To What Extent Do Japanese Learners Rely on English-Based Loanwords in Spoken Production?

マイケル・デルブ Michael Delve

Researchers and teachers disagree about whether loanwords aid or inhibit English acquisition. However, there is little doubt that English loanwords are prevalent in the Japanese lexicon. Indeed, Daulton (2008) found that 45.5% of the 3,000 most frequent English word families correspond with common Japanese loanwords. This extensive resource of English words is potentially very useful to Japanese learners. Whilst learners' listening, reading and written use of loanwords has been investigated, there is an absence of research into its significance to spoken production. A study was conducted to examine the frequency of loanword usage in spoken communication. Results indicate that Japanese learners rely heavily on English-based loanwords, although the accuracy and range of use is limited.

Key Words: Loanwords, Cognates, Vocabulary Acquisition, Language Transfer

1. Introduction: Are loanwords an aid or an obstacle to learning?

1.1 English loanwords as a latent vocabulary

English-based loanwords are prevalent in Japanese. It is difficult to watch TV, scan the advertisements on a train, or listen to a casual conversation in Japanese without noticing a host of English words that have been transformed into Japanese through a "katakana filter" (Daulton, 2008). In fact, research suggests that about 10% of the total Japanese lexicon consists of loanwords (Hogan, 2003; Inagawa, 2014). Furthermore, about 94% of these loanwords derive from English (Stanlaw, 2004; Inagawa, 2014). Whilst there is little doubt about the huge influence English has had on the Japanese lexicon, there is less agreement

about the extent to which these words function as a learning aid for Japanese students of English.

The importance of learning high frequency vocabulary is widely accepted as a key step towards acquiring a foreign language. In fact, the 2,000 most frequent words of English provide about 80% coverage for most texts. This figure is even higher for casual conversation with over 90% of words coming from the top 2,000 words (Nation, 2008, p.8). As a result of these findings, and others like it, many language programs place strong emphasis on acquiring these high frequency items.

However, for Japanese students, even acquiring the first 2,000 most frequent words can seem like an insurmountable challenge. This is because they often

Table 1: Common loanword correspondences to the BNC (adapted from Daulton, 2007, p.15)

Word frequency	Word types corresponding to loanwords	Word families corresponding to loanwords	% word families corresponding to loanwords
First 1000	803 words	548 families	54.8%
Second 1000	634 words	492 families	49.2%
Third 1000	371 words	316 families	31.6%
Overall	1808 words	1356 families	45.2%

perceive their own L1 (native language) to be distant from the English language (Daulton, 2008) and lack confidence in making assumptions about English lexis based on their prior knowledge of Japanese. This means that they could be missing the opportunity to exploit a reservoir of knowledge that they have already acquired in their L1.

The good news for Japanese learners of English is that a surprising number of high frequency English words have a corresponding loanword in Japanese. In fact, table 1 on the previous page shows that about 50% of the first 2000 most frequent words in Japanese have word types corresponding to loanwords.

If learners are able to access this potential vocabulary, this could help them to overcome the important step of acquiring a base vocabulary in English.

1.2 Language transfer

Language transfer is the way in which one language can affect the learning of another language (Ringbom, 2007, p.30). This influence can be positive or negative. In the case of positive transfer, learners can apply at least partially correct assumptions from their L1 (native language) to the TL (target language). Conversely, negative transfer causes inappropriate use of L1 vocabulary or structures. Language transfer is particularly relevant to loanwords because in order for positive transfer to occur, learners must recognize that the vocabulary item in their L1 is very similar to the item in the TL. This can be problematic for Japanese learners because English loanwords often go through a number of changes before being accepted into the Japanese vernacular.

English loanwords undergo a number of linguistic changes to fit the structure of the Japanese language. These can be categorized into phonological, morphological and semantic changes (Uchida, 2001). Phonological changes occur because Japanese has a limited set of possible syllables. For example, Japanese is limited to five basic vowel sounds whereas English has a more complicated vowel system. As a result, it is difficult to pronounce the large number of English vowels in Japanese. This is problematic because it creates homophones in Japanese such as *mattchi* being

used for match and much, and torakku being used for track and truck (Uchida, 2001, p.33). Morphological changes mean that English loanwords are subject to inflectional changes and shortening. The majority of borrowed words in Japanese are nouns. This because nouns are easier to borrow than other parts of speech and do not require a lot of grammatical modification. Other parts of speech require affixes which are the same as for Japanese words. For example, verbs usually need the auxiliary suffix suru, such as, enjoysuru (enjoy + suru) and kissusuru (kiss + suru) (Uchida, 2001, p.41). Shortening means that final syllables are often dropped in Japanese. This leads to words like apartment being shortened to apaato and diamond being shortened to dia (Uchida 2001, p.42). Semantic changes tend to be more complicated and fuzzy. These are illustrated in figure 1 on the next page.

