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PHONOLOGICAL ADAPTATION OF ENGLISH PSEUDO-LOANWORDS (*WASEI EIGO*) IN JAPANESE

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Abstract

Some researchers have classified *wasei eigo*, a unique phenomenon in the absorption of English words into Japanese, as pseudo-loanwords. These words are notable for their characteristics, which not only change morphologically but also semantically. However, the phonological adaptation that occurs in English words when they are absorbed into *wasei eigo* is often ignored by some researchers. In fact, understanding this adaptation needs to be deepened first, considering English has a different phonological system from Japanese. This study aims to fill the gap by examining *wasei eigo* words found in Japanese online communication, especially on social media. The purpose of this study is to explain the phonological processes and rules of *wasei eigo*. Based on data findings, analyzed using both the theory of English and Japanese phonological systems, Japanese tend to adapt English words by adding, deleting, and substituting phonemes. Several reasons underlie these adaptations, including the absence of phonemes in the target language and differences in syllable systems. As a first step in analyzing the phenomenon of pseudo-loanwords in Japanese, this research will serve as a foundation to further study *wasei eigo* from various perspectives of linguistics.

Keywords: Phonological Adaptation; Pseudo-Loanwords; *Wasei eigo*

Abstrak

Wasei eigo, sebuah fenomena unik dalam penyerapan kosakata bahasa Inggris ke dalam bahasa Jepang, telah dikategorikan oleh para ahli sebagai *pseudo-loanwords* atau kata serapan semu. *Wasei eigo* terkenal karena karakteristiknya, yang tidak hanya berubah secara morfologis tetapi juga secara semantik. Akan tetapi, adaptasi fonologis yang terjadi pada kosakata bahasa Inggris ketika diserap menjadi *wasei eigo* sering kali diabaikan oleh beberapa peneliti. Padahal, pemahaman mengenai adaptasi ini perlu diperdalam terlebih dahulu, mengingat bahasa Inggris memiliki sistem fonologi yang berbeda dengan bahasa Jepang. Penelitian ini bertujuan untuk mengkaji proses adaptasi fonologis *wasei eigo* yang terdapat dalam komunikasi orang Jepang, khususnya di media sosial. Berdasarkan hasil temuan data yang dianalisis menggunakan teori sistem fonologi bahasa Inggris dan bahasa Jepang, adaptasi yang ditemukan setidaknya berupa penambahan, pelesapan, dan substitusi fonem. Adapun alasan yang mendasarinya antara lain ketiadaan fonem dalam bahasa target dan perbedaan sistem suku kata. Penelitian ini adalah langkah awal untuk mengkaji *wasei eigo* lebih lanjut dari berbagai perspektif ilmu linguistik.

Kata kunci: Adaptasi Fonologis; Kata Serapan Semu; *Wasei eigo*

INTRODUCTION

Japanese has a long history of borrowing words from other languages. Loanwords in Japanese are known as *gairaigo*. Hatanaka and Pannel (2016:15) described *gairaigo* as a loanword that is absorbed from a foreign language other than Chinese. The most notable thing that differentiates *gairaigo* from other types of words in Japanese is that it is written using *katakana* characters. Therefore, this type of word is also often referred to as *katakanago* (Sakuma, 2008:87). The language with the most vocabulary absorbed in Japanese (except Chinese) is English. As time goes by, English *gairaigo* (hereafter referred to as *gairaigo* only) has become a crucial part of the Japanese vocabulary and cannot be separated from everyday communication. That's because *gairaigo* vocabulary covers more than 10% of the current Japanese vocabulary, and 80% of it comes from English words (Orita in Underwood, 1999:91).

Language contact between the two languages first occurred at the beginning of the 19th century, referred to as the Meiji restoration period (Shimizu, 2010:5). At that time, English replaced Dutch as the lingua franca when Japanese ports began to reopen for foreign trade. It is for this reason that Japanese intellectuals began to learn and master English as their second language. There's a unique language phenomenon in Japanese that is created from *gairaigo* called *wasei eigo*. Etymologically, *wasei eigo* consists of the words 和製 *wasei* 'made-in Japan' and 英語 *eigo* 'English'. Therefore, this phenomenon is often called as 'Japanese-made English' or 'made-in-Japan English'.

Miller (1998:123) defined *wasei eigo* as a pseudo-loanword, an English lexeme that has been manipulated or created in Japan. According to Tomoda (2000:5), *wasei eigo* is a word created in Japan that is formed from English lexemes that have undergone adjustments in terms of pronunciation and meaning and no longer recognized as English. Not much different from the previous opinion, Irwin (2011:143) described *wasei eigo* as an English *gairaigo*, which has undergone adjustments in terms of morphology and/or semantic changes. From these opinions, it can be concluded that *wasei eigo* is a pseudo-loanword made in Japan, originating from an English words that has been adapted phonologically to become *gairaigo* and formed through a morphological process to create new words with or without new meanings. Below are examples of *gairaigo* and *wasei eigo* words to help understand the difference between these two types of words.

