The Effect of Japanese Loanwords on Written English Production
- A Pilot Study
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Abstract

This paper will briefly survey the literature regarding the effect of English loanwords in Japanese on learning English. It will be seen that the bulk of empirical evidence shows that English loanwords in Japanese assist the learning of their related borrowed words. However, there is a gap in the literature regarding learners' production; if learners were to prefer borrowed words to non-borrowed words, this also would be evidence that borrowed words are intrinsically more learnable. Thus this paper will present a pilot study of learners' written output that indicates that learners may prefer borrowed words to non-borrowed words across various levels of vocabulary.

外来語と学習者の筆記英語におけるアウトプット

この論文は英語学習における日本語中の英語外来語の効果に関する研究を要約します。日本語中の英語外来語が関連のある借用語を学ぶ手助けになると言う経験上の証拠の大部分がこの論文に見られるでしょう。しかし、過去の研究の中に L2 の学習者のアウトプットはあまり分析されていません。例えば学習者は英語借用語を好むことがあれば、英語借用語の習得しやすさをしめす。この論文は学習者の筆記アウトプットのパイロットスタディであり、日本人の学習者は英語借用語を実際に好んでいることを見せます。
Introduction

The argument that loanwords in Japanese are of great detriment to learners of English has largely been based on observations of errors, and often evidenced with anecdotal accounts (e.g. Sheperd, 1996; Simon-Maeda, 1995). There is little empirical evidence presented, only descriptions of gross, superficial features of produced language. However, researchers such as Ringbom (1987) believe that a focus on what learners cannot do (e.g. errors) is not an appropriate way to approach cognates. Three key points come to mind regarding the relationship of Japanese learners of English, their L1 loanwords, and their learning of the related borrowed words (i.e. the English source word a loanword is based upon):

Learners’ Perception of Similarities Between L1 and L2

To realize the benefits of cognates, cognate identification must occur, consciously or unconsciously. In more clinical terms, learners must decode orthographic or phonological properties of an L2 target word well enough to perceive a connection with the L1, and then access that lexical entry. Meanwhile, the process of learning an L2 that shares the same writing system differs from learning an L2 with a different one. On the one hand, because loanwords appear in Japanese with a special syllabic system, *katakana*, Japanese learners are quite aware of which L1 words are foreign-based. On the other hand, the rephonalization and rendering of English into the Japanese script is a barrier to recognizing relatedness in the original borrowed words in English, at least initially. For instance, while Japanese are quite familiar with *ekizochikku*, they might not recognize *exotic*.

However, Uchida (2001) showed that junior high subjects were quite capable of finding connections between Japanese and English. They were able to identify the L1-L2 correspondences of about half the unknown L2 words; Uchida feels this demonstrated the potential of cognates (p. 223) As learners can and do recognize L1/L2 links -- perhaps even better with cognate focused practice -- the question turns to the effects of these perceived similarities.

The Effect of English Loanwords in Japanese Upon English Vocabulary Learning

Numerous studies have shown the generally positive effect of cognates on various aspects of word knowledge and learning situations. Yoshida (1978) found that English
loanwords in Japanese helped a Japanese boy learn English words more quickly at his nursery school in America because of their similarity as cognates. The cognates were particularly helpful in enlarging his receptive vocabulary, by assisting him in comprehending new English items. Presented with 22 English borrowed words, he comprehended 19 words such as table (teeburu) and orange (orenji). Regrettably, the boy’s pronunciation was not always recognized by English speakers because some of the borrowed words were pronounced using the Japanese sound system. While Yoshida’s study dealt with the oral production of a young child, other studies have focused on Japanese, college-level learners of English.

R. Hashimoto (1992) found evidence that English loanwords in Japanese do not impede the mastery of spoken English and may be an aid in some cases, especially for word recognition. In a listening test, she found that subjects had an easier time with distinguishing borrowed words than non-borrowed words. Four of the six highest recognition percentages were for loanwords.

It would appear that even though loanwords undergo phonological change to assimilate to the Japanese sound system, many are still recognizable to Japanese students of English (p. 89).