True cognates occur when words share the same semantic meaning in Japanese and English. An example of a true cognate is hoomushikku (homesick). Convergent cognates occur when more than one Japanese word converge on one English word. For example, the word tuna in English has a broader meaning than tsuna in Japanese, which only denotes tins of tuna. To cover the broader meaning of tuna as a fish in English, the Japanese word maguro is needed. Therefore, these two Japanese words converge on one English word. Divergent cognates are the opposite of convergent. One Japanese word is represented by several English words. For example, the adjective *sumaato* (smart) in Japanese can refer to intelligent or slim in English. Close false cognates include words that appear to be similar but have clear semantic differences in both languages. For instance, biniiru (vinyl) means soft plastic as binniru baggu (plastic bag). Distant false cognates do not share sematic features or have distant meanings. For example, konsento (consent) denotes an electrical socket. Japanised English refers to Japanese words that have no equivalent in English. For example, hotchikisu created from B.B. Hotchkiss (inventor of the stapler) refers to a stapler in Japanese (Uchida, 2001, pp.44-46).

Due to the considerable phonological, morphological and semantic changes English words go through when they are accepted into the Japanese lexicon, some researchers argue that loanwords are more

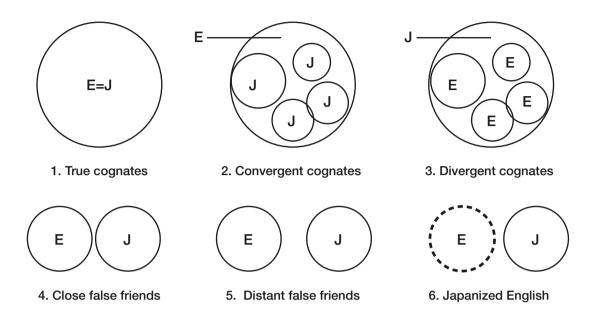


Figure 1: Types of Japanese English loanword cognates (adapted from Uchida, 2001).

of a hinderance than an aid to Japanese learners of English. Ogasagawara (2008) suggests that unless students are made aware of the various transformations that take place, loanwords can act as a "linguistic barrier" to learning. Shepherd (1995) takes a stronger stance and argues that loanwords are "confusing and meaningless" when used by Japanese students to speak English, and have the effect of turning the conversation into a "comedy of errors". The unique ways in which loanwords morph from English into their Japanese counterparts does seem to add another layer of complexity for learners when they try to access the TL word through their L1. However, more research is needed before loanwords are dismissed as a source of negative language transfer.

1.3 Research questions

The purpose of this study was to answer three questions:

- 1. How many English loanwords are being used by our students in spoken production?
- 2. Which loanwords are being used most frequently?
- 3. How accurately are loanwords being used?

2. Method

2.1 Participants

The participants (n=117; 43 male, 74 female) were first-year students aged 18-19 at a Japanese university enrolled in a compulsory 15-week general English course. They were all native speakers of Japanese who had completed six years of English study at high school and junior high school. The participants' scores on a general proficiency test (TOEIC Bridge) administered prior to the treatment ranged from 104-172. This indicated that they were of pre-intermediate to intermediate proficiency.

2.2 The Instruments

2.2.1 The Data Source

The List of Common Loanwords Corresponding to the BNC 3000 by Daulton (2008) was used to measure loanword usage by the participants. Daulton compiled this list using:

 Motwani's A Dictionary of Loanwords Usage (1991)

- Kamiya's Tuttle New Dictionary of Loanwords in Japanese (1994)
- a corpus generated from the 2001 *Mainichi* newspapers
- · input from a native informant

The selection criteria for this list included loanwords likely to be well known by Japanese speakers and loanwords that were in common usage.

2.2.2 The Speaking Prompts

Two speaking prompts were used in the study. They were designed to encourage students to talk for an extended period of time and be easy to understand for low-level students. 59 participants were given prompt 1 and 58 participants were given prompt 2. The prompts are shown in Figure 2 on the next page.