No.	English Loanwords	Romanization	Donor Words	Gloss
a.	インターネット	*intanetto*	(internet)	'internet'
b.	カロリー	*karorii*	(calory)	'calory'
c.	シンプル	*sinpuru*	(simple)	'simple'
d.	ラジオ	*rajio*	(radio)	'radio'
e.	バイク	*baiku*	(bike)	'motorbike'
f.	ダンプカー	*danpukaa*	(dump+car)	'garbage truck'
g.	OL	*oeru*	(office+lady)	'female office worker'
h.	アラサー	*arasaa*	(around+thirty)	'30s'

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Data (a) to (d) are examples of *gairaigo*. These words are borrowed from English and have been adapted to the Japanese phonology system. In both form and meaning, these words can still be recognized by native English speakers. On the other hand, data (e) to (h) are examples of *wasei eigo*. These words are formed from *gairaigo* words, which are not only adapted phonologically but are also modified both morphologically and semantically to form new words that are difficult for native English speakers to understand. An example is data (f) *danpukaa*, which originates from the words *dump* and *car*. In Japanese, this word means 'garbage truck'. The word *dump car* does not exist in standard English, and only the word *garbage truck* is known. Another example is data (g) *OL*, read as *oeru*, which is formed by abbreviating the first letters of the words *office* and *lady.* This word is used to refer to a 'female person working in the office', which in standard English is called female office workers. From these examples, it can be observed that the fundamental difference between *gairaigo* and *wasei eigo* is the word formation process, which in some cases can lead to semantic change. In the formation of *gairaigo*, the adjustments that occur are only from a phonological perspective. Meanwhile, *wasei eigo* is formed from morphological processes in English words, which results in their original form and/or meaning being difficult for native speakers to understand or even no longer being recognized.

Wasei eigo has been studied by previous researchers. Hidayat et al. (2016), Putri (2018), and Adriani (2019) examined *wasei eigo* that appears in textbooks. Their research examines the process of forming *wasei eigo* words based on it's typology theory. The results of their research show that *wasei eigo* is categorized into four groups:1) *Imizurekata*:words that seem like English but have a different meaning when used; 2) *Tanshukukata*:a type of *wasei eigo* made by shortening English words; 3) *Junwaseikata*:a *wasei eigo* that includes terms from English but is not used in standard English; and 4) *Eigohyougen fuzaikata*:a free morpheme combination that creates a new meaning.

However, the process of sound adaptation in English words when they are absorbed into Japanese has rarely been studied by previous researchers. In fact, understanding of this adaptation needs to be deepened first before studying *wasei eigo* in more depth, considering English has a different phonological system from Japanese. Based on that reason, this study aims to fill the gap by examining the phonological processes and rules of *wasei eigo*. Different from previous researchers, this research will focus on *wasei eigo,* which is found in Japanese online communication, especially on social media *X*.

The aim of this research is to examine the phonological adaptation that occurs in English words when they are absorbed into *wasei eigo*. Phonological adaptation occurs due to differences in the sound systems of the donor language and the recipient language (Campbell, 2013:59). This adaptation cannot be avoided in the process of borrowing elements from English into Japanese because these two languages have different phonological systems. English has at least 14 vowel phonemes, consisting of five long vowels (/ā, ē, ī, ō, ū/), five short vowels (a, e, i, o, u), two 'oo' vowels (/oo, ōō/), and two diphthongs (/ow/and/oy/) (Pool, 2017). On the other hand, Japanese has a fairly simple vowel sound system, which is only five phonemes:/a, I, ɯ, e, o/(Kubozono, 2015:52). Apart from vowel phonemes, English also has consonant consisting of twenty-four phonemes, including:/p/,/b/,/t/,/d/,/k/,/g/,/tʃ/,/ʤ/,/m/,/n/,/ŋ/,/l/,/f/,/v/,/θ/,/ð/,/s/,/

z/,/r/,/ʃ/,/ʒ/,/h/,/w/, and/j/(Pool, 2007). Japanese also has a much more diverse consonants than its vowels. These consonants are/p/,/b/,/t/,/d/,/k/,/g/,/s/,/z/,/h/,/ts/,/dz/,/m/,/n/,/w/,/j/,/ɸ/,/ʃ/,/ʒ/,/c/,/tʃ/,/dʒ/,/ŋ/,/n/,/r/, and (ʔ) (Iori, 2020:18).

METHOD

The method used in this research was descriptive-qualitative (Bogdan, 1972:5). To observe *wasei eigo* in Japanese online communication on social media *X*, users's speech texts were used as a data source, taken from the tweets of 22 users, which were randomly selected by considering the age, gender, and occupation written in the user's account profile. The reason for choosing this social media platform is based on data from Japan's Top Social Media Platforms in 2023 (Bigbeat, Inc., 2023), *X* is one of the social media platforms with the highest number of users in Japan. Although, in reality, *wasei eigo* is not only in the form of words but also phrases, as a data limitation, only *wasei eigo* words will be analyzed in this study.

A total of 207 data were collected over a period of two months, from January 2nd to February 28th, 2024. The results were then confirmed using a dictionary of Japanese loanwords (Harahap, 2006), a list of *wasei eigo* vocabulary on aio-english.net and ejje.weblio.jp, and an online Japanese-English dictionary at jisho.org. To check the validity of the data that has been collected, the triangulation method was used (Stainback in Sugiyono, 2007:330). Tsujimura's (2014) Japanese phonological theory, along with Kubozono's (2015) and Iori's (2020) were selected to examine phoneme adaptations that occur, including addition, deletion, and substitution of phonemes.

FINDINGS AND DISCUSSION

Based on data findings, Japanese tend to adapt English words by adding, deleting, and substituting phonemes. Below is an example of data that has been classified based on its phonological adaptation.

