

Lund University

JAPK11 (Spring term 2020)

Supervisor: Axel Svahn



LUND
UNIVERSITY

Are Loanwords Trendier?

A Qualitative Corpus Analysis on Adjective Collocations of English Loanword

Nouns and their Native or Sino Japanese Pairs in the Japanese Language

Erik Larsson

Abstract

To analyse the behaviour of English loanwords in the Japanese language using corpus analysis is a relatively new field of research. The aim of this thesis is to add to this emergent field by attempting to discover if there are any differences in how English loanword nouns and their native Japanese/Sino-Japanese near synonym pairs are used in contemporary written Japanese. The thesis also tries to explain why the differences that were discovered in the process of the analysis can be observed.

For the purpose of this thesis, an evaluation model was utilised to analyse adjective collocations that modify ten frequently used noun pairs in contemporary written Japanese. The model concerns itself with two main factors: The politeness level of the surrounding context and if a difference can be found in the emotive aspects of the modifying adjectives.

The analysis revealed that English loanword nouns are relatively more likely to appear in collocations where the modifying adjective is projecting a positive image onto the noun compared to the native Japanese/Sino-Japanese noun pairs. The opposite was also revealed to be true, with native Japanese/Sino-Japanese nouns being more likely to be modified by adjectives that project a negative light onto the noun. To conclude this thesis a discussion on the results derived from the analysis is conducted. In this discussion a theory that English loanword nouns are utilised when the writer wants to project a trendy or modern image is presented.

Keywords: Japanese, loanwords, loanword pairs, *gairaigo*, *kango*, *wago*, emotive adjectives, collocation analysis, corpus

Acknowledgements

I would like to thank Axel Svahn for his guidance as a supervisor during the process of writing this thesis. I would also like to acknowledge the input and support that I received by Sara Kopelman. Thank you both for providing me the with the help needed to complete this thesis.

Conventions

In this thesis a modified version of the Hepburn romanization system will be utilised to transcribe the various Japanese writing systems into the Latin alphabet. Double vowels will be denoted with duplicate letters rather than macrons; e.g. *obaasan* not *obāsan*.

Abbreviations

ACC	accusative
ADN	adnominal
ADV	adverbial
COP	copula
DAT	dative
FOC	focus
GEN	genitive
GER	gerund
INS	instrumental
LOC	locative
NOM	nominative
NPST	nonpast
POL	polite
PST	past
TOP	topic

Table of Contents

1. Introduction	5
2. Background	8
2.1. The role of loanwords in the Japanese lexicon.....	8
2.1.1. <i>The four lexical strata of the Japanese language</i>	8
2.1.2. <i>What is gairaigo?</i>	9
2.1.3. <i>History of Japanese lexical borrowings</i>	9
2.2. Adjectives in the Japanese language	11
2.2.1. <i>Emotive adjectives</i>	13
2.3. Politeness in the Japanese Language	15
2.4. Previous studies	16
3. Methodology	18
3.1. Research goals and research questions	18
3.1.1. <i>Research goals</i>	18
3.2. Choosing nouns and extracting them from the corpus	19
3.3. Overview of the BCCWJ	21
3.4. Evaluation model	21
4. Results and discussion.....	24
4.1. Introduction	24
4.2. Evaluation	24
4.2.1. <i>Attribute/Emotive</i>	25
4.2.2. <i>Emotion</i>	26
4.2.3. <i>Politeness</i>	28
4.3. Discussion.....	29
5. Conclusion and further research.....	32
References	33
Appendix	35

1. Introduction

The Japanese language has a longstanding history of borrowing words, reminiscent to that of the English language. What sets Japanese apart is that these borrowings are not the result of direct linguistic contact but rather from languages whose source countries are geographically distant from Japan (Irwin, 2011, p.3). These Japanese borrowings, according to Irwin (2011, p.54), stem from Japan seeking knowledge in western science and philosophy. As a result, lexical borrowings have primarily been sourced from English, the language that written works from these areas are commonly published in. An influx of new loanwords into the Japanese language has created many synonymous words of different origins. In some cases, the new loanwords have replaced previously utilised lexical items, but there are numerous examples where both are still used in contemporary Japanese. This thesis tries to begin explaining some of the differences that can be observed in adjective collocations of English loanword nouns and their native Japanese/Sino-Japanese near synonyms.

In the background chapter of the thesis I begin by giving an overview on the role of loanwords in the Japanese lexicon. I start this with a brief introduction on the four different strata of lexical items that make up the Japanese language. This thesis chiefly concerns itself with three of the four strata; foreign, Sino-Japanese, and native. Since the foreign stratum consists of lexical items that have been borrowed into the Japanese language from many different languages, I also discuss what constitutes as a loanword or *gairaigo* in this thesis. I continue with an outline of the history of lexical borrowings in the Japanese language to provide some context on the role loanwords have had historically in Japan. The background chapter then moves on to showing the two types of adjectives that can be found in the Japanese language: canonical and nominal adjectives. In that section I also present a model constructed by Murakami (2015) to further divide adjectives into attribute and emotive adjectives. This model by Murakami is utilised later in the thesis as a part of an evaluation model to analyse the noun pair collocations. To provide some background information on politeness in the Japanese language, which is used as an avenue of analysis in the evaluation model, I also have a section dedicated to polite forms which includes some examples of these. Lastly, the background chapter brings up some of the previous studies utilising corpus analysis of English loanwords. The most relevant studies for this thesis are mainly Bordislovskaya's (2014, 2016) and Barrs' (2018) as their work with corpus analysis of English loanword collocations in the Japanese language is the foundation that this thesis builds upon.

In the methodology chapter I state the aim of the thesis and outline how the study was designed. The chapter begins by stating the two major topics that this thesis concerns itself with:

- *Whether there is any difference in what type of adjectives modify English loanword nouns and their native Japanese/Sino-Japanese noun equivalents and if so, why can such a difference be observed?*
- *Whether there is any difference in what contexts the nouns pairs can be used in and if so, why can such a difference be observed?*

The research questions that were derived from these topics are also stated. I move on to discuss how I chose the ten noun pairs that were studied in this thesis and show how the data was extracted from the Balanced Corpus of Contemporary Written Japanese (henceforth BCCWJ). To motivate the choice of corpus and give some more information on the data source in this thesis, I also include a section with a brief overview on the structure and history of the BCCWJ. In the last part of the chapter the evaluation model that is used in this thesis is shown. The model concerns itself with two main factors: *The politeness level of the surrounding context* and *if a difference can be found in the emotive aspects of the modifying adjectives*. To analyse the politeness level of the surrounding context I analysed sentence ending polite and plain forms. While being a very simplified explanation of what constitutes politeness in the Japanese language the analysis was meant to give some indications of trends over the larger data set. To analyse the emotive aspect of the modifying adjectives the evaluation model concerned itself both with Murakami's (2015) model on attribute/emotive adjectives and my own evaluation of individual collocations where I evaluated whether the collocated adjective projected a positive, neutral or negative image onto the noun it modified.

In the results and discussion chapter I present the data and analyse it with the evaluation model and previous literature in mind. I begin with the results from analysing the collocated adjectives using Murakami's (2015) model. As shown in the data there was no discernible difference in the usage of attribute vs emotive adjectives that modify English loanword nouns or their native Japanese/Sino-Japanese noun pairs. I then present the results where I analysed the emotional aspect of adjectives that modify the studied nouns. I found that loanword nouns are relatively more likely to appear in collocations where the modifying adjective is giving a positive image compared to the native Japanese/Sino-Japanese noun pairs. The opposite was

also revealed to be true, with native Japanese/Sino-Japanese nouns being more likely to be modified by adjectives that give a negative image. The results and analysis of the politeness level of the surrounding context is then presented. For the politeness aspect I found that both the English loanword nouns and their native Japanese/Sino-Japanese equivalents are most often used in contexts with plain sentence ending forms. However, the English loanword nouns are relatively more often used in contexts with plain form sentence ending constructions while the native Japanese/Sino-Japanese nouns are relatively more often used in contexts with polite sentence ending forms. In the final part of the chapter a discussion of the findings is conducted. There, I discuss the results with the previous literature in mind and bring up some individual contexts that I perceive as indicative of a trend over the whole data set. I also discuss my own observations when analysing the individual collocations. From these observations in addition to the previous literature on English loanwords in the Japanese language, I draw the conclusion that English loanword nouns are most likely utilised when the writer wants to project a trendy or modern image.