In a pronunciation test, the results were “similar though less pronounced” (p. 89).

C. Hashimoto (1993) dealt in particular with the influence of loanwords on the spelling accuracy of the related English words. Her subjects were Japanese ESL students studying in the United States. She found that it was generally easier to spell borrowed words than non-borrowed words. She also found that the correct-spelling rate increased in proportion to the word frequency in English, and that knowledge of word meanings helped the subjects to spell words correctly.

Brown & Williams (1985) tested whether students, on hearing an English word, comprehended the word better if it was borrowed. The level of test vocabulary was relatively easy -- at or below the 2,000-most-common-word level of a Japanese English learners’ dictionary. They concluded that the EFL students, when they heard English words, understood the meanings of borrowed words better than non-borrowed words. Remarkably, although scores were better for all borrowed words than for non-borrowed words, students did better when not told that the correct responses would be borrowed
words. Altogether, students scored 3% and 5% better on borrowed words respectively (1985, p. 140).

Kimura (1989) found that both Japanese EFL and ESL university students could select the correct meanings of borrowed words better than for non-borrowed words. Two-thirds of the tested borrowed words were chosen from the most common 908 words of English, and one-third from less common words, and non-borrowed words were selected to be comparable in level to the borrowed words. Both groups scored about five percent better for borrowed words over non-borrowed words, as in Brown & Williams (1985). Kimura further determined that English loanwords might even assist acquisition of the correct range of meanings of English words -- leading to a native-like intuition -- for ESL learners but not necessarily EFL learners.

Daulton (1998) focused on the written recall of borrowed words versus non-borrowed words in a blank-filling format, while Brown & Williams (1985) and Kimura (1989) had compared the recall of items at a level roughly corresponding to words taught in junior-high schools. However, Daulton’s experiment included two additional levels of vocabulary difficulty: high school and university. Although replicating the results of the previous studies at a lower-level of vocabulary, the most remarkable results were discovered in the higher difficulty levels, using both an easier measure of at least a phonetically acceptable spelling (e.g. *kat* for *cat*), and a stricter measure of correct spelling. Borrowed words at the high-school level were found to be around four times easier than non-borrowed words, and borrowed words at the university-level 10 times easier. As in C. Hashimoto (1993), Daulton also found that subjects were better able to spell English words corresponding to loanwords.

Japanese Learners’ Production of Borrowed Versus Non-borrowed English Vocabulary

Production is usually held to be the hardest skill to master, and thus the last to appear. If Japanese were to prefer borrowed words over non-borrowed words in the English they produce, this would be evidence that cognate pairs are pushing borrowed words into production -- thus facilitating acquisition.

In a cloze test, Brown (1995) found that Japanese EFL learners were clearly more comfortable selecting borrowed words than non-borrowed words. That is, they choose a borrowed word almost half of the time, although there were three other logically and grammatically possible options available. He calls this the “borrowed word recognition
phenomenon,” and posits that loanwords are a “latent English vocabulary base.” Beyond this single study, the question of whether Japanese prefer borrowed words has not been thoroughly explored.

**Method**

There is a gap in the literature regarding Japanese students' actual English production, and whether borrowed words make it to production disproportionately. An examination of students' written output would clarify whether learners find borrowed words easier to use than non-borrowed words. If intrinsic difficulty were controlled for, then conclusions could be drawn from the ratio of borrowed words to non-borrowed words in students' writing.

**Subjects and Task**

The subjects were eight sophomore and senior students at a Japanese university. Although Economics majors, they were enrolled in an “advanced” English class. They were asked to write a long paragraph describing the face of someone they did not personally know, and to imagine that person's character based on his or her features. This particular topic seemed generally enough to allow a broad range of vocabulary use. They were allowed to do the task at home, so time was not a constraint, and utilizing a Japanese/English dictionary was possible.

