

# The Influence of L1 Phonological and Orthographic System in L2 Pronunciation: a Study of Brebes Javanese Learners of English

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**Abstract**— The First Language (L1) interference is one of the influential factors that may cause acquisition problems of Second Language (L2) learners. This study was conducted considering L1 may influence L2 spelling acquisition. It was aimed to investigate the influence of Brebes Javanese phonological and orthographic system towards students' spelling of English words. The research questions were (1) how do Brebes Javanese L1 learners of English spell English words which contain phonemes that do not exist in Brebes Javanese dialect? And (2) what are the spelling errors of Brebes Javanese L1 learners of English when spelling English words containing non-existent phonemes in Brebes Javanese dialect? The subjects were 12 students of grade 12 in SMA N 1 Brebes, Central Java, Indonesia. Moreover, the data were gathered from the students' spelling in reading aloud an English text twice and some isolated words once, while other supporting data were collected through questionnaires, recordings, observations, and interviews. The main result revealed that the students tend to misspell the English words which contain non-existent phoneme, and they replace with similar sounds in their L1. In addition, majority of students misspelled the sounds: /v/ to /f/; /l/ to /i/; /æ/ to /e/; /dʒ/ to /k/, /d/, /t/, /g/; /ə/ to /ʌ/; /tʃ/ to /t/; /ʒ/ to /ʃ/.

**Keywords**— *phonological system; orthographic system; L2 spelling; Brebes Javanese dialect*

## I. INTRODUCTION

There was a case experienced by one of the writers of this research. That case was being one of the reasons in conducting this study. When she was a student in a university, it was found a unique case in her classroom. This happened in group presentation activities. On that moment a small analysis was done towards her colleagues' pronunciation of words during the presentation. When paying attention on it, it was found that some presenters faced difficulties in pronouncing certain words. However, their difficulties were different between one and the others. It was indicated that the presenters who come from the same region had the same difficulty in pronouncing the certain words. The word "feature" is taken as the example which was pronounced by the presenters from Medan, North Sumatera, Indonesia. Majority of them pronounced the word "feature" as "[ˈpi:tʃə r]" instead of "[ˈfi:tʃə r]". They failed to pronounce [f] on that word. In addition, the case also happened when she taught the students from Papua New Guine, Indonesia. Almost all of the students failed to pronounce the word which contains [ə] vowel. They always replaced [ə] with [e]. Those cases might be correlated with a theory stated by Ramelan (1999). It was stated by Ramelan (1999) that

the difficulty encountered by the student in learning a second language can be caused by the different elements between TL (target language) & NL (native language), the same sounds having different distributions, the same sounds between NL and TL but allophonic in TL, similar sounds between NL and TL with slightly different quality, or the same sounds between NL and TL when occurring in cluster.

This condition makes a curiosity to investigate more about the first factor causes the second language learning difficulty stated by Ramelan above, in which the different elements between target and native language may trigger a difficulty for second language learners. Therefore, the study was conducted under the consideration whether or not that factor is proven. Specifically, this study was going to investigate the influence of first language phonological and orthographic system in second language pronunciation. Brebes Javanese dialect was chosen as the first language being investigated. In addition, the second language in this case is English

The other theories related to the discussed topic are the theories from Ellis (1994) & Ellis (1997). Ellis (1994) stated that in learning a second language a learner may find some influencing factors. One of them is first language (hereinafter, L1) transfer. In addition, Ellis (1997) explained more about it, it was stated that “L1 transfer refers to the influence that the learner’s L1 exerts over the acquisition of a second language”. Therefore, this study was conducted considering L1 may influence second language (hereinafter, L2) acquisition on pronunciation. It was aimed at investigating the influence of Brebes Javanese phonological and orthographic system towards students’ pronunciation of English words. The research questions of this study were (1) how do Brebes Javanese L1 learners of English spell English words which contain phonemes that do not exist in Brebes Javanese dialect? And (2) what are the spelling errors of Brebes Javanese L1 learners of English when spell English words containing non-existent phonemes in Brebes Javanese dialect?