Finally, in the conclusion I summarise the results of my discussion and give my thoughts on some avenues for further research.

2. Background

This chapter aims to give an overview of previous literature in the field of loanwords in the Japanese language. At the start of the chapter the four lexical strata that the Japanese language is made up of are presented. The chapter then moves on to give a definition of the concept *gairaigo*, a central subject of this thesis. To give an adequate background of the position of English loanwords in contemporary Japanese, an outline of the history of loanwords in the Japanese language is presented. The chapter then gives insight into how adjectives are utilised in the Japanese language with special emphasis on emotive adjectives which will be relevant for the analysis and conclusion of this thesis. There is also a section on politeness in the Japanese language, something that is later analysed in the study. Lastly, the recently developed field of corpus linguistics regarding collocations of English loanwords will be discussed by presenting some of the most relevant works that this thesis builds upon.

2.1. The role of loanwords in the Japanese lexicon

2.1.1. *The four lexical strata of the Japanese language*

The Japanese language consists of four lexical strata: native, mimetic, Sino-Japanese and foreign (Kageyama and Saito, 2016, p.12). Out of the four different strata that make up the Japanese language, Kageyama and Saito (2016, pp.12-14) state that the native stratum and the mimetic stratum as strata consists of words that are native to the Japanese language.

According to Irwin (2011, p.6) these native strata have mostly avoided being subjected to borrowing or replacements. However, he also states that the Sino-Japanese and foreign strata are made up of words that have almost all been borrowed into the Japanese language. The Sino-Japanese stratum consists of words that are created from Chinese lexemes and are also mainly borrowed from Chinese, while the foreign stratum is mostly made up of words borrowed from western languages and other Asian (mostly south-east Asian) languages (Irwin, 2011, pp.5-14). The native stratum is often referred to as *wago*, lit. ‘words of *wa*’ with *wa* being used as a prefix denoting something as being Japanese (Irwin, 2011, p.5). There is also a commonly used word for the Sino-Japanese stratum, namely, *kango* lit. ‘Han words’ which refers to the Chinese Han dynasty (Irwin, 2011, p.6). Henceforth, the native stratum will be referred to as *wago* and the Sino-Japanese stratum as *kango*.

2.1.2. *What is gairaigo?*

To define what constitutes a loanword or *gairaigo* in this thesis we will apply the definition utilised by Irwin, “A *gairaigo* is a foreign word which has undergone adaptation to Japanese phonology, has been borrowed into Japanese after the mid-16th century and whose meaning is, or has been, intelligible to the general speech community” (2011, p.10). This definition results in loans from the Chinese language that has been borrowed into Japanese after the mid-16th century also falling under the category of *gairaigo*. However, this thesis is only concerned with English loanwords. Thus, whenever the terms “loanword” or “*gairaigo*” are used it will refer to English lexical borrowings that are phonologically adapted and comprehensible to the Japanese speech-community in general. Irwin also defines *gaikokugo* followingly: “A *gaikokugo* is a foreign word which has not undergone adaptation, or a foreign word whose meaning has always been unintelligible to the general speech community” (2011, p.10). According to Irwin (2011, p.13), there are, however, many ‘grey areas’ that exist and therefore this distinction is not always going to hold up. For example, there are words that are fully phonologically adapted but only partially intelligible. An example of this are words used by specialists, E.g. *epidura* ‘epidural’. There is also a hybrid stratum where the four vocabulary strata that make up the Japanese language are combined with each other in various manners (Irwin, 2011, p.14).

The distribution of *gairaigo* in contemporary Japanese has increased markedly since the Meiji restoration of 1868 and has only kept increasing since then (Takahashi, 1990, p.357). The highest amount of *gairaigo* penetration in contemporary Japanese is according to Irwin (2011, p.20) found in the field of advertising. Irwin (2011, p.15) notes that especially magazines have seen a particularly large increase of *gairaigo* from 3%¹ of all tokens in 1956 to 12%² of all tokens in 1994. However, the increase of *gairaigo* in magazines can most likely be attributed to an increase of *gairaigo* found in advertisements, an increase in the proportion of advertisement found in magazines, or both (Irwin, 2011, p.21).

2.1.3. *History of Japanese lexical borrowings*

Irwin (2011, p.23) divides the history of Japanese loanwords, or more specifically *gairaigo*, into three different eras of borrowing: Iberian, Dutch, and western. The first occurrences of foreign lexical borrowings into the Japanese language can, according to Irwin (2011, p.23), be traced to Portuguese-speaking Jesuits and marks the start of the “Iberian period”. The Iberian

¹ 9,8% of types

² 34,8% of types

period can roughly be defined as starting sometime around the mid-16th century and ending around the mid-17th century. Although this period also saw some borrowings from languages such as Spanish, Latin, and Dutch, it was mostly defined by borrowings from the Portuguese language (Irwin, 2011, pp.29-30). These Portuguese borrowings can be divided into two different main categories: Catholic and trade, with trade words not only dealing with words regarding trade but virtually anything else that doesn't fit into the 'Catholic' category, according to Irwin (2011, p.29). In contemporary Japanese we can still see words that were borrowed from the Iberian period like *tabako* 'tobacco' from the trade category. From the Catholic category we can still see *pan* 'bread' from the Portuguese word *pão*, which originally referred to the communion wafer used during Christian ceremonies (Irwin, 2011, pp.31-34).

The second wave of borrowing can be attributed to the influence of Dutch scholars and merchants which has led to this era being named the "Dutch period" spanning roughly from the mid-17th to the mid-19th century (Irwin, 2011, pp.35-36). This period was, according to Irwin (2011, pp.35-38), heavily influenced by the shogunate's decision to forbid all foreign powers from docking their ships in Japanese harbours. A strict ban on all foreign language literature due to the western powers' attempts to convert Japan to Christianity with missionaries was also implemented during this period. The Dutch were considered an exception due to their more secular nature and were isolated to conducting their trade at one harbour on the island of Dejima in Nagasaki bay. After the ban was lifted on foreign language books in the mid-18th century, scientific secular books in Dutch were allowed to be studied by Japanese scholars, thus opening up the floodgates for Dutch lexical borrowings mainly in the field of medicine (Irwin, 2011, p.35-36). Irwin (2011, p.38) divides Dutch *gairaigo* into two different categories: medical and scientific vs. mercantile and other. Examples of Dutch *gairaigo* include words like *korera* 'cholera' and *koohii* 'coffee'.

Lastly, we have the "western period" which encompasses the mid-19th century to present day and is defined by borrowings from the languages of some of the major world powers like Russian, French, German and English (Irwin, 2011, p.43). The lexical borrowings in the early stages of the "western period" stemmed from the Meiji Restoration and the rapid modernisation that came with it. The different areas of borrowings during this era can, according to Irwin, (2011, pp.42-43) be tied to the Iwakura Mission where Japan based its new regime upon the institutions of western nations. This resulted in Japan modelling their institutions after, for example, the German law system, the French/German army, and the British/American education system. The languages of the countries that Japan based their new

institutions upon also exerted a heavy influence on the lexical borrowings that were adapted into their respective areas (e.g. words concerning law from the German language) (Irwin, 2011, p.43). During both the early stages of the western period and now in contemporary Japanese, Irwin (2011, p.43) names English as being the most influential of these languages. The influence that English has had on the Japanese language is not only limited to nouns and verbs, which has been the norm regarding loans from other languages. Instead, English loans have permeated all facets of the Japanese language. English loanwords can even be found in lexical categories such as adjectives, interjections, pronouns, prefixes, conjunctions, and interjections (Irwin, 2011, p.58).

There is also a history of East Asian lexical borrowings in the Japanese language. This is an area which Irwin (2011, p.61) views as overlooked regarding the history of *gairaigo*, especially Chinese borrowings, since these are often lumped into the Sino-Japanese strata even if they have been borrowed in modern times (after mid-16th century).

2.2. Adjectives in the Japanese language

There are two main types of what is commonly referred to as adjectives in the Japanese language: *keiyōshi* ‘canonical adjectives’ (CA) and *keiyōdōshi* ‘nominal adjectives’ (NA) (Nishiyama. 1999. pp.2-3). The two primary functions of adjectives in the Japanese language is to modify nouns (attributive use) and to describe the subject (predicative use).

