



The Three Stages of Coding and Decoding in Listening

Courses of College Japanese Specialty

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Abstract

The main focus of research papers on listening teaching published in recent years is the theoretical meanings of decoding on the training of listening comprehension ability. Although in many research papers the bottom-up approach and top-down approach, information processing mode theory, are applied to illustrate decoding and to emphasize the significance of the existing background information in one's memory on listening comprehension, the formation process of the background information, i.e. the formation process of the "code" or "scheme", is not explained and explored. This papers discusses and explores the three stages in listening comprehension of students of Japanese specialty, that is, the stage of "coding", of "decoding" and of "making notes" and aims at clarifying the inherent characteristics of Japanese listening courses.

Keywords: Japanese listening, Coding, Decoding, Making notes

Many academic papers on listening comprehension repeatedly state and explain that the process of listening comprehension is where the listeners analyze and process the language sound waves transmitted into their brains and then transform those sound waves into information codes; subsequently, the listeners will make notes to those codes based on the lexical meanings and grammatical structures they master. To put it simply, it is a process of decoding. Although many research papers put forward bottom-up approach and top-down approach, the information processing mode theory, the papers do not explain and emphasize the fundamental basis of the decoding, that is, the formation of "codes". This paper analyzes the cognitive and psychological process of students of Japanese specialty when they are listening Japanese and divides the process into three stages. The first stage is coding; the second decoding and the third making notes. This papers emphasizes the significant meanings of coding, does not view listening comprehension process as a mechanical and passive process of receiving information symbols, but rather defines the process as a learning process where students are actively involved, can make selection and are constructing their knowledge trees.

1. The formation process of codes

Each consumption symbol (note) has particular background relationship formed by its own symbol network. The result of the symbolization of hearing makes listening activity not longer just "listening" of the physiology sense, but a kind of information exchange activity. "Listening" becomes the interpretation of symbols (notes). However, what are the "meanings" of the symbols? Who indeed endows the symbols with "meanings" and how? How do listeners interpret the symbols and understand their meanings? Is there any discrepancy in the interpretation? To solve those problems, we must make analysis on the formation process of the codes.

1.1 To expatiate coding from the perspective of semiology

From the perspective of semiology, the process of listening comprehension is indeed a process of recognizing the codes and decoding. Correct decoding depends on the coded information of large volume existing in order in the brains of

human beings. The process of decoding needs to eliminate the pragmatic blocks of foreign culture. "In language acquisition, the acquisition process of a learner on certain category is a process where the principal part sets up parameters for objects, while the setting-up of parameters is based on exterior language stimulus." (Dunkel, 1991 and Feyten, 1991). It is obvious that the said "the principal part sets up parameters for objects" is the process where the listeners decode the sound symbols of listening context. Cognitive psychology compares interior psychological process of human beings as computers: computers receive symbol input, conduct coding, make decisions on the code input and store them, and then output the symbols. This is similar to how human beings receive listening comprehension information. The first step of listening comprehension is to divide the sound information into small units according to pronunciation, vocabulary and syntax. Sometimes, the boundary is not that obvious when dividing the sound information. For example, there are lots of homophony words in Japanese and people have to guess based on the context. Only the common rules will be analyzed in this paper. Small pronunciation unit will all have a code. Let us presume that the information code for the word "flower" is "011010". In listening comprehension process, human beings will instinctively search in their mind for the code "011010" stored in their minds. What is connected to this stored code is the image of flower. Therefore, listening comprehension process transforms the language information codes into material images and then the information transferring process is completed. The Schemata Theory of F.C. Barlett could be applied to explain such process. "For decoding newly input information, the coding relies on the existing information scheme, frame or networks of human beings' brains. Only when the input information is consistent with the scheme, can the information process be completed, that is the process from receiving information, to decoding, to re-organizing and to storing". (Yang and Yi, 2005)

As mentioned in the above, the coding is of two meaning levels. One is the coding for splitting the information and the other is that exists in the brains for a long or temporary period, which, hence, brings about two problems. How do the codes existing in the brains for a long or temporary period come into existence? Some of the language symbols formed by the language information (children) are able to find their matrix, while others could not find their correspondent matrix, which causes that the imagination and images that are connected to the listening comprehension cannot be generated and the blind spots of comprehension appear. The generation process of code is divided into two parts. Some codes formed by the listening comprehension could find correspondent matrix while others become the memory. The part that becomes memory will follow the forgetting rules of memory, remained or missed. Therefore, the more information codes a person has in his or her brain, the wider his or her knowledge is and it is more easier for him or her to understand information transmitted. Therefore, to improve listening level, students need to listen more, practice more and try their best to enlarge the codes related to Japanese notes or information schemata in their brains (F.C. Barlett).

1.2 To explain coding from the perspective of linguistics

It is mentioned in many academic papers that the process of listening comprehension is the process of decoding. "The sound goes into ears in the form of audio frequency, which vibrates the eardrums and is then transformed into nerve pulse which reaches the frontal area of the brain following hearing nerve. The brain analyzes and processes the language waves and transforms them into information codes. The listener applies his or her own lexical meaning and grammatical structure knowledge to make notes. Information codes being given the notes are endowed with true meanings." (Yang and Mo, 2005; Wang, 2004). "Nerve pulse" involves circuit and coding. The "on" and "off" switches shunt-wound in the circuit brings about nerve pulse of different forms and power. These the symbols for the switches, "on" or "off", are the presuming information codes, such as "011010" for flowers.

