JAVANESE STUDENTS’ MISPRONUNCIATION OF ENGLISH WORDS WITH THE SILENT LETTER “B”

AN UNDERGRADUATE THESIS

Presented as Partial Fulfillment of the Requirements for the Degree of Sarjana Sastra in English Letters

By

MASTERINA META SEKARSARIMURTI
Student Number: 144214092

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FACULTY OF LETTERS
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Yang menyatakan,

Masterina Meta Sekarsarimurti
Sometimes you have to be your own hero.

-unknown
This is for my super mom, my beloved little brother and all my cats 😊
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Masterina Meta Sekarsarimurti
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<td>Asean Economic Community</td>
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<tr>
<td>AMEP</td>
<td>Adult Migrant English Program Research Centre</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of SouthEast Asian Nation</td>
</tr>
<tr>
<td>BBC</td>
<td>British Broadcasting Corporation</td>
</tr>
<tr>
<td>CC</td>
<td>Consonant Consonant</td>
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<td>CCCVCCCCC</td>
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<td>English First English Proficiency Index</td>
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<tr>
<td>EME</td>
<td>English Made Easy</td>
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<tr>
<td>IPA</td>
<td>International Phonetic Alphabet</td>
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ABSTRACT


English, as an international language, is necessary to master in this AEC era. Indonesia, as one of the countries affected by AEC era, should improve the people English skills. One of the English skills that should be improved is pronunciation, which is often overlooked by the foreign learners. In fact, their pronunciation is important as it could be one of the assessments to see how good their English is. Besides, the incorrect pronunciation may create a miscommunication that will lead to someone’s death.

This research aimed to see the students’ pronunciation ability in pronouncing silent letter “b.” Therefore, this research formulated three problems. The first was how the Javanese students pronounce the English words given that contain silent letter “b.” The second was what phonological processes are ignored by the students. The last was what the reasons of the students’ mispronunciation are.

In analyzing the data, this research used phonological approach. A purposeful sampling method is used in this research. The students that were observed were the students who were Javanese and fluent in speaking Javanese. The samples were taken by recording the students’ pronunciation of 18 (eighteen) English words with the silent letter “b.” Then the students’ pronunciation was analyzed with the phonological approach to see the mother tongue interference since different phonological systems between Javanese and English might lead to mispronunciation.

The result shows most of the words given are mispronounced by the students. As predicted, the students could not silence the letter “b” in the most words given, especially the bisyllabic words given. It means the students ignored the deletion phonological process in English. The students’ ignorance of deletion process made them create insertion in the pronunciation of the words given. Besides insertion of the letter “b,” the students also created other phonological processes. There were deletion, simplification, and substitution. According to the analysis, the reason of the students’ mispronunciation was the different phonological system, which consists of syllabification and phonotactic constraint, between Javanese and English. It was proven that different phonological system might lead to mispronunciation.

Keywords: pronunciation, silent letters, mother tongue
ABSTRAK


Bahasa Inggris, sebagai bahasa internasional, perlu dikuasai di era MEA ini. Indonesia, sebagai salah satu negara yang terkena dampak MEA, harus meningkatkan keterampilan bahasa Inggris masyarakatnya. Salah satu keterampilan bahasa Inggris yang harus ditingkatkan adalah pelafalan. Hal ini sering diabaikan oleh pelajar bahasa asing. Pelafalan mereka menjadi sangat penting karena dapat menjadi salah satu tolak ukur seberapa baik bahasa Inggris mereka. Selain itu, pelafalan yang salah dapat menimbulkan kesalahpahaman yang dapat berujung kematian seseorang.


Dalam menganalisis data, penelitian ini menggunakan pendekatan fonologis. Metode yang digunakan dalam penelitian ini adalah purposeful sampling. Siswa yang diamati adalah siswa yang mampu berbahasa Jawa dan fasih dalam berbahasa Jawa. Sampel diambil dengan merekam pelafalan 18 (delapan belas) kata bahasa Inggris yang mengandung silent letter "b" dari 5 siswa. Kemudian pelafalan siswa dianalisis dengan pendekatan fonologis untuk melihat pengaruh bahasa ibu mereka karena sistem fonologis yang berbeda antara bahasa Jawa dan Inggris dapat menyebabkan kesalahan pelafalan.


Kata kunci: pelafalan, silent letter, bahasa ibu
CHAPTER I

INTRODUCTION

A. Background of the Study

Language is a communication tool amongst human beings to share their thoughts and knowledge. According to Chomsky (1976), the nature of language is considered as a function of knowledge attained (p. 46). It can be said that language helps us to increase our knowledge. Science and technology from other countries also can be mastered through their language. One of the famous philosophers, Wittgenstein, says that “the limits of my language are the limits of my world” (2001, p. 68). It means that our knowledge depends on what we have words for.

Every country has its own national language as well as Indonesia that has Indonesian that unites all of its people. Besides the national language, people also have a tendency to understand and master the language of other countries in order to expand the network and relationship between the nations, especially the language that is acknowledged as the international language, English. Other countries already mastered English deeply in order to understand science and technology that have developed in this era of globalization, but the mastery of English in Indonesia is still poor.

Based on the report launched by English First English Proficiency Index (EF EPI), in 2017, Indonesia was ranked 39th out of 80 countries worldwide participating in EF EPI, whereas in the previous year, Indonesia was ranked 32nd out of the same number of countries (Dipa, 2017, para 1-3). It means Indonesia is downgraded by 7 ranks. This situation happens probably due to the low interest and
motivation of people in Indonesia. They think English is not an important matter and urgent need.

With the results of the survey reported, the motivation to improve the English comprehension needs to be accelerated due to the era of globalization that has entered the era of AEC (Asean Economic Community), an era where everyone who lives in Southeast Asia has the same opportunity to get a job. This era forced Indonesian people to compete with people from other countries who are members of ASEAN (Association of SouthEast Asian Nation). Indonesians’ mastery of English should be improved immediately if Indonesia does not want to be left behind with more advanced ASEAN countries like Singapore and Malaysia.

Indonesian people, all this time, learn English for academic or work demand that force them to use the language. English does not become a priority as it is easy to find translators to assist us, nowadays. This condition makes English set aside as the main need.