Canonical adjectives are also commonly referred to as *i*-adjectives as their dictionary form ends with the vowel /i/ e.g. *amai* ‘sweet’, *suppai* ‘sour’, and *karai* ‘spicy’. Canonical adjectives act similarly to verbs in the Japanese language since they conjugate.

1. Conjugation of canonical adjectives

(1) *ringo ga oishi-i*
 Apple NOM delicious-NPST
 ‘The apple is delicious.’

(2) *ringo ga oishi-katta*
 Apple NOM delicious-PST
 ‘The apple was delicious.’

2. *Attributive and predicative form for canonical adjectives*

(3) Attributive

oishi-i *ringo o* *tabe-ta*
Delicious-NPST apple ACC eat-PST
'(I) ate a delicious apple.'

(4) Predicative

kono ringo wa *oishi-i*
This apple TOP delicious-NPST
'This apple is delicious.'

Nominal adjectives on the other hand are more reminiscent of nouns. For nominal adjectives, or *na*-adjectives, *na* (the adnominal copula) is necessary when describing the subject while utilised in predicative form which is also the case for nouns. The adnominal copula *na* is also necessary for nominal adjectives when modifying nouns in the attributive use (Hasegawa, 2014, p.65-66).

3. *Conjugation of canonical adjectives*

(5) *nekkuresu ga kirei da*
Necklace NOM pretty COP.NPST
'The necklace is pretty.'

(6) *nekkuresu ga kirei dat-ta*
Necklace NOM pretty COP-PST
'The necklace was pretty.'

4. *Attributive and predicative form for nominal adjectives*

(7) Attributive

kirei na *nekkuresu o* *kat-ta*
Pretty COP.ADN necklace ACC buy-PST
'(I) bought a pretty necklace.'

(8) Predicative

kono nekkuresu wa kirei da
This necklace TOP pretty COP.NPST
'This necklace is pretty.'

2.2.1. Emotive adjectives

Murakami (2015, p.39) defines emotive adjectives as adjectives that, when followed by the evidential marker *-soo* and the copula *da*, describe the internal feelings of the subject instead of an external judgement of the subject. To make this definition a bit more easily digested, Murakami (2015, p.52) shows two example sentences that provide a clearer explanation of the distinction.

(9) *hanako wa ureshi-soo da*
Hanako TOP happy-appear COP.NPST
'Hanako looks happy.'

(10) *hanako wa yasashi-soo da*
Hanako TOP kind-appear COP.NPST
'Hanako looks kind.'

In sentence (9) we can see a typical emotive adjective since *ureshii* 'happy' with the addition of the evidential marker *-soo* and the copula *da* conveys what the person behind the statement observes about Hanako's internal feelings (Abe, 2018, p.2). In contrast, *yasashii* 'kind' shows what the person behind the statement thinks of Hanako's personality, not that Hanako is feeling kindly towards something. Murakami (2015, p.39) therefore defines adjectives as emotive when they have the abovementioned "internal" reading when combined with the *soo da* construction and as attribute adjectives when they do not have an "internal" reading. Murakami's (2015, p.52) full model for classifying adjectives is shown in Table 1 on the next page.

Table 1. Adjective types (based on the work of Murakami, 2015, pp.49-58)

Four-way classification	Two-way classification	Examples	Characteristics
A	Emotive	<i>kanashii</i> “sad”	Emotive adjectives. Expresses the experiencer's state.
B		<i>nemui</i> “sleepy”	These adjectives also tend to express the state of target objects.
C	Attribute	<i>mazui</i> “unappetising”	Conveys emotions by indicating temporary behaviour as an adverbial.
D		<i>kibishii</i> “strict”	Typical attribute adjectives. Expresses the experiencer's observation of the subject.

As can be observed in Table 1, the emotive and attribute adjectives are further divided into two more categories each, creating a classification system of four different classes A-D. The distinction between class A and class B type emotive adjectives is done by another test that Murakami (2015, p.52) has constructed. In this test the evidential marker *-soo* is once again added to the adjective being evaluated but additionally the adnominal copula *na* is added so that the adjective is able to modify a noun. This creates the construction *adjective + soona + noun*. If the adjective only gives an “internal” reading the adjective is classified as a type A adjective, while adjectives that only pass the first *-sooda* test and not the second is classified as a type B adjective. In the example sentences (11) and (12) below we can see the difference illustrated. In sentence (11) *kanashii* ‘sad’ denotes the “internal” feelings of the person (type A) while in sentence (12) the adjective *nemui* ‘sleepy’ describes the external properties of the person (type B).

- (11) *kanashi-soo na hito*
Sad-appear COP.ADN person
‘A sad-looking person’

- (12) *nemu-soo na hito*
Sleepy-appear COP.ADN person
‘A sleepy-looking person’

A distinction between type C and type D attribute adjectives is made by putting the adjective in the adverbial construction *sooni* + verb (Murakami, 2015, p.49). A type C adjective gives an “internal” reading in this adverbial construction while the type D adjectives do not. In example sentences (13) and (14) below, we can see the distinction made more clearly. In example (13) we can observe an “internal” reading in the adverbial construction while example (14) does not exhibit the same behaviour.

- (13) *mazu-sooni* *tabe-ru*
 Unappetising-appear.ADV eat-NPST
 Lit. ‘eating unappetizingly’

- (14) *kibishi-sooni* *mie-ru*
 strict-appear.ADV look-NPST
 ‘(they)look strict’

2.3. Politeness in the Japanese Language

Politeness in the Japanese language is according to Hasegawa (2015, p.255) constructed in such way that it forms a very complex system. In this system she states that there are two different dimensions to consider when showing politeness. Since polite expressions are often referred to as honorifics when they are incorporated into the syntax of a language Hasegawa (2015, p.255) differentiates between addressee honorifics and referent honorifics. Addressee honorifics are used when conveying politeness to the person that is being addressed while referent honorifics are used when showing esteem to the person that is being referred to in a sentence, e.g. “Thomas” in the sentence “Thomas is a teacher.”. When utilising honorifics there are two ways of expressing politeness to either the referent or the addressee: firstly, by exalting the person, this is commonly referred to as honorific proper. Secondly, by depreciating someone (in most cases the speaker themselves) in relation to the person, this is commonly referred to as humble forms (Hasegawa, 2015, p.255).

Table 2 on the next page shows how the copula *da* and the verb *iku* ‘go’ conjugates in both plain form and polite form as an addressee honorific. Table 3 shows how the copula *da* and the verb *nomu* ‘drink’ is used as a referent honorific.

Table 2. plain and polite form of addressee honorifics.

Non-past plain	Non-past polite	Past plain	Past polite	English
<i>da</i> (copula)	<i>desu</i>	<i>datta</i>	<i>deshita</i>	‘be’
<i>iku</i> (verb)	<i>ikimasu</i>	<i>itta</i>	<i>ikimashita</i>	‘go’

Table 3. referent honorifics.

Regular	Honorific	English
<i>da</i> (copula)	<i>de irassharu</i>	‘be’
<i>nomu</i>	<i>meshiagaru</i>	‘drink’

2.4. Previous studies

Corpus analysis of collocations of English loanwords in Japanese is a relatively recent area of study, partly due to the first large scale Japanese corpus being created in 2011 (Barrs, 2018, p.88). The work of three researchers within this emerging field will be discussed briefly below.

Bordilovskaya (2011, 2016) has conducted two quantitative studies using data from the BCCWJ. Her 2016 doctoral thesis can be considered a continuation of the 2012 study she conducted on English *gairaigo* and *kango* colour word pairs. In these studies, she examined if English *gairaigo* adjectives collocate more frequently with other *gairaigo* than their *kango* adjective counterparts when modifying nouns. In her studies she builds on Loveday’s (1996, p.81) theory that *gairaigo* refers to the western occurrence of a phenomenon while *wago* refers to the core concept of the word. In her studies she found that English *gairaigo* adjectives on average collocate more often with *gairaigo* nouns than with *wago/kango* nouns.

Mogi’s 2012 study of the English loanword *katto suru* ‘to cut’ carries out a far more detailed analysis of the grammatical behaviour of loanwords compared to Bordilovskaya’s 2012 and 2016 studies. This can mainly be attributed to the fact that Mogi (2012) only analysed the behaviour of one single loanword. In his 2012 study, Mogi manually analysed the concordances of all 252 occurrences of the loanword in the BCCWJ. In his study, Mogi finds that the loanword tends to most often occur in transitive constructions across all the different semantic uses of the word. Mogi (2012, p.22) believes that creating an extensive database with detailed analysis of individual loanwords’ grammatical behaviour is very important. He states that such a data base would help facilitate the learning of the Japanese language to L2 learners (2012, p.22).

