論文の英文要旨	
論文題目	Problem-handling Strategies for Non-Face-to-Face Listening Comprehension
氏　　名	WANG, JueiChi

　　　　The purpose of this research was to investigate the use of listening strategies in the listening comprehension process by considering the variable of time in listening activities, and to clarify differences between experienced and inexperienced listeners. Using experimental teaching materials with similar vocabulary difficulty, utterance speed, and length, but with different styles—two narrative and two explanatory sentences—I conducted a questionnaire survey with 56 Japanese as a Foreign Language (JFL) learners along with a "retelling" interview in order to examine problem-handling strategies in non-face-to-face listening from two perspectives: conscious/intended and actual use. I analyzed the conscious/intended use of listening strategies by JFL learners from the questionnaire survey and the actual use of listening strategies from protocol data. Additionally, using a flow chart of the comprehension construction process regarding listening strategy problems, I thoroughly analyze the process starting from hearing the speech to the range of test takers' grammatical problem areas, the personal traits of the test takers, their problem-solving strategies, and, finally, the resulting comprehension. This dissertation is comprised of seven chapters, the abstracts of which are described below.

　　　　In Chapter One, I describe the purpose and significance of this research while touching on its intellectual context. In addition to clarifying differences between skilled and unskilled listeners, this dissertation considers the following three lines of inquiry.

Inquiry I: Can we detect differences between skilled and unskilled listeners regarding the conscious use of listening strategies? If so, what are those differences?

Inquiry II: Can we detect differences between skilled and unskilled listeners regarding the actual use of listening strategies in listening comprehension activities? If so, what are those differences?

Inquiry III: Can we detect differences between skilled and unskilled listeners regarding the process of constructing understanding and handling problems? If so, what are those differences?

　　　　Before clarifying the above three subjects, I will explain the listening comprehension test and the retelling task in order to verify the effectiveness of the retelling task. To do so, I will address the following four sub-lines of inquiry.

Sub-Inquiry i: Can retelling tasks measure listening ability?

Sub-Inquiry ii: Is replicability different depending on the type of text?

Sub-Inquiry iii: Does the extent of replicability very by language?

Sub-Inquiry iv: What things specifically are difficult to replicate?

Chapter Two introduces the definition of learning strategies, their typical classifications, and extant research on learning strategies. I then present an overview of extant research on reading comprehension in fields close to the processes of listening comprehension. Regarding reading comprehension, I will introduce Kintsch's (1998) "model of the developmental process of mental representation" and Levelt's (1989) "utterance processing model." I also review research on strategies for reading comprehension. Finally, I outline research on listening comprehension strategies in the following order: audible language processing, actual use/intended use/instruction etc. of listening strategies, listening strategy chain, construction process of listening comprehension, and listening comprehension and retelling ability.

In Chapter Three, I explain my four previous research projects and the design of the research reported in this dissertation. The four studies are addressed in the following order: research on the intended use of listening strategies, research on listening strategy chain, research on the comprehension construction process, and research on retelling tasks. I determined the design of this research (i.e., research method, subjects, experimental teaching materials, analysis units, evaluation scales, and analysis items) based on the results and remaining issues of these previous studies, all of which I explain in this chapter.

Chapter Four explains the core experiment of this study in the following order: listening materials for experiments, listening tests for experiments, the questionnaire for listening strategies, definitions and classification of listening strategies, procedures for characterization and extraction of listening strategies, breakdown of idea units (IU) and how they are scored, and survey target, research period, and experimental procedure. In the first section of this chapter, I analyze the vocabulary range and difficulty, along with utterance speed, in order to establish criteria for selecting listening comprehension materials for the experiment. I also discuss these criteria in detail. In the second section, I first consider the format of the listening comprehension test before describing format and contents of the experimental listening comprehension test. In the third section, I present my questionnaire's items, structure, and evaluation method in order to investigate the conscious/intended use of listening strategies. In the fourth section, I outline this study's classifications and definitions of listening strategies and give examples extracted from the protocol data. In the fifth section, I introduce the phased of the study focused on transliteration and extraction of listening strategies. In the sixth section, I explain the criteria for dividing the idea units in the experimental teaching materials and the scoring scale for the protocol data. The final section of this chapter describes the subjects of this study, preliminary research, its time-frame, and its experimental procedure.