English learners who are classified having good English can be seen from the mastery of grammar, vocabulary used, chosen diction, and pronunciation. The criteria of good English can be examined by many factors, but by listening to their pronunciation is adequate to assume whether they have good English or not. Some English learners do not really pay attention to how to pronounce a word correctly. They only focus on their grammar and vocabulary. As long as their grammar is correct and their diction is difficult, they think they will look like having good English. This can be dangerous because the error and accuracy in pronunciation can affect the meaning of a word or sentence as a whole.
For example, there was an accident at a viaduct on a highway in Cantabria when a teenager named Vera, 17, did bungee jumping. The girl had misunderstood an instruction from the Spanish instructor to "No jump" as "Now jump". The instructor’s poor English makes his pronunciation not clear so that the girl heard it as the instruction to jump. Vera’s death resulted in part from a misunderstanding derived from the incorrect use and pronunciation of English (Strange, 2017, para 1-7). That is, why pronunciation is an important matter.

When English learners mispronounce words, the meaning will change and the message will not be delivered well. The message that they attempt to convey will not be transferred well. Learners with good pronunciation in English are more likely to be understood even if they make errors in other areas, whereas learners whose pronunciation is difficult to understand will not be understood even if their grammar is perfect (Adult Migrant English Program Research Centre AMEP Research Centre, 2002, p. 1).

Indonesia is a nation consisting of many tribes that have their own local languages. The local language refers to the language spoken in homes and marketplaces of a community (Bühmann & Trudell, 2008, p. 6). In Indonesia, there are many local languages that are used in each tribe, such as Javanese, Sundanese and Batakese. The local languages in Indonesia, mostly, are learned at home from older family members as their very first language. Therefore, local languages in Indonesia are also the mother tongues for Indonesian people. In general, every language, especially a mother tongue, has their own dialect that will affect verbal pronunciation of each person as it is a language that is used in daily life.
For example, Indonesian people from Central Java and Yogyakarta have Javanese as their mother tongue. Though both Central Java and Yogyakarta people speak Javanese, they have a different dialect amongst them. Javanese in Tegal, one of regions in Central Java, is different from Javanese in Yogyakarta. In Tegal, they will pronounce “sega” /səɡa/, but in Yogyakarta it will be pronounced as /səɡɔ/. Even though the meaning is still the same, Yogyakarta’s dialect tends to pronounce the letter “a” with /ə/. Another example, the letter “d” in Indonesian is different from “d” in Javanese. When Indonesian people usually pronounce the word “sudah” /sudah/, people with Javanese dialect will pronounce it /suḍah/. The letter “d” will be pronounced “dh” in Javanese or in the Javanese transcription it symbolizes with /ḍ/. According to this condition, dialect will affect their learning process at school and college when studying English, especially on the pronunciation aspect.

Languages have different phonological rules. In English phonological rules, there is a segment deletion. This rule makes phoneme not pronounced in certain environments (Panevova & Hana, 2010, p. 5). The very common example of this rule is silent letters. A silent letter is a letter that is not pronounced, but still written in the writing of the words, such as “b” in the word “comb” /kɒm/ and “z” in the word “rendezvous” /rəndəˈvuː/. A number of words are difficult to spell because of silent or slurred consonants (Guth, 1966, p. 409). Therefore, words with silent letters are often mispronounced by the learners.

Mispronunciation can happen because of some factors. One of them is the interference of the mother tongue. Interference is defined as errors in the learner’s use of the foreign language that can be traced back to the mother tongue (Lott cited
in Bhela, 1999, p. 22). The different phonological rules in Javanese and English can make the learners mispronounce some English words. In Javanese, there is no letter that is not pronounced like silent letters in English. All of the letters in Javanese are pronounced in every word. In contrary, in English, a silent letter is acceptable due to the English irregularity. The English irregularity creates diversity between the orthography and the spoken word. Spelling has no longer accurately reflect pronunciation in English (Fromkin, Rodman & Hyams, 2011, p. 562). The writing system in English also has affected the speech only marginally. It creates a phenomenon in the English spelling pronunciation.

Javanese students, as second language learners, might have difficulty in pronouncing words with the silent letter “b” since they tend to pronounce words depend on the spelling pronunciation. According to Yamini, the English irregularities can make the non-native English speakers face difficulty in pronouncing the English words (Yamini, 2011, p. 45).

Acknowledging the difference phonological rules between Javanese and English, this research is conducted to see how much influence that the mother tongue gives to the mispronunciation of English words. The respondents will be students who have Javanese as their mother tongue and speak Javanese in their daily life. As discussed above, the silent letter is often mispronounced by the learners. Therefore, this research studied how the Javanese students pronounce words containing silent letters.

Since English has so many silent letters, to limit the scope, this research will only discuss and analyze the silent letter “b”. Furthermore, in silent letter “b,” the
letter “b” will remain silent even its added by suffixes. For example, the words “climbing” /klʌɪmɪŋ/ and “climber” /klʌɪmə/. The letter “b” remains silent after added by the suffix {–ing} and {–er}. Another silent letter, for example, is the silent letter “n”. The letter “n” will be pronounced after added by suffixes. The word “solemn” /sələm/ contains the silent letter “n”. The letter “n” is silent, but after added by the suffix {–ize}, the letter “n” will be pronounced as “solemnize” /sələmnʌɪz/. With this condition, the possibility of mispronouncing English word with the silent letter “b” is expected to appear more often compared to the other silent letters. Hopefully, this research can support a new finding of linguistic study, particularly, on the silent letter “b” because this study has not been done.

B. Problem Formulation

In designing this research, three questions were formulated in order to limit the scope and objectives of this research. The questions are listed below:

1. How do Javanese students mispronounce English words with the silent letter “b”?  
2. What phonological processes are ignored by the students?  
3. What are the reasons of their mispronunciation?

C. Objectives of the Study

From the problem formulation, there are three objectives of the study. First, this research will observe how the Javanese students mispronounce words containing silent letter “b” compared to the correct pronunciation according to Longman Pronunciation dictionary. The second objective is to identify
phonological processes that being ignored by the Javanese students as different phonological rules between Javanese and English might affect the pronunciation of the students. The third objective is to find out the reasons behind the students’ mispronunciation.