**Controlling for Level of Vocabulary**

In order to draw valid conclusions based on a comparison of the number of borrowed and non-borrowed words in production, it is necessary to control for the intrinsic difficulty of the vocabulary. In this study, intrinsic vocabulary difficulty was controlled for by using the VocabProfile (VP) computer program, which performs lexical text analysis. VP takes any text and divides its words into five categories by frequency: (1) the most frequent 1000 words of English, (2) the second half of the first 1000, (3) the second most frequent thousand words of English, i.e. 1001 to 2000, (4) the 570-word Academic Word List (AWL; Coxhead, 1998), and (5) the remainder which are not found on the three lists. After VP had divided the words produced by the subjects by level, it was then possible to make direct comparisons of the number of borrowed words versus non-borrowed words at each level.
Results

Although the results varied by level of vocabulary, in general, they showed learners’ preference for borrowed words in their writing. The data is summarized in Table 2 and explained below.

Table 1: Lexical Text Analysis of Written Corpus

<table>
<thead>
<tr>
<th>word level</th>
<th>number of types</th>
<th>number of tokens</th>
<th>% non-borrowed types</th>
<th>% borrowed types</th>
<th>% non-borrowed tokens</th>
<th>% borrowed tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 1000</td>
<td>52</td>
<td>99 /67*</td>
<td>21.2%</td>
<td>78.8%</td>
<td>22.4%*</td>
<td>80.1%*</td>
</tr>
<tr>
<td>500 to 1000</td>
<td>35</td>
<td>44</td>
<td>20.0%</td>
<td>80.0%</td>
<td>25.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>1001 to 2000</td>
<td>18</td>
<td>23</td>
<td>50.0%</td>
<td>50.0%</td>
<td>42.9%</td>
<td>61.1%</td>
</tr>
<tr>
<td>AWL</td>
<td>7</td>
<td>7</td>
<td>57.1%</td>
<td>42.9%</td>
<td>57.1%</td>
<td>42.9%</td>
</tr>
<tr>
<td>&quot;Off List&quot;</td>
<td>21</td>
<td>24</td>
<td>47.6%</td>
<td>52.4%</td>
<td>43.5%</td>
<td>56.5%</td>
</tr>
</tbody>
</table>

*After eliminating face and faces.

As the first 1000 (K1) words abound with structure words such as articles and common prepositions, it was decided to examine only content words, i.e. nouns (e.g. actor) and words that also were commonly used as nouns in addition to other parts of speech (e.g. black). Thus, a list of 52 K1 words was created. Of the 52 types (i.e. different words), only 11 were not borrowed words. By tokens (i.e. running words), only 15 percent of the 99 tokens did not correspond to Japanese loanwords. This figure is not so useful because by the nature of the topic -- describing someone's face -- unavoidable words such as face (a borrowed word) were likely to occur frequently. Indeed face and faces occur 32 times in 99 tokens. However, if one were to eliminate these two types, still only 22.4 percent of the 67 tokens were not borrowed words. Among the 41 types related to Japanese, 28 were borrowed words (e.g. all and black) and 13 were members of word families containing borrowed words (e.g. expression (express) and popularity (popular)). Taken together, 78.8 percent of types and 80.1 percent of tokens (not including face and faces) corresponded to Japanese loanwords.

In examining the second half of the K1 words, all parts of speech were considered. There were 35 types and 44 tokens. Eleven of these types present shared the same
word family with another type in this set. Of the 35 types, only 7 were unrelated to Japanese. Of the 44 tokens, only 25.0 percent were unrelated to Japanese. Among the 28 types related to Japanese, 16 were borrowed words (e.g. happy and black) and 12 were members of word families containing borrowed words (e.g. smiles (smile) and expressions (express)). Taken together, 80 percent of types and 75 percent of tokens were related to Japanese.

There were 18 types and 23 tokens in the second 1000 (K2) group. Word family associations existed for four types. Because of the smaller number of types and tokens, all parts of speech from this level on were examined. Of the 18 types, 9 were unrelated to Japanese. By tokens, only 42.9 percent of the 18 tokens were unrelated to Japanese. Among the 9 types related to Japanese, 6 were borrowed words (e.g. angry and charming) and 3 were members of word families containing borrowed words (e.g. cheerful (cheer)). Taken together, 50 percent of types and 61.1 percent of tokens were related to Japanese. At the K2 level and above, the particularly small sampling raises doubts concerning validity. It would clearly have been better to have a larger sampling of these higher-level (lower-frequency) words in the full-scale study.