2.3 Procedure

Data was collected during regular English classes at university. Participants sitting in pairs were divided into two groups. The first group spoke in response to prompt 1. After this group had completed the task, the second group spoke in response to prompt 2. Voice recorders were used to record to the talks. These talks were then transcribed by the researcher and a corpus was created using the software AntConc. Loanword usage in the corpus was identified by comparing the corpus with the List of Common Loanwords Corresponding to the BNC 3000 (Daulton, 2008). After loanwords were identified in the corpus, they were analyzed in relation to the research questions.

2.4 Data Analysis

There were a number of problems encountered transcribing the data. First, in cases where the recording was not clear, these words were not transcribed. Second, due to phonological modifications of loanwords and the low proficiency of the participants in general, it was difficult to reflect the actual pronunciation of words in the transcripts. For example, there were many instances of *but* being pronounced as

butto. It was decided that these pronunciation issues were beyond the scope of this study. If the words were recognized as English by the researcher, they were included in the transcription with standard English spellings. Third, many participants repeated words as they attempted to think of the next sentence or rephrase the current sentence. These repeated words were included in the transcriptions as separate items.

3. Results and Discussion

3.1 Lexical Summary

There was nothing surprising revealed in the lexical summary of the data. About 90% of tokens spoken came from the most frequent 3,000 words. This was to be expected given the genre of the spoken tasks and the proficiency of the participants. Perhaps surprising was the high number of off-list tokens (8.26%), but this can be accounted for by use of proper nouns specific to the participants.

3.2 How many English loanwords are being used by our students in spoken production?

It was clear just by looking at a few transcripts that a large number of loanwords were being used by the participants.

Example transcript (loanwords in bold):

My kind of sports is tennis, watching tennis game is very exciting, but I but I don't play tennis well, but playing tennis is exciting too. But, but tennis is very high cost. Racket and ball shoes is very is expensive. I don't have money so. I have I have played tennis I played tennis in junior high school, but high school, but in high school I didn't play it. Tennis is two kinds; soft tennis and tennis. I played I played junior school is soft tennis. I want to play tennis someday.

This transcript shows that the majority of content words used by the participant are loanwords. It also illustrates the high levels of repetition that was common among many of the participants.

Describe a game or sport you enjoy playing.

あなたの好きなゲームかスポーツについて 述べてください。

You should say:

- · What kind of sport it is
- · Who you play it with
- · Where you play it

Explain why you enjoy playing this game or sport.

Start your talk like this:

"My name is _____ and my student number is ____

When the teacher says "start" try to keep talking for three minutes.

Describe a subject your enjoy studying.

あなたの好きな教科について述べてください。

You should say:

- · What subject it is
- What it is about
- · How you feel about it
- Who is your teacher

Explain why you are interested in this subject.

Start your talk like this:

"My name is _____ and my student number is ____

When the teacher says "start" try to keep talking for three minutes.

Figure 2. The Task Prompts

Table 2: Lexical Summary of Results

Word frequency	Number of tokens	Percentage of total corpus by tokens
1-1000	10,399 (638 types)	85.04%
2-3000	544 (159 types)	4.45%
3-4000	182 (54 types)	1.49%
AWL	93 (30 types)	0.76%
Off-list	1,010	8.26%
Total	12,228	100

Table 3: The borrowed word effect

Word level	Number of borrowed tokens (types)	Number of non-borrowed tokens	Borrowed word effect
1-1000	2184 (246)	8215 (392)	26% (63%)
1001-2000	440 (79)	104 (80)	423% (99%)
2001-3000	97 (30)	85 (24)	114% (125%)
AWL	93 (22)	0 (0)	-

To determine how many loanwords are being used by the participants the borrowed word effect (Daulton, 2008) can be calculated. This is calculated by dividing the total number of borrowed words by the number of non-borrowed words. This is shown in table 3 above.

About half of the most frequent 2,000 words in English correspond to loanwords in Japanese. Therefore, we would expect the borrowed word effect to be about 50%. The results clearly demonstrate a strong borrowed word effect at each vocabulary level.

1-1000 Word Level: Of the 10,399 tokens used at this level, 2,184 were loanwords. This is less than the 50% expected. However, this can be explained by large number of function words that often do not have a Japanese equivalent. Moreover, when we compare word types (number of distinct words), we can see that the borrowed word effect increases to 63%, more than would be expected.