D. Definition of Terms

The definitions of terms are given in order to explain some words that might be misunderstood by the reader. In this research, there are three words that need to be explained, pronunciation, mispronunciation, and silent letters.

**Pronunciation** refers to the process of producing meaningful speech sound which is articulated by the controlled friction of airstream through the human’s speech organs (Kreidler, 2004, p. 22). It includes attention to the particular sounds of a language (segments), aspects of speech beyond the level of the individual sound, such as intonation, phrasing, stress, timing, rhythm, (suprasegmental aspects), how the voice is projected (voice quality) and, attention to gestures and expressions that are closely related to the way we speak a language (AMEP Research Centre, 2002, p. 1).

**Mispronunciation** is the act or habit of pronouncing a word in a way that is regarded as nonstandard, unconventional, or faulty (Nordquist, 2017, para. 1). Lems, Miller, and Soro (2010) says that learners may mispronounce a word because some of the sounds do not exist in their first language and they have not learned to say them in English, or because the letters they are trying to pronounce map to different sounds in their native language.
A silent letter is a letter that cannot be heard when the word is spoken. It means the letter is not pronounced but still written in the writing of the words. There are silent letters in some English words because over hundreds of years English changed how they pronounce those words but kept the old spelling (BBC, 2011, para. 1). English has a number of silent letters. It is about twenty with initials from A to Z.
CHAPTER II
REVIEW OF LITERATURE

This chapter discusses the review of related studies and theories. This chapter consists of three sections: review of related studies, review of related theories, and theoretical framework.

A. Review of Related Studies

Many studies have discussed the way people pronouncing English words. Most of their studies find out that non-native English speakers mispronouncing the English words due to the influence of their own native languages. Ayumi’s (2018) undergraduate thesis, for example, studies about the pronunciation of English words with the silent letter “g.” Her subjects are Elementary and Advanced level students of English Made Easy (EME) English course. In collecting the data, she uses a sampling method (purposive). She asks her informants to pronounce the selected 15 words containing silent letters “g” that taken from the English Made Easy Daily Vocabulary List and then record it.

Her study shows that the percentage of correct pronunciation from Advanced level students (71.3%) is higher than the Elementary level students (30.7%). Both the Elementary and Advanced level students can pronounce the selected words with /g,n/ correctly, but they get a difficulty in pronouncing the selected words with /g,h,t/. For example, the Elementary level students can pronounce the words “design” and “foreign” correctly, but they mispronounce the words “neighbor”, “frighten,” and “eighteen.” In line with them, the Advanced level
students can pronounce the words “design” and “daughter” correctly, but they mispronounce the word “outweigh.”

Based on the analysis, Ayumi also finds out some phonological processes that occur in the students’ mispronunciation. There are segment addition, segment deletion, vowel change and consonant change. Although the students were tested with the selected words, which are familiar, they still mispronounce some of the words. The words given for the test are the words that already discussed in their classes, but they still unaware of the correct pronunciation of the words.

Besides the ignorance of the students, the influence of the Indonesian phonological system also become the reason of the students’ mispronunciation. The different phonological system between Indonesia and English leads the students to mispronounce the words. In Indonesia, all of the letters in a word must be pronounced. That is, why the students tend to pronounce the letter “g” in the words given.

After Ayumi, Utama (2018) also conducts a similar study entitled Error Analysis of Silent Letters “H” and “W” in English Words by Non-English Department Students. Utama conducts this study to find out the errors made by the students in pronouncing silent letter “h” and “w.” He collects the data by recording the students pronouncing 24 English words containing silent letters “h” and “w” in the initial, medial, and final position.

According to Utama’s analysis, there are 162 pronunciation errors from the total 240 students’ pronunciation. He identifies two types of errors in the students’ pronunciation, systematic and pre-systematic. The students make systematic errors
in the words containing silent letters “h” in all positions and in the words containing silent letters “w” in final position. The students mispronounce the words “heir” and “cheetah,” but they can pronounce the words “ghost” and “brew” correctly. In the words containing silent letters “w” in initial and medial positions, the students make the pre-systematic errors. All of the students mispronounce the words “answer” and “awry.”

In his research, he concludes that the reason behind the students’ pronunciation errors is the influence of their mother tongue. The Indonesian phonotactic constraints affects the way the students pronounce the English words given. Based on Utama’s analysis, the pronunciation errors happen because the students applying the rules of syllabic structure and consonant clusters in Indonesia. The students keep pronouncing the letters “h” and “w” to maintain the Indonesian rules.

The other study is conducted by Yamini (2002) with his journal article entitled Silent Consonants in English. Yamini conducts this study in order to find and formulate rules that show the context in which certain consonants are silent. This study is based on Yamini’s worries about the irregularity of English pronunciation that can confuse the learners. His journal provides information about rules of silent letters in English. He formulates the rules of silent letters “b”, “p”, “t”, “d”, “k”, “g”, “n”, “r”, “l”, “w”, “h”, and “gh”. Other silent letters such as “ch”, “f”, “ph”, “th”, and “m” are not formulated in his journal because of the low appearance frequency. The main purpose of Yamini’s study is to prevent the
learners or even the teachers from making hasty generalizations that might be confusing for them.

Based on the findings, the prior studies support this research. The studies done by Ayumi and Utama find out that the students’ mother tongue affects the way they pronounce English words. This is parallel with this research hypothesis which stated that mispronunciation can be traced back to the interference of the mother tongue. Besides that, those studies reveal that the different phonological systems between languages also contributes to the mispronunciation of the English words.

Likewise this research, both Ayumi and Utama conduct a study about English words with silent letters. This research aims to develop their study by conducting the similar study in English words with the silent letters “b.” While Ayumi and Utama use participants that have Indonesian as their mother tongue, this research uses the participants that have Javanese as their mother tongue.

If those two studies can reassure and reinforce this research’s hypothesis, the study done by Yamini provides the theory that this research need. Yamini’s rules of silent letters can help the writer to see the different phonological system between Javanese and English. Besides providing the rules, he also expects that silent letters might cause mispronunciation since it is one of the examples of irregularity in English pronunciation.