Table 1: Addition of vowels

No	Donor Words	Wasei eigo	Rules	Gloss
1	[bætɒn] [tʌ**tʃ**]	[batontaQ**chi**]	/tʃ/→/chi/	'passing off the baton'
2	[biː**tʃ**] [sændəl]	[biː**chi**sandarɯ]	/tʃ/→/chi/	'flip-flops'
3	[tʃælɪn**dʒ**]	[charen**ji**sɯrɯ]	/dʒ/→/ji/	'strive to the goal'
4	[maɪnəs] [ɪmɪ**dʒ**]	[mainasɯimeː**ji**]	/dʒ/→/ji/	'bad image'
5	[**b**reɪnstɔːmɪŋ]	[**bɯ**resɯto]	/b/→/bɯ/	'brainstorming'
6	[**s**telθ] [mɑːrkɪtɪŋ]	[s**ɯ**tema]	/s/→/sɯ/	'hidden ads'
7	[njuː] [hɑː**f**]	[nyɯːhaːɸ**ɯ**]	/f/→/ɸɯ/	'transgender'
8	[əmerɪkən] [do**g**]	[amerikandoQ**gɯ**]	/g/→/gɯ/	'corn dog'
9	[bæ**k**[[nʌmbər]	[baQ**kɯ**nambaː]	/k/→/kɯ/	'back issue'
10	[kɔːr] [rɪðə**m**]	[koarizi**mɯ**]	/m/→/mɯ/	'weight-loss exercise'
11	[beɪs] [ʌ**p**]	[beesɯaQ**pɯ**]	/p/→/pɯ/	'pay rise'

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12	[gəʊ**l**ɪn]	[go:**rɯ**in]	/r/→/rɯ/	‘achieved the goal’
13	[diːp] [kɪ**s**]	[di:pɯki**sɯ**]	/s/→/sɯ/	‘french kiss’
14	[wɒ**z**]	[wa**zɯ**]	/z/→/zɯ/	‘just now’
15	[dæ**ʃ**]	[daQ**shɯ**]	/ʃ/→/shɯ/	‘in rush
16	[sæbətɑː**ʒ**]	[sabotaa**jɯ**]	/ʒ/→/jɯ/	‘lazy to work’
17	[pæn**ts**]	[pan**tsɯ**]	/ts/→/tsɯ/	‘underwear’
18	[dɪlɪvəri] [hel**θ**]	[deriberi:heru**sɯ**]	/θ/→/sɯ/	‘call-girl’
19	[vaɪkɪ**ŋ**]	[baikiŋ**gɯ**]	/ŋ/→/ŋggɯ/	‘all-you-can-eat’
20	[smɑː**t**]	[sɯma:**to**]	/t/→/to/	‘slim’
21	[sɒf**t**] [kriːm]	[soɸɯ**to**kɯri:mɯ]	/t/→/to/	‘soft-serve’
22	[waɪ**d**] [ʃəʊ]	[wai**do**sho:]	/d/→/do/	‘variety show’
23	[vɜːdʒɪn] [rəʊ**d**]	[ba:jinro:**do**]	/d/→/do/	‘wedding aisle’

Table 2: Addition of consonants

No	Donor Words	Wasei eigo	Rules	Gloss
24	[vaɪkɪ**ŋ**]	[baikiŋ**gɯ**]	/ŋ/→/gɯ/	‘all-you-can-eat’
25	[lɪvɪ**ŋ**]	[ribiŋ**gɯ**]	/ŋ/→/gɯ/	‘living room’
26	[kʌnɪ**ŋ**]	[kanniŋ**gɯ**]	/ŋ/→/gɯ/	‘cheating’
27	[lɪvɪ**ŋ**] [səˈpɔːt]	[ribiŋ**gɯ**supo:to:]	/ŋ/→/gɯ/	‘life will’
28	[mʌ**g**] [kʌp]	[ma**Qgɯ**kappɯ]	/g/→/Qgɯ/	‘mug’
29	[bɪ**g**] [stɑː]	[bi**Qgɯ**sɯta:]	/g/→/Qgɯ/	‘superstar’
30	[ɔːl] [bæ**k**]	[o:ruba**Qkɯ**]	/k/→/Qkɯ/	‘swept-back hair’
31	[peər] [lʊ**k**]	[pearɯ**Qkɯ**]	/k/→/Qkɯ/	‘matching outfit’
32	[kost] [ʌ**p**]	[kosɯtoa**Qpɯ**]	/p/→/Qpɯ/	‘inflation’
33	[riːsaɪkəl] [ʃɒ**p**]	[risaikɯrɯsho**Qpɯ**]	/p/→/Qpɯ/	‘thrift shop’
34	[merɪ**t**]	[meri**Qto**]	/t/→/Qto/	‘advantage’
35	[ɪntəne**t**]	[ne**Qto**]	/t/→/Qto/	‘internet’
36	[æ**t**] [həʊm]	[a**Qto**ho:mɯ]	/t/→/Qto/	‘homey’
37	[bɑːskɪ**t**]	[basɯke**Qto**]	/t/→/Qto/	‘basketball’
38	[pɒ**t**]	[deŋkipo**Qto**]	/t/→/Qto/	‘dispenser’

Table 3: Deletion of consonant/r/

No.	Donor Words	Wasei eigo	Rules	Gloss
39	[kuːlə**r**]	[kɯːr**a:**]	/r/→/Ø/	'air conditioner'
40	[mʌflə**r**]	[maɸɯr**a:**]	/r/→/Ø/	'thick scarf'
41	[lɒŋ] [selə**r**]	[roŋgɯser**a:**]	/r/→/Ø/	'bestseller'
42	[fæn] [sɜ**r**vɪs]	[ɸans**a:**bisɯ]	/r/→/Ø/	'fanservice'
43	[græfɪk] [-ə**r**]	[gɯraɸikk**a:**]	/r/→/Ø/	'graphic designer'
44	[mɪrə**r**] [bɔːl]	[mir**a:**boːrɯ]	/r/→/Ø/	'disco ball'
45	[bæk] [mɪrə**r**]	[baQkɯmir**a:**]	/r/→/Ø/	'rear-view mirror'
46	[sɪmɪlə**r**] [lʊk]	[simir**a:**rɯkkɯ]	/r/→/Ø/	'matching style'
47	[ɔːdə**r**] [meɪd]	[**o:**d**a:**me:do]	/r/→/Ø/	'custom-made'
48	[əʊpən] [kɑː**r**]	[**o:**pɯnk**a:**]	/r/→/Ø/	'convertible'
49	[ɔːdə**r**] [stɒp]	[**o:**d**a:**sutoQpɯ]	/r/→/Ø/	'last order'
50	[pɑ**r**kɪŋ]	[p**a:**kiŋgɯ]	/r/→/Ø/	'parking lots'
51	[pɑ**r**kə]	[p**a:**k**a:**]	/r/→/Ø/	'hoodie'
52	[peɪpə**r**] [draɪvə**r**]	[pe:p**a:**doraib**a:**]	/r/→/Ø/	'driver licence'
53	[haɪ] [dekə**r**]	[haidekk**a:**]	/r/→/Ø/	'double decker'