1001-2000 Word Level: At this level the dependence on loanwords rises dramatically to 423% for tokens and 99% for word types. This increase suggests that as lexical difficulty increases, learners rely more heavily on loanwords. In fact, learners are twice as likely to use a loanword than a non-borrowed word at this level of vocabulary.

2001-3000 Word Level: At this level only about 30% of words in the BNC have an equivalent loanword. Therefore, we would expect the borrowed word effect to drop in comparison with the 1001-2000 range. In contrast, the borrowed word effect for word types increases from 99% to 114%. The small sample of language at this level means that care needs to be taken when drawing any strong conclusions, but results suggest that as the participants are stretched to the limits of their lexical knowledge, they do tend to draw heavily on loanword knowledge.

AWL: Interestingly, none of the words from the AWL were non-loanwords. Again, this is a small sample (22 word types), but results again support the view that as lexical difficulty increases, Japanese learners rely more on loanwords in spoken production.

In short, the results of this study demonstrate that the learners prefer loanwords to non-loanwords at all levels of word frequency, but that this preference increases as word frequency decreases.

3.3 Which loanwords are being used most frequently?

Table 4. Most frequent words (loanwords in bold)

Most frequent words		
I	1526	
is	595	
my	362	
and	334	
like	333	
so	326	
very	271	
to	238	
in	214	
play	188	

Not surprisingly, the most frequent words in the corpus are function words. This helps to explain the low borrowed word effect in the most frequent word level. Of the ten most frequent words in the corpus, 5

are loanwords, and *like* is the most frequent content word

Table 5. Most content words (loanwords in bold)

Most frequent loanwords		
like	333	
very	271	
play	188	
school	168	
high	140	
want	115	
sports	110	
when	102	
teacher	87	
baseball	85	

Of the top five most frequent words in the corpus, four of them are loanwords. These words are strongly related to the topics presented in the prompt cards. The results here show that high proportion of content words used are loanwords. Since these content words are strongly related to the prompt materials, it is difficult to make any strong conclusions about which loanwords are being used most frequently because the prompts are likely to skew the data.

3.4 How accurately are loanwords being used?

The concordance lines in table 6 are examples of the usage of *like* in the learner corpus. Whilst the usage of the word is appropriate, the word in only used with one sense – to like someone or something.

These concordance lines taken from the BNC in table 7 show that the word *like* is often used in a range of senses, such as giving examples and showing similarity. The results of this study suggest that while a large number of loanwords are being used, perhaps they are only being used a semantically narrow way. This is an area that requires further investigation.

As expected in this genre of task, there were not many words used from the AWL. Only 22 word types came from this list. It is still interesting to note that all of these words are loanwords. Furthermore, a range of words were used from all AWL sublists. Strong conclusions cannot be made from this small study, but an interesting area for future research

Table	6.	Usage	of	like
-------	----	-------	----	------

studied English for six years. I like I	like English teacher than in high school. He is	
activity twice a week. One, another subject, I	like another subject. It is Japanese. I'm not	
studying Japanese for entrance examination, but I	like teacher, I like teacher, she is Mika Asakawa.	
for entrance examination, but I like teacher, I	like teacher, she is Mika Asakawa. She she's	
gentle and teached me very soft. She I	like I like her very much and I'm	
teached me very soft. She I like I	like her very much and I'm contact with	
'm contact with her now. Final, I also	I also like Chinese, I'm interested in foreign language s	

Table 7. Usage of like from the BNC

he will tell you something about that. Right so I'd	<u>like</u>	to introduce Brenda, ladies and gentleman. And er she
didn't exist or were an expensive luxury. Routine household chores	<u>like</u>	washing cleaning cooking sewing and mending were
Don't you think that a lot of the advertisements are just	<u>like</u>	advertising today, wanting to sell the garments Yes. ra
Again which is full of war time recipes. And you might	<u>like</u>	to look at these later, these later. And erm some
post-war recipe books and I'm sure you know if you'd	<u>like</u>	to look at them after I've finished talking you might ev
One of the things that was popular was that the smaller things	<u>like</u>	rabbit clubs when people could then get food for them
marrow but no eggs or lemons. Goodness know what that tasted	<u>like</u>	!. We used to do erm we used to have erm
dmon and freshwater fish were not rationed but were price fixed and	<u>like</u>	game and poultry, usually became part of the black ec
produced the kettlepan. The kettlepan was erm a sauce- a thing	<u>like</u>	a saucepan with a a kettle that fitted on to the top
coat and a siren suit. And um, if you'd	<u>like</u>	to have a look at this book, Utility Furniture and Fash:
old black stockings. And it showed you how to make things	<u>like</u>	that. Some toys you could get, the German prisoners u
money, people could give them objects, could give them things	<u>like</u>	coffee and things like that Yes. in exchange and they t
give them objects, could give them things like coffee and things	<u>like</u>	that Yes. in exchange and they used to do quite a