B. Review of Related Theories

There are five theories used to support this research. The theories are Phonetics & Phonology, Silent Letters, Syllabification, Phonological Processes, and Orthography. Since this research wants to see the interference of mother tongue
in students’ pronunciation of English words, the Javanese, as the students’ mother tongue, syllabification and orthography also explained in this section. All of the theories elaborated in this part are used to help the researcher to answer the problem formulation.

1. **Phonetics & Phonology**

   Phonetics is a study of speech sounds and their physiological production and acoustic qualities (Ladefoged, 2014, p. 1). This study deals with the configurations of the vocal tract (articulatory phonetics), the acoustic properties of speech sounds (acoustic phonetics), and the manner of combining sounds into syllables, words, and sentences (linguistic phonetics). Phonetics becomes an important matter for the non-native English speaker because it teaches them to pronounce the English words accurately. The learners can understand each individual sound and how they differ from one another.

   Phonetics is a prominent perspective to help the researcher observes the students’ pronunciation. Articulatory phonetics becomes the main focus as it observes how speech sounds are produced.

   Besides phonetics, phonology is also a necessary theory in this study. Yule defines phonology as the description of the systems and patterns of speech sounds in a language (2010, p. 42). Phonology tells us what sounds are in language, how they do and can combine into words, and explains why certain phonetic features are important in identifying a word.

   In phonology, there are phonological rules to ensure that phonetic forms of words do not violate the phonotactic constraints. This makes the word walked is
impossible to be pronounced as [wɔːkd]. A phonological rule, such as the one that devoices the past tense marker in English, changes the pronunciation into [wɔːkt], so that it conforms to the English phonotactic constraints (Szczegielniak, 2013, p. 40).

Different languages have different rules, however, there are some typical kinds of rules that are very common. There are assimilation, dissimilation, insertion, and deletion (Panevova & Hana, 2010, pp. 1-5).

2. Silent Letters

Silent letters is a letter that cannot be heard when the word is spoken. It means the letter is not pronounced but still written in the writing of the words. There are silent letters in some English words because over hundreds of years English changed how they pronounce those words but kept the old spelling (BBC, 2011, para. 1). As stated by Jones, if one traces the pronunciation of words back to older times, one sees that the silent consonants of today were once pronounced fully (Jones cited in Yamini, 2002, p. 45). For example, the word “knight” used to be pronounced as /knɪxt/, but now two of the consonant sounds are deleted /nɪt/. English turned out to have very much silent letter. There are plenty silent letters in English words. It is about twenty silent letters from A to Z, but this research will only use the silent letter “b”.

The silent letter “b” is chosen because of its consistency of being silent in any conditions. Even when the words containing silent letters “b” is added by suffixes, the “b” remains silent. The rules of silent letters “b” can be divided into two according to Yamini’s journal. The first rule is observed in Table 1 below:
Table 1. List of Words Observed by Yamini

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>Transcription</td>
</tr>
<tr>
<td>Obtain</td>
<td>/abˈten/</td>
</tr>
<tr>
<td>Subtract</td>
<td>/səbˈtrakt/</td>
</tr>
<tr>
<td>Subtitle</td>
<td>/ˈsʌbtaɪt(ə)/</td>
</tr>
<tr>
<td>Obtuse</td>
<td>/əbˈtjuːs/</td>
</tr>
<tr>
<td>Obturate</td>
<td>/əbˈtjʊərət/</td>
</tr>
</tbody>
</table>

It is obvious that the letter “b” in the column I are all pronounced, but in the column II are all silent. The reason is a boundary between the letter “b” with the following consonant. There is a prefix that attached to the stem. The boundary separates the final consonants of the prefix from the consonant at the beginning of the root. Therefore, the consonants belong to two different syllables and they are both definitely pronounced without any effect on one another. In contrary, the words in column II have no boundary that separates thus consonants. From the analysis, it can be concluded that the letter “b” is silent in front of the letter “t” provided that the former is not part of a prefix. The second rule is observed in Table 2 below:

Table 2. List of Words Observed by Yamini

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>Transcription</td>
</tr>
<tr>
<td>Ambition</td>
<td>/amˈbɪʃən/</td>
</tr>
<tr>
<td>Symbol</td>
<td>/ˈsmb(ə)l/</td>
</tr>
<tr>
<td>Bombard</td>
<td>/bɒmˈbɑːd/</td>
</tr>
<tr>
<td>Amber</td>
<td>/ˈɑmbər/</td>
</tr>
</tbody>
</table>

It is clear that the letter “b” in the column I are all pronounced, but remains silent in column II. The words in the table show that the letter “b” is silent after the
letter “m” in the final position and before inflectional endings. From the Table 1 and 2, the rule for silent letter “b” can be presented below:

\[ [b] \rightarrow \emptyset / \_ + \]

The rule above shows that [b] sound will be silence or omit if it comes before the morpheme boundary or places at the final position of the word.

3. Syllabification

A syllable contains obligatory of a vowel (or syllabic consonants) or nucleus of the syllable and potentially carries stress (Laurel & Donna, 2010, p. 74). The basic elements of a syllable are onset and rhyme. The rhyme consists of a vowel, which is treated as the nucleus and any following consonant(s), which described as the coda (Yule, 2010, pp. 45-46). The form may optionally begin with one to three consonants of the onset and one to four consonants at the coda (CCCVC CCC). It can be presented in the form of a tree diagram of the word “green” below:

```
   g
  /\      /
Onset Rhyme
 /\     /\   /
Nucleus Coda
 /   /   /
/i:/  /n/
```

In the tree diagram above, the combination of /gr/ consonants is the onset, the vowel /i:/ is the nucleus, and the following consonant /n/ is the coda.

When the syllable has an onset and nucleus, but no coda, it is known as an open syllable. The examples of the open syllable are “me”, “to”, and “no”. When
the syllable has an onset, nucleus and coda, it is known as a closed syllable. The examples of the closed syllable are “cup”, “at”, and “up” (Yule, 2010, p. 46).

The diagram above shows the difference between open syllable in the word “me” (a) and closed syllable in the word “cup” (b).

