

## Comparison of the Use of Background Knowledge between Intermediate and Low Level Students of Listening

Masahiko GOSHI\*<sup>1</sup>

### Abstract

Listening instruction has become increasingly important although it is the least researched area of teaching. With the advancement of technology, it has become useful to use video materials for listening. The purpose of this paper is to discuss an effective method by examining the use of background knowledge by the learners of listening when they are presented with two different modes of materials; an audio-only material and a video material. This action research was done during regular listening classes at two universities. Two different levels of university students were compared by examining their information written on their mind maps prior to listening and the answers to comprehension questions with the two different modes of materials.

The results indicate: 1) motion pictures are more motivating than audio only materials, especially for low level students, 2) low level students still need bottom up listening exercises, and 3) intermediate students need exercises to make use of visual clues for better comprehension.

### 1. Introduction

The use of video materials in the foreign language classrooms has been long implemented. Typically, learners watch a video and answer comprehension questions, learn useful vocabulary and expressions, and/or dictate part of a segment, etc (Discover Great Britain and Ireland, 2008). Most of these typical exercises are merely borrowed from those used in lessons using audio-only-materials. This lack of innovation could be because listening is the least understood and least researched area (Vandergrift, 2007). Do the learners make use of visual images when they watch video materials? This paper examines if the use of mapping activated by watching visual images of listening material helps the listener for their comprehension (Oxford, 1990). Also it investigates how two different levels of students make use of their own maps in comprehending listening materials.

Nishikawa *et al.* (2002) studied the effects of visual images and learners' use of strategies when video materials are used. They used a news story with visual images (video) and audio only (tape) and examined their learners' comprehension using a fill-in type summary test (in

Japanese) and a fill-in type dictation test. They found that "1) visual information closely matching the speech information enhances learners' comprehension more than visual information that does not match speech information, and 2) low-level learners tend to rely on visual images to get information while watching news material more than upper-level learners." (p. 150). Imai *et al.* (2004) carried out a similar study, but with videos and still pictures. Their findings were: "1) visual information from motion pictures and still pictures help learners understand contents of the material in listening comprehension if the visual information adequately matches the audio information, and 2) if the visual information does not match the audio information, it hinders learners' listening comprehension unless they understand the contents only from the audio information." (p. 124).

### 2. Study

#### 2.1 Participants

There were two groups of university students involved in this study. Group 1 majors in marine science and Group 2 in English communication. There were 19 students in Group 1 and 31 in Group 2. There were eight students who missed

either one or both of the lessons, so their data were deleted. The students who participated in this study were all freshmen.

To compare the learners' listening ability, a simple listening placement test (Skills for Success Listening and Speaking, Oxford University) was administered. The results are shown in (Table 1).

**Table 1:** Results of the Placement Test

	Participants	Major	Average	Standard Deviation
Group 1	19	Science	23.72	4.61
Group 2	31	English	27.45	6.03

## 2.2 Materials

The materials that were used in this study were retrieved from National Geographic website (<http://video.nationalgeographic.com/video/player/?source=4001>). "Columbus" is about 19 minutes long, and "Egypt" lasts for about 13 minutes. Because "Columbus" was much longer than the other one, the first half of the film was used in this study.

## 2.3 Procedures

In order to investigate how learners made use of visual information, two different listening procedures were compared. The study was carried out during two ninety-minute lessons (June, 2011).

Two groups of university students were involved (Group 1 and Group 2) and two listening materials (Columbus and Egypt) were used in this study. They listened to one material with audio only and the other with motion pictures (See Table 2).

**Table 2:** Materials and methods

	Columbus	Egypt
Group 1	with motion pictures	audio only
Group 2	audio only	with motion pictures

In the first lesson, the learners were asked to make mind maps regarding the contents of the materials before they listened. When an audio-only material was used, the title was given, whereas when an audio material with pictures was shown, the title was not given. The title "Egypt" (audio only) was given to Group 1 and the learners were asked to make maps, for example, they put down what they knew about the topic and whatever questions that came up. When

"Columbus" (audio + motion pictures) was presented, the students in Group 1 made maps without receiving the title. Likewise, the title "Columbus" (audio only) was given to Group 2 and the learners made maps regarding the topic, and put down anything that came to their minds. When "Egypt" (audio + motion pictures) was shown, the students in Group 2 made maps without the title. After that, each group of students listened to each material three times and answered the comprehension questions.

In the second lesson, the students were presented with listening materials with motion pictures. Group 1 watched "Columbus," and Group 2 watched "Egypt." At first, each group watched their materials with no audio and then was asked to make maps. Finally, they answered comprehension questions by watching the materials with narrations three times.

The students' maps and answers to the questions were compared both qualitatively and quantitatively between the one with audio only and the one with motion pictures.

## 3. Results

### 3.1 Comprehension Questions

To gauge how much the learners were motivated to listen to the materials and to answer the comprehension questions, the number of answers they responded to (whether correct or wrong) was tallied. There were eight comprehension questions for "Egypt" and nine questions for "Columbus" (See Appendix 1). For both groups, when they listened to the materials with motion pictures (the first time round, they watched the material without the sound), they tried to answer more (See Table 3).