Table 8. Usage of economy

I like	economy and Germany. This subj
. This subjects is I started	economy and Germany is when I
e I hope enjoy this subject.	Economy is economy is very int
joy this subject. Economy is	economy is very interesting su
g subject, but I want I want	economy is economy is knowledg
but I want I want economy is	economy is knowledge, use my l
I like	economy and Germany. This subj
. This subjects is I started	economy and Germany is when I
e I hope enjoy this subject.	Economy is economy is very int
joy this subject. Economy is	economy is very interesting su
g subject, but I want I want	economy is economy is knowledg
but I want I want economy is	economy is knowledge, use my 1

would be to test Japanese learners' knowledge of AWL loanwords compared with AWL non-loanwords.

Table 8 shows that whilst students are able to draw on their knowledge of loanwords, there are problems with usage. In this case the word *economy* has likely been used inappropriately in the place of *economics*.

A full analysis of how accurately and effectively loanwords are being used by students is beyond the scope of this small study, but this is another area that needs further investigation. Results suggest that learners need more support to help them use loanwords accurately.

4. Conclusion

The main finding from this study is that participants relied heavily on English-based loanword knowledge during production of a spoken task. Perhaps learners are able to access this knowledge more easily due to positive transfer from their L1. There was a significant borrowed-word effect for participants of this study, and it seems likely that these words supported students during the speaking tasks.

Due to the small size and scope of this investigation, no strong conclusions can be drawn with regards to which loanwords are most frequent, or the accuracy of loanword usage. However, it does appear that most content words produced were loanwords. Furthermore, there were problems with production in terms of range of usage, and appropriacy of the loanwords selected.

5. Limitations of the study

First, both the number of participants (N = 117) and the speech samples were limited. By using speech prompts it is highly likely that this influenced and restricted the range of language that was used. Therefore, the results of this study cannot be generalized to spoken production by Japanese students in general.

Second, due to time limitations, this study did not include an in-depth analysis of the corpus created during this study. More analysis is required to investigate the accuracy of the language being used and if there are any patterns of usage that are common to certain students or to certain loanwords.

6. Pedagogical Implications

Despite the modifications that occur when English words are introduced into the Japanese language, students are readily able to access these words during production the TL. Therefore, as teachers and researchers we should try to find the best way to help learners exploit this knowledge to acquire a base vocabulary in English. This could be particularly fruitful for low-level learners who will be able to gain confidence from the knowledge that

they already know many of the words they need to communicate in basic English.

REFERENCES

- Daulton, F. (2007). Japanese learners' built-in lexicon of English and its effect on L2 production. The Language Teacher. 31.9, 15-18
- Daulton, F. (2008). *Japan's built-in lexicon of English-based loanwords*. Clevedon: UK. Multilingual matters Ltd
- Hogan, J. (2003). The social significance of English usage in Japan. *Japanese Studies*, 23(1), 43-58.
- Inagawa, M (2014) A re-examination of loanwords as an aid for English language learning and teaching. *International Journal of Liberal Arts and Social Science*. 2(3), 13-26.
- Nation, I.S.P. (2008) Teaching vocabulary: strategies and techniques. MA:USA. Heinle Cengage Learning
- Ringbom, H. (2007) The Importance of cross-linguistic similarities. *The Language Teacher*. 31.9, 3-5.
- Shepherd, J. (1995). Loanwords: A pitfall for all students. *The*Internet TESL Journal, 3. Retrieved from: http://iteslj.org/
 Articles/ Shepherd-Loanwords.html
- Stanlaw, J. (2004). *Japanese English: Language and culture contact.* Hong Kong: Hong Kong University Press
- Uchida, E. (2001). The Use of Cognate Inferencing Strategies by Japanese Learners of English (Unpublished PhD thesis). University of Essex, Essex, England.