Both the onset (one or more consonant followed by the rhyme) and the coda (any following consonants after the nucleus) can consist of more than one consonant, also known as a consonant cluster (Yule, 2010, p. 46). Consonant cluster may appear in the initial, middle, and final position. For example, the combination of /st/ in English consonant cluster, it is used as onset in the word “stop” /stɒp/ and as a coda in the word “post” /pɒst/. It also can be said that /st/ (CC) in the word “stop” appear in initial position and in the word “post” appear in the final position.

Every language might has different consonant clusters. A combination of consonants in one language might not exist in another language. On the other hand, it might also exist in both languages, but thus occur in the different position. The positions and sequences of consonant clusters are limited by phonotactic constraints. The phonotactic constraints organize the combinations of certain sounds that permitted in language, including the possible positions of sounds.
(Brinton & Brinton, 2010, p. 59). The combination of /mb/ CC in Javanese, for example, it can be used in the initial position as in the word “mbak” /mbʌk/. This consonant cluster cannot be applied in the initial position in English because there is no English word that begins with /mb/. The consonant cluster /mb/ can be applied in the medial position in English as in the word “combine” /kɔmbain/. The other consonant cluster in Javanese is /ŋ/ as in the word “ngulang” /ŋulʌŋ/. This consonant cluster also cannot be applied in initial position in English. The /ŋ/ can occur in the medial position after a stressed vowel as in the word “anger” /æŋɜ/ (Brinton & Brinton, 2010, p. 59).

The different phonotactic constraints between English and Javanese can make the learner for both languages have difficulty in pronouncing the word. It can easily lead the learner to mispronounce the word whether they eliminate one of the consonant or even insert a schwa [ə] between the consonants.

a. English Phonotactic Constraints

As the explanation above, the English phonotactic constraints controls the possible positions and sequences of sounds. The possible positions of sounds in English according to Laurel and Donna (2010, p. 59) are presented in the table below:

<table>
<thead>
<tr>
<th>Sound</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ŋ/</td>
<td>Medial and final only.</td>
</tr>
<tr>
<td>/ʃ/</td>
<td>Rare in initial and final but common in medial.</td>
</tr>
<tr>
<td>/ð/, /j/, and /w/</td>
<td>Always syllable initial before a stressed vowel.</td>
</tr>
<tr>
<td>/j/ and /w/</td>
<td>In final only as part of a diphthong.</td>
</tr>
<tr>
<td>/ð/</td>
<td>Restricted in initial, occurs freely word medially and finally.</td>
</tr>
</tbody>
</table>
Besides the position of sounds, the phonotactic constraints also responsible for the possible sequences of sounds in a language. The possible sequences of sounds in English according to Brinton and Brinton are listed below:

Table 4. Possible Sequences of Sounds in English

<table>
<thead>
<tr>
<th>Positions</th>
<th>Sound</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>/pl, pr, br/</td>
<td>play, price, bread</td>
</tr>
<tr>
<td></td>
<td>/fl, sl, _SL/</td>
<td>fly, sled, three</td>
</tr>
<tr>
<td></td>
<td>/sp, st, sk/</td>
<td>spend, sting, scare</td>
</tr>
<tr>
<td></td>
<td>/sn, sm/</td>
<td>snail, sneak, small</td>
</tr>
<tr>
<td></td>
<td>/str, spl/</td>
<td>strong, split</td>
</tr>
<tr>
<td>Final</td>
<td>/rp, rm/</td>
<td>harp, harm</td>
</tr>
<tr>
<td></td>
<td>/nd, nt/</td>
<td>bend, bent</td>
</tr>
<tr>
<td></td>
<td>/ft, vd/</td>
<td>lift, paved</td>
</tr>
<tr>
<td></td>
<td>/ts, bs/</td>
<td>mats, grabs</td>
</tr>
<tr>
<td></td>
<td>/vs, fs/</td>
<td>leaves, reefs</td>
</tr>
<tr>
<td></td>
<td>/pt, kt/</td>
<td>apt, ached</td>
</tr>
<tr>
<td></td>
<td>/dst, kst/</td>
<td>midst, boxed</td>
</tr>
<tr>
<td></td>
<td>/nsd, mtf/</td>
<td>rinsed, triumphed</td>
</tr>
<tr>
<td></td>
<td>/mps, nts/</td>
<td>glimpse, dents</td>
</tr>
<tr>
<td></td>
<td>/mpt, mbed/</td>
<td>prompt, thumbed</td>
</tr>
<tr>
<td></td>
<td>/ps, lps/</td>
<td>corpse, gulps</td>
</tr>
<tr>
<td></td>
<td>/lpt, rpt/</td>
<td>helped, warped</td>
</tr>
<tr>
<td></td>
<td>/lvs, rvs/</td>
<td>shelves, dwarves</td>
</tr>
<tr>
<td></td>
<td>/rst, rvd/</td>
<td>first, starved</td>
</tr>
<tr>
<td></td>
<td>/lns, rms/</td>
<td>kilns, terms</td>
</tr>
</tbody>
</table>

b. Javanese Phonotactic Constraints

Javanese, as a language, also has its own phonotactic constraints to limit the positions and sequences of sounds in its language. Before going to the possible positions of Javanese sounds, the table of Javanese consonants below can make it easier for the reader to understand the possible positions of sounds in Javanese. The table of Javanese consonants below is arranged by Horne (1961, p. xxix):
Table 5. Javanese Consonants

<table>
<thead>
<tr>
<th></th>
<th>Labial Sounds</th>
<th>Dental Sounds</th>
<th>Alveolar Sounds</th>
<th>Palatal Sounds</th>
<th>Velar Sounds</th>
<th>Lateral Sounds</th>
<th>Glottal Sounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Consonants</td>
<td>p</td>
<td>t</td>
<td>ṭ</td>
<td>tʃ</td>
<td>k</td>
<td>l</td>
<td></td>
</tr>
<tr>
<td>Heavy Consonants</td>
<td>b</td>
<td>d</td>
<td>ḍ</td>
<td>dʒ</td>
<td>g</td>
<td>ḥ</td>
<td></td>
</tr>
<tr>
<td>Nasal Consonants</td>
<td>m</td>
<td>n</td>
<td>nj</td>
<td>nj</td>
<td>ṇ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasalized Heavy Consonants</td>
<td>mb</td>
<td>nd</td>
<td>nd</td>
<td>ndʒ</td>
<td>ṇ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Consonants</td>
<td>w</td>
<td>r,s</td>
<td>j</td>
<td></td>
<td>h,q</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: the “tʃ,” “dʒ,” “nj,” “ndʒ,” “ŋ,” and “ŋɡ” sounds are adopted from Wedhawati.