In Chapter Five, I split the analysis into two stages. In the first stage, 56 JFL learners were surveyed about six items: conscious/intended use of listening comprehension strategies, the number of correct answers on the listening comprehension test, the accuracy of reproduced sentences, the

correlation between the number of correct answers and the accuracy of reproduced sentences, the actual use of listening strategies, and the high and low reproduction of IU. In the second stage, I split the 56 JFL learners into "skilled" and "unskilled" listener categories so I could analyze the differences in their degree of skill. I analyzed these differences along three axes: conscious/intended use of listening strategies, actual use of listening strategies, and the construction process of listening comprehension.

In Chapter Six, I comprehensively analyze and verify listening comprehension in terms of conscious/intended and actual use of problem-handling strategies in non-face-to-face listening comprehension tasks. In particular, I focus on the comprehension construction process, the process of listening to speech and then tracing it to the range of grammatical problems, the characteristics of the test takers, their use of listening strategies, and the resulting comprehension.

In Chapter Seven, I describe the conclusions of this study as well as the subjects and prospects for further research. In the first phase of this project, I extracted 5,250 listening strategies from the protocol data and classified them. As a result, I observed forty novel listening strategies. I also considered the effectiveness of retelling tasks in terms of reproducibility and listening comprehension, reproduction rate and reutterance language, reproduction rate and text type, and points that are difficult to reproduce. In the second phase of this research, I identified 28 skilled and unskilled listeners from a total of 56 JFL learners and analyzed them, revealing important differences in the conscious/intended use of listening strategies. I highlighted 741 "strategy linkages" after clarifying the differences between the range of problem areas and test takers' characteristics from their protocol data. Further, I identified 31 new patterns across four categories from the strategy linkages. Finally, I visualized the process of listening to speech to comprehension by creating a model of the construction of listening comprehension in problem-solving tasks. The conclusions of this study's research questions are summarized below.

Regarding Task I, the "differences among conscious/intended uses of listening strategies," I observed three broad commonalities shared by experienced and inexperienced listeners. First, while they enjoy engaging the Japanese language through electronic devices that allow control over the amount of information one receives, they generally do not like situations in which they interact directly with native speakers. Second, their main clues for guessing overall meaning are vocabulary, context, and background knowledge. Third, they actively use visual information.

On the other hand, one major difference between experienced and inexperienced listeners is that more skilled listeners are likely to make efforts to behave linguistically in a manner resembling native speakers. However, skilled listeners still tend to fail to pay close attention to nuances in vocabulary, conjunctions, grammar, and expressions, or memorizing minor points. Inexperienced listeners draw on their native language when considering the target language and memorize audible information as is while avoiding words that are difficult to express. Finally, unskilled listeners tend not to visualize the information in their heads nor do they attempt to further deepen their memory or understanding of that information.

In Task II, "differences in the actual use of listening strategies," the higher the level of proficiency, the less likely the rate of correct answers was affected by the type of text, whereas the opposite was the case when the listener's proficiency was lower (i.e., the text type exerted greater influence over the rate of correct answers). Second, the replicated (i.e., "retold") language did not affect the accuracy of the replication. Rather, the higher the accuracy of the reproduction of language one (L1), the higher the accuracy of the reproduction of language two (L2). Third, explanatory texts were easier to understand than narrative texts, but in the case of narrative texts, experienced listeners were not affected by the structure of the text, whereas inexperienced were. Fourth, while experienced listeners did not show much difference between their listening comprehension and retelling ability, inexperienced listeners did show a big difference between each ability, their test results varying depending on individual differences and the specific task. Finally, experienced listeners have fewer identifiable problems than inexperienced listeners, can memorize content by attaching images to sounds, and have time to associate things to the given topic, resulting in a greater ability to select or reject specific information as relevant or irrelevant. On the other hand, inexperienced listeners have more identifiable problem areas. They chase comprehension by guessing vocabulary, spend a lot of time and energy on thinking about each problem, resulting in an inability to associate the correct images and sounds in a timely manner, and ultimately fail to fully grasp the overall meaning of the texts.

