

CORPUS ANALYSIS OF THE COLLOCATIONS OF THE TRANSITIVE VERBS *OWARU* AND *OERU*

Nastja PAHOR

University of Ljubljana, Slovenia

nastja.pahor@gmail.com

Abstract

The transitivity of Japanese verbs is a topic, which had been widely discussed in Japan even before the beginning of the Meiji period and is still one of the major obstacles for learners of Japanese nowadays. This paper focuses on the transitivity of the verbs *owaru* 終わる (to end [tr./intr.]) and *oeru* 終える (to end [tr.]). It encompasses the analysis of collocations of the two verbs and examines their objects in the patterns 'N *wo owaru*' and 'N *wo oeru*'. The aim of this research is to give a new perspective on the usage of the two verbs. The analysis of both collocations and co-occurring verbal forms shows collocations grouping into individual semantic categories. Furthermore, verbs exhibit specific morphological characteristics in different semantic fields of the collocations.

Keywords: verb transitivity; *owaru*; *oeru*; collocations; corpus

Povzetek

Prehodnost japonskih glagolov je tema, o kateri se je na Japonskem široko razpravljalo že pred začetkom obdobja Meiji in še dandanes predstavlja eno večjih ovir pri učenju japonskega jezika. Raziskava se osredotoča na prehodno rabo glagolov *owaru* 終わる (končati, končati se) in *oeru* 終える (končati) in podaja analizo njunih kolokacij oziroma predmetov v stavčnem vzorcu 'N *wo owaru*' in 'N *wo oeru*'. Cilj študije je razjasnitev rabe obeh glagolov. Rezultati analize kolokacij in sopojavljajočih glagolskih oblik kažejo na porazdelitev kolokacij v specifična semantična polja ter na obstoj določenih morfoloških lastnosti glagolov, ki se pojavljajo v različnih semantičnih skupinah kolokacij.

Ključne besede: glagolska prehodnost; *owaru*; *oeru*; kolokacije; korpus



1 Introduction

The discussion regarding verb transitivity in Japan can be observed even before the beginning of the Meiji period (Okutsu, 1967, p. 46). To this day, differentiating between transitive and intransitive verbs is still one of the major obstacles for learners of Japanese. Transitive verbs are those that take on an object and intransitive verbs are those that cannot take on an object.

This paper discusses the transitivity of the verbs *owaru* 終わる (to end, finish [tr./intr.]) and *oeru* 終わる (to end, finish [tr.]). Semantically, the verb *owaru* comprises both the transitive and intransitive meaning, whereas *oeru* is only used as a transitive verb. Therefore, despite both verbs holding the meaning of ‘end’ or ‘finish’, their usage in terms of transitivity differs. The focal point of this paper is the semantic examination and categorization of their respective collocations in the patterns ‘N *wo owaru*’ and ‘N *wo oeru*’. ‘N’ represents the object of the verb, followed by the accusative case particle *wo* を. Additionally, verbal forms co-occurring with each collocation are examined. This part of the research aims to determine if any specific structural patterns or forms are present in each semantic group.

1.1 Research motivation and purpose

The general aim of this research is to give a new perspective on the usage of the verbs *owaru* and *oeru*, by focusing on the issue of transitivity and categorization of semantic fields of collocations belonging to each verb.

In Section 2, previous research on the topic of transitivity is examined. Section 2.1 establishes the meanings of ‘transitive’ and ‘intransitive verbs’, while Section 2.2 focuses specifically on the verbs *owaru* and *oeru* as a pair.

However, despite extensive discussions on the topic, discrepancies can still be observed in dictionary definitions of the verbs (Section 3.1). Similarly, an unbalanced representation of the two verbs in instructional materials (Section 3.3), as well as a consequential non-uniform perception of their usage (Section 3.4), can be seen. An example of diachronic change in verb use is also provided (Section 3.2).

To clarify the abovementioned inconsistencies regarding verb transitivity, this paper examines collocations co-occurring with each verb in order to portray a picture of their semantic distribution and compare the two verbs (Section 5). Furthermore, verb forms of *owaru* and *oeru* belonging in each semantic group are also analyzed (Sections 6 and 7).

1.2 Methodology

After an analysis of prior research in Section 2, Section 3 is divided into four segments. The first segment (Section 3.1) is dedicated to the analysis of verb definitions that have been retrieved from eight dictionaries, published over several decades. Secondly, Section 3.2 compares dictionary definitions with sample sentences retrieved from the Corpus of Historical Japanese (*Nihongo rekishi kōpasu* 日本語歴史コーパス, henceforth CHJ). The comprised data consist of over 16 million words, with source texts dating to the eras of Nara, Heian, Kamakura, Muromachi, Edo, and Meiji. This analysis is followed by an examination of instructional materials and the way each of them presents the verbs to their audience (Section 3.3). The last part (Section 3.4) deals with the general public's perception of both verbs and their transitivity. Examples, which indicate a mixed understanding of the verbs, especially in regards to *owaru*, have been retrieved from sites *Yahoo! Chiebukuro* 知恵袋 and *HiNative*.

Following is the empirical part of this research. Firstly, sample sentences were retrieved using the following three corpora created by NINJAL (National Institute for Japanese Language and Linguistics *Kokuritsu kokugo kenkyūjo* 国立国語研究所):

- Balanced Corpus of Contemporary Written Japanese (*Gendai nihongo kakikotoba kinkō kōpasu* 現代日本語書き言葉均衡コーパス, henceforth BCCWJ). The data are comprised of 104.3 million words from various texts published between 1976-2005.
- Corpus of Spontaneous Japanese (*Nihongo hanashikotoba kōpasu* 日本語話し言葉コーパス, henceforth CSJ). It comprises over 650 hours of recordings, transcribed into approximately 7 million words. The data were recorded between 1999-2001.
- Nagoya University Conversation Corpus (*Meidai kaiwa kōpasu* 名大会話コーパス, henceforth NUCC). 129 conversation recordings, created between 2001-2003, expand over a span of roughly 100 hours.

The concordancer used to filter sentences is *Chūnagon*. Due to a high number of result sentences BCCWJ, the concordancer NINJAL-LWP, which allows sorting according to the frequency of appearance of each word, was used as well. Subsequently, the results were downloaded as an .xlsx file and all sentences were manually analyzed. Details concerning this part of the research are elaborated in Sections 4.

The semantic analysis of collocations is based on *Bunrui Goihyō: zōho kaiteiban* (分類語彙表：増補改訂版, *Word List by Semantic Principles, Revised and Enlarged Edition*), published by NINJAL in 2003. The list is a collection of words classified and arranged by their meanings. Details regarding the process of classification within this paper are explained in Section 5.

The categorization of verbal forms is provided in detail in Sections 6 and 7.

2 Verb transitivity

The discussion regarding verb transitivity has been an ongoing debate, dating back to the beginning of the Meiji era. Okutsu (1967, p. 46) cites several linguists that have already researched this topic. These include Motoori Haruniwa, Gonda Naosuke, Kurokawa Harumura, Ōtsuki Fumihiko, Yamada Yoshio, Mochizuki Seikyō, Nishio Teraya, Sakuma Kanae, and Bernard Bloch. Okutsu himself shares some points of view that Haruniwa, Sakuma, and Bloch proposed. However, he points out that the results discovered up to that point were not sufficient to give clear answers regarding the issue of transitivity and consequently proposes his own categorization.

2.1 Defining intransitive and transitive verbs

According to Okutsu's criteria, transitive verbs are those that have an object in the form of a noun followed by the case particle *wo*. All other verbs are intransitive (Numata, 1989, p. 196). It is important to differentiate between the particle *wo* marking an object and the particle *wo* that is followed by verbs of motion.

Additionally, two verbs have to meet conditions on three separate levels to be recognized as a pair.

Firstly, on a morphological level, two verbs must present the same root. Amano et al. (2013, p. 70) give the verbs *aku* 開く, 'to open' [intr.], and *akeru* 開ける, 'to open' [tr.], as an example of verbs which share the root /ak/.

Secondly, from a syntactic point of view, the sentence with a transitive verb gains a subject A followed by the case particle *ga* が, while the subject of the sentence with an intransitive verb B becomes the object of the transitive verb followed by the case particle *wo* as seen in Figure 1 below (Numata, 1989, p. 197; Amano et al., 2013, p. 70).

Bが開く。		AがBを開ける。
<i>B ga aku.</i>	→	<i>A ga B wo akeru.</i>
B [nom] to open [intr. pres.]		A [nom] B [acc] to open [tr. pres.]
B opens.		A opens B.

Figure 1: Intransitive verb in relation to its transitive pair

Lastly, a semantic structure must be observed. The subject A, which appears in the sentence with a transitive verb, must influence the occurrence or event B. Event B takes on the role of an object of the same verb and is simultaneously depicted in the sentence with an intransitive verb as its subject. In short, the sentence with a transitive verb must also cover the meaning of the corresponding intransitive verb sentence.

2.2 The verbs *owaru* and *oeru* as a pair

Okutsu (1967, p. 63) categorizes the verb *oeru* as a verb that forms its pair *owaru* with the process of intransitivization. The shared root verb is ‘*owe-*’ (終).

In the section regarding ergative verbs, Morita (1994, p. 240) states that *owaru* and *oeru* already exist as a pair. He gives the following sentences as examples:

- a) 私は話を終える
Watashi wa hanashi wo oeru.
 I [top] story [acc] to finish [tr.act.pres]
 I finish the story.
- b) 話が終わる
Hanashi ga owaru.
 Story [nom] to finish [intr.act.pres]
 The story finishes.

Furthermore, Izuhara (2010) responds to a question regarding the nature of *owaru* in the sentence ‘with this I finish the lesson’ (*kore de jugyō wo owarimasu* これで授業を終わります). With the use of a dictionary definition, according to which *owaru* is a ‘*jitadōshi* 自他動詞’, he explains an ergative verb that allows both transitive and intransitive use.

The most accurate definition of *owaru* and *oeru* would be that *owaru* is a verb that forms two pairs in terms of transitivity. The first one is *owaru* [intr.] → *owaru* [tr.], whereas the second is *owaru* [intr.] → *oeru* [tr.].

2.3 Use of causative

When an intransitive verb lacks its transitive pair, the role can be performed by the causative form of the intransitive verb. Intransitive verbs that lack a transitive pair are defined as *zettai jidōshi* 絶対自動詞 (Amano et al., 2013, p. 70). Due to inconsistencies regarding the usage of the verb *owaru* and the general perception of it being purely intransitive, which are discussed in detail in the following Section 3, I propose the hypothesis that verbs co-occurring with collocations will be found in sentence patterns or phrases including causative forms of the verb *owaru*.

3 Meaning and use of the verbs *owaru* and *oeru*

This section gives an overview of dictionary definitions of both verbs, as well as their representation in instructional materials, and the public's general perception.