According to the classification made by Horne in the table above, both the light and heavy consonants can occur at the initial and the middle positions of words, but only “p”, “t”, “k”, and “l” that can occur at the final positions of words. The nasal consonants can occur at the initial, middle and final positions of Javanese words, except “nj” that cannot occur at the final positions of words. The nasalized heavy consonants (“mb”, “nd”, “ndʒ”, and “ŋɡ”) are like the heavy consonants of “b”, “d”, “dʒ”, and “q”, but with nasal onsets. This consonants often appear in the initial, like in the word “mbak” /mbak/ (sister) and middle, like in the word “ombo” /ɔmbɔ/ (wide) positions of Javanese words, but never occur at the final positions.

Javanese “h” is very much like English “h”. But whereas English “h” appears only at the beginning and middle positions of words, Javanese “h” occurs mostly in the final of words. Other consonants (“w”, “r”, “s”, and “j”) can occur at the initial, middle and final positions of words, except “w” and “j” that cannot occur at the final positions of words (Horne, 1961, pp. xxix-xxxii).
In additions to the possible positions of Javanese sounds above, the phonotactic constraints also rule the possible sequences of Javanese sounds. The possible sequences of Javanese sounds are listed by Wedhawati, Nurlina and Setiyanto (2001, pp. 67-70) in the table below:

### Table 6. Possible Sequences of Sounds in Javanese

<table>
<thead>
<tr>
<th>Positions</th>
<th>Sounds</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>/pr, spr, tr, str/</td>
<td>priya, sprei, trima, strika</td>
</tr>
<tr>
<td></td>
<td>/ṭr, ṭr, kr, skr/</td>
<td>throthakan, crita, kramas, skripsi</td>
</tr>
<tr>
<td></td>
<td>/br, ḍr, ʤr, dr/</td>
<td>brai, driji, dhredheg, jrigen</td>
</tr>
<tr>
<td></td>
<td>/ṭr, mṛ, ṭr, sr, wr/</td>
<td>grims, mripat, ngreti, srutu, wredha</td>
</tr>
<tr>
<td></td>
<td>/pl, tl, ṭl, kl, bl/</td>
<td>plang, tlusur, clurut, klapa, blarak</td>
</tr>
<tr>
<td></td>
<td>/dl, dgł, gl, ml/</td>
<td>dlima, jlalatan, glugu, mliwis</td>
</tr>
<tr>
<td></td>
<td>/ŋl, sl, wl/</td>
<td>nglangut, sledri, wluku</td>
</tr>
<tr>
<td></td>
<td>/pj, tj, kj, bj, gj/</td>
<td>pyayi, tyas, kyai, byar, gya</td>
</tr>
<tr>
<td></td>
<td>/mj, nj, hj/</td>
<td>myang, ngyeyet, hyun</td>
</tr>
<tr>
<td></td>
<td>/kw, dw, mw, ny, sw/</td>
<td>kwaci, dwi, mwang, ngwang, swiwi</td>
</tr>
<tr>
<td></td>
<td>/sp, st, ks, ps/</td>
<td>spion, stasion, ksatriya, psikologi</td>
</tr>
<tr>
<td></td>
<td>/sk, sn, kn, sn/</td>
<td>skala, smes, knop, snek</td>
</tr>
<tr>
<td>Middle</td>
<td>/pr, tr, ṭr, kr, skr/</td>
<td>kapri, mantra, muncrat, cakruk, sanskrit</td>
</tr>
<tr>
<td></td>
<td>/br, dr, ʤr, gr/</td>
<td>abrit, sledri, ajrh, sigra</td>
</tr>
<tr>
<td></td>
<td>/mṛ, sr, wr/</td>
<td>angrem, asri, awrat</td>
</tr>
<tr>
<td></td>
<td>/tl, ṭl, kl, bl</td>
<td>atlas, menclok, angklung, keblasuk</td>
</tr>
<tr>
<td></td>
<td>/dgł, sl/</td>
<td>anjlog, kesliya</td>
</tr>
<tr>
<td></td>
<td>/tj, bj, dj/</td>
<td>setya, disubya-subya, sedya</td>
</tr>
<tr>
<td></td>
<td>/gj, mj/</td>
<td>bagya, sumyah</td>
</tr>
</tbody>
</table>

Besides the phonotactic constraints, the possible patterns of syllable structure in Javanese also important to support this research analysis. One of the reasons is that consonants clusters in Javanese never occur in the final positions. It can be observed in table 6 that Javanese words only ended with single consonants. According to Horne, in Javanese, it is possible to have more than one consonant in the initial position, but it is impossible to end with more than one consonant (1961, p. 35). Thereby, it is necessary to know what patterns that can be formed in Javanese.
words in order to understand the students’ pronunciation problem later. Wedhawati, Nurlina and Setiyanto explained the possible patterns of Javanese syllable structure in the table below (2001, p. 66):

Table 7. Possible Patterns of Syllable Structure in Javanese

<table>
<thead>
<tr>
<th>No.</th>
<th>Patterns</th>
<th>Words</th>
<th>No.</th>
<th>Patterns</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>V</td>
<td>A-man</td>
<td>5.</td>
<td>CCV</td>
<td>Bla-bag</td>
</tr>
<tr>
<td>2.</td>
<td>VC</td>
<td>Ang-kat</td>
<td>6.</td>
<td>CCVC</td>
<td>Prap-ta</td>
</tr>
<tr>
<td>3.</td>
<td>CV</td>
<td>Gu-la</td>
<td>7.</td>
<td>CCCV</td>
<td>Stri-ka</td>
</tr>
<tr>
<td>4.</td>
<td>CVC</td>
<td>Pang-kat</td>
<td>8.</td>
<td>CCCVC</td>
<td>San-skrit</td>
</tr>
</tbody>
</table>