There were 7 types found at the Academic Word List (AWL) level, with no repetitions. Of the 7 types, 4 were unrelated to Japanese. Regarding either types or tokens, 57.1 percent were unrelated to Japanese. Among the 3 types related to Japanese, two were borrowed words (media and minor) and one (symbolized (symbol)) was a word family member. Regarding all tokens, 42.9 percent of the 7 types and tokens were related to Japanese.

After eliminating erroneously classified types (don't and etc.) and a proper noun (Paris), there were 24 tokens and 21 types to be found among the “Off List” words. Word family associations existed for four types. Likely instances of students referring to dictionaries for vocabulary items to use were found -- profusion and unamiable. In order to obtain more reliable data, clearly further experiments should not allow dictionary use. Of the 21 types, 47.6 percent (10 types) were unrelated to Japanese. Regarding tokens, 43.5 percent of the 23 tokens were unrelated to Japanese. Among the 11 types related to Japanese, 10 were borrowed words (baseball and guy) and one was a word family member (guys (guy)). Taken together, 52.4 percent of the types and 56.5 percent of the tokens were related to Japanese.

Important in understanding the significance of this data is knowing what the original
proportion of borrowed words to non-borrowed words should be at the various levels of vocabulary. The percent of BNC 3000 (Nation, in preparation) word families corresponding to common loanwords in Japanese was established in Daulton (in press). These figures, then, can be compared with the occurrences of borrowed words in the students' writing:

Table 2: Equivalent Vocabulary Levels (BNC 3000 versus VP); Percent of Corresponding Word Families (BNC 3000); Percent of Corresponding Word Families (VP) -- By Type and By Token

<table>
<thead>
<tr>
<th>vocabulary level (BNC 3000)</th>
<th>corresponding to (VP)</th>
<th>% of corresponding word families (BNC 3000)</th>
<th>% of corresponding word families (VP) by TYPE</th>
<th>% of corresponding word families (VP) by TOKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>first 1000</td>
<td>1 to 1000</td>
<td>55.5 percent</td>
<td>78.8 percent</td>
<td>80.1 percent</td>
</tr>
<tr>
<td>second 1000</td>
<td>1001 to 2000</td>
<td>49.3 percent</td>
<td>50.0 percent</td>
<td>61.1 percent</td>
</tr>
<tr>
<td>third 1000</td>
<td>AWL (550 words)</td>
<td>31.7 percent</td>
<td>42.9 percent</td>
<td>42.9 percent</td>
</tr>
</tbody>
</table>

Again a pattern where borrowed words are occurring disproportionately to their actual presence within the English lexicon is apparent. Although the comparisons between the BNC 3000 and the VP are not necessarily precise, they likely are rather reliable, as there is generally good overlap between competing frequency lists (e.g. Nation & Hwang, 1995).

Conclusions and Implications for Teaching

The findings in this experimental study suggest that the participants preferred borrowed words in their written output, which corroborates previous studies on the facilitative effect of English loanwords in Japanese. This leads to various implications.

Teachers can serve a useful role in guiding their learners to cognate relationships. Kimura (1989) and others assert that Japanese learners may lack confidence in using the loanword lexicon as a source of help. Cognates are a great tool for learners to approach new vocabulary, but using this skill requires practice, as loanwords in
Japanese may have undergone many transformations. However, after making a prediction about the meaning of a borrowed word, learners should see if their meaning works in the context in which the English word appears, because some words -- such as English *cunning* and Japanese *kanningu* (meaning cheating on a test) -- are actually quite different in meaning. A point often overlooked is that familiarity with the common affixes of English can allow students to fully exploit their knowledge of a word family member to the entire family. Naturally, English teachers, too, must be familiar with the loanwords of the native language of their students.

References


Department of Linguistics.