3.1 Use of *owaru* and *oeru* according to dictionary definitions

The verb *owaru* is categorized as an ergative verb regardless of the dictionary (Table 1). On the other hand, definitions of *oeru* point at minor inconsistencies in its use. No deviations are found in regards to the transitive use, which is present in all seven dictionaries. However, *Kokugo jiten* and *Daijirin* list the intransitive use as well:

Kokugo jiten: 「会期が一・えた」のように、自動的に使うこともある。
 ‘*Kaiki ga -- eta’ no yō ni, jidōteki ni tsukau koto mo aru.*
 ‘The session --’ Sometimes used intransitively as shown.

Daijirin: (自動詞) 終わる。果てる。
(Jidōshi) Owaru. Hateru.
 (Intransitive verb) To end. To finish.

Shin meikai kokugo jiten lists the intransitive use with an annotation of it being based on incorrect use (*moto goyō ni motozuku* もと誤用に基づく).

Table 1: Dictionary definitions of *owaru* and *oeru*

Dictionary	<i>owaru</i>		<i>oeru</i>	
	intr. use	tr. use	intr. use	tr. use
<i>Kōjien</i> 広辞苑, 1955	YES	YES	NO	YES
<i>Kokugo jiten</i> 国語辞典, 1979	YES	YES	YES	YES
<i>Progressive Japanese-English Dictionary</i> , 1993	YES	YES	NO	YES
<i>New Japanese-English Dictionary</i> , 1998	YES	YES	NO	YES
<i>Daijirin</i> 大辞林, 2006	YES	YES	YES	YES
<i>jaSlo</i> , 2006	YES	YES	NO	YES
<i>Shin meikai kokugo jiten</i> 新明解国語辞典, 2012	YES	YES	(YES)	YES

3.2 Comparison of the use of *owaru* and *oeru* in corpora CHJ and BCCWJ

A short comparison of the use of verbs *owaru* and *oeru* in the Corpus of historical Japanese CHJ and the Balanced corpus of contemporary written Japanese BCCWJ illustrates some interesting results (see Tables 2 and 3):

Table 2: Use of *owaru* and *oeru* in CHJ

	<i>owaru</i>	<i>oeru</i>
Total cases	2,178	380
Cases of intransitive use (N + <i>ga</i>)	64	1
Cases of transitive use (N + <i>wo</i>)	366	227

Table 3: Use of *owaru* and *oeru* in BCCWJ

	<i>owaru</i>	<i>oeru</i>
Total cases	19,244	4,624
Cases of intransitive use (N + <i>ga</i>)	5,861	5 (12)
Cases of transitive use (N + <i>wo</i>)	1,046	2,921

It is clear that the verb *owaru* is used more extensively in comparison to *oeru*. Furthermore, despite some dictionary definitions allowing it, the intransitive use of *oeru* is negligible, as can be seen in some examples listed below. Out of 12 sentences, only five are actual cases of intransitive use (1-5); others can be explained with the structure indicating volition N1 *ga oeyō to suru* N2 (6), the potential form *oerareru* which requires the particle *ga* が (7), or an incorrect morphological analysis (8-9).

- 1) つまり、十二年間の修行が終えて仏子戒を受けるのではなくて、[...]
Tsumari, jūninenkan no shūgyō ga oete busshikai wo ukeru no de wa nakute, [...]
 training [nom] to end [intr.act.ger]
 In brief, as the 12-year-long training finishes, you don't accept the Buddhist principles, [...]
- 2) このことは、学習会が終えてからいっそう証明されました。
Kono koto wa, gakushūkai ga oete kara issō shōmei saremashita.
 study group [nom] to finish [intr.act.ger]
 This became even clearer once the study session finished.
- 3) やっと三カ月が終えようとしていますが、正直ほっとしています。
Yatto sankagetsu ga oeyō to shiteimasu ga, shōjiki hotto shiteimasu.
 three months [nom] to end [intr.act.vol]
Three months have finally come to pass, and I honestly feel relieved.
- 4) 託児が終えたのは十二時頃、[...]
Takuji ga oeta no wa juuniji goro, [...]
 daycare [nom] to end [intr.act.pst.adn]
Daycare ended at around 12 o'clock, [...]

- 5) 『頼政』が終え、『地蔵舞』が演じられるころから、[...]
 ‘*Yorimasa*’ *ga oe*, ‘*Jizōmai*’ *ga enjirareru koro kara*, [...]

Yorimasa [nom] to finish [intr.act.inf]

Ever since *Yorimasa* ended and *Jizōmai* has been performed, [...]
- 6) おもえば、私たちが終えようとしている今世紀も、なんと、戦争の嵐が吹き荒れた時代であったことか。
Omoeba, watashitachi ga oeyō to shiteiru konseiki mo, nanto, sensō no arashi ga fukiareta jidai de atta koto ka.

we [nom] to end [tr.act.vol]

Come to think of it, has this century, that we are about to end, also been a, what, an era, during which the storm of war blew violently?
- 7) いずれにせよ、無事取引が終えられるよう、同じ出品者の立場からお祈りいたしております。
Izure ni seyo, buji torihiki ga oerareru yō, onaji shuppinsha no tachiba kara oinori itashite orimasu.

deal [nom] to end [poten.nonpst.adn]

Either way, as a fellow exhibitor myself, I pray that your deal can be completed without problems.
- 8) 音大生が卒試で弾くには“技術的には”簡単かもしれませんが。
 Incorrect analysis: 終える・卒える → 卒試 (卒業試験)
- 9) 反抗期をむかえた子どもは手がおえなくなり、親をこまらせる。
 Incorrect analysis: 終えない → 負えない

Additionally, the diachronic analysis points at a remarkable shift in the usage of *owaru*. According to results observed in CHJ, the number of cases, in which *owaru* is used transitively, is approximately six times higher compared to the number of sentences with intransitive use. On the other hand, BCCWJ illustrates a completely reversed picture, as the number of examples of intransitive use is six times higher. This outcome further reinforces the thought that the verb *owaru* in modern Japanese is heavily leaning towards an exclusively intransitive use.

3.3 Representation of *owaru* and *oeru* in instructional materials

Owaru is generally represented in its intransitive use when appearing within exercises or texts for reading comprehension. Examples of transitive use are only present in textbook sections dedicated to detailed explanations or glossaries. Similarly, *oeru* is only mentioned in such sections and does not appear in practical example sentences or other exercises (Table 4).

Table 4: Representation of *owaru* and *oeru* in instructional materials

Textbook	<i>owaru</i>		<i>oeru</i>	
	intr. use	tr. use	intr. use	tr. use
<i>Uvod v japonsko pisavo</i> , 2007	YES	NO	NO	YES
<i>Japonščina za začetnike 1 in 2</i> , 2012/2016*	YES	YES	/	/
<i>Minna no nihongo (shokyū 2)</i> , 1998/2013*	YES	YES	/	/
<i>Kanji Goi ga yowai anata e</i> , 2013*	YES	NO	/	/
<i>Pregled slovnice japonskega jezika</i> , 2005	YES	YES	NO	YES
<i>Tobira</i> , 2009*	YES	NO	/	/
<i>Essential Japanese Grammar</i> , 2012	YES	YES	NO	YES

* The asterisk indicates that the verbs appear exclusively as part of exercises or reading comprehension texts and not in sections dedicated to detailed explanations.

3.4 General perception of the use of *owaru* and *oeru*

The representation of both verbs in instructional materials mirrors the general perception of the usage of *owaru* and *oeru*. Based on various examples taken from the websites *Yahoo! Chiebukuro* 知恵袋¹ and *HiNative*², the results are consistent with previous findings. Links to full examples are provided in footnotes.

Users express their doubts about the transitive use of *owaru* and place the two verbs or the particles *wo* and *ga* in juxtaposition, questioning the correct use: ‘end a lesson’ (*jogyō wo owaru* 授業を終わる and 授業を終える) or ‘end a lesson’ (*jogyō wo owaru* 授業を終わる) and ‘the lesson ends’ (*jogyō ga owaru* 授業が終わる). It appears that most users lean towards the perception of *owaru* as solely intransitive.

In response to the above, some answers correctly state that *owaru* is an ergative verb and point out both the transitive and intransitive use, while others label the transitive use as an exception to the rule, or explain the presence of the particle *wo* with the causative *owaraseru* 終わらせる.

Discrepancies in dictionary definitions, a lack of representation in instructional materials and the public’s unanimous general perception of both verbs are all points of concern, as well as the main reasons for this research being conducted. Section 4

¹ Retrieved from https://detail.chiebukuro.yahoo.co.jp/qa/question_detail/q1011595455
https://detail.chiebukuro.yahoo.co.jp/qa/question_detail/q12108164892
https://detail.chiebukuro.yahoo.co.jp/qa/question_detail/q11114803361
https://detail.chiebukuro.yahoo.co.jp/qa/question_detail/q12194686977

² Retrieved from <https://hinative.com/ja/questions/5638244>

elaborates on the searching criteria used for sentence sampling and is followed by Sections 5-8, which are dedicated to the examination of collocations, verb forms and their relation, and the clarification of the transitivity of *owaru* and *oeru*.

4 Searching criteria

In order to extract collocations of *owaru* and *oeru* in their transitive use from three corpora, the following criteria were set (Figure 2).

The screenshot shows the '短単位検索' (Short Unit Search) interface. It features two main search criteria sections. The top section, highlighted in green, is for '前方共起1' (Front Collocation 1). It includes a dropdown for 'キーから' (from key), a value of '1', and a dropdown for '語' (word). A checkbox 'キーと結合して表示' (Display combined with key) is present. The search term 'を' (object particle) is entered in the search box. The bottom section, highlighted in purple, is for 'キー' (Key). It includes a dropdown for '--', a value of '1', and a dropdown for '語' (word). A checkbox 'キーの条件を指定しない' (Do not specify key conditions) is present. The search term '終わる' (finish) is entered in the search box. Both sections have a '短単位の条件の追加' (Add short unit conditions) button.

Figure 2: Searching criteria in *Chūnagon*

Within this research, the 'short unit method' (*tan-tan'i kensaku* 短単位検索) was used, as the keywords are limited to *owaru* '終わる' and *oeru* '終える'.

The purple box indicates the keyword (*kī* キー). An additional searching condition is searching by 'lexeme' (*goiso* 語彙素), which includes all of the verbs' tokens, such as conjugated forms and various *kanji* characters appearing in the corpora, as long as they are all classified under the same lemma (Srdanović, 2016, p. 28).

The green box above shows the 'front collocation 1' (*zenpō kyōki* 1 前方共起 1). It is important to note that this option refers to the collocation exclusively in the context of corpus searching and not the collocation (verb object) that is discussed in the rest of this paper. Within this analysis, the front collocation option serves as a tool to limit the search to transitive verb use. For this purpose, the option is set to the accusative case particle *wo* 'を', which defines the object of a verb.

The concordancer *Chūnagon* also allows searching for distant collocations. Such collocations can be found at a distance of at least one or more interposed words (Srdanović, 2016, p. 21). However, due to an already high number of results, the option was set to a fixed distance of one word; the front collocation is immediately followed by the keyword. The option *shojikei shutsugenkei* 書字形出現形 limits the search to the form of *wo* as written in the box (を).

On a semantical level, all collocations within examples of corpora CSJ and NUCC were analyzed. A minimal frequency of appearance of 5 for *owaru* and 15 for *oeru* was set for collocations found in BCCWJ due to a high number of results. Some additional examples with lower frequency were analyzed for comparison as they appear in both corpora (see Section 5).