Barrs’ (2018) doctoral thesis is the first attempt to make a comprehensive and mainly automated study on the grammatical behaviour of a large number of English loanwords in the

Japanese language. The previous studies in this field before Barrs (2018) were all carried out by manually analysing concordances. Barrs' (2018) doctoral thesis is a continuation of the work of Mogi (2012) and utilises the web corpus JaTenTen11. To conduct the study Barrs takes advantage of new technology to automatically analyse a sample of over 500 English loanword and compares their grammatical behaviour with native Japanese and Sino-Japanese words. Much like Mogi (2012), Barrs (2018) is able to carry out a detailed analysis on the grammatical behaviour of English loanwords in the Japanese language, but on a much larger scale. In his thesis he finds that loanwords tend to favour a compound noun relationship. He also found that loanwords that favour the compound noun relationship more strongly tended to collocate more often with other loanwords.

3. Methodology

In this chapter I will firstly present the aim of this thesis and present the research questions. I will then explain how the nouns that were studied in this thesis were chosen, the process of extracting the data from the corpus, and give some background information regarding the corpus. Lastly, the evaluation model that was used to conduct the analysis in the present thesis will be explained.

3.1. Research goals and research questions

3.1.1. Research goals

The goal of this thesis is to observe whether there is any difference in how *gairaigo* nouns and their *wago/kango* equivalents are utilised in contemporary written Japanese. I will attempt to answer this question and explain why such a difference can be observed by analysing collocations.

This thesis will concern itself with two major topics. The first topic regards whether there is any difference in what type of adjectives modify *gairaigo* nouns and their *wago/kango* equivalents. It will also explore why this difference can be observed. I will discuss this topic and try to answer the questions by analysing the emotive aspect of adjectives that collocate with the noun pairs.

The second topic this thesis will concern itself with is whether there is any difference in what contexts the nouns pairs can be used in and why. This topic will be discussed by analysing the level of politeness used in the surrounding context of each noun. I will also attempt to explain why *gairaigo* nouns used in contemporary written Japanese are observed to be less frequently utilised in sentences with sentence ending politeness markers compared to their *wago/kango* equivalents. The research questions are as follows:

1. Is there any difference in distribution of adjectives that modify *gairaigo* nouns and adjectives that modify their *wago/kango* equivalents in contemporary written Japanese?
 - 1b. If a difference is observed, can a pattern be observed in terms of what types of adjectives modify which nouns?
 - 1c. If a pattern emerges, why can this pattern be observed?
2. Do *gairaigo* nouns and their *wago/kango* equivalents display a difference in what contexts they are used in?
 - 2b. If a difference is observed, why do the nouns differ in terms of usage?

3.2. Choosing nouns and extracting them from the corpus

In this thesis the number of noun pairs needed to be limited due to the rather labour-intensive manual evaluation method that was used for analysing the data. To select the pairs that were going to be studied in this thesis it was important that the nouns were used relatively frequently in contemporary Japanese. Therefore, the BCCWJ was utilised to extract a list of all *gairaigo* nouns used in the corpus and sort them by frequency. From there the most common *gairaigo* nouns were selected that had appropriate *wago/kango* synonyms with similar usage frequency in the BCCWJ. In this selection process I also tried to select a mix of *wago* and *kango* nouns. A list of ten noun pairs was compiled and analysed with seven of the nouns being of *kango* origin, two being of *wago* origin and one being mixed (both *wago* and *kango*). This led to a slight overrepresentation of *kango* nouns, something that might have led to a difference in the results compared to if there would have been a more even mix of *kango* and *wago*. The selected nouns can be observed in the following table:

Table 4. List of noun pairs.

<i>bideo</i>	<i>Gairaigo</i>	<i>dooga</i>	<i>Kango</i>	‘video’
<i>bijinesu</i>	<i>Gairaigo</i>	<i>shoobai</i>	<i>Kango</i>	‘business’
<i>furuutsu</i>	<i>Gairaigo</i>	<i>kudamono</i>	<i>Wago</i>	‘fruit’
<i>kitchin</i>	<i>Gairaigo</i>	<i>daidokoro</i>	Mixed	‘kitchen’
<i>maaketto</i>	<i>Gairaigo</i>	<i>shijoo</i>	<i>Kango</i>	‘market’
<i>miruku</i>	<i>Gairaigo</i>	<i>gyuunyuu</i>	<i>Kango</i>	‘milk’
<i>oiru</i>	<i>Gairaigo</i>	<i>abura</i>	<i>Wago</i>	‘oil’
<i>pointo</i>	<i>Gairaigo</i>	<i>ten</i>	<i>Kango</i>	‘point’
<i>supiichi</i>	<i>Gairaigo</i>	<i>enzetsu</i>	<i>Kango</i>	‘speech’
<i>tesuto</i>	<i>Gairaigo</i>	<i>shiken</i>	<i>Kango</i>	‘test’

To collect data the BCCWJ was used to extract the collocation patterns examined in this thesis. The process was as follows:

1. The *gairaigo* noun being analysed was input in *katakana* as a search key with orthographic form (*shojikei-shutsugenkei*) selected e.g. ミルク *miruku* ‘milk’
2. The collocation condition for the context was selected as being a canonical adjective (*keiyooshi*) one unit before the search key.
3. Samples where the canonical adjective did not modify the selected noun or when the noun was part of a compound word were removed manually.

Figure 1. The picture shows the input used to search for canonical adjectives.

The screenshot shows the '短単位検索' (Short Unit Search) interface. The search key is 'ミルク' (milk) in katakana. The collocation condition for the context is set to '品詞' (part of speech) with '大分類' (major classification) as '形容詞' (adjective). The search is performed using the '検索フォームで検索' (Search with search form) method.

After extracting the samples where canonical adjectives modified the *gairaigo* nouns, cases where nominal adjectives modified the noun were also extracted as described in the process below:

1. The *gairaigo* noun being analysed was input in *katakana* as a search key with orthographic form (*shojikei-shutsugenkei*) selected e.g. ミルク *miruku* 'milk'.
2. The collocation condition for the context was selected as being the modifying morpheme for nominal adjectives な (*na*) in orthographic form (*shojikei-shutsugenkei*) as one unit away from the key.
3. The collocation condition for two units away from the search key was set as a nominal adjective (*keiyodooshi*).
4. Samples where the nominal adjective did not modify the selected noun or when the noun was part of a compound word were manually removed.

Figure 2. The picture shows the input used to search for nominal adjectives.

The screenshot shows the '短単位検索' (Short Unit Search) interface. The search key is 'ミルク' (milk) in katakana. The collocation condition for the context is set to '品詞' (part of speech) with '大分類' (major classification) as '名詞' (noun). The search is performed using the '検索フォームで検索' (Search with search form) method.

The same process was also repeated with the *wago/kango* equivalent synonym inserted once in *kanji* and once in *hiragana* in place of the *gairaigo* noun in *katakana*.

3.3. Overview of the BCCWJ

For the purpose of this thesis the Balanced Corpus of Contemporary Written Japanese (BCCWJ) has been utilised as the source for procuring collocation data. The BCCWJ is a corpus developed by the National Institute for Japanese Language and Linguistics (NINJAL), consisting of one hundred million words of written material that is intended to give a balanced overview of contemporary written Japanese (Maekawa, 2007, p.3). The BCCWJ, released in 2011, is the result of a five-year national project that started in 2006 to create the first balanced corpus of written contemporary Japanese and consists of a variety of texts. The corpus is divided in three different sub-corpora:

- Publication sub-corpus: Books, Magazines, Newspapers. 35 million words 2001-2005
- Library sub-corpus: Books. 30 million words. 1980-2005
- Special-purpose sub-corpus: Reports, legal documents, Textbooks, Minutes, Bestsellers, Internet texts, etc. 35 million words. 1975-2005.

In this thesis all the above-mentioned sub-corpora were utilised. The choice to collect data from the BCCWJ when conducting the research in this thesis was motivated by the fact that the BCCWJ is one of the most comprehensive and balanced corpora that exists for the Japanese language. By utilizing the BCCWJ it was possible to acquire a large and mostly representative sample of contemporary written Japanese that is considerably less likely to contain biases than if the data were to be collected by myself or if I were to use, for example, a web corpus.