*) V = Vowel; C = Consonants

Since this research only uses IPA (International Phonetic Alphabet) to transcribe the pronunciation, the researcher arranges a table of some Javanese consonants that are not suitable with the IPA transcriptions and gives the suitable transcriptions in order to make the reader understand the differences easily. The table is presented below:

Table 8. Some Javanese Consonants in IPA Transcription

<table>
<thead>
<tr>
<th>No.</th>
<th>Old Javanese Orthography by Horne</th>
<th>Current Orthography by Wedhawati</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>tj</td>
<td>c</td>
<td>tj'</td>
</tr>
<tr>
<td>2.</td>
<td>ṭ</td>
<td>ṭ</td>
<td>th</td>
</tr>
<tr>
<td>3.</td>
<td>d</td>
<td>d</td>
<td>dh</td>
</tr>
<tr>
<td>4.</td>
<td>dj</td>
<td>j</td>
<td>dʒ</td>
</tr>
<tr>
<td>5.</td>
<td>nj</td>
<td>n</td>
<td>nj</td>
</tr>
<tr>
<td>6.</td>
<td>ng</td>
<td>D</td>
<td>n</td>
</tr>
<tr>
<td>7.</td>
<td>n_DUMP</td>
<td>n_dump</td>
<td>ndh</td>
</tr>
<tr>
<td>8.</td>
<td>ndj</td>
<td>nj</td>
<td>ndʒ</td>
</tr>
<tr>
<td>9.</td>
<td>ngg</td>
<td>ng</td>
<td>ngg</td>
</tr>
<tr>
<td>10.</td>
<td>j</td>
<td>y</td>
<td>j</td>
</tr>
</tbody>
</table>
The Javanese consonants presented by Horne are still applying the old spelling of Javanese letters, but the Javanese consonants presented by Wedhawati and friends are already applying the newest spelling of Javanese letters. The letters “tj”, “dj”, “ndj”, and “j” are supposed to spell “c”, “j”, “ñ”, and “y” now. After 1945, Javanese tends to change some of their spelling systems, including the spelling of vowel “oe” that changed into “u” /u/ and the spelling of consonant “dj” that changed into “j” /j/ (Horne, 1963, p. xiv). Some peoples’ names, street, and public places are still using the old spelling system such as Soediro /suˈdɪrɔ/ (people name) and Djogja /dʒɔdʒa/ (city name). Besides that, the letter “z” /z/ and “f” /f/ are not yet identified by Horne, but according to Wedhawati the use of the letters “z” and “f” are only for loan words.

4. Phonological Processes

Although, there are actually plenty phonological processes in English, this research will mainly use 4 (four) phonological processes to discover the students’ mispronunciation. There are insertion, deletion, substitution, and simplification.

a. Insertion

Insertion or also known as segment addition rule is when a new sound inserted whether in the initial, middle, or final position of a word (Panevova & Hana, 2010, p. 5). For example, insert a schwa [ə] before the plural morpheme /z/ when a regular noun ends in a sibilant, giving [əz]. The schwa, sometimes, pronounced as lax “i” [ɪ]. It depends on the pronunciation. The lax “i” [ɪ] appears when it is a strong pronunciation and the schwa [ə] appears when it is a weak
pronunciation. According to Fromkin, Rodman and Hyams (2014), the rule of insertion can be formed as:

\[ \emptyset \rightarrow \varepsilon / [+\text{consonants}] \_ [+\text{consonants}] \]

Besides schwa, other sounds also can be inserted because of the different phonological rules between two languages. The speaker can insert a letter because of the absences of the rules in their native languages. In English phonological rules, for example, it is allowed to have a letter that is left unpronounced but still written in the writing of the words. However, in Javanese phonological rules, it is impossible. In Javanese, every letter in a word must represent a sound. Therefore, Javanese speakers that learn English might mispronounce words which contain silent letters.

b. Deletion

Deletion or segment deletion is when a phoneme is not pronounced in certain environments (Panevova & Hana, 2010, p. 5). For example, in silent letters, the word “climb” is pronounced as /klam/. The letter “b” is not pronounced. Besides the silent letter “b”, English turned out to have more or less twenty silent letters. For examples, they have silent letter “n” like in the word “solemn” /sələm/, silent letter “k” like in the word “knife” /naɪf/, silent letter “h” like in the word “honest” /ɒnɪst/, silent letter “c” like in the word “muscle” /mʌsəl/, and silent letter “g” like in the word “foreign” /fɒrɪn/. The lack of knowledge and the ignorance of this rule can cause mispronunciation of some English words. Guth mentions that silent consonants in English can make it difficult for the learners to pronounce it (1966, p. 409).
c. Simplification

Simplification refers to a variation in which the certain syllable is simplified into a monophthong. This variation usually happens in diphthongs or minimal pairs (McMahon, 2002). For example, the diphthong /eɪ/ in the pronunciation of the word “snake” /sneɪk/ is simplified with /e/. Thus, the pronunciation become /snek/.

d. Substitution

Substitution refers to a sound that is substituted with another sound in the pronunciation of a word. The simple example is the vowel in the word “bed” /bed/ and “bad” /bæd/. Though it might look simple to substitute a vowel in those words, it will give the wrong message if the speakers mispronounced it (Kenworthy, 1987, p. 17).

5. Orthography

Orthography is the standardized writing system of a language (Crystal cited by Ayumi 2018, p. 22). In English orthography, there are irregularities in English spelling, as there are only 26 letters to handle more than 40 phonemes. Most English sounds undergo changes in spoken language, but the written form retains the old spelling pattern. Spelling has no longer accurately reflect pronunciation in English (Fromkin, Rodman & Hyams, 2011, p. 562). This irregularity creates diversity between the orthography and the spoken word that make the non-native English speakers face difficulty in pronouncing the English words (Yamini, 2011, p. 45). One of the English irregularities exists in words that contain written symbols that no longer represent any sounds, or briefly called silent letters.
This research uses silent letter “b” as the object in order to see the interference of the English irregularities with the non-native English speakers’ pronunciation. As stated previously by Guth also, the silent consonants might cause the mispronunciation of foreign language learners. That is, why the subjects of the research are all Javanese native speakers. The reason is because in the Javanese spelling system, all letters that present in a word are pronounced. The silent letter is not acceptable in the Javanese orthography system.