On the same basis, verb forms co-occurring with a collocation that represents at least 1% of all gathered sentences for each verb were analyzed within BCCWJ. For *owaru* (1,046 sentences) this means the analysis of verbs co-occurring with collocations of a frequency of 10 or above; for *oeru* (2,921 sentences) of 29 or above (see Table 5 below).

Table 5: Number of results in corpora

		BCCWJ	CSJ	NUCC	Total
Appearance frequency (general)	<i>owaru</i>	19,247	2,539	416	22,202
	<i>oeru</i>	4,624	119	3	4,746
Appearance frequency (transitive)	<i>owaru</i>	1,046	303	8	1,357
	<i>oeru</i>	2,921	63	3	2,987
Analyzed verb forms	<i>owaru</i>	581	303	8	892
	<i>oeru</i>	623	63	3	689
Analyzed collocations (semantic)	<i>owaru</i>	640	303	8	951
	<i>oeru</i>	1,046	63	3	1,112

Due to a low number of sentences in NUCC, the results are grouped with those from CSJ. Both are corpora of spoken Japanese.

Detailed information regarding the semantical and morphological analyses is explained in the upcoming Sections 5, 6, and 7.

5 Semantical analysis of collocations

The semantical categorization of collocations (objects of the transitive verbs) is based on *Bunrui goihyō: zōho kaiteiban* (Word list by semantic principles, revised and enlarged

edition, henceforth *Bunrui goihyō*). The word list is comprised of 79,027 lemmas (94,985 words in total). Words in *Bunrui goihyō* are classified as follows.

Each word is first categorized by ‘class’, *rui* 類. This category consists of four groups: 1) nouns - *tai no rui* 体の類, 2) verbs - *yō no rui* 用の類, 3) *-i* and *-na* adjectives, adverbs and adnominal adjectives - *sō no rui* 相の類, and 4) other - part of adverbs, conjunctions, and interjections - *sono ta no rui* その他の類.

The categories are then further grouped into ‘divisions’ (*bumon* 部門), followed by ‘sections’ (*chūkōmoku* 中項目), and finally ‘articles’ (*bunrui kōmoku* 分類項目). Each ‘article’ is then divided into several numbered paragraphs.

For example, the word ‘question’ (*shitsumon* 質問) can be found next to the ID number 1.3132, indicating:

- number 1 (1.3132) - class (1. noun, *tai no rui* 体の類)
- number 3 (1.3132) - division (1.3 human activity - psyche and actions, *ningen katsudō – seishin oyobi kōi* 人間活動—精神および行為)
- number 1 (1.3132) - section (1.31 language/speech, *genko* 言語)
- number 32 (1.3132) - article (1.3132 dialogue, *mondō* 問答)

All collocations in this paper are classified into semantic groups based on ‘sections’ (in the example above ‘language/speech’), in order to prevent the categorization from becoming too fragmentary and at the same time making a clear distinction between each semantic field.

Tables 6, 7, 9, and 10 provide a list of all collocations with corresponding transcriptions and translations, as well as their frequency of appearance and the semantic field they were sorted into as per the *Bunrui goihyō* classification.

As mentioned at the end of Section 4, due to a high number of results, restrictions have been applied to collocations and verb forms from BCCWJ. The collocations co-occurring with analyzed verb forms are marked in bold.

5.1 *Owaru*

Collocations of the verb *owaru* can be classified into nine semantic fields or groups. These are ‘time’, ‘person’, ‘work’, ‘speech’, ‘quantity’, ‘mental process’, ‘relationship’, ‘organization’ and ‘life’ (see Tables 6 and 7).

Table 6: List of collocations (*owaru* - BCCWJ)

<i>owaru</i> - BCCWJ				
Verb object	Transcription	Translation	Frequency	Semantic field
質問	<i>shitsumon</i>	question	339	speech
執行	<i>shikkō</i>	execution	78	work
討論	<i>tōron</i>	discussion	37	speech
仕事	<i>shigoto</i>	work	28	life
一生	<i>isshō</i>	whole life	17	time
報告	<i>hōkoku</i>	report	16	speech
話	<i>hanashi</i>	story, talk	14	speech
説明	<i>setsumei</i>	explanation	14	speech
戦争	<i>sensō</i>	war	12	relationship
生涯	<i>shōgai</i>	life	11	time
教科書	<i>kyōkasho</i>	textbook	8	speech
食事	<i>shokuji</i>	meal	8	life
回	<i>kai</i>	-times	7	quantity
人生	<i>jinsei</i>	life	7	life
時代	<i>jidai</i>	period, era	6	time
全て	<i>subete</i>	everything, all	6	quantity
発言	<i>hatsugen</i>	statement	6	speech
点前	<i>temae</i>	tea-ceremony procedure	6	life
夢	<i>yume</i>	dream	5	mental process
陳述	<i>chinjutsu</i>	declaration	5	speech
質疑	<i>shitsugi</i>	question, interpellation	5	speech
処理	<i>shori</i>	processing, treatment	5	work

Table 7: List of collocations (*owaru* - CSJ/NUCC)

<i>owaru</i> - CSJ/NUCC				
Verb object	Transcription	Translation	Frequency	Semantic field
発表	<i>happyō</i>	speech	171	speech
話	<i>hanashi</i>	story, talk	72	speech
報告	<i>hōkoku</i>	report	18	speech
説明	<i>setsumei</i>	explanation	4	speech
仕事	<i>shigoto</i>	work	4	life
幹部	<i>kanbu</i>	executive	3	work
講演	<i>kōen</i>	lecture	3	speech
スピーチ	<i>supīchi</i>	speech	3	speech

<i>owaru</i> - CSJ/NUCC				
Verb object	Transcription	Translation	Frequency	Semantic field
～について (話)	<i>ni tsuite</i> (<i>hanashi</i>)	about (talk)	2	speech
授業	<i>jugyō</i>	lesson	2	work
高校生以降	<i>kōkōsei ikō</i>	during/after high school	1	time
野球部	<i>yakyūbu</i>	baseball club	1	organization
発話	<i>hatsuwa</i>	utterance, speech	1	speech
検索	<i>kensaku</i>	searching	1	mental process
前夜祭	<i>zen'yasai</i>	night before a festival	1	life
生活	<i>seikatsu</i>	life	1	life
分析	<i>bunseki</i>	analysis	1	mental process
文	<i>bun</i>	sentence	1	speech
選手	<i>senshu</i>	player	1	work
感想	<i>kansō</i>	impression	1	mental process
町浦和 (話)	<i>machi urawa</i> (<i>hanashi</i>)	Urawa city (story)	1	speech
入力	<i>nyūryoku</i>	input	1	work
小学校時代	<i>shōgakkō jidai</i>	time period of primary school	1	time
戦争	<i>sensō</i>	war	1	relationship
コンパニオン	<i>konpanion</i>	companion	1	work
これ (紛争)	<i>kore (funsō)</i>	this (dispute)	1	relationship
ゲーム	<i>gēmu</i>	game	1	life
調べ	<i>shirabe</i>	investigation	1	mental process
ヤマト	<i>yamato</i>	Yamato	1	person
やつ	<i>yatsu</i>	he	1	person
トーク	<i>tōku</i>	talk	1	speech
ドクター	<i>dokutā</i>	doctor (PhD)	1	work
ターゲット(目標)	<i>tāgetto</i> (<i>mokuhyō</i>)	target (objective)	1	mental process
食事	<i>shokuji</i>	meal	1	life
の (レポート)	<i>no (repōto)</i>	nominalization (report)	1	speech
子育て	<i>kosodate</i>	parenting	1	work
それ (体験)	<i>sore (taiken)</i>	that (experience)	1	mental process
それ (実習)	<i>sore (jissū)</i>	that (practice)	1	mental process
それ (説明)	<i>sore (setsume)</i>	that (explanation)	1	speech

Once the results are summed up, it becomes apparent that over 75% of analyzed sentences include collocations classified into the semantic field of ‘speech’, such as ‘question’ (*shitsumon* 質問) or ‘story’ (*hanashi* 話). The most prominent group is followed by the semantic field of ‘work’, including collocations such as ‘execution’ (*shikkō* 執行). 6% of all collocations are sorted into the semantic field of ‘life’ (‘life/lifetime’ *shōgai* 生涯, ‘life/living’ *seikatsu* 生活). The remaining 5% are evenly distributed between smaller groups (Table 8 and Figure 3).

Table 8: Semantic fields of collocations (*owaru*)

	Time	Person	Work	Speech	Quantity	Mental process	Relationship	Organization	Life
BCCWJ	34	0	83	444	13	5	12	0	49
	5.3%	0.0%	13.0%	69.4%	2.0%	0.8%	1.9%	0.0%	7.7%
CSJ/NUCC	8	2	10	279	0	7	2	1	8
	2.5%	0.6%	3.2%	88.0%	0.0%	2.2%	0.6%	0.3%	2.5%
Total	42	2	93	723	13	12	14	1	57
	4.4%	0.2%	9.7%	75.5%	1.4%	1.3%	1.5%	0.1%	6.0%

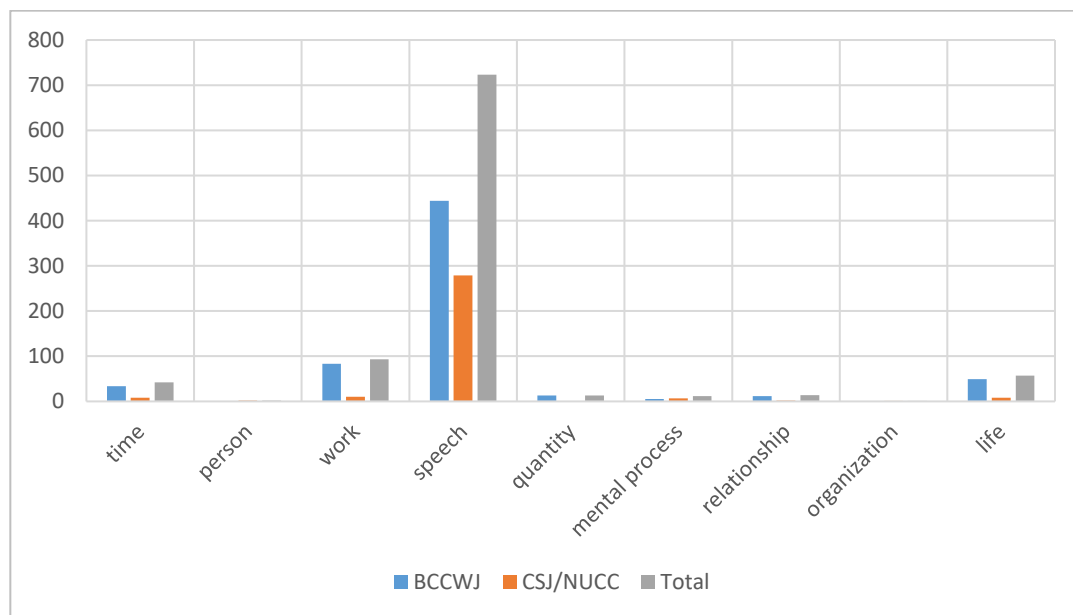


Figure 3: Semantic fields of collocations (*owaru*)

5.2 *Oeru*

Collocations are divided into seven semantic categories: ‘time’, ‘work’, ‘speech’, ‘mental process’, ‘relationship’, ‘organization’ and ‘life’. All categories overlap with those observed in *owaru*. (see Tables 9 and 10).