Even though there were many researches investigated the influence of L1 system towards L2 acquisition, little is known about both phonological and orthographic system of certain regional dialect in influencing L2 pronunciation. Majority of them talked only about the system of standard language rather than a dialect, for example the research conducted by Basseti & Atkinson (2015) and Park (2011). In addition, so far, most of the reseaches also investigated the languages from outside Indonesia, in example the effects of orthographic forms on pronunciation in experienced instructed second language learners in Italian learners of English (Basseti & Atkinson, 2015). The other researches are from Huhui (2012) and Chan (2012). Huhui (2012) explained about the difficulties of Albanian speakers in pronouncing particular English speech sound. Whereas, Chan (2012) talked about the Cantonese English as a second language learners’ perceived relations between “similar” L1 and L2 speech sounds. Due to those conditions we conducted the study in which we chose a dialect in Javanese in this case Brebes Javanese dialect as the topic under the discussion because of the limitation of the research related to it.

## II. LITERATURE REVIEW

### A. Brebes Javanese Dialect

A study about Brebes Javanese dialect has been conducted by Nur (1999). The title is “Bahasa Jawa di Wilayah Kabupaten Brebes, Kajian Geografi Dialek”. He investigated phonemes of Brebes Javanese dialect and he found two kinds of them. They are Brebes Javanese vowels and consonants. The followings are tables of vowels and consonants of Brebes Javanese dialect.

TABLE I. VOWEL SOUNDS OF BREBES JAVANESE DIALECT BASED ON NUR (1999)

No	Sounds	Words	Indonesian Equivalents	English Equivalents
1.	[i]	<i>siyung</i>	<i>taring</i>	<i>canine tooth</i>
2.	[e]	<i>enak</i>	<i>enak</i>	<i>tasty</i>
3.	[a]	<i>apa</i>	<i>apa?</i>	<i>what</i>
4.	[ê]	<i>têlu</i>	<i>tiga</i>	<i>three</i>
5.	[i]	<i>birit</i>	<i>tikus</i>	<i>mouse</i>
6.	[o]	<i>sore</i>	<i>sore</i>	<i>afternoon</i>
7.	[o]	<i>tonggong</i>	<i>punggung</i>	<i>back</i>
8.	[u]	<i>cungur</i>	<i>hidung</i>	<i>nose</i>

TABLE II. CONSONANT SOUNDS OF BREBES JAVANESE DIALECT NUR (1999)

No	Sounds	Words	Indonesian Equivalents	English Equivalents
1.	[p]	<i>kalapa</i>	<i>kelapa</i>	<i>coconut</i>
2.	[b]	<i>bapak</i>	<i>ayah</i>	<i>father</i>
3.	[t]	<i>tua</i>	<i>tua</i>	<i>old</i>
4.	[d]	<i>duk</i>	<i>ijuk</i>	<i>broom</i>
5.	[t]	<i>batuk</i>	<i>kening</i>	<i>forehead</i>
6.	[d]	<i>dada</i>	<i>dada</i>	<i>chest</i>
7.	[c]	<i>curut</i>	<i>tikus</i>	<i>mouse</i>
8.	[j]	<i>jaran</i>	<i>kuda</i>	<i>horse</i>
9.	[k]	<i>kelek</i>	<i>ketiak</i>	<i>armpit</i>
10.	[ʔ]	<i>boʔol</i>	<i>dubur</i>	<i>anus</i>
11.	[g]	<i>iga</i>	<i>tulang iga</i>	<i>rib</i>
12.	[s]	<i>sapi</i>	<i>sapi</i>	<i>cow</i>
13.	[h]	<i>hurang</i>	<i>udang</i>	<i>shrimp</i>
14.	[m]	<i>macan</i>	<i>harimau</i>	<i>tiger</i>
15.	[n]	<i>lintah</i>	<i>lintah</i>	<i>leech</i>
16.	[ŋ]	<i>ambung</i>	<i>cium</i>	<i>kiss</i>
17.	[r]	<i>sore</i>	<i>sore</i>	<i>afternoon</i>
18.	[ɭ]	<i>alis</i>	<i>alis</i>	<i>eyebrow</i>
19.	[w]	<i>wani</i>	<i>berani</i>	<i>brave</i>
20.	[y]	<i>siyung</i>	<i>taring</i>	<i>canine tooth</i>