Tabel 4: Substitution of vowels

No.	Donor Words	Wasei eigo	Rules	Gloss
54	[biːtʃ] [s**æ**ndəl]	[biːchis**a**ndarɯ]	/æ/→/a/	'flip-flops'
55	[b**æ**tɒn] [tʌtʃ]	[b**a**tontaQchi]	/æ/→/a/	'passing off the baton'
56	[f**æ**n] [sɜːvɪs]	[ɸ**a**nsa:bisɯ]	/æ/→/a/	'giving fan a service'
57	[nj**u**ː] [hɑːf]	[ny**ɯ**ːha:ɸɯ]	/u/→/ɯ/	'transgender'
58	[k**u**ːlər]	[k**ɯ**ːra:]	/u/→/ɯ/	'air conditioner'
59	[sɪmɪlər] [l**ɯ**k]	[simira:r**ɯ**kkɯ]	/ʊ/→/ɯ/	'similar style'
60	[peər] [l**ɯ**k]	[pear**ɯ**Qkɯ]	/ʊ/→/ɯ/	'matching outfit'

Tabel 5: Subtitution of diftongs

No.	Donor Words	Wasei eigo	Rules	Gloss
61	[gr**aw**nd]	[gɯr**aɯ**ndo]	/aw/→/aɯ/	'playing ground'
62	[ˈɪmɪdʒ] [da**wn**]	[ime:jid**aɯ**n]	/aw/→/aɯ/	'bad image'
63	[n**ay**t] [-er]	[n**ai**ta:]	/ay/→/ai/	'late-night game'
64	[m**ay**] [peɪs]	[m**ai**pe:sɯ]	/ay/→/ai/	'at one's own pace'
65	[b**ey**s] [ʌp]	[b**e:**sɯappɯ]	/ey/→/e:/	'pay rise'

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66	[d**ey**] [tuː]	[d**e:**tsɯː]	/ey/→/e:/	‘two days without bath’
67	[l**ow**] [ˈtenʃən]	[r**o:**tenshoŋ]	/ow/→/o:/	‘gloomy’
68	[l**ow**] [tiːn]	[r**o:**tiin]	/ow/→/o:/	‘pre-teen’

Tabel 6: Substitution of consonant

No.	Donor Words	Wasei eigo	Rules	Gloss
69	[**f**emɪnɪst]	[**ɸ**eminisɯto]	/f/→/ɸ/	‘*gentleman*’
70	[**f**aɪt]	[**ɸ**aito]	/f/→/ɸ/	‘do your best’
71	[**f**rʌnt] [glɑːs]	[**ɸ**urontogarasɯ]	/f/→/ɸ/	‘*windshield*’
72	[hɑː**f**]	[haː**ɸ**ɯ]	/f/→/ɸ/	‘transgender’
73	[hɑːt] [**f**ʊl]	[haːto**ɸ**ɯːrɯ]	/f/→/ɸ/	‘heart warming’
74	[feɪ**v**ərɪt]	[ɸa**b**orɯ]	/v/→/b/	‘liking a post’
75	[**v**ɔɪs]	[ike**b**o]	/v/→/b/	‘sexy male voice’
76	[kən**v**iːniəns] [stɔː]	[kom**b**ini]	/v/→/b/	‘minimarket’
77	[maɪnəs] [ˈdraɪ**v**ər]	[mainasɯdorai**b**a]	/v/→/b/	‘*flat-tip screw driver*’
78	[noʊ] [sliː**v**]	[noːsɯriː**b**ɯ]	/v/→/b/	‘sleeveless’
79	[hel**θ**] [miːtə]	[herɯ**s**ɯmeːtaː]	/θ/→/s/	‘scales’
80	[**θ**ʌmneɪl]	[**s**amɯne]	/θ/→/s/	‘thumbnail’
81	[**θ**riː] [saɪz]	[**s**ɯriːsaizɯː]	/θ/→/s/	‘body measurement’
82	[**θ**riː] [-ər]	[**s**ɯriːtaː]	/θ/→/s/	‘three wheeler’
83	[fæʃ.ən] [hel**θ**]	[ɸasshonherɯ**s**ɯ]	/θ/→/s/	‘hidden prostitution place’
84	[bæ**r**iər] [f**r**iː]	[ba**r**iaɸɯ**r**iː]	/r/→/ɾ/	‘wheelchair-friendly’
85	[b**r**eɪk]	[bɯ**r**eikɯsɯ**r**ɯ]	/r/→/ɾ/	‘becoming fampus’
86	[d**r**ɑːmə]	[do**r**ama]	/r/→/ɾ/	‘TV series’
87	[f**r**ʌnt]	[ɸɯ**r**onto]	/r/→/ɾ/	‘receptionist’
88	[g**r**uːp] [tʃæt]	[gɯ**r**ɯcha]	/r/→/ɾ/	‘chat group’
89	[f**l**aʊər] [stænd]	[ɸɯ**r**asuta]	/l/→/ɾ/	‘flower stand’
90	[fæmə**l**i] [restərɒnt]	[ɸami**r**esɯ]	/l/→/ɾ/	‘family restaurant
91	[gɜː**l**] [hʌnt]	[gaː**r**ɯhanto]	/l/→/ɾ/	‘looking for a girl date’
92	[hændə**l**]	[hando**r**ɯ]	/l/→/ɾ/	‘steering wheel’
93	[aɪdə**l**]	[aido**r**ɯ]	/l/→/ɾ/	‘Japanese idol’
94	[kɔːr] [rɪ**ð**əm]	[koari**z**imɯ]	/ð/→/z/	‘weightloss exercise’
95	[meyl] [mægə**z**iːn]	[meːrɯmaga**j**in]	/z/→/j/	‘email newsletter’