Table 9: List of collocations (*oeru* - BCCWJ)

Verb object	<i>oeru</i> - BCCWJ			
	Transcription	Translation	Frequency	Semantic field
仕事	<i>shigoto</i>	work	189	life
生涯	<i>shōgai</i>	life	63	time
食事	<i>shokuji</i>	meal	62	life
一生	<i>isshō</i>	whole life	57	time
作業	<i>sagyō</i>	work, duty	51	life
式	<i>shiki</i>	ceremony	42	life
役割	<i>yakuwari</i>	part, role	40	work
取引	<i>torihiki</i>	trade, business	34	work
旅	<i>tabi</i>	travel	30	life
役目	<i>yakume</i>	duty, role	29	work
朝食	<i>chōshoku</i>	breakfast	27	life
撮影	<i>satsuei</i>	photography	27	work
話	<i>hanashi</i>	story, talk	26	speech
準備	<i>junbi</i>	preparation	24	mental process
生活	<i>seikatsu</i>	life	23	life
授業	<i>jugyō</i>	lesson	23	work
取材	<i>shuzai</i>	collecting data	22	mental process
教育	<i>kyōiku</i>	education	21	work
活動	<i>katsudō</i>	activity	20	work
日	<i>hi</i>	day	20	time
電話	<i>denwa</i>	phone call	20	speech
生	<i>sei</i>	life	20	life
夕食	<i>yūshoku</i>	dinner	19	life
訓練	<i>kunren</i>	training	19	work
出産	<i>shussan</i>	birth, delivery	19	life
調査	<i>chōsa</i>	survey	18	mental process
型	<i>kata</i>	kata (sports)	18	life
手術	<i>shujutsu</i>	surgery	18	work
練習	<i>renshū</i>	exercise	17	mental process
戦	<i>ikusa</i>	battle	17	relationship
会	<i>kai</i>	meeting	16	organization
人生	<i>jinsei</i>	life	15	life

Table 10: List of collocations (*oeru* - CSJ/NUCC)

Verb object	<i>oeru</i> - CSJ/NUCC			
	Transcription	Translation	Frequency	Semantic field
仕事	<i>shigoto</i>	work	7	life
プログラム	<i>puroguramu</i>	program	4	speech
取引	<i>torihiki</i>	trade, business	4	work
報告	<i>hōkoku</i>	report	3	speech
学習	<i>gakushū</i>	learning	2	mental process
出産	<i>shussan</i>	birth, delivery	2	life
一生	<i>isshō</i>	whole life	3	time
学校 (教育)	<i>gakkō (kyōiku)</i>	school (education)	2	work
旅	<i>tabi</i>	travel	2	life
結婚式	<i>kekkonshiki</i>	wedding	2	life
年間	<i>nenkan</i>	in a year (period)	1	time
推論	<i>suiron</i>	deduction	1	mental process
話	<i>hanashi</i>	story, talk	1	speech
練習	<i>renshū</i>	exercise	1	mental process
実習	<i>jisshū</i>	practice	1	mental process
本番	<i>honban</i>	performance	1	work
野球	<i>yakyū</i>	baseball	1	life
生涯	<i>shōgai</i>	life	1	time
生活	<i>seikatsu</i>	life	1	life
授業	<i>jugyō</i>	lesson	1	work
作業	<i>sagyō</i>	work, duty	1	life
調査	<i>chōsa</i>	survey	1	mental process
論文	<i>ronbun</i>	thesis, article	1	speech
文	<i>bun</i>	sentence	1	speech
挨拶	<i>aisatsu</i>	greeting, address	1	speech
大役	<i>taiyaku</i>	important role	1	work
合宿	<i>gasshuku</i>	training camp	1	life
試合	<i>shiai</i>	match, game	1	life
総会	<i>sōkai</i>	general meeting	1	relationship
任	<i>nin</i>	duty	1	work
インターン	<i>intān</i>	intern	1	work
焼き入れ	<i>yakiire</i>	quenching	1	work
仕込み	<i>shikomi</i>	preparation	1	work
コンパ	<i>konpa</i>	party, event	1	relationship
～っていうの (授業)	<i>tte iu no (jugyō)</i>	nominalization (lesson)	1	work
レジデント	<i>rejidento</i>	medical resident	1	work

<i>oeru</i> - CSJ/NUCC				
Verb object	Transcription	Translation	Frequency	Semantic field
バイト	<i>baito</i>	part-time job	1	life
全て (葬列)	<i>subete (sōretsu)</i>	everything, all (funeral)	1	life
フェーズ	<i>fēzu</i>	phase	1	time
スパーリング	<i>supāringu</i>	sparring	1	life
フルメイク	<i>furumēku</i>	make-up	1	life
それ (仕事)	<i>sore (shigoto)</i>	that (work)	1	life
それ (教育)	<i>sore (kyōiku)</i>	that (education)	1	work
「みんなの日本語」 1 (教科書)	<i>Minna no nihongo 1 (kyōkasho)</i>	Minna no nihongo 1 (textbook)	1	speech
ドクター	<i>dokutā</i>	doctor (PhD)	1	work

When compared to *owaru*, a noticeable difference in semantic distribution can be observed. Almost half (48.4%) of all collocations are classified into the semantic field of ‘life’. This category is followed by the semantic group of ‘work’, which amounts to a little less than a quarter of all collocations (22.3%). The only other notable category is collocations related to ‘time’ with 13.1%. The remaining groups are relatively small. It is worth pointing out that the largest semantic category of *owaru*, ‘speech’, only amounts to 5.2% within *oeru* (Table 11 and Figure 4).

Table 11: Semantic fields of collocations (*oeru*)

	Time	Work	Speech	Mental process	Relationship	Organization	Life
BCCWJ	140 13.4%	231 22.1%	46 4.4%	81 7.7%	17 1.6%	16 1.5%	515 49.2%
CSJ/NUCC	6 9.1%	17 25.8%	12 18.2%	6 9.1%	2 3.0%	0 0.0%	23 34.8%
Total	146 13.1%	248 22.3%	58 5.2%	87 7.8%	19 1.7%	16 1.4%	538 48.4%

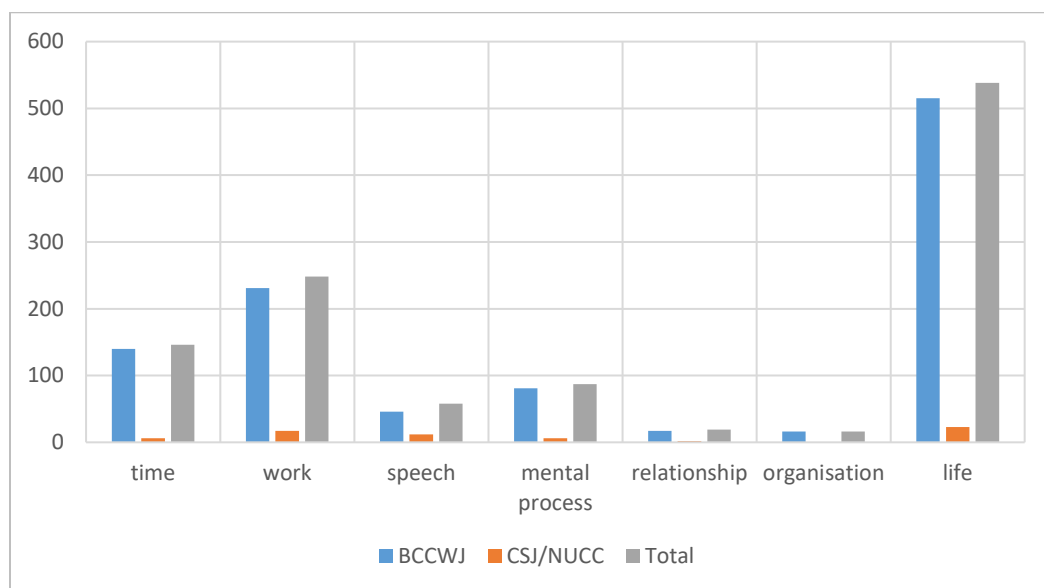


Figure 4: Semantic fields of collocations (*oeru*)

6 Categorization of verb forms and collocations

This section discusses the categorization of verb forms.

Analyzed verbs were first grouped into six categories according to the voice (*voisu, tai* ヴォイス, 態) or modality (*modariti, hō* モダリティ, 法) they display. Due to an already high number of results, only verb forms exhibiting modality through inflection were counted.

Furthermore, almost all verbs in modality categories are found in the active voice. There are six exceptions where a combination of two morphemes can be observed (causative + volition, causative + desire). Such exceptions are only found in examples of the verb *owaru* and were assigned to both categories (see 6.1). Once categorized, all verb forms were further classified into eight subcategories (see 6.2).

All samples were exported in an .xlsx file and analyzed manually. Both categories and subcategories are based on verb forms appearing throughout sample sentences. Verb forms not observed within examples of either *owaru* or *oeru* are therefore not included.

When a verb form corresponded to one of the categories or subcategories, a point was assigned in the designated table. Two examples of point-counting are given at the end of this section (refer to Tables 12 and 13 below). This was done in order to determine the distribution of verb forms within example sentences and, most importantly, within semantic groups of collocations (Sections 7 and 8).

Both categories and subcategories as well as example sentences representative of each are provided on the following pages (Sections 6.1 and 6.2).

6.1 Categories of verb forms

10. Active form

Active voice of the verb, including the final form *shūshikei* 終止形 and attributive form *rentaikei* 連体形.

- 1) 彼の言うには、神、すなわち、われわれとわれわれの周りの人間の創造者は、その仕事を終える前に死んだというのです。

Kare no iu ni wa, kami, sunawachi, wareware to wareware no mawari no ningen no sōzōsha wa, sono shigoto wo oeru mae ni shinda to iu no desu.

work [acc] to finish [tr.act.nonpst.adn]

According to his words, God, the creator of us and others, died before he finished his work.

11. Causative form

Causative voice (-*(s)ase-*) of the verb.

- 2) 時間内に仕事を終わらせることも大切な責任です。

Jikannai ni shigoto wo owaraseru koto mo taisetsu na sekinin desu.

work [acc] to finish [tr.caus.nonpst.adn]

Finishing work within the time frame is just as big of a responsibility.

12. Passive/potential/honorific form

Indicates the passive form, potential form, or honorific form of the verb (-*rare-*).

Out of seven cases, five verbs (including Example 3 below), are used as honorific speech. Four co-occur with nouns meaning 'life', such as '*shōgai* 生涯' or '*isshō* 一生', while one is used in dialogue as a direct question 'have you completed your PhD?' (*dokutā wo owarareta no desu ka* ドクターを終わられたのですか).

