Sino-Japanese Effect in the Learning of
Korean Language by Japanese Native Learners

Miki Makino¹ and Seok-Hoon, YOU²

¹Faculty of linguistics Korea University, ²Faculty of linguistics, Korea University
Mikima05@korea.ac.kr, linguists@paran.com

Abstract
This research aims to explore more efficient way of teaching Korean for Japanese learners. In particular, we focus on the effect of Sino-Japanese vocabulary in the acquisition of Korean language by Japanese native learners. Vocabulary learning frequently considered as one of the most important factors in efficient language learning.

In many cases, the so-called Sino-Korean vocabulary stock shared their meanings and pronunciation with the Sino-Japanese one. Sino Chinese characters are ideograms; they have outstanding ability in forming new words, i.e. word-formation. However, the form is abandoned in the process of the Koreanization, and only the pronunciation is retained.

To improve this situation, development of teaching materials and methods of Sino-Korean for Japanese is important. Although previous research mostly claims that the most effective method is to simply write Sino-Korean in Japanese characters, there is little research that addresses these assumptions critically and examines their importance. The aim of this research is to investigate understanding of Sino-Korean words among Japanese-speaking learners of Korean through surveys.

In our survey, the average rate of correct answers to the questions was approximately 30%. However, on many questions, up to 70% of examinees knew the meaning of hints, but only 30% of them could answer the question and correctly identify the word. That is to say, Japanese-speaking learners of Korean often misunderstand the meaning of Sino-Korean words, even if the Japanese and Korean reading of the Chinese character is very similar. Based on these results, we surveyed intermediate and advanced learners. Intermediate learners seem not to be able to use word-formation ability and the result of advanced learners is showed differently person by person.

Keywords
Teaching Korean as a foreign language, vocabulary learning, Sino-Korean, Japanese-native learner, Word-formation

Introduction
Vocabulary learning plays very important role in second language acquisition since words are the most basic factor which makes sentences and it is important to know how many words a speaker can use when we grasp the speaker’s proficiency. Beside, commonness of vocabulary between languages is helpful to learn each language. In many cases, the so-called Sino-Korean vocabulary stock shared their meanings and pronunciation with the Sino-Japanese one. Since Chinese characters are ideograms; they have outstanding ability in forming new words, i.e. word-formation. However, the form is abandoned in the process of the Koreanization, and only the pronunciation is retained. Thus, development of teaching materials and methods of Sino-Korean for Japanese learners is important. If Japanese learners can apply the ability of word-formation of Chinese characters to Sino-Korean words, they might be able to extend the vocabulary much more easily.

This research aims to explore more efficient way of teaching Korean to Japanese learners. In particular, our focus is on the effect of Sino-Japanese vocabulary in the acquisition of Korean language by Japanese native learners. Vocabulary learning frequently considered one of the most important factors in efficient language learning. In this paper, especially, we investigate this issue through survey.

1 Background
According to Ho Chul(2010)’s research, More than 60% of the Korean vocabulary is Sino-Korean. Also Sino-Japanese occupies almost 70% of Japanese vocabulary. Sino-Korean shares many part with Sino-Japanese. For example, the Japanese
sentence (2) below is translation of Korean one(1).

(1) 공약·취임사로 본 대통령 부패인식도, “현 정부 가장 낮아”
(2) 公約・就任辞で見る大統領腐敗認識度、「現政府最も低く」

We can see that there are a lot of words which share common Chinese character in Japanese and Korean.

1.1 Sino-Korean and Sino-Japanese

However, there is a huge difference between these two languages. Japanese use Chinese character for Sino-Japanese. On the other hand, Korean use Hangul for Sino-Korean. In Japanese, since Chinese characters are ideograms, they have outstanding ability in forming new words, i.e. word-formation. For example, thanks to Chinese character, we can recognize many technical terms such as medial terms as (3) below.

(3) 血栓性動脈内膜炎
(Kessensei-Domyaku-Naimakuen)

(4) Thromboendarteritis

Since we can grasp meaning of each letter, Japanese can guess the meaning of this word very easily. However, if this word is English as (4), it might be difficult to grasp the meaning as long as we do not have background knowledge of medical jargon. Then, how about Sino-Korean? Korean use Hangul to describe most of the words. Therefore Sino-Korean words are written in Hangul as (5).

(5) 혈전성동맥내막염
( 혈전性動脈內膜炎)

As you can see in (5), Hangul represents only the sound of Sino-Korean. In other words, Koreanization of Chinese character is retained only in pronunciation and the meaning part is replaced. Therefore, Japanese native learners have difficulty in grasping the meaning of Sino-Korean words even though they originate from Chinese characters.