On the study, Nur (1999) also explained that he conducted his research in two areas of Brebes. In addition, the areas were labeled into “group 1” and “group 2”, in which group 1 consists of 5 villages. Those are Sarireja, Kubangpari, Baros, Malahayu, and Pamulihan. Moreover, group 2 consists of 8 villages. Those are Palimbangan, Pakijangan, Kalimati, Kebogadung, Purwadadi, Kalilangkap, Mendala, and Kedungoleng. He explained on his research that group 1 has 8 vowels and 20 consonants. They are [a], [i], [u], [e], [o], [ê], [o], [ɪ], [p], [b], [t], [d], [t], [d], [c], [j], [k], [ʔ], [g], [s], [h], [m], [n], [ŋ], [r], [l], [w], [y]. However, group 2 has 7 vowels and 20 consonants [a], [i], [u], [e], [o], [ê], [o], [p], [b], [t], [d], [t], [d], [c], [j], [k], [ʔ], [g], [s], [h], [m], [n], [ŋ], [r], [l], [w], [y]. By looking at the lists of speech sounds between those two groups, it can be indicated that group 2 area does not have [ɪ] vowel. Moreover, from the study conducted by Nur (1999) it can be indicated that between the orthographic form and phonological form of all Brebes phonemes are same as presented in the tables below.

TABLE III. ORTHOGRAPHIC AND PHONOLOGICAL FORMS OF BREBES JAVANESE VOWELS

No	Vowels	Words	Orthographic forms	Phonological forms
1.	[i]	<i>siyung</i>	<siyung>	/siyũŋ/
2.	[e]	<i>enak</i>	<enak>	/enak/
3.	[a]	<i>apa</i>	<apa>	/apaʔ/
4.	[ê]	<i>têlu</i>	<têlu>	/têlu/
5.	[ɪ]	<i>birit</i>	<birit>	/birit/
6.	[o]	<i>sore</i>	<sore>	/soreʔ/
7.	[o]	<i>tonggong</i>	<tonggong>	/tonggũŋ/
8.	[u]	<i>cungur</i>	<cungur>	/cũŋũr/

TABLE IV. ORTHOGRAPHIC AND PHONOLOGICAL FORMS OF BREBES JAVANESE CONSONANTS

No	Consonants	Words	Orthographic forms	Phonological forms
1.	[p]	<i>kalapa</i>	<kalapa>	/kɫapaʔ/
2.	[b]	<i>bapak</i>	<bapak>	/bapak/
3.	[t]	<i>tua</i>	<tua>	/tua/
4.	[d]	<i>duk</i>	<duk>	/duk/
5.	[t]	<i>batuk</i>	<batuk>	/batuk/
6.	[d]	<i>dada</i>	<dada>	/dadaʔ/
7.	[c]	<i>curut</i>	<curut>	/curut/
8.	[j]	<i>jaran</i>	<jaran>	/jaran/
9.	[k]	<i>kelek</i>	<kelek>	/kelek/
10.	[ʔ]	<i>boʔol</i>	<boʔol>	/boʔol/
11.	[g]	<i>iga</i>	<iga>	/igaʔ/
12.	[s]	<i>sapi</i>	<sapi>	/sapiʔ/
13.	[h]	<i>hurang</i>	<hurang>	/hurang/
14.	[m]	<i>macan</i>	<macan>	/macan/
15.	[n]	<i>lintah</i>	<lintah>	/lintah/
16.	[ŋ]	<i>ambung</i>	<ambung>	/ambung/
17.	[r]	<i>sore</i>	<sore>	/soreʔ/
18.	[l]	<i>alis</i>	<alis>	/alis/
19.	[w]	<i>wani</i>	<wani>	/wani/
20.	[y]	<i>siyung</i>	<siyung>	/siyung/

### B. Orthography System

According to Seifart (2008), the basic concept of the orthographic is a brief of the writing system typology such as graphemes, alphabet, related rules of their use. Typology means the categorization of different language. The orthographic system standardizes by considering two main points. The first is a graphic symbol which relates to sign, characters, letters, and punctuation marks. The second is the rules or conventions which deals with orthographic, punctuation, and pronunciation rules. Then, Sgall (as cited in Luelsdorf, 1987) distinguishes three principles of orthography reflecting with: phonetics; etymological; and historical. Phonetics refer to reflecting the words' pronunciation. The etymological principle is indicating the origin of words, in term of morphemic structure. The third principle is historical, which referring to those particular spelling of the words which cannot be identified by those two principles before.