In Task III, "differences in the process of constructing comprehension," I found the range of problems for experienced listeners to be narrow at the vocabulary level, whereas the range of problems was quite wide for inexperienced listeners at the vocabulary level as well as at the sentence level. Second, experienced listeners' personal characteristics were broad at "over two idea units (IU)," whereas inexperienced listeners' personal characteristics were narrow at the vocabulary level and "one IU" level. Third, both experienced and inexperienced listeners most frequently used the "problem identification to guessing" linkage pattern, but inexperienced listeners tended to rely even more heavily on this linkage pattern.

On the other hand, experienced listeners used a broad variety of linkage patterns, identified problems, and then solved those problems using multiple listening strategies. Fourth, I classify experienced listeners' range of problems, vocabulary level, and range of personal characteristics as "broad" since they were able to use linkage patterns to solve problems, resulting in successful comprehension rates of forty to fifty percent. In contrast, inexperienced listeners' range of problem areas was extensive, their personal characteristics restricted to the "vocabulary level," their main strategy for solving problems being "guessing based on vocabulary knowledge," all of which resulted in a comprehension success rate of approximately ten percent. Additionally, experienced listeners often left unprocessed an extensive range of unrecognized syllables and missed parts of the speech that were difficult to recover. Frequently inexperienced listeners also failed to process a wide range of problem areas, but they nevertheless tenaciously solved problems as well.

The conclusions of the four subtasks on the effectiveness of the retelling task are as follows:

Subtask i: The retelling task can indeed measure listening comprehension. In particular, the higher the language proficiency, the more accurately listening comprehension can be measured. The score of the reproduction task can also be predicted based on the score of correct answers on the test.

Subtask ii: reproducibility differs depending on the text type, with explanatory texts being more reproducible than narrative texts. Additionally, the reproduction accuracy rate is particularly low for narrative texts in which there are many scenes of exchanges between characters and changes in their behavior.

Subtask iii: The language in which the speech is reproduced does not affect the accuracy of the reproduction. Further, the information content generated in the second language (L2) was nearly identical to the information in the first language (L1).

Subtask iv: Regardless of the level of proficiency, there is little apparent difference between easy-to-reproduce and difficult-to-reproduce passages. In addition, test-takers often reproduce the beginning and end of the sentence and nouns with low-level difficulty, regardless of the importance of the information. On the other hand, nouns and verbs with high-level difficulty, nouns frequently used in narrative sentences (e.g., shepherds and thorns) and compound verbs are elements that are difficult to reproduce.

In future research, I will pursue the following topics: One, a survey on recognition and articulation of previously learned pronunciations; Two, further study into the comprehension construction process; Three, consideration of the conscious/intended use and actual use of listening comprehension strategies, as well as the comprehension construction process in problem-solving tasks that were omitted in this analysis; Fourth, a survey of native Japanese speakers. Finally, as a suggestion for future Japanese language education, perhaps the most useful insight discerned from this study is the effectiveness of introducing narrative sentences to encourage learners' understanding and detailed, active generation of more elaborate grammatical constructions. I also hope that the listening strategies, types of listening strategy chains, and models of the comprehension construction process that are systematically categorized in this study will contribute to future research into listening comprehension. Furthermore, even learners with low proficiency may be able to improve their listening comprehension through listening and retelling tasks, which may additionally improve speaking ability. For these reasons, I encourage the introduction of retelling tasks into listening courses for Japanese language education.