1.2 Previous research


The second group includes the current researches about Korean vocabulary learning such as, Sang Gak(2006), SunEun Park(2008), and YungHee Lee(2008). YungHee Lee(2008) investigated the Knowledge of Chinese character effect on the students from non-Chinese character use countries such as European. She surveyed the foreign students who study Korean. The survey was excuted twice to each student. Firstly, she let them answer the question which let student change the meaning of Sino-Korean to native Korean word for example Haksuup(학습) can be changed to Baewoo-ta (배우다). Secondly, she had a class to explain Chinese characters and then let students to take the survey. As a result, foreign students could answer more questions correctly in the 2nd survey.

Finally, the third group includes the researches about Korean vocabulary learning for Japanese native learners such as Kanno(1991, 2003), Gyung(2005), HyunChul Kim(2006) and Hara(2008). Hara(2003) investigated the Japanese native learner’s comprehension about Sino-Korean words. In her survey, participants are supposed to answer the meaning of Sino-Korean in a sentence and she also has a questionnaire about whether the participants know the correspondent relationship about Sino-Japanese and Sino-Korean. She found that 60% of beginner, 80% of intermediate and 100% of advanced level learner know that Sino-Korean shares many Chinese characters with Sino-Japanese. However, only 30% of the participants answered correctly to the questions. According her research, Japanese native learners recognize that relationship between Sino-Korean and Sino-Japanese of the word is used frequently in the textbook.

Looking through the previous researches, there are various researches that suggest the importance of vocabulary learning for Korean language for not only Japanese native learner but also students from any other countries. Several papers held the survey about the reception and effect of Chinese character in Sino-Korean, and a lot of method to teach Sino-Korean to foreigners and Japanese native learners. Although, the previous researches mostly claim that the most effective methods is to simply write Sino-Korean in Japanese characters, there is little research that addresses these assumptions critically and examines their importance. The aim of our research is to investigate whether Sino-Japanese can help Japanese speaking learners to understand Sino-Korean through surveys.
2 Examination

2.1 Methodology

This survey comprises with three sections. The first section has questions about participant’s individual information such as age, sex, proficiency level and so forth. We divided participant’s Korean proficiency level based on the grade of language center class or TOPIK score. In language center classes, beginner will be classified to 1st, 2nd grade of language classes or TOPIK. Intermediate can be 3rd and 4th grade of them, and 5th and 6th grade will be high proficiency level.

In the second section, participants are supposed to answer the meaning of Sino-Korean words. we divided this section into 2 parts. The former part has 10 questions about Sino-Korean and they are written in only Hangul. So participants required to answer the meaning of questionnaire in Japanese. we also put 2 hint words on each question. The latter section has totally same contents but they have Chinese Character with each hint. Finally, the third section asks about the reception to the Sino-Korean to Japanese native learners.

2.2 Survey

In part1, we ask the participants some personal information, such as age, sex, level of Korean (TOPIK score, level of class), period of learning Korean and place of start to learn. There is one essay form question for advanced learner about the process to guess the meaning of Sino-Korean words and this question is only for the participant who answered all of questions correctly.

In part2, we ask them to answer the meaning of 10 Sino-Korean words in Japanese and we put 2 hints on each questions. we choose question words and hints by considering the conditions below:

1. Words must be unknown to beginners.
2. Be able to create by combining words that they learned in textbooks.
3. Hints must be known to many of beginners.

In order to investigate validity of the survey, we held pilot test in the language center in Korea University.

3 Pilot test

3.1 Pilot test 1

3.1.1 Overview

To make questionnaire, we picked up Sino-Korean from Korean textbook of Korea University "Fun! Fun! Korean" level 1 and 2. Using these words we make words that are not in these textbooks, we examined 13 Japanese participants who learn Korean in language school or graduated from language school in Korea. There are 10 beginners and 3 advanced learners. Beginners are the students who have just finished 2nd or 3rd grade of the language school and advanced learners are graduate students in Korea University.

3.1.2 Procedure

This survey is divided into 2 steps. In the first step, the participants are supposed to answer the question without the hints and secondly we show them the hints. The questions which they could answer correctly in the first step should be excluded from the observation. And the second step will be an object of the analysis.

3.1.3 Results

In 2nd part of the survey, advanced learners answered all of questions correctly. On the other hand, the percentage of correct answer of beginners is relatively lower. The highest percentage of correct answer was 50% in Q5. And the lowest percentage was 10% in Q7 and Q8. (figure1) The average percentage of correct answer is 29%.

Looking through the result, it is hard to say they answered these questions well. Focusing on Q5, 명소, it seems that they could answer correctly because the pronunciation of this Sino-Korean words is similar to Japanese one. Considering this result, Sino-Japanese seems to be helpful for intermediate learners to guess the meaning of Sino-Korean words. Besides, focusing on the
relationship between the percentage of understanding the meaning of hints and rate of correct answers of Question words as shown in Table 1, we can realize an interesting point.