Something that is worth noting is that the BCCWJ, as the name suggests, only consists of written Japanese samples. This results in that the research conducted in this thesis might not be fully applicable to contemporary spoken Japanese.

3.4. Evaluation model

Each sample was analysed by utilizing an evaluation model consisting of three different avenues of analysis. The first method of analysing the adjectives consisted of dividing the adjectives into two classes: “attribute” and “emotive” with the four subclasses A, B, C and D based on a list of adjectives divided into these classes provided by Murakami (2015, p.58). If an adjective did not occur in the list provided by Murakami (2015, p.58), the process to classify adjectives into the subclasses A, B, C and D was utilised as discussed in section 2.2.1. (see table.1).

After classifying the adjectives according to Murakami's (2015) model, the emotion of each adjective that collocated with the studied nouns was evaluated. This evaluation concerned the emotional aspect that the adjective projected onto the noun it modified. Not all adjectives were always considered to have the same emotional meaning in each sample due to the context. Therefore, each sample was evaluated individually. Each sample was graded on three "modes": positive, neutral, or negative. Samples were put in the neutral category if it was difficult to determine from the context whether the adjective put the noun in a positive or negative light. The samples were also put in the neutral category if the adjective did not impart any particular emotion on the noun. Below are typical examples of each of the three modes.

(15) Positive:

<i>ichiban</i>	<i>oishii</i>	<i>gyuunyuu</i>	<i>wa?</i>
Most	delicious	milk	TOP

'(what) is the most delicious milk?'

(16) Neutral:

<i>sono</i>	<i>ato</i>	<i>ni</i>	<i>tsumetai</i>	<i>miruku</i>	<i>o</i>	<i>ire-ru</i>
That	after	DAT	cold	milk	ACC	put-NPST

'After that add cold milk'

(17) Negative:

<i>sengo</i>	<i>no</i>	<i>kyuushoku</i>	<i>de</i>	<i>de-ta</i>
Post war period	GEN	school lunch	INS	come out-PST

<i>mazui</i>	<i>gyuunyuu</i>	<i>desu</i>
unappetising	milk	COP.POL

'The unappetising milk (we) got at school lunch during the post-war period'

In these examples we can see that the adjectives either project a positive, negative or neutral emotional image onto each noun. In the case of *oishii* 'delicious' it is quite clear that the adjective projects a positive image onto the noun it modifies, in this case milk. The neutral

example³ *tsumetai* ‘cold’ could in some contexts also be considered positive as in the example sentence below as a response when asked about what their favourite drink is.

- (18) *tsumetai* *gyuunyuu* *ga* *suki* *desu*
 cold milk NOM like COP.POL
 ‘I like cold milk’

However, in the cases when the adjectives were used in such a way to only state the physical properties of the milk without giving a reason as to why this would be considered desirable or undesirable, the samples were marked as neutral. In example sentence (17) it is also rather clear why the adjective *mazui* ‘unappetising’ is considered a typically negative adjective. The sentence clearly shows that the person behind such a statement is projecting an unpleasant image upon the noun.

The third and last avenue of analysis was concerned with the politeness of the surrounding context. The samples were evaluated by using a simplified definition of what constitutes politeness in the Japanese language by only looking at the polite forms *desu*, *masu*, *dearu*, *deshoo*, *mashoo* compared to their plain form equivalents in sentence final positions (see Hasegawa, 2015, p.257). The model did not take into consideration the numerous other ways of determining politeness or formality in the Japanese language, such as the polite cause-consequence conjunctive particle *node* instead of the plain form equivalent *kara* (See Miyagawa and Nakamura, 1991 for more information).

The samples were categorised using three different modes: polite, neutral and plain. Samples where the surrounding context was utilizing the aforementioned polite forms in sentence final positions were classified as polite, while samples using the plain form were classified as plain. Samples that did not show any sentence ending forms due to limited context of ten characters before and after the analysed noun were classified as neutral.

³ When referring to the temperature.

4. Results and discussion

4.1. Introduction

In this chapter the results of the study are presented and discussed while attempting to answer the research questions. The data is presented in the form of pie charts and tables, showing raw numbers and percentage ratios.

4.2. Evaluation

In total 286 instances of *gairaigo* collocations and 354 instances of *wago/kango* collocations were evaluated. For each noun 25 instances of canonical adjective collocations and 25 instances of nominal adjective collocations were evaluated for a total of 50 collocations for each noun if there was enough data available from the BCCWJ. In the cases where there were less than 25 samples for a single noun, all the available samples were evaluated. To create an unbiased selection of samples when there were more than 25 samples for a single noun, I opted to randomise the selection. Each sample was given a random number between 0 and 1 using the Excel randomisation formula. After a random number had been assigned to each sample they were sorted from the smallest number to the largest and the first 25 samples were evaluated.

Table 5. *gairaigo* and *wago/kango*: number of samples

<i>gairaigo</i>	Number of samples		<i>wago/kango</i>	Number of samples
<i>bideo</i>	24		<i>dooga</i>	18
<i>bijinesu</i>	49		<i>shoobai</i>	50
<i>furutsu</i>	32		<i>kudamono</i>	40
<i>kicchin</i>	23		<i>daidokoro</i>	29
<i>maaketto</i>	20		<i>shijoo</i>	50
<i>miruku</i>	28		<i>gyuunyuu</i>	29
<i>oiru</i>	15		<i>abura</i>	32
<i>pointo</i>	50		<i>ten</i>	50
<i>supiichi</i>	18		<i>enzetsu</i>	32
<i>tesuto</i>	27		<i>shiken</i>	24
Total:	286		Total:	354

4.2.1. Attribute/Emotive

Analysis on the ratio of attribute and emotive adjectives that modify the noun pairs revealed that there is no discernible difference between the pairs. Out of 354 adjectives that modified the *wago/kango* nouns, 322 of tokens or 92% were in the “attribute”, C or D class according to the model provided by Murakami (2015) in section 2.2.1, e.g. *mazui* ‘unappetising and *kibishii* ‘strict’ respectively. For the *gairaigo* nouns a very similar percentage of 91% can be found with 264 out of 286 tokens being classified as the “attribute”, C or D class. 9% of the tokens that modified *wago/kango* nouns were in the A or B class which are classified as emotive adjectives according to Murakami’s (2015) model, e.g. *kanashii* ‘sad’ and *nemui* ‘sleepy’ respectively. Similarly, 8% of adjectives that modified *gairaigo* nouns belonged to the A or B class of emotive adjectives. The largest class by far was found to be the attribute D class which 83% of tokens for both *gairaigo* and *wago/kango* collocation belonged to. In Murakami’s (2015) and Abe’s (2018) studies they found 83% and 85.6% of types to be class D attribute adjectives, respectively. This analysis was mainly concerned with token analysis and did not explore the possibility of a potential discrepancy when it comes to the amount of types. However, based on this striking similarity of tokens it is unlikely that any large difference of types would occur in this particular data set. In table 6 below and table 7 on the next page we can see the raw data for each individual noun. In table 10 and 11 in the appendix it is possible to see a comparison of frequencies for canonical and nominal adjectives.

Table 6. frequency of wago/kango collocations with type A, B, C and D adjectives.

<i>wago/kango</i>	Total	A	B	C	D
<i>dooga</i>	18	2	2	2	12
<i>shoobai</i>	50	1	3	5	41
<i>kudamono</i>	40	1	0	7	32
<i>daidokoro</i>	29	0	3	0	26
<i>shijoo</i>	50	0	0	1	49
<i>gyuunyuu</i>	29	0	16	7	6
<i>abura</i>	32	0	4	2	26
<i>ten</i>	50	0	0	2	48
<i>enzetsu</i>	32	0	0	1	31
<i>shiken</i>	24	0	0	1	23
Total:	354	4	28	28	294

Table 7. frequency of gairaigo collocations with type A, B, C and D adjectives.