### C. Effects of Orthography on L2 Phonology

Developing awareness of phonology structure, speakers often assumed it as sounds (Frost & Katz, 1992). It also will be naturally uttered when the speakers are spelling and pronouncing in their speaking or reading. In case, when someone in the context of non-native English speakers speaks the word naturally, it can bring up misspell or mispronounce. Then, what is the reason for non-native English speakers often misspell English pronunciation? Because, they recall their memory when looking at the new words as indicated by Daffern & Critten, (2019). In their study, revealed that students use their memory of visual knowledge to pronounce the new words. For instance, their memory in pronunciation of word 'heal' is also used to assert the word 'healthy'. Nicolai & Kondrak (2015) linked spelling and pronunciation that to attain complete phonemic and morphemic only through spelling optimally is inept. In particular, the form of 'hearing' has a similar spelling to 'heard' at the beginning but having different pronunciation. Another illustration is Dutch learners who are fierce in differing the sounds /æ/ and /ɛ/ (Ki Mok, Lee, Jingwen, & Bo Xu, 2018). Likewise, neighborhood frequency apparently plays a notable role in visual word recognition and reading, as suggested by Grainger et al. (1992 as cited in Perea & Rosa, 2000). The neighborhood here means neighborhood concerning its orthographic in the processes of underlying words recognition. Afterward, the orthographic neighbor is a visual presentment of a word which spelled in similar words (Perea & Rosa, 2000). Perfetti & Liu (2005) also support by claiming that the writing system, the orthography, and the language might comprehensively affect the students reading. They also revealed that Event Related Potential (ERP)—an experiment which applied for Chinese learners studying English and vice versa, indicates tentative differences during word identification will depend on the reader's skill in the language and writing system (Perfetti & Liu, 2005).

A study has a positive awareness of orthography on phonology in the context of ESL. Research which concerns with mandarin tone indicates that pinyin (a transparent schematic system) is more beneficial for novice learners by comparing orthographic effects of Chinese characters and a pinyin on a suprasegmental feature (lexical tones) (Ki Mok et al., 2018). Thus, this study suggested that orthographic effects are not limited to alphabetic systems because it depends on the proficiency of the learners. Li, Wang, Castles, Hsieh, & Marinus (2018) involved students in their study that they are encountered to the written characters in short stories to check their spelling and reading accuracy, also their subsequent orthographic learning. The result showed three different types of pronunciation about its phonetics radical. The first is phonetic radical in isolation. Then, there is an alternative pronunciation associated with the phonetic radical when emerging in other characters. Lastly, there is a pronunciation which is unrelated to the phonetic radical. Eventually, this article will discuss the influence of orthography on L2 phonology in isolation words in the particular case of Brebes Javanese learners in the English context, as which known that Javanese is the biggest of

Indonesia's regional language speakers (Quinn, 2011). Additionally, Javanese is a first language over the whole of Central Java, Brebes is one of them. The unique of a chosen topic is that Brebes Javanese dialect has their vowel which is not owned by the Javanese language, such as [i], [o], and [a], (based on Nur, 1999). With the special, when the vowel [a] is in the ending of the word, it will be a glottal [ʔ], even though that is not a question. The precise explanation will be elaborate in the result and discussion part.

### III. METHOD

The critical point in conducting research is the research design. The research design may determine the research process, particularly the methodology which affects the data collecting and analyzing technique. Tavakoli (2012) states that considering the research design is one of the crucial preparations before conducting research, especially in collecting and analyzing the data. Thus, the research design of this research will be explained as follows.

#### A. Participants

Taking the participants should be concerned by the researchers as the primary sources of research. Due to the aim of this research is to see whether the L1 phonological and orthography system affects the foreign language pronunciation or not- where in this case we focus on Brebes dialect students toward English, the population of this study are SMAN (Senior High School) 1 Brebes, Central Java.