**Table 1:** Rate of understanding the hints and correct answers of Question words

<table>
<thead>
<tr>
<th>Hints</th>
<th>hints understanding</th>
<th>correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>연극</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>설명</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>은퇴하다</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>직장</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>발표</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>반대</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>과서</td>
<td>50%</td>
<td>30%</td>
</tr>
<tr>
<td>음식</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>장소</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>유명하다</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>과자</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>음악</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>유적지</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>산업</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>응원하다</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>적당하다</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>관광하다</td>
<td>50%</td>
<td>30%</td>
</tr>
<tr>
<td>경찰</td>
<td>80%</td>
<td></td>
</tr>
</tbody>
</table>

In question 1, even though 70% of participants know the meaning of the hints, most of them could not answer correctly. Same phenomena also can be seen in question 3, 4, 5, and 10. These show us that even if intermediate learners know the meaning of Sino-Korean, they cannot understand meaning of words that they do not know. Thus, from this result, it seems that beginners are not good at using the ability of word formation to Sino-Korean words. However, if they have Sino-Japanese which corresponds to Sino-Korean, they seem to be able to apply word-formation ability to Sino-Korean.

This pilot test show us the beginners misunderstand the meaning of Sino-Korean words even though they share same Chinese character in each word. In other words, in the current situation, beginners cannot grasp the Sino-Japanese which correspond to Sino-Korean even though they know the meaning of the words.

### 3.2 Pilot test 2

This time, we extended level of participants and questionnaire. The aim of this pilot test is to investigate whether intermediate and advanced learners can guess the meaning of Sino-Korean words by using word-formation ability.

The participants of this survey are 8 intermediate learners and 11 advanced learners who study Korean at Korea University language center. And the contents of the survey are almost same but we changed the questionnaires of part 2 in the pilot test 1. we picked up Sino-Korean words from “Fun! Fun! Korean 1-6”, combined each Chinese Characters and made words which the participants might not know. We set up 15 questions, question 1 to 5 are made of the words in “Fun! Fun! Korean” 1 and 2, question 6-10 are 1st to 4th grade of the textbook, and the last 5 questions (question 11-15) are made of 1st to 6th grade textbooks.

### 3.2.1 Procedure

As in pilot test 1, this survey is also divided into 2 steps. In the first step, the participants are supposed to answer the question without the hints and secondly we show them the hints. The questions which they could answer correctly in the first step should be excluded from the observation. And the second step will be the object of the analysis.

### 3.2.2 Result

The result is quite different between intermediate and advanced level. In intermediate learners, the rate of correct answers in step 1 was low comparing with advanced learners’ one. However, the rate of correct answer increased dramatically in the step 2 (Figure 3).

![Figure 3: rate of correct answer in step 1, 2 (INT)](image-url)

On the other hand, considering this result in each participant, they seem not to be able to use word-formation ability constantly. In advanced learners, they seem to be able to answer without the hints (Figure 4). However, through individual results, we can see that the ability of
word-formation seems to be different in each participant.

We analyzed percentage of each type of answer in the step2. In step2, the participants refer 2 hints to answer the question. We divided the answers into 5 types based on whether they understand the meaning of hints and they could answer correctly or not.

Type 1 (AO): to know both of the hints and answer correctly.
Type 2 (FX): to know only former hint and could not answer correctly.
Type 3 (LX): to know latter hint and could not answer correctly.
Type 4 (AO): to know both of the hints but could not answer correctly.
Type 5 (NX): do not know both of the hints and could not answer correctly.

Here, Type 2, 3 and 5 should be excluded from object of the observation because participants cannot apply the word-formation ability in this situation. Thus, in this survey, we will focus on the type1 and type4. Type 1 seems to be able to use the word-formation ability. On the other hand, type 4 seems that they cannot use word-formation ability.

Figure 5 shows the percentage of answers in each type. It can be seen that they have both type of 1 and 4. In other words, their ability of word-formation has not acquired yet. However, they seem to start to use the Sino-Japanese information to guess the meaning of Sino-Korean word.

On the other hand, advanced learners have only a few cases of Type 1, 2, 3, 5 in step2 and most of the answers are Type 4 as shown in figure 6.

Merely with these two results, it seems that intermediate learners can show better word-formation ability than advanced learners. Yet, individual tests result accounts for contrary fact.

4 Conclusion

This paper discuss about word-formation ability on the level basis through the examination. Beginners have difficulty in applying word-formation ability. Intermediate learners are able to guess Sino-Korean words but, not able to apply this ability to all of the words. The word-formation ability of advanced learners greatly varies person by person. These results represent that the education in intermediate level and usability of word-formation ability in Sino-Korean have close relation.

We need more researches on reason(s) of contrary test results of the advanced learners. For example, as for the learner No. 3 (not answered to all of the questions) and the learner No. 18 (answered all of the questions) in Figure 7, their writing, reading, speaking, and listening abilities can be examined in order to check the relation between the word-formation ability and the language proficiency.

References