2. The stage of decoding

Chinese students majoring in Japanese study Japanese without Japanese culture. In addition, most of them start to learn Japanese at the age of 18 or 19. Although Chinese and Japanese are seemingly similar, they actually belong to different language families. It is impossible for students to apply Chinese code systems existing in their brains to interpret Japanese code system input in Japanese listening comprehension. Therefore, students have to re-construct Japanese code system in their brains. Even though students have constructed new language code systems, due to different experiences, cultures and statuses, listening comprehension units of the same code system could still generate different interpretation according to their own conditions. According to the decoding theory of Hall, roughly, the decoding status of students in listening comprehension can be divided into three types.

The first could be defined as complete understanding. Listeners of this type (refer to the students majoring in Japanese) feel that the codes in the listening comprehension (they are actually the codes that the speakers establish in the listening comprehension context under the presumption that the target group is Japanese) are the same as or similar to their "codes". They could completely understand the coding in the listening comprehension context and could correctly transform the speeches of the speakers into images that are easy for them to understand, which shows that the listeners have established the information code system that is related to the listening comprehension context.

The second type could be defined as uncertainty. Listeners could not find the "codes" that are in full consistence with

the “coding” of the listening comprehension context. They are not sure about the meanings the speakers want to express. If with the supplementation of the following listening comprehension context, their listening status may become the first type. Whilst, if there is no supplementation in the following listening comprehension context, they will develop towards the status of completely failure of understanding, which shows that the listeners have not constructed a perfect information code system that is related to the listening comprehension context.

The third type is defined as complete failure of understanding. Listeners could not find the “codes” that are consistent with the “coding” of the listening comprehension context and do not understand at all the contents of the speakers in the listening comprehension context, which shows that the listeners have not yet established in their brains the information code system that is related to the listening comprehension context.

After analysis on the differences of the formation of listening comprehension abilities of students, it is found that “to construct comparatively perfect Japanese code system” is the key to improve students’ listening ability. “To construct comparatively perfect Japanese code system”, students must listen more and practice more. The accumulation of Japanese knowledge of learners (especially, the familiarity on Japanese vocabulary, common phrases, common syntax) prompts their knowledge structure. When the knowledge comes to be perfect, the cognitive structure and ability of Japanese listening will have a substantive improvement.

3. The stage of making notes

Listening comprehension is a process of listening and comprehension. “Listening” is a passive act while “comprehension” is a subjective and active psychological process. The active and positive psychological process is related to self-judgment and selection. While the judgment and selection of individuals is based on their culture experience. Therefore, cultural differences must be mentioned here. Because different peoples have long been lived in different cultures, traditions and atmospheres and have formed special aesthetic customs of their own, which build up particular aesthetic “receiving blocks”. To put it other way, because of different social and cultural environments and psychological structures and that the detailed conditions determine human beings’ aesthetic value tendency, culture differences are formed among different peoples.

In listening comprehension process, listeners compare the independent language meaning unit with the information stored in their brains and apply their knowledge on lexical meaning and grammatical structure stored in their brains to make notes. After the notes are made, the information is meaningful. However, due to cultural difference in the sub-consciousness of listeners, the information, after notes are made on, obtain different meanings. Therefore, the meaning of the speech after the notes are made may not be in consistent with the original meaning of the speaker. Chinese students majoring in Japanese are confronted with two kinds of cultural differences when having Japanese listening comprehension class. One is culture difference between Chinese and Japanese culture. Students shall not use Chinese cultural knowledge system that have already been established to interpret language ideas of foreign cultural knowledge system. The other is that students come from different culture regions and there is individual cultural difference among them. In Japanese listening comprehension, the influence of regional cultural difference is not the influential element.

At this stage, teachers shall focus on introducing the social and cultural background of Japan to students. It could be seen from the characteristics of “top-down” information processing mode that the knowledge obtained previously is the key for decoding. Cultural difference between China and Japan is large and the difference brings about different languages, living customs and behavior rules. To improve Japanese listening ability, one must understand and could use Japanese social and cultural knowledge. Many students lack knowledge in cultural background of Japan and do not master the imagination meanings, social meanings and pragmatic rules of some of the Japanese vocabulary. Or, under the condition that they do not have a full understanding of Japanese cultural background information, they misunderstand the meanings of the speakers. Hence, comes the situation that the listeners understand each word but still do not understand or misunderstand the meanings of the speakers.

4. Conclusion

Thought analysis on the three stages in listening comprehension process, it is understood that Japanese listening course integrates human beings’ ability in memory, summing up, forecasting, and language transformation. With clear understanding of the nature of Japanese listening course, teachers will be able to avoid blindness in designing Japanese listening course and in teaching practices, to change from the single teaching mode, i.e. vocabulary teaching, tape playing and answer checking, and to organize Japanese listening teaching activities systematically and gradually with aims and key points by following scientific teaching mode of listening system decoding rules.

Let us take the activities before the listening comprehension as an example. First, the students shall be informed of the knowledge related to the listening comprehension context, the information combination of different contexts, relevant culture background, the aim of the listening, and the to what extent that the students should master the listening comprehension context. Such activities will be conducive to helping students to forecast before they listen and to listen

to the context with aim, which will get twice the result with half the effort in training listening comprehension ability.

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