Twelve students grade 12 in SMAN (Senior High School) 1 Brebes, Central Java participated in this study. They were recruited from grade 12 because they are the highest grade in formal school in Indonesia. Thus, they already experienced the English learning process since lower secondary level, even an elementary level. Among 32 students in the class, we took twelve students who are the native speaker of Brebes Javanese dialects. The meaning of Brebes native speakers refers to the students who born from Brebes people parent and live in Brebes, also use the Brebes Javanese dialects as the language communication in daily activity. Also, twenty students from 32 are not Brebes native speakers. It is because; a) some of them were not born in Brebes; b) some of them were born in Brebes, but their parents are not Brebes native speaker (e.g., Sundanese, Malay, Javanese (exclude Banyumasan)); and c) some of them came from outside of Brebes. Thus, regarding those considerations, we choose only twelve students to be considered as Brebes native speaker. These samples are taken using a purposeful sampling technique. In a purposeful sampling technique, the samples are recruited in reflecting the purpose of the research (Creswell, 2013).

#### B. Analysis

Regarding the research methodology in linguistics research, the quantitative and qualitative method can be used as the research method, which depends on the research objectives. Quantitative is suitable to conducted research in significant number of samples using a statistical procedure in specifying the relationship between the independent and dependent variable (Tavakoli, 2012). Besides, qualitative research may focus on a small number of participants for gaining a depth analysis of a phenomenon based on the real situation (Bogdan & Biklen, 2007). In this case, we use the descriptive qualitative method as the research method.

Furthermore, related to data collection, Saldaña (2011) states that taking the data in qualitative research can be done through survey, observation, and interview. Thus, the source of the data of this research was from recording. The recording was taken from twelve participants. The data were gathered through questionnaire, recording, observation, and interview. The questionnaire was distributed to the participants in order to get the demography data as essential information. Based on the data, we then decided the students who are suitable to be the participants of this research. Then, twelve participants were.

After determining the participants, we started collecting the data by recording. The participants were asked to read aloud a reading text twice and isolated words. The words were selected from the learning textbook which is used by the participants in the class. Regarding to the analysis unit of this research, it included 12 vowels (/i:/, /ɪ/, /e/, /æ/, /ɑ:/, /ɒ/, /ɔ:/, /u:/, /ʊ/, /ʌ/, /ɜ:/, and /ə/) and 26 consonants (/p/, /ph/, /b/, /t/, /th/, /d/, /k/, /kh/, /g/, /f/, /v/, /θ/, /ð/, /s/, /ʃ/, /z/, /h/, /tʃ/, /dʒ/, /m/, /n/, /ŋ/, /l/, /r/, /w/, and /j/). Those units are called phonemes, which connect the meaning (Kreidler, 2004). After the recording process, then we transcribed the pronunciation of the participants. Based on the pronunciation recording, we can determine how the participants spell English words. While doing the record, we observed the classroom learning activities to convince whether the teacher taught them how to pronounce the word or not. The interview was conducted to know the teacher contribution to teaching the English pronunciation in the class. Then, after that process was completed, we can draw a conclusion regarding the influence of L1 phonological and orthography system toward English pronunciation and spelling.

### IV. RESULT AND DISCUSSION

#### A. Results

Briefly, this research is aimed to answer the two research questions. First, how do Brebes Javanese L1 learners of English spell English words which contain phonemes that do not exist in Brebes Javanese dialect? And second, what are the spelling errors of Brebes Javanese L1 learners of English when spelling English words containing non-existent phonemes in Brebes Javanese dialect? Based on those two questions, we can determine the spelling errors from the English pronunciation and the way how the participants pronounce the English words especially the vowels and consonants which do not exist in Brebes Javanese dialect.

## 1. Vowels Spelling

Related to the vowels, English has twelve vowels phonemes; /i:/, /ɪ/, /e/, /æ/, /ɑ:/, /ɒ/, /ɔ:/, /u:/, /ʊ/, /ʌ/, /ɜ:/, and /ə/ (International Alphabetic Association, 1999). In English, vowels have played a big influence in phonetics because consonants cannot stand by itself and the existing of vowels also play an important role for identifying the syllables or can be said as a syllabic symbol (Ogden, 2009). Thus, mispronounce of English vowels may cause misunderstanding and produce different meaning from the original one.