DISCUSSION

English and Japanese have a different phonological system. This difference causes English words to undergo phonological adaptation processes when borrowed into Japanese. *Wasei eigo* found in Japanese online communication on social media is also inseparable from these adaptation processes. This is in line with what Campbell (2013:59) stated:phonological adaptation is needed when the sounds in the source language do not exist in the target language. These sounds are then replaced with the closest sounds of the target language in the process of borrowing. Based on 207 data, at least three phonological adaptation processes were found in *wasei eigo*:phoneme addition, phoneme deletion, and phoneme substitution. The following will present the results of the data analysis, along with its rules and data examples.

Phoneme addition

Unlike English, Japanese is a language that uses an open syllable system. This system is called mora (Tsujimura, 2014:65), a minimal unit of metrical time equivalent to a short syllable. This difference makes English words containing closed syllables difficult for Japanese people to pronounce. This reason may cause a phoneme addition in *wasei eigo*. Based on the observation of the data collected, English words that are borrowed into *wasei eigo* receive additional phonemes, both vowels and consonants.

Addition of vowels

First is the addition of vowels. Japanese people who are used to using the mora syllable system have difficulty pronouncing English words, except for those who study or are familiar with the language. This is one of the reasons for the need to add vowel phonemes in *wasei eigo*. According to data findings, the addition of vowel phonemes that are often found in *wasei eigo* are/i, ɯ, o/. The results of data observation show that the addition of vowels occurs in approximately two cases:

- Vowel addition in the middle of the consonant sequence (KKV → KVKV)
- Vowel addition at the end of words with closed syllables ends in a certain consonant (VK → VKV or VKKV). This addition is referred to as paragogue, which is the addition of a phoneme at the end of a word (Badudu, 1985:63). This is in line with what Ng (2013:1) said that paragogues are found in all types of linguistic events caused by language contact, one of which is loanwords.

The addition of a vowel/i/occurs in English words with closed syllables or ending with affricates post-alveolar/tʃ, dʒ/. Its function is to turn the closed syllable into an open one so that Japanese people can pronounce it easily. Since English and Japanese have differences in terms of phonetic symbols, the phonemes/tʃ/and/dʒ/will be written with/ch/and/j/, thus becoming/chi/and/ji/. In the Japanaese phonological system, the high vowel phonemes/i/and/ɯ/tend to be devoiced (Tsujimura, 2014:41). The devoicing phenomenon occurs when both phonemes are flanked by consonants or, at the end of a word, preceded by a consonant. This rule is also applied to English words that get vowel addition (/i/and/ɯ/) when borrowed into *wasei eigo*. For example, data (1) batontacchi, which means 'passing off the baton', is derived from English words baton and touch. To make the pronunciation easier, the word [tʌtʃ] gets a vowel addition/i/at the end of the consonant/tʃ/and turns into/chi/. Thus, the words [bætɒn]+[tʌtʃ] became [batontaQchi].

Based on data findings, the most common vowel addition found in *wasei*

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eigo was the addition of a vowel/ɯ/. This addition occurs in English words containing consonant sequences or ends with bilabial stops/b, p/, velar stops/g, k/, labio-dental fricatives/f/, alveolar fricatives/s, z/, dental fricatives/θ/, post-alveolar fricatives/ʃ, ʒ/, bilabial nasal/m/, velar nasal/ŋ/, alveolar approximant/liquids/r/, and fricative stops/ts/. Just like the vowel/i/, the vowel/ɯ/ also tends to experience devoicing, although not completely. Based on data observation, consonants/g, k, p, ʃ/located at the end of words have a tendency to turn into double consonants (geminate or *sokuon*) when the vowel/ɯ/is added. In addition, the velar nasal consonant/ŋ/also has a tendency to get a consonant/g/before the vowel/ɯ/ is added. Data (5) *buresuto*, which means 'brainstorming', is formed by clipping the English word *brainstorming*. The consonant cluster/br/gets a vowel addition/ɯ/in the middle when borrowed into *wasei eigo*. This word then turns into [bɯresɯto] with the same meaning. Another example is data (19) *baikinggu*, 'all-you-can-eat restaurant', which comes from the English word *viking.* The nasal velar consonant/ŋ/gets additional consonants/g/and/ɯ/at once. Thus, the word [vaɪkɪŋ] in English became [baikiŋgɯ] when absorbed into *wasei eigo*.

