の質問に答えて下さい。

1. 英検や TOEIC テストのスコアなど、英語に関して現在持っている資格・級があれば、教えてください。

2. あなたは英語を使っている外国に、1年以上暮らしたことがありますか。

はい いいえ

3. (2ではいと答えた方のみ) 国はどこで、滞在期間はいつからいつまででしたか。

国名 _____

滞在期間 _____ 才から _____ 才までの _____ 年間

調査へのご協力、ありがとうございました。

Appendix 7:

Post-questionnaire in Study 5 (English translation)

Grade _____ Name _____

These are the sentences that you heard in the SR task. Please read all the sentences and confirm that there are no unfamiliar words or grammatical points.

If there are any, place a check mark in the box () for the relevant sentence, and then draw a line under the words or phrases that are unfamiliar to you.

If there are no unfamiliar words or phrases, place a check mark in the box () at the very end.

Example sentences

- 1. We are students.
- 2. I don't play basketball.

Sentence repetition task

- 1. They speak Chinese.
- 2. He doesn't eat vegetables.
- 3. She gave her baby milk.
- 4. I made cookies for my father.
- 5. The picture he painted was beautiful.
- 6. She has known him for three years.
- 7. The girl dancing over there is Mary.
- 8. It's easy for some people to learn languages.
- 9. The pictures taken by Nancy are very nice.
- 10. The teacher asked the student to move the desk.
- 11. The dictionary I bought yesterday is useful to me.
- No unfamiliar words or grammatical points

Questionnaire

★Please respond to the following questions below.

1. Have you obtained any formal English qualifications such as EIKEN or TOEIC that show your current English proficiency? If you have, please write the details below.

2. Have you ever lived in an English-speaking foreign country for a year or longer?

Yes

No

3. (For only those who answered yes in Q2) Where and how long did you stay there?

Country: _____

Period (Year/Month): From: _____ / _____ to _____ / _____

Thank you for your cooperation.

Appendix 8:

Instructions for SR task in Study 6

(Excerpt from the NIER's computer-based speaking Test: Section 2)

【指示文】

これからセクション2を始めます。この問題は、聞いた英文を繰り返して言う問題です。最初に、英文が2回読まれます。次に『ブーブー』という発信音を聞いた後に、英文を一度繰り返してください。それでは、例題を2回やってみましょう。（“Good morning.” × 2回）

発信音を聞いた後に、“Good morning.” と繰り返せましたか。発信音を聞き終わってから、英文を繰り返すように注意してください。（この後、“See you tomorrow.”という文についても一度練習する。）

問題は全部で6題あります。

(English translation)

【Narration】

We will start Section 2. In this section, you will listen to a sentence and repeat it. Each sentence will be read twice, followed by a beep sound. Please repeat the sentence you have heard after you hear the beep. Let's practice the repetition task with two example sentences.

(1. “Good morning.” × twice)

Were you able to repeat “Good morning” after you heard the beep sound? Please make sure that you do not repeat before you hear the beep sound. (2. “See you tomorrow.” × twice)

There are six sentences to be repeated.

Appendix 9:

Instructions for 1-minute speech in Study 6

(Excerpt from the NIER's computer-based speaking Test: Section 4)

【指示文】

これからセクション4を始めます。この問題は、与えられたテーマについて話す問題です。与えられたテーマについて考える時間が 30 秒あります。その後『ピー』という発音音を聞いた後に話してください。話すための持ち時間は1分間です。

それでは問題に入ります。問題は1題です。

【問題】

英語の授業で、クラスの友だちに「季節」について話すことになりました。あなたが好きな季節を一つ選んで、それを選んだ理由やその季節にどのようなことをしたいかなどについて話してください。

それでは、30 秒間考えてください

English translation

【Narration】

We will start Section 4. In this section, you will express your ideas based on the theme presented. You have 30 seconds to prepare. Then, start talking after you hear the beep sound. You have one minute to talk.

The following is the theme you are going to talk about.

【Question】

Suppose that you are going to talk about “The Seasons” with your classmates in English class. Please choose one season that you like, and tell them the reason why you chose that particular season. Also, tell them what you like to do during that season.

Now, you have 30 seconds to prepare before talking.

8. 日頃英語を勉強する際、どのように勉強しますか。よく行う学習法があれば教えてください。

[]

9. スピーキングテストを受けてみて、何か感想がありましたら、自由に書いて下さい。

[]

アンケートは以上です。ご協力ありがとうございました。