One example is ambiguous and can be interpreted as either the potential or as the honorific form - 'you, who were able to safely complete your duty' or 'you, who safely completed your duty' (*buji oyakume wo oerareta anata* 無事お役目を終えられた貴方).

The last example is a direct question referring to a third party. *Oeru* is used in its potential form - 'do you think the villagers will be able to finish the long journey?' (*murabito-tachi wa [...] nagai tabi wo oerareru to omoimasuka?* 村人たちは [...] 長い旅を終えられると思いますか?).

There are no examples of either verb in its passive form.

- 3) しかし、不幸なことに二年たらずで大腸がんにかかり、五十五歳の短い生涯を終えられました。
Shikashi, fukō na koto ni ninen tarazu de daichōgan ni kakari, gojūgosai no mijikai shōgai wo oeraremashita.
 life [acc] to end [tr.pol.pst]
 However, unfortunately, in less than two years, he fell ill with colorectal cancer and ended his short life at the age of 55.

13. Volition

Verb form expressing volition *-(y)ō*.

- 4) ちょうどその仕事を終えようとしたとき、エレベーターの動く音がした。
Chōdo sono shigoto wo oeyō to shita toki, erebēta no ugoku oto ga shita.
 work [acc] to finish [tr.act.vol]
 Just as I was about to finish work, I heard the sound of the elevator moving.

14. Desire

Verb form expressing desire, wish *-(tai)*.

- 5) この二点御答弁いただいて、質問を終わりたいと思います。
Kono niten gotōben itadaite, shitsumon wo owaritai to omoimasu.
 question [acc] to end [tr.act.des.nonpst]
 Once you provide an explanation of these two points, I would like to end my question.

15. Gerundive/-te form

The gerundive or *-te* form of the active voice. It is generally a subcategory (see 6.2), but separated in the case of active voice due to a very high frequency of appearance.

- 6) 仕事を終えて味わう酒は本当に美味。
Shigoto wo oete ajiwau sake wa hontō ni bimi.
 work [acc] to finish [tr.act.ger]
 Alcohol savored after work is truly delicious.

6.2 Subcategories of verb forms

Subcategories highlight additional characteristics of the verbs. The eight groups are classified as follows.

16. Positive form

Positive form of the verb.

- 7) あの子は親の名前も顔も知らないわずか十余年の短い生涯を終えた。
Ano ko wa oya no namae mo kao mo shiranai wazuka jūyonen no mijikai shōgai wo oeta.
life [acc] to end [tr.act.pst.pos]
That child ended his short life of ten years or so without knowing the names and faces of his parents.

17. Negative form

Negative form of the verb.

- 8) 業者さんがとにかく仕事を終わらせないと帰れないのです。
Gyōsha san ga tonikaku shigoto wo owarasenai to kaerenai no desu.
work [acc] to finish [tr.caus.nonpst.neg]
In any case, workers cannot go home if they do not finish work.

18. Non-past form

The verb is found in non-past tense.

- 9) 以上で発表を終わります。
Ijō de happyō wo owarimasu.
presentation [acc] to end [tr.act.pol.nonpst]
With this I end my presentation.

19. Past form

The verb is found in past tense.

- 10) 小坂はあわてて話を終わらせた。
Kosaka wa awatete hanashi wo owaraseta.
story [acc] to finish [tr.caus.pst]
Kosaka hurriedly finished the story.

20. Past context

The context of an analyzed sentence as a whole is placed in the past. The category was added in order to compare the use of tenses between *owaru* and *oeru*. For example, the

gerundive form of *oeru* (*oete*) does not indicate past nor non-past on its own. However, it frequently appears within sentences where the main verb is used in past tense.

- 11) ほどなく、彼は話を終えて戻ってきた。
Hodonaku, kare wa hanashi wo oete modotte kita.
 story [acc] to finish [tr.act.ger]
 Soon after, he finished the story and came back.

21. Adnominal use

The verb is used adnominally in the structure V-ru + N.

- 12) 効率よく仕事を終わらせるコツ。
Kōritsu yoku shigoto wo owaraseru kotsu.
 work [acc] to finish [tr.caus.nonpst.adn]
 The secret to finishing work effectively.

22. Gerundive/-te form'

The gerundive form of all categories with the exception of active voice. In order to differentiate it from the main category, it is marked with the apostrophe sign '.

- 13) 以上、私の所見を交え、質問を終わらせていただきます。
Ijō, watashi no shoken wo majie, shitsumon wo owarasete itadakimasu.
 question [acc] to finish [tr.caus.ger]
 With this, I have expressed my opinion and will now finish my question.

23. Conditional form

-ba and *-tara* forms.

- 14) 食事を終わったら、君の客室へ行って話し合おうか？
Shokuji wo owattara, kimi no kyakushitsu e itte hanashiaō ka?
 meal [acc] to finish [tr.act.cond]
After we finish the meal, shall we head to your room and talk?

The following Tables 12 and 13 present examples of point assignment during the analysis. The first row lists the category, while the second one lists the subcategories. When the verb form coincides with one of the subcategories, one point '1' is added to the chart. If the verb form does not correspond to any category, no points '0' were assigned.

Example for the sentence 'allow me to finish my presentation' (*happyō wo owarasete itadakimasu* 発表を終わらせていただきます):

Table 12: Point assignment 1

Causative							
Positive	Negative	Non-past	Past	Past context	Adnominal	Gerundive'	Conditional
1	0	0	0	0	0	1	0

Example for the sentence 'after finishing work, I read a book' (*shigoto wo oeta ato hon wo yomimashita* 仕事を終えた後本を読みました):

Table 13: Point assignment 2

Active							
Positive	Negative	Non-past	Past	Past context	Adnominal	Gerundive'	Conditional
1	0	0	1	1	1	0	0

Once each verb form was analyzed in line with this procedure, points were summed up and edited in the form of tables and graphs. These provide a picture of the morphological distribution in two corpora separately as well as a general picture (total) where all results are counted together. This made it possible to easily determine the frequency of morphological categories and subcategories, presented in the upcoming Section 7, and, additionally, determine their relation to the semantic fields (Section 8).

7 Frequency of morphological verb categories and subcategories

In this section results of the sentence, analysis are provided. For practical reasons the forms *owarareru* and *oerareru* are marked as 'honorific' in tables and figures, as they are the highest in frequency (refer to Section 6.1).

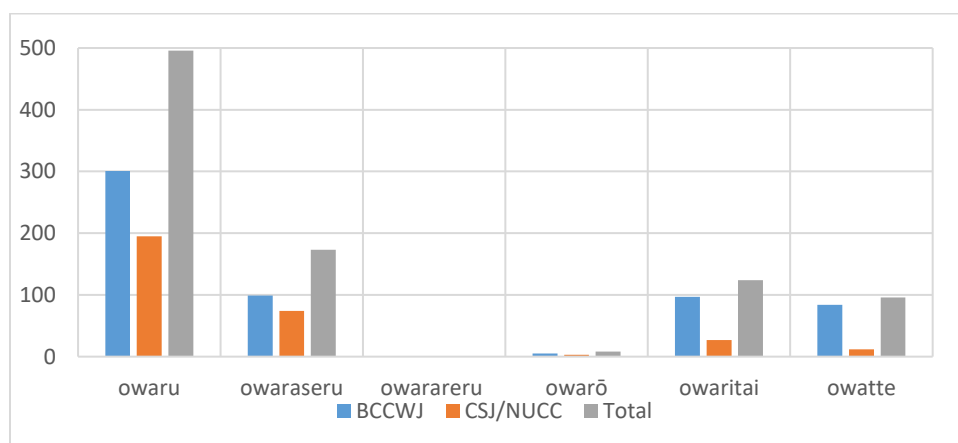
7.1 *Owaru*

7.1.1 Categories

Over half of all examples find *owaru* in its active form (55.2%). Causative use is placed second, with 19.3% of appearance frequency. In this case, the high number is to be expected. As pointed out in Section 2.3, as well as during the analysis of instructional materials and the public's general perception of *owaru*, the verb is consistently being presented or perceived as solely intransitive. Two smaller groups consist of the gerundive *owatte* (10.7%) and the form expressing desire *owaritai* (13.8%). Meanwhile, the volitional form *owarō* (0.9%) and the honorific form *owarareru* (0.1%) are barely present (see Table 14 and Figure 5).

Table 14: Verb forms (*owaru*)

	<i>owaru</i> active	<i>owaraseru</i> causative	<i>owarareru</i> honorific	<i>owarō</i> volition	<i>owaritai</i> desire	<i>owatte</i> gerundive
BCCWJ	301 51.4%	99 16.9%	0 0.0%	5 0.9%	97 16.6%	84 14.3%
CSJ/NUCC	195 62.5%	74 23.7%	1 0.3%	3 1.0%	27 8.7%	12 3.8%
Total	496 55.2%	173 19.3%	1 0.1%	8 0.9%	124 13.8%	96 10.7%

**Figure 5:** Verb forms (*owaru*)

When comparing the corpora of written (BCCWJ) and spoken (CSJ/NUCC) Japanese, the most remarkable difference can be found in the causative use of *owaru*. The active form is the most notable in both corpora and encompasses over 60% of the forms in CSJ/NUCC.

However, the causative use is more prevalent in the corpus of spoken Japanese (23.7%), whereas the frequency in BCCWJ reaches only 16.9%. The reason for this difference could be assigned to one specific collocation, ‘presentation, speech’ *happyō* 発表. It is ranked first in frequency and frequently co-occurs with the phrase ‘allow to finish’ *owarasete itadaku* 終わらせていただく. This structure consists of the causative morpheme *-(s)ase-* and the verb ‘to receive’ in its humble form *itadaku*. It can be used when the speaker is granted permission from the listener for a specific action, or as a phrase when there is no actual need for permission and the speaker simply wants to express politeness or humbleness when talking about a planned action (Shigemori Bučar, 2008, p. 76-77).

BCCWJ on the contrary exhibits a higher percentage of the form *owaritai*, which most frequently co-occurs with the collocation ‘question’ *shitsumon* 質問 in the phrase ‘I think I want to finish’ *owaritai to omoimasu* 終わりたいと思います.

7.1.2 Subcategories

The verb *owaru* is found almost entirely in its positive form (99.2%) and non-past tense (86.5%). Even considering the context in its entirety, the past tense of the main verb can only be observed in 50 cases (Table 15 and Figure 6).

Gerundive forms are visible especially in the category of causative use (*owarasete*), which is due to the frequently used phrase *owarasete itadaku*. In this research, this structure most often co-occurs with collocations in the semantic field of ‘speech’, such as ‘question’ *shitsumon* 質問, ‘presentation’ *happyō* 発表 or ‘story’ *hanashi* 話. As this semantic group is the most prominent for *owaru*, the high percentage of causative use and gerundive forms are not unexpected. The latter is particularly present in CSJ/NUCC. There are no other significant differences between the two corpora.