The last is the addition of the vowel/o/. This addition occurs in English words that end with consonants/t, d/, both of which are labio-dental stops to form a mora. In the previous analysis, the sounds/b, g, k, p/in English tend to get the vowel insertion/ɯ/ when absorbed into Japanese. However, based on the data collected, there is an exception that occurs in the phoneme/t, d/. This could be due to the absence of the sounds/tɯ/and/dɯ/in JL. Instead, English words with closed consonants/t, d/are given the additional vowel/o/when absorbed into *wasei eigo*, thus becoming/to/and/do/. In data (20), the word *sumaato*, which means 'slim', is derived from the English word *smart*. The consonant/t/at the end is added with the vowel/o/to make the pronunciation easier, considering that consonants in Japanese cannot stand alone and must be followed by vowel sounds. Thus, after phonological adaptation, [smɑːt] turns into [sɯma:to] in *wasei eigo*. In addition to the/t/phoneme, the/d/phoneme also receives the same treatment, with the addition of the/o/phoneme at the end. Other examples of both changes can be seen in data (21), (22) and (23).

Addition of vowels

The addition of consonants that are often found in this research were/g/and geminates/Qg, Qk, Qp, Qt/. Based on the data findings of *wasei eigo* that appear in Japanese communication on social media *X*, consonant addition occurs in two cases, as follows:

- First, the addition of the consonant/g/ only occurs in English words that end with velar nasal/ŋ/and are given an additional vowel/ɯ/after.
- Second, consonants/g, k, p, t/in English words receive an identical consonant called a double consonant or geminate when the consonant is placed at the end of words and preceded by a short vowel sound. This double consonant is then followed by the vowel/ɯ/or/o/.

English words that end with nasal velar/ŋ/ will have consonant/g/and vowel/ɯ/added at the same time when absorbed into *wasei eigo*. In data (25), the word ribinggu 'living room' comes from the English word living. The velar nasal/ŋ/is added with the consonant/g/and followed by the vowel/ɯ/after. This is because the consonant sound in Japanese cannot stand alone and must be given an additional vowel

behind it. The same thing can be seen in data (24), (26) and (27).

Double consonants or geminate in Japanese are called sokuon and serve to extend the duration of consonants in words. In Japanese, *sokuon* is written with the phonetic symbol/Q/(Kawahara, 2015:43), which implies the lengthening of the sound in the next consonant. The presence of *sokuon* in Japanese is indicated by the small symbols っ (*tsu*) when written in hiragana and ッ (*tsu*) when written in *katakana*. When absorbed into *wasei eigo*, the consonants/g, k, p, t/ in English turn into double consonants and are followed by the vowel sound/ɯ/or/o/to become the sounds/Qgɯ, Qkɯ, Qpɯ, Qto/. In data (32), the word *kosutoappu*, which means 'inflation or increase in production costs', comes from the words *cost* and *up* in English. The phoneme/p/in *up* gets an additional of the same consonant and is followed by the vowel/ɯ/, so it turns into/ Qpu/. Thus, the words [kost]+[ʌp] turn into [kosɯtoaQpɯ] in *wasei eigo*. The same thing also happens in data (33). In data (28) and (29), the addition of double consonants occurred in the phoneme/g/to/Qgu/, while in data (30) and (31) the addition of double consonants occurred in the phoneme/k/to/ Qku/. In contrast to the others, in data (34) until (38) the addition of double consonants occurs in the phoneme/t/and is followed by the vowel/o/to become/Qto/.

Phoneme deletion

Other than the addition of phonemes, phonological adaptation is also seen in the deletion of English phonemes when they are absorbed into the Japanese phonological system. Based on data observation, phoneme deletion occurs in the liquid/r/sound. Tsujimura (2014:100) explains that if the/r/ sound is used as a syllable closure or at the end of words, the sound will be devoiced and the previous vowel sound will be lengthened. However, when the phoneme/r/is in the beginning or middle of words and not as a syllable closure, it is still pronounced with the same sound in Japanese. The rules for lengthening vowel sounds caused by the deletion of the/r/phoneme are formulated by Kawarazaki (1978:48) as follows:

- category 1:if the previous vowel was/a, i, u, e/, then the vowel is lengthened to the sound/a:/.
- category 2:if the preceding vowel is/o/, then the vowel is lengthened to the/o/ sound, except for the words e*rror, sailor,* and *doctor*, which are lengthened to the/a:/sound. Based on the data findings, *wasei eigo* that formed with *mirror* also falls into this category.

Basically, English words that contai the labio-dental liquid/l/will also be substituted into with liquid flap/ɾ/in Japanese (Tsujimura, 2014:83). Thus, if there is a consonant/l/ followed by the vowels/a, i, u, e, o/, the rules are the same as the deletion of the phoneme/r/, as proposed by Kawarazaki (1978) above. However, due to limited data in the research process, no *wasei eigo* words with consonant/l/were found. The deletion of/l/is mostly found in general English loanwords or *gairaigo*, such as *booru* 'ball', *hooru* 'hal', *dooru* 'doll', and so on.

Data (41) *rongguseraa* 'bestseller' comes from the English words *long* and *seller*. The phoneme/r/in word was preceded by the vowel/e/and the sound changed to a long vowel/a:/. Likewise, in data (48), *oodameedo* means 'custom made; made to order' comes from the words *order* and *made*. The phoneme/r/in order is preceded by the vowel/o/, so when it is pronounced, it turns into a long vowel/o:/. Therefore, the words

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[lɒŋ]+[ˈsel.ər] become [roŋgɯsera:] and [ˈɔ:dər]+[meɪd] become [o:da:me:do]. Based on the collected data, *wasei eigo* words formed with the word *mirror* also fall into category 2 based on Kawarazaki's (1978) theory above. Although the phoneme/r/is preceded by the vowel/o/, after it is pronounced, it turns into a long vowel/a:/, just like the words *error, sailor*, and *doctor*. This can be seen in data (44) *miraabooru* 'disco ball or disco lights'. This *wasei eigo* comes from the words *mirror* and *ball*. The phoneme/r/in *mirror* is preceded by the vowel/o/, which turns into the long vowel/a:/. Therefore, [ˈmɪrər]+[bɔ:l] turns into [mira:bo:rɯ]. The same phoneme deletion also occurs in data (45), which results in the words [bæk]+[mɪrə] became [baQkɯmira:] 'rear-view mirror'.