**Table 3:** Average Number of Answers Responded

	Columbus	Egypt
Group 1	63.7% (with motion pictures)	48.7%
Group 2	71.0%	77.8% (with motion pictures)

The percentages of the correct answers show similar results, too (See Table 4). For Group 1 (science major), out of eight questions, the average number of correct answers was 0.89 (11.2%). For the non-English major students, audio-only material (Egypt) seems very difficult. On the other hand, when they answered nine comprehension questions for Columbus with pictures, the average number of correct answers was 3.57 (40.4%). This increase could be

interpreted that because they had a chance to see the pictures, they were able to activate appropriate content schema and to understand the content better than the audio-only material.

For the English major students, the difference was small; however the percentage of correct answers was slightly higher when they watched the material with pictures (Egypt).

### 3.2 Students' Maps

The students' maps were examined to see how they anticipated and schematized the listening materials and if the information on their maps helped them in listening.

#### 3.2.1 Audio-only materials

For Group 1, "Egypt" was used and the students created maps with the introduction of the title. Most of their maps consisted of random lists of words (mostly in Japanese and some in English) that they came up with. Out of 19 students, there was one student who did not put down any words or phrases. Some of the common words that the students put down were "pyramid(s)," "desert," "sphinx," "Tutankhamen," "the Nile River," and "mummy" most of which were written in Japanese. The average score was 11.2% (0.89 out of eight questions). It seems that for these low level students, activating the background knowledge that they possess did not help their comprehension of the material given.

For Group 2, "Columbus" was used and, likewise, the students created maps with the introduction of the title. Because their level of English was much higher than that of Group 1, their maps consisted mostly of English sentences, either in statements or questions. This can be explained by the facts that they have better control of English than those of Group 1 and the story was familiar to the students.

#### 3.2.2 Audio with motion pictures

One of the purposes of this study is to examine if the use of mapping activated by watching visual images of listening material helps the listener's comprehension.

Group 1 showed a substantial difference in the number of the responses that the students tried to answer between the audio only material and the motion pictures (visuals with the sound). When they listened to the audio only material (Egypt), the average number of their responses was 3.89 per person (out of eight questions; 48.7%), while for the motion pictures (Columbus), the average of their responses was 5.74 per person (out of nine questions; 63.7%). Of all the descriptions they made on their maps, 28.6% was in English

for Egypt while 63.2% was in English for Columbus. This suggests that the motion picture motivated the students to respond to the questions although the average score of the questions was still very low (See Table 4).

**Table 4:** Percentages of Correct Answers

	Columbus	Egypt
Group 1	40.4% (3.57) (with motion pictures)	11.2% (0.89) (audio only)
Group 2	48.4% (4.35) (audio only)	49.2% (3.94) (with motion pictures)

There were two questions for which the images could have assisted in comprehending. They were Q 3 – What did educated people in Europe know? and Q 4 – What did he study?. The scene showed a picture of a man holding a globe, the earth rotating in space and a world map. There were six students who jotted down "earth," "globe," or "world map," but none of them were able to answer correctly.

The maps of Group 2 indicated different results from those of Group 1. This is probably due to their superior ability in English compared to that of Group 1. Most of their descriptions written on their maps were in English; 80.7% for Egypt (motion pictures) and 97.9% for Columbus (audio only). This group wrote more sentences and questions than words or phrases for Columbus. As for Egypt, 19.9% was either in sentence or question with the remaining either words or phrases. On the contrary, of all the descriptions about Columbus, 61.3% was in statements, 35.5% in questions, and only 8.6% in words or phrases. It seems the topic, Columbus, was more familiar to them than Egypt.

### 3.3. Item Analysis for Group 2

Item analysis for "Egypt" was conducted for this group to examine how they utilized their prior knowledge in listening. Four of the eight questions can be answered by utilizing their descriptions on their maps and/or visuals (See Appendix). For example, Question 1 asked the students to fill in a blank; Egypt is called "the land of \_\_\_\_" (correct answer: pharaohs). Only two students answered correctly. There were four students who put down "pharaoh" in their mappings, two of them in English and two in katakana. Only one of them got the answer correct.

For Question 6, "What is felucca?", eleven students answered correctly. The scene showed sailing boats on the Nile River. Twenty students put down "ship (or sip)," "boat," or "yacht (or yot)" on their mappings. Nine of them got

correct answers. It seems their descriptions might have helped in answering the question.

Question 2: What did ancient Egyptians build along the Nile River? and Question 4: What can you find in the streets of Cairo? can be answered with visual clues. The percentages of the correct answers were 67.7% for both the questions, which were higher than the rest of the questions except Q 8.