Different from English, in fact, Brebes Javanese dialect does not have all of those vowels. In this research, we focus on the vowels which do not exist in Brebes Javanese dialects. It is interesting to know about the way on how the pronounce those non-existent vowels. Regarding the non-existent vowels of Brebes Javanese dialects, the participants' spelling can be seen as follows.

TABLE V. PARTICIPANT'S VOWEL SPELLING

Phone	Words	Orthographic form (English)	Phonological form (English)	Participant's code	Participant's pronunciation		
					I	II	III
[ɪ]	Visit	<visit>	/'vɪz.ɪt/	A1	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A2	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A3	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A4	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A5	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A6	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A7	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A8	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A9	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A10	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A11	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A12	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
[æ]	Bag	<bag>	/ bæɡ/	A1		[bɛɡ]	
				A2		[bɛɡ]	
				A3		[bɛɡ]	
				A4		[bɛɡ]	
				A5		[bɛɡ]	
				A6		[bɛɡ]	
				A7		[bɛɡ]	
				A8		[bɛɡ]	
				A9		[bɛɡ]	
				A10		[bɛɡ]	
				A11		[bɛɡ]	
				A12		[bɛɡ]	
[ə]	arrive	<arrive>	/ ə'raɪv/	A1	[ʌrɪf]	[ʌrɪf]	[ʌrɪf]
				A2	[əraɪf]	[əraɪf]	[əraɪf]
				A3	[əɪrɪf]	[əɪrɪf]	[əɪrɪf]
				A4	[əraɪf]	[əɪrɪf]	[əɪrɪf]
				A5	[əraɪf]	[əraɪf]	[əraɪf]
				A6	[əɪrɪf]	[əɪrɪf]	[əɪrɪf]
				A7	[əraɪf]	[əraɪf]	[əraɪf]
				A8	[ʌfi]	[ʌrɪf]	[ʌrɪf]
				A9	[əraɪf]	[əraɪf]	[əɪrɪf]
				A10	[əɪrɪf]	[əɪrɪf]	[əɪrɪf]
				A11	[ʌrɪf]	[ʌrɪf]	[ʌrɪf]
				A12	[ʌrɪf]	[ʌrɪf]	[ʌrɪf]

Note:

At the column participation, column participation I and II show the first and second reading aloud activities. Then, participation III shows reading isolated words activity.

As in table 1, it shows the sample of mispronouncing of the vowels by the participants. We take the samples which contain the major mistakes which are pronounced by the participants. It can be seen that all of the participants cannot pronounce [ɪ] correctly. They tend to replace the sound [ɪ] using [i] or [i:]. Besides, based on the table above, regarding the vowel [æ], all of the participants mispronounced vowel [æ]. They replace vowel [æ] using vowel [e]. Furthermore, although some of the participants correctly pronounce the vowel [ə], some participants, e.g., A1, A8, A11, and A12, replace vowel [ə] to [ʌ].

In conclusion, concerning the participants' spelling of non-existence vowels in Brebes Javanese dialects, the participants tend to mispronounce the vowels. They tend to replace the non-existent vowels to closed sound vowels which exist in Brebes Javanese dialects, e.g. [ɪ] to [i] and [i:] to [e], [æ] to [e], and [ə] to [ʌ].

## 2. Consonant Spelling

According to International Alphabetic Association (1999), there are 26 consonants in English, /p/, /ph/, /b/, /t/, /th/, /d/, /k/, /kh/, /g/, /f/, /v/, /θ/, /ð/, /s/, /ʃ/, /z/, /h/, /ʒ/, /dʒ/, /m/, /n/, /ŋ/, /l/, /r/, /w/, and /j/. As reflecting to vowels, consonants are little bit structured. They depend on where they are produced (Clark & Yallop, 1995). Just like vowels, mis-pronunciation of consonants affect the meaning of the English words. Brebes Javanese dialect does not have those all of the English consonants. In order to see on how the participants pronounce the non-existence consonants, it can be seen in table 2 below.