Table 15: Subcategories of verb forms (*owaru*)

	Positive	Negative	Non-past	Past	Past context	Adnominal	Gerundive'	Conditional
BCCWJ	581	5	482	20	37	35	73	2
	99.1%	0.9%	82.3%	3.4%	6.3%	6.0%	12.5%	0.3%
CSJ/NUCC	310	2	295	5	13	12	65	2
	99.4%	0.6%	94.6%	1.6%	4.2%	3.8%	20.8%	0.6%
Total	891	7	777	25	50	47	138	4
	99.2%	0.8%	86.5%	2.8%	5.6%	5.2%	15.4%	0.4%

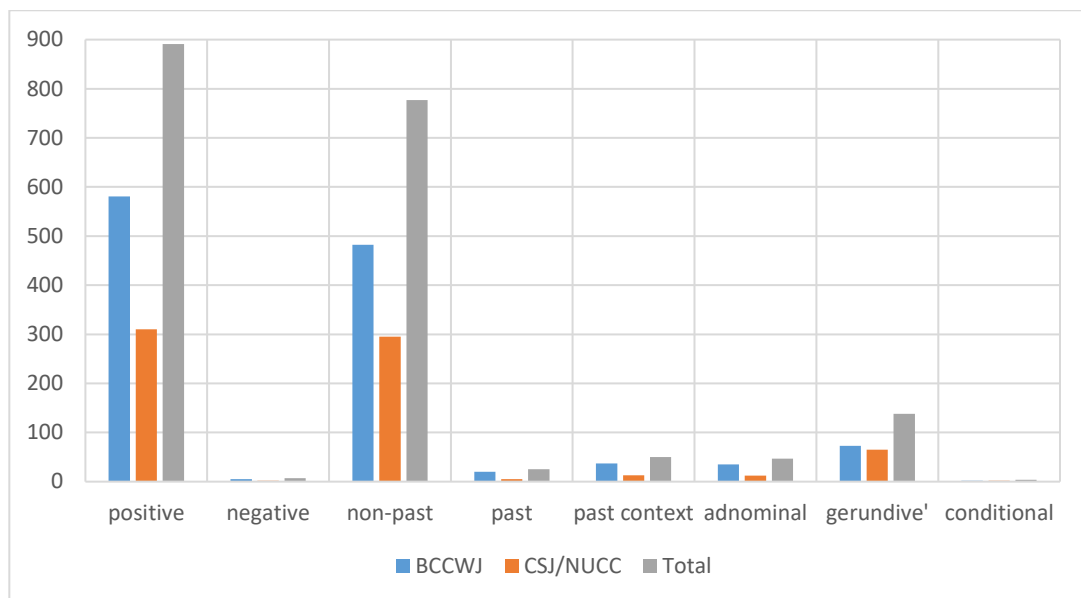


Figure 6: Subcategories of verb forms (*owaru*)

7.2 *Oeru*

7.2.1 Categories

In contrast with the verb *owaru*, the distribution of categories is significantly different for *oeru*. Only two major groups can be identified; the active form taking up almost 60% of all examples and the gerundive form amounting to almost 40%. If counted together, the two groups make up for 95.8% of all analyzed verb forms.

No other form, including the causative use, stands out (Table 16 and Figure 7).

Table 16: Categories of verb forms (*oeru*)

	<i>oeru</i> active	<i>oesaseru</i> causative	<i>oerareru</i> honorific	<i>oeyō</i> volition	<i>oetai</i> desire	<i>oete</i> gerundive
BCCWJ	369	0	6	7	10	231
	59.2%	0.0%	1.0%	1.1%	1.6%	37.1%
CSJ/NUCC	34	3	0	1	2	26
	51.5%	4.5%	0.0%	1.5%	3.0%	39.4%
Total	403	3	6	8	12	257
	58.5%	0.4%	0.9%	1.2%	1.7%	37.3%

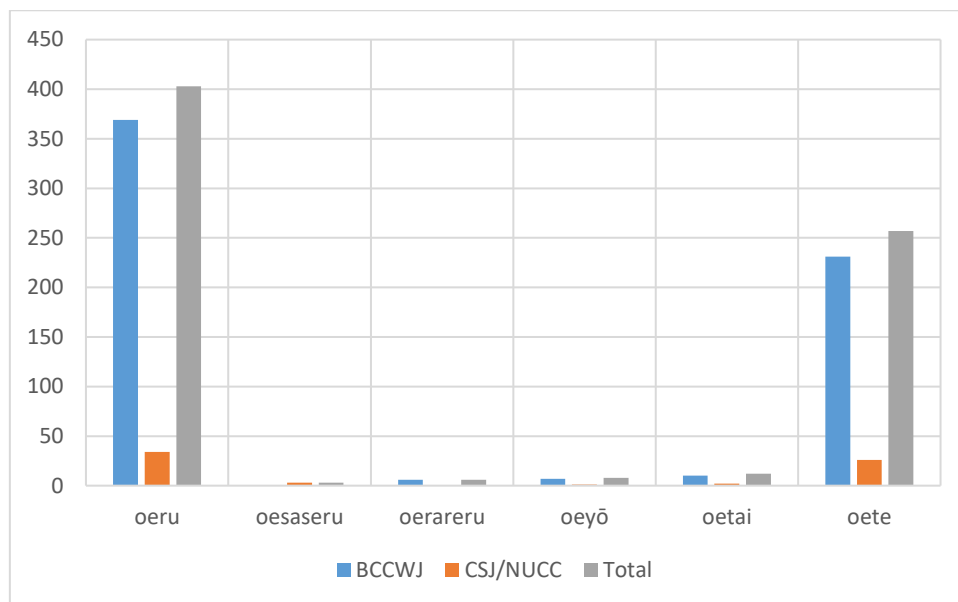


Figure 7: Categories of verb forms (*oeru*)

As explained in Section 7.1, causative use is primarily found co-occurring with collocations in the semantic field of ‘speech’. However, such collocations are not as frequent when discussing *oeru*. The lack of this category could be an explanation for the low percentage of causative forms when compared to *owaru*.

There are no significant differences between the corpora of written and spoken Japanese. However, two minor discrepancies can be mentioned; all causative forms are observed in CSJ/NUCC, while all honorific forms are located in BCCWJ.

7.2.2 Subcategories

It is worth noting one major discrepancy can be observed when comparing the results with those of the verb *owaru*.

While the absence of negative forms is characteristic of both verbs, the use of the tense is significantly different. *Oeru* is found in past tense in the majority of cases (past tense 271 cases, non-past tense 150 cases), and past context prevails as well (395 cases out of 689). Adnominal use is also often found in past forms.

The gerundive’ group has an extremely low frequency (0.4%), which can however be explained with the gerundive of the active form being a separate category. (Table 17 and Figure 8).

The distribution of forms (active and gerundive forms covering over 95% of all verb forms) and the major use of both past tense and past context suggest that *oeru* is a verb that tends to express ‘completion’. Past tense and past context on their own define an action that has already been finished. Furthermore, the gerundive also

implies a sequence of two or more actions, in which the first one has to be completed before the next one begins.

Other than a higher percentage of the 'past context' category observed in BCCWJ, no major differences between the corpora of written and spoken Japanese are present.

Table 17: Subcategories of verb forms (*oeru*)

	Positive	Negative	Non-past	Past	Past context	Adnominal	Gerundive'	Conditional
BCCWJ	623	0	139	246	368	178	0	8
	100.0%	0.0%	22.3%	39.5%	59.1%	28.6%	0.0%	1.3%
CSJ/NUCC	66	0	11	25	27	21	3	3
	100.0%	0.0%	16.7%	37.9%	40.9%	31.8%	4.5%	4.5%
Total	689	0	150	271	395	199	3	11
	100.0%	0.0%	21.8%	39.3%	57.3%	28.9%	0.4%	1.6%

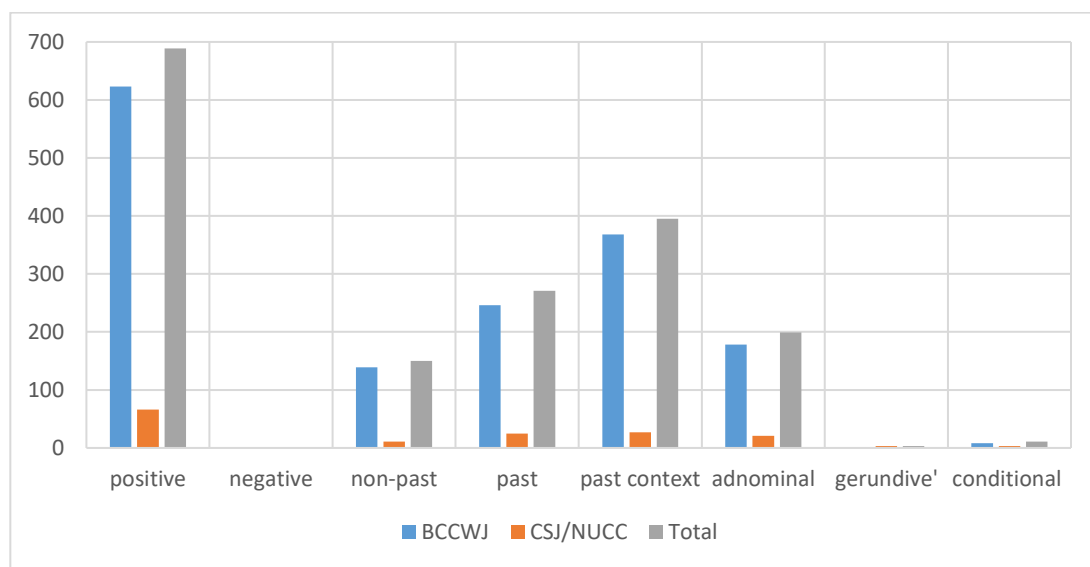


Figure 8: Subcategories of verb forms (*oeru*)

8 Collocations in relation to verb forms

This section provides the analysis of relations between semantic fields of collocations and morphological categories of verb forms. Only collocations of higher frequency co-occurring with analyzed verb forms are counted (refer to Section 4).

The tables in this section list all semantic fields of collocations and their frequency of appearance, as well as the morphological categories of each verb.

Full lists of collocations belonging to separate semantic fields can be found in Sections 5.1 and 5.2. Morphological categories are described in detail in Section 6.

Each table corresponds to the graph located beneath it. Sections on the graphs represent the distribution of verbal forms within a specific semantic group of collocations.

8.1 *Owaru*

The most prominent semantic group of collocations for the verb *owaru* is that of ‘speech’ (refer to Section 5). Numbers in Table 18 show that collocations in this field most frequently (62.9%) co-occur with active forms of the verb. Additionally, in the same semantic field, there are two other emerging morphological categories; the causative form *owaraseru* (19.3%) and the form expressing desire *owaritai* (17.2%).

Collocations classified into the semantic field of ‘work’ show a high co-occurrence of 85.2% with the gerundive form *owatte*, as well as the active form (12.5%). The remaining morphological categories fluctuate between 0–1.1%.

Similarly, the semantic groups of ‘life’, ‘time’, and ‘relationship’, although lesser in frequency, also show that the most prominent morphological categories are those of active, causative, and gerundive forms.

Other semantic groups of collocations are not common and show no particular relations in regards to any morphological category of the verbs.