<i>gairaigo</i>	Total	A	B	C	D
<i>bideo</i>	24	2	1	0	21
<i>bijinesu</i>	49	0	0	5	44
<i>furuutsu</i>	32	0	1	5	26
<i>kicchin</i>	23	0	1	1	21
<i>maaketto</i>	20	0	1	1	18
<i>miruku</i>	28	0	12	3	13
<i>oiru</i>	15	0	2	0	13
<i>pointo</i>	50	1	0	8	41
<i>supiichi</i>	18	0	0	1	17
<i>tesuto</i>	27	0	1	3	23
Total:	286	3	19	27	237

Figure 3. wago/kango attribute/emotive

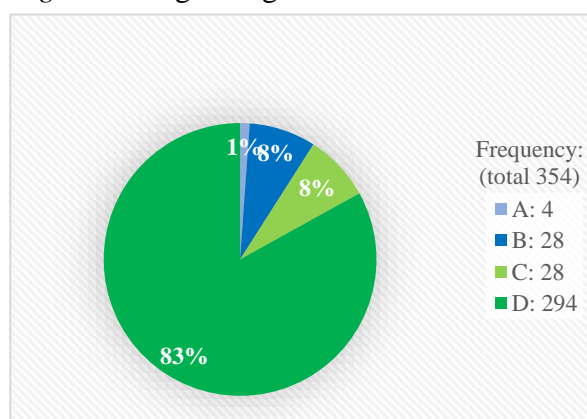
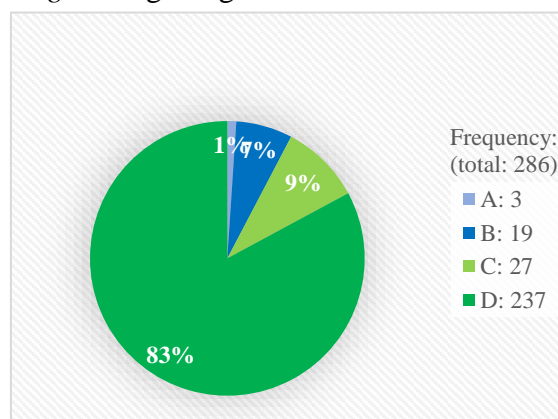


Figure 4. gairaigo attribute/emotive



4.2.2. Emotion

When it comes to the emotional aspect there was a quite notable skew towards adjectives being used in a positive manner for the *gairaigo* nouns (63% of tokens positive) compared to the *wago/kango* pairs (54% of tokens positive). The *wago/kango* nouns also saw a larger number of adjectives being used in a negative emotional aspect compared to the *gairaigo* nouns (21% and 7% of tokens negative respectively). This difference is especially clear when it comes to the pair *bijinesu* ‘business’ (*gairaigo*, 81,6% of tokens positive, 6,1% of tokens negative) and *shoobai* ‘business’ (*kango*, 46% of tokens positive, 40% of tokens negative). *Bijinesu* is comparatively more often collocated with adjectives such as *atarashii* ‘new’, describing new business in a positive manner. While *shoobai* on the other hand was seen collocated more often with adjectives such as *tsurai* ‘tough’ or *muzukashii* ‘difficult’. From the context analysis it was shown that *shoobai* seemed to be used more often in situations talking about difficulties, while *bijinesu* was used more often in cases when describing new business opportunities.

This pattern seemed quite consistent over the entirety of the data set albeit not as strongly as in the case of the business pair. This result implies that *gairaigo* nouns are more probable to be used in situations where the person behind the statement or text is projecting a favourable light onto the noun. The *wago/kango* synonyms are on the other hand more likely to be used when the person behind the text is writing unfavourably about the phenomenon. The results of this data can be considered to answer research questions 1 (*Is there any difference in distribution of adjectives that modify their wago/kango equivalents in contemporary written Japanese?*) and 1b (*If a pattern is observed, can a pattern be observed in what types of adjectives modify which nouns*). Based on the data set utilised in this thesis, adjectives with positive implication are more likely to modify *gairaigo* nouns and negatively orientated adjectives are more likely to modify their *wago/kango* equivalents. In table 8 below we can find the numerical data for each individual noun. Figure 5 and 6 on the next page shows the percentage ratios for *wago/kango* nouns and *gairaigo* nouns, respectively. In table 12 and 13 in the appendix it is possible to see a comparison of frequencies for canonical and nominal adjectives.

Table 8. frequencies for wago/kango and gairaigo nouns when analysed for emotion.

<i>wago/kango</i>	# of samples	Positive	Neutral	Negative	<i>gairaigo</i>	# of samples	Positive	Neutral	Negative
<i>dooga</i>	18	11	6	1	<i>bideo</i>	24	10	13	1
<i>shoobai</i>	50	23	7	20	<i>bijinesu</i>	49	40	6	3
<i>kudamono</i>	40	33	3	4	<i>furuutsu</i>	32	22	8	2
<i>daidokoro</i>	29	9	3	17	<i>kicchin</i>	23	14	6	3
<i>shijoo</i>	50	41	6	3	<i>maaketto</i>	20	18	2	0
<i>gyuunyuu</i>	29	11	17	1	<i>miruku</i>	28	9	17	2
<i>abura</i>	32	10	15	7	<i>oiru</i>	15	7	8	0
<i>ten</i>	50	25	11	14	<i>pointo</i>	50	38	7	5
<i>enzetsu</i>	32	19	10	3	<i>supiichi</i>	18	7	9	2
<i>shiken</i>	24	9	10	5	<i>tesuto</i>	27	15	9	3
Total:	354	191	88	75	Total:	286	180	85	21

Figure 5. wago/kango positive/negative

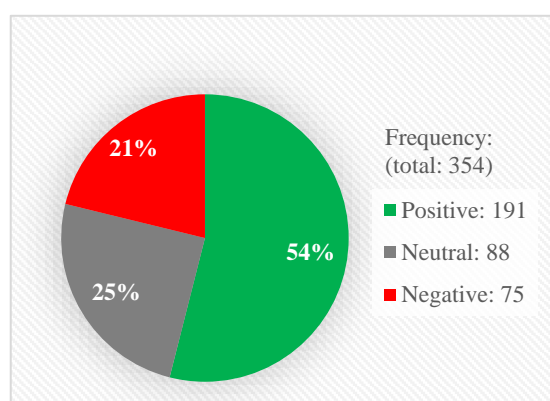
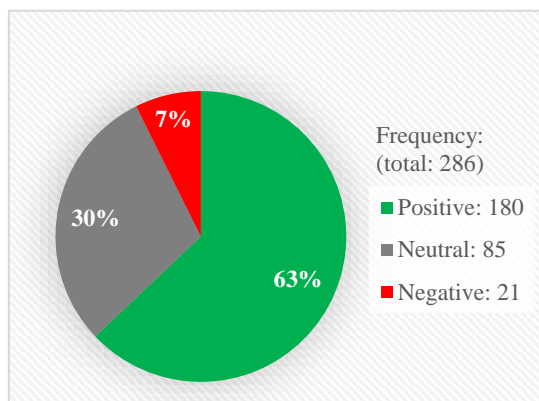


Figure 6. gairaigo positive/negative



4.2.3. Politeness

The *wago/kango* samples exhibited a slightly higher usage of polite sentence ending forms (as defined in the method section 3.3) with 28% compared to 24% of *gairaigo* samples.

Similarly, the *gairaigo* samples had a slightly higher amount of plain form sentence final endings with 51% compared to 40% of *wago/kango* samples. This difference is not large enough in itself to explain with certainty that *gairaigo* has a more casual connotation compared to their *wago/kango* pairs. However, from observing this data, in addition with my analysis of the individual collocations, there seems to be a pattern in that *gairaigo* is more likely to appear in text with a more a casual mood, like posts on internet forums. The *kango* equivalents, on the other hand, seem to be used more frequently in technical texts. *Gairaigo* nouns also tend to be used more frequently in “modern sounding” contexts like texts concerned with global business and technical texts regarding computers and the internet. These texts do not exactly have a casual connotation but are instead new concepts that cannot be handled with the present native or Sino-Japanese vocabulary. This evaluation of the politeness level of the surrounding context, combined with the individual concordance analysis, can be considered to mostly answer research question 2 (*Do gairaigo nouns and their wago/kango equivalents display a difference in what contexts they are used in?*). Something to keep in mind is that most scientific literature is written in plain sentence ending forms (Shibatani, 1990, p.360). From this one can come to understand that just sentence ending forms is not the only way of determining politeness or formality of a text. What this rudimentary evaluation does is to give insight into the value of further research in the field of synonym pairs from different lexical origins and their politeness. In table 9 on the next page it is possible to find numerical data for each individual noun. Figure 7 and 8 on the next page shows percentage ratios between the different modes of politeness. In table 14 and 15 in the

appendix it is possible to see a comparison of frequencies for canonical and nominal adjectives.