Phoneme substitution

The last phonological adaptation is phoneme substitution. Kridalaksana (2009:229) explained that substitution is the process of replacing language elements by other elements in larger units in order to obtain distinguishing elements or to explain certain elements. Phoneme substitution also occurs in *wasei eigo*, found in Japanese online communication on social media. This substitution occurs because there are differences in the phonological systems of English and Japanese, especially the absence of certain phonemes in the target language. One of the factors causing the substitution is the level of bilingualism of the speaker (Tsujimura, 2014:82). Japanese people who are familiar with or are English learners will certainly be aware of the sound differences that exist. These differences may be dealt with during the process of learning or acquiring a second language. However, for Japanese people who rarely or do not have direct contact with English, sound substitution is necessary to make word pronunciation easier.

Substitution of vowels

English has approximately 20 vowels, consisting of short vowels and diphthongs. The complexity of these vowel phonemes is inversely proportional to the number Japanese vowels, which is quite simple, consisting of only five phonemes:/a, i, ɯ, e, o/. The absence of these vowels means that the vowels in English need to be substituted with the closest vowels that Japanese has to facilitate pronunciation and in accordance with the rules of the Japanese phonology system. During the data collection stage, the most frequent vowels that experienced substitution were the phonemes/æ/into/a/,/ə/into/a, i, e, o/, and/u, ʊ/into/ɯ/. This substitution can be seen in the following data example.

In data (54) *biichisandaru* [bi:chisandarɯ] 'flip-flops', the phoneme/æ/is substituted with the phoneme/a/in Japanese. It's because Japanese does not have a sound with an almost open, unrounded front articulation, so it is substituted with the closest phoneme available, which is an open, unrounded front phoneme. Then, in data (58), *nyuuhafu* [nyɯ:ha:ɸɯ] 'transgender', the vowel/u/in *new*, which is a sound with an unrounded high back articulation, is substituted with the vowel/ɯ/in Japanese, which is a rounded high back sound. Likewise, the phoneme/ʊ/in data (60) *simiraarukku* [simira:rɯkkɯ] 'matching style' which is located at the beginning of the penultimate syllable in English is substituted with the vowel/ɯ/in Japanese. Therefore, it can be concluded that the phonemes/u, ʊ/in English are substituted with the vowel/ɯ/in Japanese because both phonemes have the same place of articulation.

Substitution of diftongs

English has seven diphthongs, which are/ay, iy, ey, ɔy, aw, uw, ow/. On the other hand, the Japanese phonological system does not recognize diphthong sounds at all. Instead, the English diphthongs will be substituted to the closest phoneme in Japanese when they are absorbed into *wasei eigo*, either as a long vowel phoneme or in the form of a vowel cluster. Based on data observation, the diphthong substitutions that are often found are/aw/to/aɯ/,/ay/to/ai/,/ey/to long vowel/e:/, and/ow/to long vowel/o:/. The diphthong substitutions can be seen in the examples below.

Looking at the data examples above, most diphthong substitutions tend to occur in words consisting of one vowel-team syllable. An example is data (62) *guraundo* 'playing ground or playground', which is formed from *ground*. This word consists of one vowel-team syllable. The phoneme/aw/changes to/aɯ/when absorbed into Japanese. Another example is data (64) *naitaa* 'late-night game' which comes from the word night with suffix -er. When absorbed into *wasei eigo*, the phoneme/ay/changes to/ai/in Japanese. Furthermore, in data (66) *beesuappu* 'pay rise', there is a substitution of the diftong/ey/ into a long vowel/e:/in the word base. Long vowel substitution also occurred in data (68) *rootenshon* 'gloomy', which is the phoneme/ow/in low turns into/o:/.

Substitution of vowels

There are several consonant phonemes in English that Japanese does not have, including labio-dental fricative/f, v/, liquid/r/, labio-dental liquid/l/, labio-dental fricative/ð/, voiceless interdental fricative/θ/, and alveolar fricative/z/. Instead, these phonemes will be substituted with the closest phoneme that has the same place of articulation found in Japanese. Tsujimura (2014:81–82) formulates the rules of sound substitution/f, v, r, ð, θ/in English when absorbed into Japanese:phoneme/f/ becomes bilabial fricative/ɸ/, phoneme/v/ becomes bilabial stops/b/, liquid/r/becomes liquid flap/ɾ/, phoneme/ð/becomes alveolar fricatives/z/, and phoneme/θ/becomes voiceless alveolar fricative/s/. As explained in the phoneme deletion section, English words containing the labio-dental phoneme liquid/l/ will also be substituted into liquid flap/ɾ/ in BJ (Tsujimura, 2014:83). Therefore, the substitution rule in BJ is the same as/r/. The substitution of these phonemes can be seen in the following table. In addition, based on data findings, substitution of the phoneme/z/into the alveo-palatal affricate/j/when followed by the vowel phoneme/i/was also found in this research.

In data (69), the phoneme/f/in feminist changes to/ɸ/in *feministuto* 'gentleman'. The absence of the labio-dental fricative in Japanese makes the phoneme substituted into the bilabial fricative/ɸ/. The same thing also happens to the phoneme/v/. This phoneme, which is still in the same place of articulation as/f/, is also substituted with/ɸ/when it is absorbed into *wasei eigo*. For example, it happened in data (78) *noosuriibu* 'sleeveless', which comes from the words *no* and *sleeve*. In addition, the phoneme/θ/in English also changes to/s/in Japanese. It's because Japanese does not have the consonant/θ/, which is a voiceless dental fricative sound. Thus, the sound is replaced with the closest sound, which is phoneme/s/as a voiceless alveolar fricative sound.