#### 4. Discussion

The purpose of this action research is to examine how the two different levels of learners react to the two different modes of listening: audio only material and motion picture material. For the science major students (low level), listening to the audio only material was beyond their level because of lack of their listening ability and of experience in listening to authentic materials such as the ones used in this study, even though the topic was familiar to them. On the other hand, when they listened to the visual material, they showed their willingness to answer the questions. This indicates visual materials motivate the students to listen to the material. However, the fact that the information on their maps of the visual material was mainly in word and phrase forms indicates it did not help their listening comprehension much, although it was mainly in English. One reason that could be attributed to this problem is that because the low level learners had to allocate more attention for decoding incoming information (bottom-up process), they could not allow themselves to understand the material holistically (i.e. main ideas) and/or utilize their background knowledge using top-down process (Field, 2008, p. 132-133, Buck, 2001, p. 7). These results suggest that exercises for those low level students should contain exercises in noticing main points of the story by using visuals, in familiarizing pronunciation of key words/phrases, and in making summaries of materials in English. In other words, those learners need ample amount of bottom up exercises such as shadowing and dictation.

For the higher students, it is beneficial to enhance noticing and connecting key visual segments and audio contents. Field (2008) recommends a non-interventionist approach which “requires teachers to change the persona they adopt in relation to the listening exercise. They need to suppress their instinct to assist; instead, what is needed is a deliberate policy of non-intervention. Instead of assuming that their role is to explain/paraphrase/target, teachers should ensure that the learners do much more of the listening work for themselves.” (p. 41). In this method, it is important for teachers to create a relaxing atmosphere

where students can freely discuss and test their hypotheses, and/or change them, which is rather challenging for Japanese students.

#### 5. Conclusion

Recently listening has become an increasingly important subject in English education in Japan. However, many students feel it is the most difficult of the four skills (Graham, 2006). These particular research results show that using authentic video materials motivates the students to listen to the materials used in this study, and try to understand the contents. Even the low level students showed their willingness to answer the questions despite the difficulty of the material. However, using the learners’ background knowledge prior to actual listening seemed not to help their comprehension as much as expected, especially for the low level students. For these students, exercises intended to improve their decoding skills should be provided more than top-down exercises, although using skills such as background knowledge and guessing should still be encouraged. The author’s next challenge is to devise a method in which low level students are able to improve their decoding skills and holistic understanding using motion pictures.

#### References

- Berlin, S. and Nakayama, C. (2008), Discover Great Britain and Ireland, Kinseido.
- Buck, G. (2001), Assessing Listening, Cambridge: Cambridge University Press.
- Field, J. (2008), Listening in the Language Classroom. Cambridge: Cambridge University Press.
- Graham, S. (2006). Listening comprehension; The learner’s perspective. *System*, **34**, 165-182.
- Imai Y., Yoshimura M., Nishikawa K., Edasawa Y., and Mine H., (2004), Effects of Video Material on Listening Comprehension: Difference between Motion Pictures and Still Pictures, *Language Education and Technology*, (41), 123-139 (in Japanese)
- National Geographic Web Site, <http://video.nationalgeographic.com/video/index.html>
- Nishikawa, K., Imai Y., Edasawa Y., and Yoshimura M. (2002), Effects of Visual Information in Listening Instruction Using TV News Material: A Preliminary Experiment, *Language Education and Technology*, (39), 149-166 (in Japanese)
- Oxford, R., (1990), *Language Learning Strategies*, Heinle & Heinle Publishers.
- Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching*, **40**(3), 191-210.

## 初級・中級リスニング学習者における背景知識利用の比較

郷司正彦

### 要 旨

リスニング指導は以前にもまして重要になってきているが、その他のスキル（スピーキング、リーディング、ライティング）に比べてその研究は遅れている。このような状況下でも様々な技術の進歩によって、動画を教材として利用することが手軽になってきている。本稿の目的は2つの異なるモードの教材：動画と音声のみの教材に対して学習者がどのように背景知識を利用しているかを検証することによってより効果的なリスニング指導法を考察することである。このアクションリサーチは2大学の通常のリスニング授業で、レベルの異なる学生に異なるモードの教材を使用し、事前にその教材に関するマッピングを作成させ、その後内容理解に関する質問に答えさせ、マッピングの内容と質問に対する解答を質的・量的に比較し、動画の提示方法を検証した。

調査の結果以下の3点が明らかになった。1) 動画教材は音声のみの教材に比べ学習者の内容質問に答えようとする動機を高めた、特に初級レベルの学生に顕著であった。2) 初級レベルの学習者にはボトムアップ練習が依然必要である。3) 中級レベルの学習者には内容理解を深めるために画像をより有効に利用する練習が必要である。

### Appendix

#### Egypt

Name: \_\_\_\_\_ Student No.: \_\_\_\_\_

1. Egypt is called “the land of the \_\_\_\_\_.”
2. What did ancient Egyptians build along the Nile River?
3. What is the population of Cairo?
4. What can you find in the streets of Cairo?
5. How many artifacts are there on display at the Egyptian Museum?
6. What is a “felucca”?
7. What is Giza famous for?
8. How many people visit Giza every day?

#### Columbus

Name: \_\_\_\_\_ Student No.: \_\_\_\_\_

1. When was Christopher Columbus born?
2. Where was he born?
3. What did educated people in Europe know?
4. What did he study?
5. What was the major problem at that time?
6. When did he leave Europe (Spain) to sail west?
7. How many ships did he have?
8. What did Columbus promise when frustrated sailors were ready to rebel?
9. When did they find a land?