TABLE VI. PARTICIPANT'S CONSONANT SPELLING

Phone	Words	Orthographic form (English)	Phonological form (English)	Participant's code	Participant's pronunciation		
					I	II	III
[dʒ]	Bridge	<bridge>	/ brɪdʒ/	A1	[brɪdʒ]	[brɪdʒ]	[brɪdʒ]
				A2	[brɪdʒ]	[brɪdʒ]	[brɪdʒ]
				A3	[brɪdʒ]	[brɪdʒ]	[brɪdʒ]
				A4	[braɪdʒ]	[braɪk]	[brɪdʒ]
				A5	[brɪk]	[brɪk]	[brɪg]
				A6	[braɪk]	[braɪk]	[brauk]
				A7	[braɪd]	[braɪd]	[braɪdʒ]
				A8	[brɪd]	[braɪk]	[brɪk]
				A9	[brɪdʒ]	[brɪdʒ]	[brɪdʒ]
				A10	[breɪk]	[breɪk]	[brɪdʒ]
				A11	[breɪk]	[breɪk]	[brɪdʒ]
				A12	[braɪt]	[breɪk]	[breɪk]
[v]	visit	<visit>	[ˈvɪz.ɪt]	A1	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A2	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A3	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A4	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A5	[fɪsɪt]	[fɪsɪt]	[fɪsɪ:t]
				A6	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A7	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A8	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A9	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A10	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A11	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
				A12	[fɪsɪt]	[fɪsɪt]	[fɪsɪt]
[tʃ]	nature	<nature>	[neɪ.tʃə]	A1	[netʃər]	[netʃər]	[netʃər]
				A2	[netʃər]	[netʃər]	[netər]
				A3	[netʃər]	[netʃər]	[netʃər]
				A4	[nətər]	[nətər]	[nətər]
				A5	[natʃər]	[natʃər]	[natʃər]
				A6	[nətər]	[nətər]	[nətər]
				A7	[nətər]	[nətər]	[nətər]
				A8	[natʃər]	[natʃər]	[natʃər]
				A9	[netʃər]	[netʃər]	[netʃər]
				A10	[nətər]	[nətər]	[nətər]
				A11	[natʃər]	[natʃər]	[natʃər]
				A12	[nətər]	[nətər]	[nətər]
[ʒ]	Leisure	<leisure>	[ˈleɪ.ʒər]	A1	[leʃər]	[leʃər]	[leʃər]
				A2	[leʃər]	[leʃər]	[leʃər]
				A3	[leɪʃər]	[leɪʃər]	[lɪʃər]
				A4	[leɪʃər]	[leɪʃər]	[leɪʃər]
				A5	[leɪʃər]	[leɪʃər]	[leɪʃər]
				A6	[leɪʃən]	[leɪʃər]	[leɪʃ]
				A7	[lɪʃər]	[lɪʃər]	[lɪʃər]



A8	[leʃər]	[leʃər]	[leifər]
A9	[leʃər]	[leʃər]	[lifər]
A10	[leʊʃər]	[leʊʃər]	[leʊʃər]
A11	[leʃər]	[leʊʃər]	[leʃər]
A12	[lifər]	[lifər]	[lifər]

Note:

At the column participation, column participation I and II show the first and second reading aloud activities. Then, participation III shows reading isolated words activity.

Brebes Javanese dialects do not have consonants [dʒ], [v], [ʃ], and [ʒ]. Based on the table above, although some participants can pronounce consonant [dʒ] well, most of them still mispronounce the sound. In the sample table above, in the 1st and 2nd practice, A5 replaces [dʒ] to [k]; where in the 3rd practice, A5 returns it to [g]. In addition, A6 replaces [dʒ] to [k] in all pronunciation practice. Then, in the next sample, A7 and A8 tend to replace [dʒ] to [d], or even A12 replaces it to [t].

Furthermore, about the consonant [v], all of the participants can not spell the sound well. All of them change [v] to [f] because they do not have [v] in Brebes Javanese dialects. Besides, most of the participants are difficult to pronounce [ʃ]. They replace the sound to [t] which as the most closed sound. Then, even for the [ʒ], it is also difficult for them. All of the participants mispronounce [ʒ], so that they change the sound to [ʃ]. Thus, regarding the non-existent consonant in Brebes Javanese dialects, the participants tend to replace them with the closed sounds which contain in their dialect, e.g. [dʒ] to [k], [d], [t], and [g]; [v] to [f]; [ʃ] to [t]; [ʒ] to [ʃ].