Table 18: Collocations in relation to verb forms (*owaru*)

Semantic field	Frequency	<i>owaru</i> active	<i>owaraseru</i> causative	<i>owarareru</i> honorific	<i>owarō</i> volition	<i>owaritai</i> desire	<i>owatte</i> gerundive
Time	30	21 70.0%	1 3.3%	0 0.0%	1 3.3%	2 6.7%	6 20.0%
Person	2	0 0.0%	2 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Work	88	11 12.5%	1 1.1%	1 1.1%	0 0.0%	0 0.0%	75 85.2%

Semantic field	Frequency	<i>owaru</i> active	<i>owaraseru</i> causative	<i>owarareru</i> honorific	<i>owarō</i> volition	<i>owaritai</i> desire	<i>owatte</i> gerundive
Speech	699	440 62.9%	135 19.3%	0 0.0%	3 0.4%	120 17.2%	2 0.3%
Mental process	7	3 42.9%	1 14.3%	0 0.0%	1 14.3%	0 0.0%	2 28.6%
Relationship	14	2 14.3%	12 85.7%	0 0.0%	0 0.0%	1 7.1%	0 0.0%
Organization	1	1 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Life	51	18 35.3%	21 41.2%	0 0.0%	3 5.9%	1 2.0%	11 21.6%

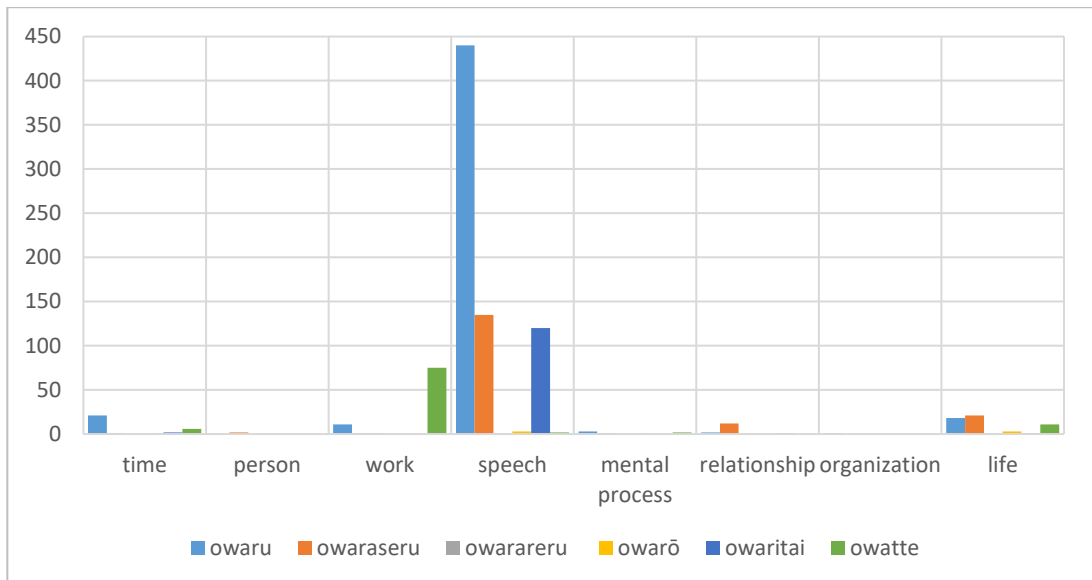


Figure 9: Collocations in relation to verb forms (*owaru*)

8.2 *Oeru*

The results of collocations in relation to verbal forms of *oeru* are consistent with the semantical and morphological analysis (Sections 5 and 7).

In all semantic fields, the most noticeable morphological are of the active voice *oeru* and the gerundive form *oete* (see Table 19 and Figure 10).

Only one exception can be observed. In line with the results of *owaru*, the verb *oeru* also displays a higher percentage of causative *oesaseru*, as well as the form expressing desire *oetai*, in the semantic field of 'speech'. Causative is only observable

in this semantic field. Each morphological category constitutes 7.9% of analyzed verb forms, whereas in *owaru* causative is prevalent.

This pattern of distribution can be anticipated, as the analysis of the morphological categories (Section 7) reveals that *oeru* is largely observed in either its active or its gerundive form.

The remaining categories (causative, honorific, volition and desire) are, except for the abovementioned semantic group of ‘speech’, very low in percentage or not observed in several cases.

Table 19: Collocations in relation to verb forms (*oeru*)

Semantic field	Frequency	<i>oeru</i>	<i>oesaseru</i>	<i>oerareru</i>	<i>oeyō</i>	<i>oetai</i>	<i>oete</i>
		active	causative	honorific	volition	desire	gerundive
Time	126	101	0	4	2	5	14
		80.2%	0.0%	3.2%	1.6%	4.0%	11.1%
Work	120	88	0	1	3	2	26
		73.3%	0.0%	0.8%	2.5%	1.7%	21.7%
Speech	38	18	3	0	0	3	14
		47.4%	7.9%	0.0%	0.0%	7.9%	36.8%
Mental process	6	4	0	0	0	0	2
		66.7%	0.0%	0.0%	0.0%	0.0%	33.3%
Relationship	2	2	0	0	0	0	0
		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Life	397	190	0	1	3	2	201
		47.9%	0.0%	0.3%	0.8%	0.5%	50.6%

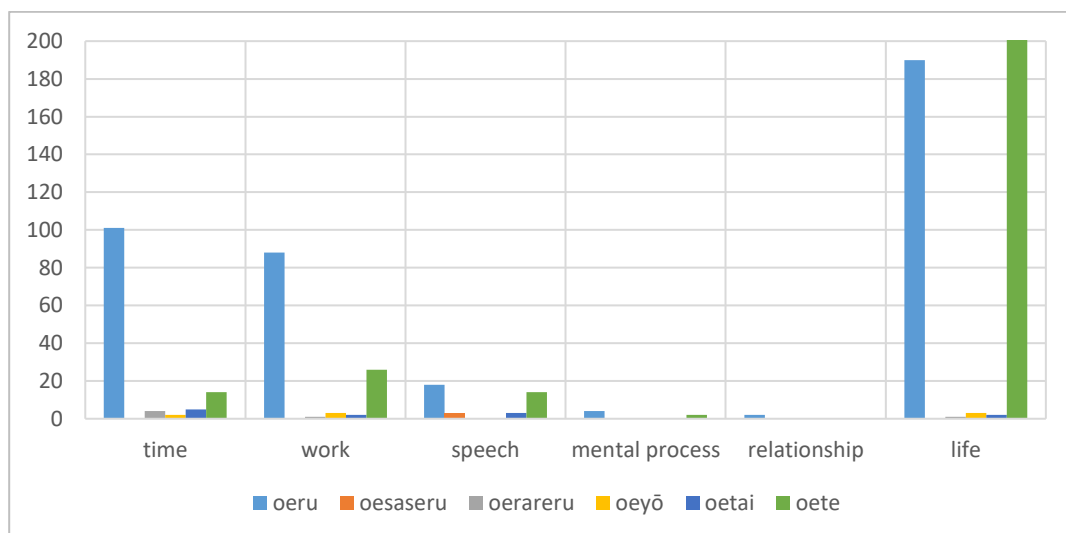


Figure 10: Collocations in relation to verb forms (*oeru*)

9 Conclusion

The evidence from this research suggests that differences between the use of transitive verbs *owaru* and *oeru* exist. The semantical analysis of collocations in combination with the morphological analysis of co-occurring verbs brings forth interesting results. It is however necessary to point out that major issues remain to be solved, despite numerous studies and discussions on verb transitivity.

Section 2 elaborates on verb transitivity with an emphasis on *owaru* and *oeru* as a pair. Although it is correct to refer to *owaru* [intr.] as a verb forming two pairs, one with its transitive counterpart *owaru* [tr.] and one with *oeru* [tr.], the analysis presented in Section 3 highlights several inconsistencies in both representation and perception of the verbs.

Firstly, some differences can be discerned in dictionary definitions of the verbs (Section 3.1), particularly regarding the transitivity of *oeru*. *Owaru* is listed as an ergative verb in all cases. These results stand out especially when the diachronic change in verb use is taken into consideration. As can be gathered from the comparison of sample sentences from CHJ and BCCWJ, it is evident that a significant shift in the use of *owaru* has occurred, despite the consistent dictionary definitions. In modern Japanese, *owaru* tends to lean towards its intransitive use, while *oeru* overall appears in a small number of cases (see 3.2).

Furthermore, a similar pattern can be observed in the representation of the verbs within instructional materials, as *owaru* is most frequently used intransitively. *Oeru* is rarely seen at all (see 3.3). This also leads to a non-uniform perception of the verbs, as seen in examples gathered from two websites, where users express their doubts regarding *owaru* and question the correctness of its transitive use (see 3.4).

With these points of concern in mind, the next part of this research deals with the analysis of example sentences gathered from three corpora; BCCWJ, CSJ, and NUCC (Sections 4-8).

Section 5 examines collocations of *owaru* and *oeru* and categorizes them into limited semantic fields in order to spot similarities and differences between the verbs. The following Section 6 explains the morphological categories, used to later analyze verb forms in Section 7. Lastly, Section 8 points out structural forms of the verbs in relation to collocations. These analyses bring forth some noteworthy results.

Firstly, *owaru* has been observed to most often co-occur with collocations classified into the semantic field of 'speech', which is also the largest semantic group found within collocations of *owaru*. Results also show that causative forms of the verb '*owaraseru*' are very common in this semantic field. The high frequency of causative forms, even more so in the corpora of spoken Japanese CSJ/NUCC, is not unexpected. This is partly due to the collocations being classified into the aforementioned semantic

field of 'speech', which demonstrates a tendency of co-occurring with the frequently used phrase '*owarasete itadaku*' (i.e., *happyō wo owarasete itadakimasu*). A higher number of verb forms expressing desire '*owaritai*' has also been observed (i.e., *happyō wo owaritai to omoimasu*), although not as often as the causative. In some cases, gerundive forms have a higher frequency of appearance, for example in the semantic field of 'work'. Other semantic fields show no particular patterns. When comparing written and spoken Japanese, causative is found in even higher percentages in the latter corpus (CSJ/NUCC).

On the other hand, *oeru* illustrates a different picture. While the semantic fields overlap with *owaru*, their distribution differs. Most prominent are the semantic fields of 'life', 'work' and 'time', whereas the largest group within collocations of *owaru*, 'speech', amounts to only 38 examples for *oeru*. Similarly, causative is also found in much smaller numbers and is only present in the corpus of spoken Japanese, among verbs co-occurring with collocations semantically classified into the group of 'speech'. Regarding morphological categories of the verb forms, the active *oeru* and gerundive *oete* combined cover over 95% of all forms. That makes the distribution within semantic fields quite uniform and generally split between the two categories.

Another significant result is the correlation of *oeru* and the past tense. It is often observed in either past form, or within sentences set in the past. This characteristic, along with the high frequency of gerundive forms, which indicate a sequence of actions (one has to end before the other begins), signifies that *oeru* correlates to the meaning of completion.

Interestingly, both verbs appear almost exclusively in positive forms.