Table 9. frequencies for wago/kango and gairaigo when analysed for politeness.

wago/kango	# of samples	Polite	Neutral	Plain	gairaigo	# of samples	Polite	Neutral	Plain
dooga	18	12	2	4	bideo	24	8	8	8
shoobai	50	14	14	22	bijinesu	49	8	17	24
kudamono	40	9	13	18	furuutsu	32	5	4	23
daidokoro	29	5	7	17	kicchin	23	3	3	17
shijoo	50	2	26	22	maaketto	20	2	11	7
gyuunyuu	29	13	7	9	miruku	28	6	2	20
abura	32	8	8	16	oiru	15	7	2	6
ten	50	21	18	11	pointo	50	17	7	26
enzetsu	32	3	10	19	supiichi	18	1	8	9
shiken	24	15	4	5	tesuto	27	10	10	7
Total:	354	102	109	143	Total:	286	67	72	147

Figure 7. Politeness wago/kango

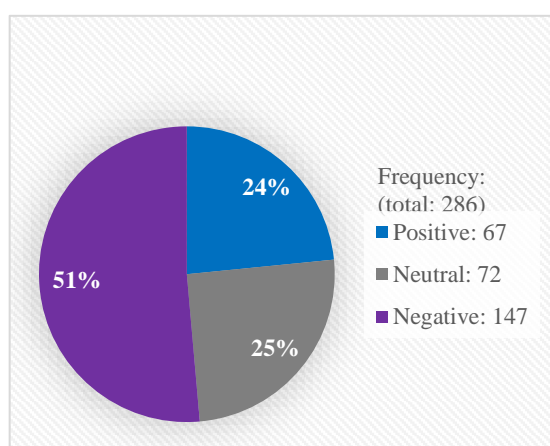
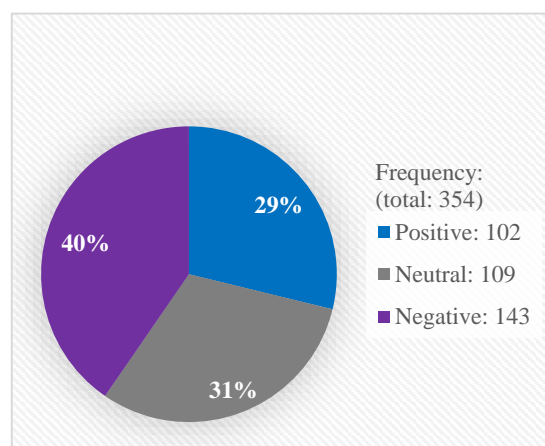


Figure 8. Politeness gairaigo



4.3. Discussion

By analysing the factors of attributive vs emotive adjectives, the emotion that the adjectives project onto the noun and finally the politeness level of the surrounding context individually, it was possible to answer (at least partially) research questions 1, 1b and 2. In this discussion I will attempt to answer the last two research questions. 1c, *if a pattern emerges, why can this pattern be observed?* In relation to what types of adjectives modify which of nouns and 2b, *if a difference is observed, why do the nouns differ in terms of usage?* In relation to what contexts *gairaigo* and *wago/kango* noun equivalents are used in. This will be done by discussing what the results imply when analysed together.

Both research question 1c and 2b deal with the reason of why these patterns that were possible to observe in the data occur. These questions cannot be answered suitably by just looking at the data that was presented previously in this chapter. To answer these two questions in a manner that will be satisfactory, we must instead turn to the individual collocations.

- (19) *hiroi* *kitchin* *ni* *wa* *ichiryuu* *meekaa*
 spacious kitchen LOC TOP first-class manufacturer
 no *shisutemukitchin*
 GEN system kitchen
 ‘the spacious kitchen is (furnished with) a system kitchen from a first-class
 manufacturer’

- (20) *fuyu* *wa* *chanchanko* *o* *kite* *mo* *samui* *daidokoro*
 winter TOP Japanese vest ACC wear.GER FOC cold kitchen
 ‘in the winter, the kitchen is cold even if you wear a (japanese style) vest’

In these two sentences we can observe the difference in usage between *gairaigo* and *wago/kango* nouns that seems to be an emerging pattern over the whole data set. As can be seen in sentence (19) the loanword is used in a sentence that consists of other *gairaigo* such as *meekaa* ‘manufacturer’ and *shisutemukitchin* ‘system kitchen’. This sentence is using the adjective *hiroi* ‘spacious’ to project a positive light onto the noun and is most likely used to describe what should be present in an ideal kitchen. The second sentence on the other hand is used in a more traditional sounding context and collocates with words such as *chanchanko* ‘padded sleeveless kimono jacket’ a type of traditional Japanese clothing. In this sentence the adjective does not try to cast a positive light upon the noun it modifies but instead shows the negative properties of the kitchen being cold even when wearing warm clothing.

If we return to Irwin’s (2011, p.20) statement that the field of advertising has seen the highest amount of *gairaigo* penetration compared to other forms of Japanese, we might be able to draw the conclusion that *gairaigo* is considered to be used beneficially when trying to sell products. When analysing the collocations individually the pattern that emerges seems to be that *gairaigo* is more often used in contexts where the writer wants to convey some sort of trendy or positive image, as is the case when advertising for a product. This seems to be

supported by the fact that *gairaigo* is more often collocated with adjectives that project a positive image upon the noun as shown by the present study.

To answer the research questions 1c and 2b more directly: the reason behind the difference of usage between *gairaigo* nouns and their *wago/kango* pairs in contemporary written Japanese seems to indicate that writers are most likely trying to project a trendier and more modern image when utilizing *gairaigo* nouns. Loveday's (1996) theory that *gairaigo* nouns refer to the western occurrence of the concept while *wago* refers to the more general phenomenon seems to be not entirely accurate as a result of this conclusion. If we look at noun pairs such as *furuutsu* 'fruit' (*gairaigo*) and *kudamono* 'fruit' (*wago*) there is no real difference in that fruits that grow on the Japanese islands are supposed to be *kudamono*, while other fruits are supposed to be *furuutsu*. There is, however, a difference in the semantic usage of the words, e.g. *furuutsu* is more often used in terms of fruit flavouring and when fruit is used in cooking or baking, *kudamono* is more often used to refer to the fruit in itself. *gairaigo* words often undergo semantic narrowing when being adapted into the Japanese language and thus encompass fewer concepts than their *wago/kango* equivalents (Irwin, 2011, p.154). This semantic narrowing might also have a part in explaining why a difference can be observed in the usage of *gairaigo* nouns and their *wago/kango* equivalents.

With this discussion in mind one can see that the differences between *gairaigo* nouns and *wago/kango* equivalents seems to be rather complicated. The question of why these patterns of differences can be observed cannot be attributed to only semantic narrowing or perceptions of *gairaigo* as more casual than *wago/kango*. Instead, it seems that *gairaigo* is being utilised as a way of projecting a trendier and more modern image, which seems to be especially true in regard to the field of advertisement.

5. Conclusion and further research

This thesis has been an attempt to answer the questions of how and why *gairaigo* nouns differ from *wago/kango* noun equivalents in contemporary written Japanese. To answer these questions an evaluation model that analysed adjective collocations from an emotive perspective as well as an evaluation of the politeness level was applied. In the process no notable difference was found between *gairaigo* nouns and their *wago/kango* equivalents regarding the ratio of collocated emotive and attribute adjectives. A notable difference was, however, discovered for both the ratio of collocated positive/negative adjectives and the politeness level of the surrounding context. With this difference and an analysis of the individual concordances in mind, it can be concluded that there is a tendency for *gairaigo* nouns to be used in contexts where the writer wants to project a modern or trendy image. The results of this thesis suggest some exciting future avenues for further research: A more rigorous and comprehensive analysis of politeness regarding *gairaigo* and *wago/kango* pairs is something that might prove interesting and fruitful. Further research into the emotive aspects of noun pairs might also prove interesting. A study of native Japanese speakers where they are asked to choose which of the pairs provides the most appealing or natural sentence is also another possible opportunity to find interesting results in the emotive field.