## B. Discussions

In relation to language pronunciation and dialects or geographic areas, Kreidler (2004) states that every geographic area has different dialects. Those dialects influence the native speaker when using other languages, especially English. It is because not all of the English vowels and consonants contain in other languages. Sometimes, it is caused by the locality of the speaker. Thus, the speaker tends to use their own speech perception based on their geographical dialects.

The way on how they pronounce the vowels of English which do not exist in Brebes Javanese dialect is affected by the situation. It is called as normal vowels (Clark & Yallop, 1995). Regarding the vowels' pronunciation perspective, the participants shift the non-existent vowels to the articulatory possibility, which contains in Brebes Javanese dialects. Based on that condition, we can label that the participants use their essential knowledge to pronounce the non-existent vowels. O'Connor (1980) explains that in language learning, the best way how to pronounce vowels are through listening and imitating. Based on this context, although the teacher already taught them about how to pronounce the words and the words also are taken from their learning textbook, they are still influenced by their native vowels in Brebes Javanese dialects where in fact the participants tend to use the closed sound of Brebes Javanese dialects, e.g. [ɪ] to [i] and [i:] to [e], [æ] to [e], and [ə] to [ʌ].

Besides, not only vowels, Clark & Yallop (1995) state that consonants' pronunciation may be affected by the notion of the consonants features which is had by the speaker. In fact, those consonants features are influenced by the speaker dialects. English consonants are produced based on the place of articulation where every dialect may have different consonants which also has different place of articulation. Thus, Brebes Javanese language has many non-existent consonants so that it is difficult for the participants pronounce the English words contained the sound which does not exist in Brebes Javanese dialects. As in the results, the participants use the closed sounds replace the non-existent consonants, e.g. [dʒ] to [k], [d], [t], and [g]; [v] to [f]; [ʃ] to [t]; [ʒ] to [ʃ].

Through the discussion, this study displays emphasizing the frequency on the students' nature of mistakes. When the students can recognize their mistakes, it can help them in recalling or reflecting something significant about their spelling and pronunciation (Daffern & Critten, 2019). Brebes Javanese learners who are non-native English speakers must find the errors and difficulty in their practice. In such, they cannot realize the consonant [tʃ] in the word nature. They naturally utter the words by its spelling. It means that they cannot differ the spelling and pronunciation in relation. Thus, Ki Mok et al., (2018) suggestion supports this case—that no limitations to alphabetic systems on orthographic effects to because it depends on the proficiency of the learners. The nature of students' mother tongue is not solely being a mistake in spelling or pronunciation English words. But, it can be useful points of them in uttering particular English word, which not all non-native English speakers can pronounce it easily. For instance, is the sounds of final [d] in the word 'bad'. The Brebes Javanese learners can utter that word steadily and clearly.

## V. CONCLUSION

In conclusion, in the vowels and consonants pronunciation perception, most of the participants mispronounce the English vowels and consonants, especially the words which contain non-existent vowels and consonants in Brebes Javanese dialects. Their pronunciations are influenced by the dialect. Thus, they tend to pronounce the non-existent vowels and consonants with the closed sound of their dialects, e.g. [ɪ] to [i] and [i:] to [e], [æ] to [e], and [ə] to [ʌ] for the vowels and [dʒ] to [k], [d], [t], and [g]; [v] to [f]; [ʃ] to [t]; [ʒ] to [ʃ] for the consonants.



Through reading and writing in a text, students can learn about sounds and symbols relationship as their practical learning pronunciation in the classroom. They can take on known reading in writing vocabularies, and they can use what they know about words to generate new learning. By this purpose, the teacher can be a guide or facilitator for them, but students can independently take the initiative to continue on their own.

Lastly, we realize our limitation of this study that the influence of teacher when teaching pronunciation in the class can be variables on shaping students' pronunciation, the same as spelling learning (Daffern & Critten, 2019). However, this study cannot provide this variable as one of analysis factor. Hopefully, for the further research which will conduct an orthography system research can deeply dig the way of the teacher when teaching pronunciation in the class as a focus of that research to perfect this study.

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