To sum up, it can be concluded that the distribution of semantic fields of collocations for each verb varies heavily. The semantic field of 'speech' covers most of the collocations for the verb *owaru*, whereas *oeru* mostly co-occurs with collocations relating to 'life', 'work', and 'time'.

Additionally, it has been observed that compared to *owaru*, *oeru* strongly gravitates towards active and gerundive forms as well as past tense, and displays a nuance of 'completion'.

However, it is imperative to admit that the discussion regarding the transitivity of *owaru* in *oeru* is still insufficient and in need of further research. To facilitate the understanding and correct the perceiving of verbs, it is necessary to focus on rare cases of ergative verbs during the educational process. This can be done with the help of dictionary definitions, practical examples, and the use of corpora, where special attention is given to *owaru* as a verb with two transitive pairs; the transitive *owaru* and *oeru*. Instructional materials should also provide detailed information, covering all aspects of the two verbs.

As future research, I propose a questionnaire that focuses on the students' perception of the two verbs. As noted for different languages, this is a topical issue at different levels of L2 acquisition (Pavlovič, 2020; Ito, 2021, etc.). Comparing the results with this paper could potentially be the next step towards a better understanding of intransitive and transitive verbs and their relations.

Abbreviations

[acc]	accusative
[adn]	adnominal use
[caus]	causative
[cond]	conditional
[des]	desire/wish
[ger]	gerundive
[inf]	infinitive
[intr]	intransitive
[neg]	negation
[nom]	nominative
[nonpst]	non-past tense
[pst]	past tense
[pol]	polite
[pos]	positive
[poten]	potential
[pres]	present tense
[top]	topic
[tr]	transitive
[vol]	volition

References

Books

- Adachi, A. 足立章子, Kurosaki, N. 黒崎典子, & Nakayama, Y. 中山由佳. (2013). *Kanji goi ga yowai anata e 漢字・語彙が弱いあなたへ*. Tokyo: Bonjinsha.
- Amano, M. 天野みどり, Ōshima, M. 大島資生, Sugimoto, T. 杉本武, Numata, Y. 沼田善子, Masuoka, T. 益岡隆志, & Yazawa, M. 矢澤真人. (2013). *Wākubukku nihon bunpō ワークブック日本文法*. Tokyo: Ōfū.
- Bekeš, A. (2005). *Pregled slovnice japonskega jezika* [Lecture notes]. Ljubljana: Faculty of Arts, Department of Asian and African studies.

- Hmeljak Sangawa, K., Kobayashi, R., Kumagai, Y., Shigemori Bučar, C., Maeno, Y., & Shukuri, Y. (2007). *Uvod v japonsko pisavo: hiragana, katakana in prvih 854 pismenk*. Ljubljana: Faculty of Arts, Department of Asian and African studies.
- Hmeljak Sangawa, K., Ichimiya, Y., Ida, N., Kawashima, T., Koga, M., Moritoki Škof, N., & Ryu, H. (2012). *Japonščina za začetnike 1*. Ljubljana: Ljubljana University Press, Faculty of Arts.
- Hmeljak Sangawa, K., Ichimiya, Y., Ida, N., Kawashima, T., Koga, M., Moritoki Škof, N., & Ryu, H. (2012). *Japonščina Za Začetnike 2*. Ljubljana: Ljubljana University Press, Faculty of Arts.
- Hmeljak Sangawa, K., Ichimiya, Y., Ida, N., Kawashima, T., Koga, M., Moritoki Škof, N., & Ryu, H. (2016). *Japonščina Za Začetnike 2*. Ljubljana: Ljubljana University Press, Faculty of Arts.
- Ito, H. (2021). From Native-speaker Likeness to Self-representation in Language: Views from the Acquisition of Japanese Transitive and Intransitive Verbs. *Acta Linguistica Asiatica*, 11(1), 25-36. <https://doi.org/10.4312/ala.11.1.25-36>
- Izuhara, S. (2010). Q&A-7 'owaru' wa tadōshi? Q&A-7 「おわる」は他動詞? Nihongo kyōshi Izuhara Shōji webusaito 日本語教師 泉原省二ウェブサイト Retrieved from http://blog.livedoor.jp/s_izuha/archives/1924977.html
- Kokuritsu kokugo kenkyūjo 国立国語研究所. (2003). *Bunrui goihyō: zōho kaitei-ban 分類語彙表: 増補改訂版 (Word list by semantic principles, revised and enlarged edition)*. <http://doi.org/10.15084/00002282>
- Makino, A., et al. (Eds.). (1998). *Minna no nihongo shokyū 2 honsatsu みんなの日本語：初級 II：本冊*. Tokyo: Suriē nettowāku.
- Makino, A., et al. (Eds.). (2013). *Minna no nihongo shokyū 2 honsatsu みんなの日本語：初級 II：本冊*. Tokyo: Suriē nettowāku.
- Morita, Y. 森田良行. (1994). *Dōshi no imironteki bunpō kenkyū 動詞の意味論的文法研究*. Tokyo: Meiji Shoin.
- Numata, Y. 沼田善子. (1989). Nihongo dōshi jita no imiteki taiō (1): tagigo ni okeru taiō no ketsuraku kara 日本語動詞 自・他の意味的対応 (1)：多義語における対応の欠落から (Semantic Correspondence between Transitive and Intransitive Verbs in Japanese (1): Correspondence Gaps in the Case of Polysemy). *Kenkyū hōkoku-shū 研究報告集*, 10, 193-215. <http://doi.org/10.15084/00001122>
- Oka, M., Tsutsui, M., Kondo, J., Emori, S., Hanai, Y., & Ishikawa, S. (2009). *Jōkyū e no tobira: kontentsu to maruchimedia de manabu nihongo 上級へのとびら：コンテンツとマルチメディアで学ぶ日本語 (Tobira: Gateway to Advanced Japanese Learning through Content and Multimedia: Textbook)*. Tokyo: Kuroshio shuppan.
- Okutsu, K. 奥津敬一郎. (1967). Jidōka tadōka oyobi ryōkyokuka tenkei – jitadōshi no taiō [自動化・他動化および両極化転形--自・他動詞対応. *Kokugogaku 国語学*, 70, 46–66.
- Pavlovič, M. (2020). Grammar Errors by Slovenian Learners of Japanese: Corpus Analysis of Writings on Beginner and Intermediate Levels. *Acta Linguistica Asiatica*, 10(1), 87-104. <https://doi.org/10.4312/ala.10.1.87-104>
- Shigemori Bučar, C. (2008). Causative and Politeness. *Asian and African Studies*, 12(3), 71–82.
- Srdanović, I. (2016). *Kolokacije in kolokacije na daljavo v japonskem jeziku: korpusni pristop*. Ljubljana: Scientific Research Institute of the Faculty of Arts.
- Tanimori, M., & Sato, E. (2012). *Essential Japanese Grammar a Comprehensive Guide to Contemporary Usage*. Tokyo: Tuttle.

Dictionaries

- Hmeljak Sangawa, K. (2006). 終える. In *Japonsko-slovenski slovar JaSlo*. Retrieved from <http://nl.ijs.si/jaslo/cgi/jaslo.pl>.
- Hmeljak Sangawa, K. (2006). 終わる. In *Japonsko-slovenski slovar JaSlo*. Retrieved from <http://nl.ijs.si/jaslo/cgi/jaslo.pl>.
- Kondō, I. 近藤いね子, & Takano, F. 高野フミ (Eds.). (1993). *Oeru*. In *Shogakukan Progressive Japanese-English Dictionary*. Tokyo: Shōgakukan.
- Kondō, I. 近藤いね子, & Takano, F. 高野フミ (Eds.). (1993). *Owaru*. In *Shogakukan Progressive Japanese-English Dictionary*. Tokyo: Shōgakukan.
- Nishio, M. 西尾実, Iwabuchi, E. 岩淵悦太郎, & Mizutani, S. 水谷静夫 (Eds.). (1955). 終える. In *Kokugo jiten 国語辞典*. Tokyo: Iwanami shoten.
- Nishio, M. 西尾実, Iwabuchi, E. 岩淵悦太郎, & Mizutani, S. 水谷静夫 (Eds.). (1955). 終わる. In *Kokugo jiten 国語辞典*. Tokyo: Iwanami shoten.
- Masuda, Ko. 増田綱 (Ed.). (1998). *Oeru*. In *Kenkyusha's New Japanese-English Dictionary*. Tokyo: Kenkyūsha
- Masuda, Ko. 増田綱 (Ed.). (1998). *Owaru*. In *Kenkyusha's New Japanese-English Dictionary*. Tokyo: Kenkyūsha
- Matsumura, A. 松村明 (Ed.). (2006). 終える. In *Daijirin 大辞林*. Tokyo: Sanseidō. Retrieved from <https://kotobank.jp/>.
- Matsumura, A. 松村明 (Ed.). (2006). 終わる. In *Daijirin 大辞林*. Tokyo: Sanseidō. Retrieved from <https://kotobank.jp/>.
- Shinmura, I. 新村出 (Ed.). (1955). 終える. In *Kōjien 広辞苑*. Tokyo: Iwanami shoten.
- Shinmura, I. 新村出 (Ed.). (1955). 終わる. In *Kōjien 広辞苑*. Tokyo: Iwanami shoten.
- Yamada, T. 山田忠雄, Shibata, T. 柴田武, Sakai, K. 酒井憲二, Kuramochi, Y. 倉持保男, Yamada, A. 山田明雄, Uwano, Z. 上野善道, Ijima, M. 井島正博, & Sasahara, H. 笹原宏之 (Eds.). (2012). 終える. In *Shin meikai kokugo jiten 新明解国語辞典*. Tokyo: Sanseidō.
- Yamada, T. 山田忠雄, Shibata, T. 柴田武, Sakai, K. 酒井憲二, Kuramochi, Y. 倉持保男, Yamada, A. 山田明雄, Uwano, Z. 上野善道, Ijima, M. 井島正博, & Sasahara, H. 笹原宏之 (Eds.). (2012). 終わる. In *Shin meikai kokugo jiten 新明解国語辞典*. Tokyo: Sanseidō.

Corpora

- Fujimura, I., Chiba, S., & Ōso, M. (2012). *Lexical and grammatical features of spoken and written Japanese in contrast: Exploring a lexical profiling approach to comparing spoken and written corpora*. Proceedings of the VIIth GSCP International Conference: Speech and Corpora, 393–98.
- Kokuritsu kokugo kenkyūjo 国立国語研究所. (2019). *Gendai nihongo kakikotoba kinkō kōpasu 現代日本語書き言葉均衡コーパス (Balanced Corpus of Contemporary Written Japanese - BCCWJ)*. Available online at <https://chunagon.ninjal.ac.jp/>.

Kokuritsu kokugo kenkyūjo 国立国語研究所. (2019). *Nihongo hanashikotoba kōpasu* 日本語話し言葉コーパス (*Corpus of Spontaneous Japanese - CSJ*). Available online at <https://chunagon.ninjal.ac.jp/>.

Kokuritsu kokugo kenkyūjo 国立国語研究所. (2019). *Nihongo rekishi kōpasu* 日本語歴史コーパス (*Corpus of Historical Japanese - CHJ*). Available online at <https://chunagon.ninjal.ac.jp/>.