References

- Abe, S. (2018). Decoding “positive” flavors; An analysis of emotive adjectives and related expressions in gastronomic discourse. *CAJLE2018 Proceedings*. London, Ontario; Huron University College. pp.1-10.
- Barrs, K. (2018). *A corpus analysis of the grammatical behaviour of English loanwords in the Japanese language*. PhD Thesis. University of Leicester.
- Bordilovskaya, A. (2012). A study of loan color terms collocation in modern Japanese. In *Proceedings of the 34th Annual Conference of the Cognitive Science Society*. pp. 1362-1367.
- Bordilovskaya, A. (2016). *Collocation tendencies and classification of gairaigo adjectives in contemporary Japanese: Corpus-based study*. PhD Thesis. Kobe University.
- Hasegawa, Y. (2015). *Japanese: A linguistic introduction*. Cambridge: Cambridge University Press.
- Irwin, M. (2011). *Loanwords in Japanese*. Amsterdam: John Benjamins Publishing Company.
- Irwin, M. (2016). The morphology of English loanwords. In Taro Kageyama., Hideki Kishimoto (eds.) *Handbook of Japanese lexicon and word formation*. Chapter 5. pp. 161-197. Boston/Berlin: Walter de Gruyter Inc.
- Loveday, L. J. (1996). *Language contact in Japan: A sociolinguistic history*. Clarendon Press.
- Maekawa, K. (2007). Kotonoha and BCCWJ: development of a balanced corpus of contemporary written Japanese. In *Corpora and Language Research: Proceedings of the First International Conference on Korean Language, Literature, and Culture*. pp. 158-177.

- Mogi, T. (2012). Towards the lexicographic description of the grammatical behaviour of Japanese loanwords: A case study. *Acta Linguistica Asiatica*, 2(2). pp. 21-34.
- Murakami, K. (2015). *Gendai nihongo no kanjoo keeyooshi no kenkyuu* [research of emotive adjectives in contemporary Japanese]. Doctoral thesis. Gakushuin University.
- Nishiyama, K. (1999). Adjectives and the Copulas in Japanese. *Journal of East Asian Linguistics* 8. pp. 183-222.
- Shibatani, M. (1990). *The languages of Japan*. Cambridge: Cambridge University Press.
- Takashi, K. (1990). A sociolinguistic analysis of English borrowings in Japanese advertising texts. *World Englishes*, 9(3). pp. 327-341.

Appendix

Table 10. Nominal adjectives attribute/emotive.

wago/kango	Frequency	A	B	C	D	gairaigo	Total	A	B	C	D
dooga	6	0	0	0	6	bideo	9	0	0	0	9
shoobai	25	1	1	1	22	bijinesu	24	0	0	3	21
kudamono	18	1	0	0	17	furuutsu	22	0	0	3	19
daidokoro	4	0	0	0	4	kicchin	4	0	0	1	3
shijoo	25	0	0	0	25	maaketto	14	0	0	1	13
gyuunyuu	4	0	0	0	4	miruku	8	0	1	1	6
abura	9	0	0	1	8	oiru	4	0	0	0	4
ten	25	0	0	1	24	pointo	25	0	0	6	19
enzetsu	15	0	0	1	14	supiichi	9	0	0	1	8
shiken	17	0	0	1	16	tesuto	18	0	0	3	15
Total:	148	2	1	5	140	Total:	137	0	1	19	117

Table 11. Canonical adjectives attribute/emotive.

wago/kango	Frequency	A	B	C	D	gairaigo	Total	A	B	C	D
dooga	12	2	2	2	6	bideo	15	2	1	0	12
shoobai	25	0	2	4	19	bijinesu	25	0	0	2	23
kudamono	22	0	0	7	15	furuutsu	10	0	1	2	7
daidokoro	25	0	3	0	22	kicchin	19	0	1	0	18
shijoo	25	0	0	1	24	maaketto	6	0	1	0	5
gyuunyuu	25	0	16	7	2	miruku	20	0	11	2	7
abura	23	0	4	1	18	oiru	11	0	2	0	9
ten	25	0	0	1	24	pointo	25	1	0	2	22
enzetsu	17	0	0	0	17	supiichi	9	0	0	0	9
shiken	7	0	0	0	7	tesuto	9	0	1	0	8
Total:	206	2	27	23	154	Total:	149	3	18	8	120

Table 12. Nominal adjectives emotion.

wago/kango	frequency	Positive	Neutral	Negative	gairaigo	frequency	Positive	Neutral	Negative
dooga	6	4	2	0	bideo	9	5	4	0
shoobai	25	12	4	9	bijinesu	24	17	6	1
kudamono	18	16	1	1	furuutsu	22	16	5	1
daidokoro	4	3	1	0	kicchin	4	3	1	0
shijoo	25	22	3	0	maaketto	14	12	2	0
gyuunyuu	4	4	0	0	miruku	8	7	1	0
abura	9	2	5	2	oiru	4	2	2	0
ten	25	16	4	5	pointo	25	24	1	0
enzetsu	15	13	1	1	supiichi	9	6	3	0
shiken	17	7	8	2	tesuto	18	12	6	0
Total:	148	99	29	20	Total:	137	104	31	2

Table 13. Canonical adjectives emotion.

<i>wago/kango</i>	frequency	Positive	Neutral	Negative	<i>gairaigo</i>	frequency	Positive	Neutral	Negative
<i>dooga</i>	12	7	4	1	<i>bideo</i>	15	5	9	1
<i>shoobai</i>	25	11	3	11	<i>bijinesu</i>	25	23	0	2
<i>kudamono</i>	22	17	2	3	<i>furuutsu</i>	10	6	3	1
<i>daidokoro</i>	25	6	2	17	<i>kicchin</i>	19	11	5	3
<i>shijoo</i>	25	19	3	3	<i>maaketto</i>	6	6	0	0
<i>gyuunyuu</i>	25	7	17	1	<i>miruku</i>	20	2	16	2
<i>abura</i>	23	8	10	5	<i>oiru</i>	11	5	6	0
<i>ten</i>	25	9	7	9	<i>pointo</i>	25	14	6	5
<i>enzetsu</i>	17	6	9	2	<i>supiichi</i>	9	1	6	2
<i>shiken</i>	7	2	2	3	<i>tesuto</i>	9	3	3	3
Total:	206	92	59	55	Total:	149	76	54	19

Table 14. Nominal adjectives politeness.

<i>wago/kango</i>	frequency	Polite	Neutral	Plain	<i>gairaigo</i>	frequency	Polite	Neutral	Plain
<i>dooga</i>	6	3	1	2	<i>bideo</i>	9	0	7	2
<i>shoobai</i>	25	4	9	12	<i>bijinesu</i>	24	5	8	11
<i>kudamono</i>	18	4	6	8	<i>furuutsu</i>	22	3	2	17
<i>daidokoro</i>	4	0	1	3	<i>kicchin</i>	4	1	1	2
<i>shijoo</i>	25	1	14	10	<i>maaketto</i>	14	1	9	4
<i>gyuunyuu</i>	4	0	2	2	<i>miruku</i>	8	0	1	7
<i>abura</i>	9	2	3	4	<i>oiru</i>	4	1	0	3
<i>ten</i>	25	8	10	7	<i>pointo</i>	25	9	5	11
<i>enzetsu</i>	15	2	6	7	<i>supiichi</i>	9	0	5	4
<i>shiken</i>	17	10	4	3	<i>tesuto</i>	18	7	7	4
Total:	148	34	56	58	Total:	137	27	45	65

Table 15. Canonical adjectives politeness.

<i>wago/kango</i>	frequency	Polite	Neutral	Plain	<i>gairaigo</i>	frequency	Polite	Neutral	Plain
<i>dooga</i>	12	9	1	2	<i>bideo</i>	15	8	1	6
<i>shoobai</i>	25	10	5	10	<i>bijinesu</i>	25	3	9	13
<i>kudamono</i>	22	5	7	10	<i>furuutsu</i>	10	2	2	6
<i>daidokoro</i>	25	5	6	14	<i>kicchin</i>	19	2	2	15
<i>shijoo</i>	25	1	12	12	<i>maaketto</i>	6	1	2	3
<i>gyuunyuu</i>	25	13	5	7	<i>miruku</i>	20	6	1	13
<i>abura</i>	23	6	5	12	<i>oiru</i>	11	6	2	3
<i>ten</i>	25	13	8	4	<i>pointo</i>	25	8	2	15
<i>enzetsu</i>	17	1	4	12	<i>supiichi</i>	9	1	3	5
<i>shiken</i>	7	5	0	2	<i>tesuto</i>	9	3	3	3
Total:	206	68	53	85	Total:	149	40	27	82