Other examples include (79) *herusumeetaa* 'body scales', (80) *samune* 'thumbnail', and others. Data (84) to (93) show examples of words with substitution of liquid phoneme/l, r/into liquid flap/ɾ/ in Japanese when absorbed into *wasei eigo*.

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The substitution of the phoneme/l/mostly occurs when the phoneme becomes the closing syllable in words, although there are also those in the beginning and middle of the syllable. Examples of/r/to/ɾ/substitution are *drama* into *dorama* 'TV series', *front* into *furonto* 'receptionist', *group+chat* into *gurucha* 'group chat', and so on. Besides that, examples of/l/to/ɾ/substitution include *girl+hunt* into *gaaruhanto* 'looking for a girl date', *handle* into *handoru* 'steering wheel', *family+restaurant* into *famiresu* 'family restaurant', and others.

As explained in the phoneme deletion section above, if the phoneme/r/is placed at the beginning or middle of words (not as a syllable closure), the phoneme is still pronounced with the same sound in Japanese. For example, in general English loanwords or *gairaigo*, the word *real* becomes *riaru* 'real', *rose* becomes *roze* 'rose', *run* becomes *ran* 'run', *replay* becomes *ripurei* 'replay', and many others. A case like this indicates that the substitution of the English phoneme/r/into the flap/ɾ/in Japanese is very dependent on the position of that phoneme in words. The substitution of the phonemes/ð/into/z/and/z/into/j/also occurs in *wasei eigo*. An example of phoneme substitution/ð/to/z/is seen in data (95) *koarizimu* 'weight-loss exercise'. In [rɪðəm], the phoneme/ð/is substituted into/z/in Japanese. In addition to that, in data (96) *meerumagajin* 'email newsletter' formed from the words *mail+magazine*, the phoneme/z/in [mægəziːn] changes into/j/when followed by the vowel/i/.

Based on data findings, it was founds that the substitution of the phoneme/z/ into/j/only occurs when the phoneme/z/is followed by the vowel/i/. Japanese has the consonant/z/, for example, in the sounds/ za/,/zu/,/ze/, and/zu/, but does not have the sound/zi/and only has the sound/ji/. This shows that the phonological adaptation of English words is quite influenced by the mora syllable system in Japanese. In addition to making the pronunciation easier, another function of substitution is to facilitate orthographic writing. Other examples found in *gairaigo* include *magajiin* 'magazine', *jippa* ' zipper', *jiguzagu* 'zig-zag', and others.

CONCLUSION

Based on the analysis of *wasei eigo* found in Japanese online communication on social media, it can be concluded that three phonological adaptation processes were occurred:phoneme addition, phoneme deletion, and phoneme substitution. First, the English words absorbed into *wasei eigo* received additional phonemes, both vowels and consonants. The addition of vowel phonemes that are often found were phonemes/i, ɯ, o/. Besides vowel addition, the addition of consonants also found which is consonant/g/and geminates/Qg, Qk, Qp, Qt/.

Besides that, a phoneme deletion occurs in the liquid sound/r/. If/r/is used as a syllable closure or at the end of words, the sound will be removed, and the previous vowel sound will be lengthened. If the previous vowel is/a, i, u, e/, then the vowel is lengthened to the sound/a:/, and if the previous vowel is/o/, then the vowel is lengthened to the sound/o/, except for the words *error, sailor, mirror,* and *doctor*, which are lengthened to the sound/a:/. However, if the phoneme/r/is placed at the beginning or in the middle of a words (not in a close syllable), it is still pronounced with the same sound in Japanese. In addition to that, words that contain the labio-dental liquid/l/will also be substituted into liquid flap/ɾ/in BJ. Thus, if English words contain the consonant/l/followed by the vowels/a, i, u, e, o/, the rules are the same.

The last was adaptation in the form of phoneme substitution. The substitution occurs in vowels, diphthongs, and consonants. Based on data findings, the most frequent vowels that experienced substitution were phonemes/æ/à/a/,/ə/à/a, i, e, o/, and/u, ʊ/à/ɯ/. The frequent diphthong substitutions were/aw/à/aɯ/,/ay/à/ai/,/ey/à/e:/, and/ow/à/o:/. Most diphthong substitutions tend to occur in words consisting of one vowel team syllable. The substitutions of consonants include phoneme/f/→ /ɸ/, phoneme/v/→/b/, phoneme/r/→/ɾ/, phoneme/ð/→/z/, phoneme/θ/→/s/, and phoneme/l/→/ɾ/.

The phonological adaptation that occurs in *wasei eigo*, especially in Japanese online communication on social media, is caused by several factors. First, the difference between the English and Japanese phonological systems can be used as the main reason. Second, phonological adaptation is also influenced by the syllable system in Japanese, which adheres to the mora syllable system, so English words can be easily pronounced by Japanese people when absorbed into *wasei eigo*. In addition to that, the orthographic differences between English and Japanese also play a role in the phonological adaptation process. Unlike English, which uses the alphabetic system, Japanese has its own orthographical peculiarities, especially for writing loanwords. This character is called *katakana*, where each character represents one mora or open syllable (except characters with the sounds/a, i, ɯ, e, o/, and/ŋ/). As a first step in studying *wasei eigo*, this research will serve as a foundation to further study this topic from various perspectives of linguistics, especially from morphology and semantic point of view, considering that this phenomenon is different from loanwords in general.

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