The irregularities that exist in Javanese orthography only happen in the vowel letters. Javanese actually has its own orthography system which is called *aksara Jawa*, the original Javanese script, but when Indonesia is colonized by Europeans, Javanese children beginning primary school are taught the Roman alphabet for reading and writing both Javanese and Indonesian. In fact, Javanese has more vowel than the Roman alphabet has vowel symbols (Horne, 1963, p. xiv). This makes the educated students can write “uga” /uɡa/, but spell it “ugo” /uɡɔ/, which means “too.” It creates the difference between the written and spoken Javanese vowel letters.

C. Theoretical Framework

Theories elaborated above are beneficial to analyze the data in this research. The theory of phonetics, phonology and silent letter give reference about the correct spelling of English words with the silent letter “b”. The theory of syllabification, English phonotactic constraints and Javanese phonotactic constraints help the researcher to find out the reasons behind the students’ mispronunciation. The phonological rule theory is used to form the students’ pronunciation. It is also used
to find out what actually happens to the students’ pronunciation. The orthography in English will be compared to Javanese orthography to find out the absences of the silent letter term in Javanese language that might lead the students to mispronounce the words containing silent letter “b.”
CHAPTER III

METHODOLOGY

This chapter discusses the procedure of how the data were taken and analyzed. The chapter consists of three parts. Object of the study is the first part. It explains the objects (the participants and the chosen words) in conducting this research. Next is the approach of the study. This part discusses what kind of linguistic approach is used in this research. The last part is method of the study. This part is divided into two subparts: data collection and data analysis. It explains how the data of this research was collected and how the data were analyzed.

A. Object of the Study

The objects of this research were the pronunciations of English words containing silent letter “b” by the students who have Javanese as their mother tongue and speak Javanese in their daily life. The pronunciations were taken from students from any majors who are not exposed by English course intensively. The criterion of the participants is active students who have learnt English pronunciation course in their school before. They were 5 students from non-English department in Universitas Sanata Dharma. Their ages vary from 18 to 21 years old. There were two students from Mechanical Engineering Department batch 2017, one student from Mechanical Engineering Department batch 2014, one student from Biology Department batch 2014 and one student from Psychology batch 2017. All of the students are on the same level of English
proficiency since they all get B (considered as fair) on their English course in Universitas Sanata Dharma. The data that were used in this research were English sounds, to be particular, this research was conducted to discover how the students pronounced English words containing silent letter “b”.

The participants were given 18 words containing silent letter “b.” The selected words were divided into two different parts with 9 words in each part. The first part consists of 9 words that contain silent letter “b” in the final position. They are all monosyllabic words. The second part consists of 9 words that contain silent letter “b” in the middle position. They are all bisyllabic words. The bisyllabic words given are the monosyllabic words that already added by suffixes. The words are listed in the table below:

**Table 9. List of Words for the Research Instrument**

<table>
<thead>
<tr>
<th>No.</th>
<th>Monosyllabic Words</th>
<th>Dictionary Transcription</th>
<th>No.</th>
<th>Bisyllabic Words</th>
<th>Dictionary Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Thumb</td>
<td>[θʌm]</td>
<td>17.</td>
<td>Thumbling</td>
<td>[ˈθʌmlɪŋ]</td>
</tr>
</tbody>
</table>

The complete research instrument is on appendix 1.
B. Approach of the Study

The purposes of this research were to find out and analyze the pronunciation and the phonological processes found in the students’ pronunciation of English words containing silent letter “b” and also find out the reasons behind the students’ mispronunciation. Consequently, the suitable approach to this research was phonological approach since the data of this research were sounds. Phonological approach can be applied to researches that deal with sounds (Odden, 2005, p. 133). The phonological approach could help the researcher to find out what phonological processes occurred in the students’ pronunciation. Furthermore, the phonological approach is also beneficial to analyze the reasons that caused the students’ mispronunciation.

C. Method of the Study

1. Data Collection

In the data collection, this research used purposeful sampling. According to Creswell, purposeful sampling is when the researcher intentionally selected individuals and sites to learn or understand the central phenomenon (2012, p. 206). This research purposefully chose respondents who are Javanese students and speak Javanese in daily life. Furthermore, this research also had limited the scope of the subject which is the silent letter “b” only.

In collecting the data, 5 active students of Universitas Sanata Dharma from different majors were asked to pronounce the selected English words with the silent letter “b” that have been listed on table 9. Each student had to pronounce 18 words containing silent letter “b”. The words were divided into two parts,
monosyllabic words and bisyllabic words. The pronunciation of the students was recorded via Voice Recorder, which is a voice recording application in Samsung mobile phone.

The data collection was conducted on Monday, April 2nd, 2018 and Tuesday, April 3rd, 2018 at Campus III of Universitas Sanata Dharma. The interview took approximately 10 minutes. Each student needed approximately 2 minutes to pronounce the English words containing silent letter “b” which has been given.

2. Data Analysis

In analyzing the data, there were some steps done in this research. The first step was selecting the English words with the silent letter “b” to be given to the students. The researcher, then, recorded the students’ pronunciation. After that, the recording was transcribed into phonetic transcription. In transcribing the students’ pronunciation, the researcher used Windows Media Player 12 to slow motion the recording so it can be easier to transcribe correctly. The last step was analyzing the phonological processes found in the students’ pronunciation of English words given.

The first problem was answered by providing the students’ transcribed pronunciation. The students’ pronunciation was presented in two tables. The first table contained the pronunciation of monosyllabic words and the second table contained the pronunciation of bisyllabic words. To make it easier to read, the students’ names were coded as S1, S2, S3, S4 and S5. The “S” stood for the
student. This research focused whether the silent letter “b” in each word was pronounced or not.

The second problem was answered by observing the result of the students’ pronunciation. The researcher analyzed the phonological processes that appeared in the students’ pronunciation then formulated the pattern. In analyzing the phonological processes, firstly, the researcher compared the students’ transcribed pronunciation with the Longman Pronunciation Dictionary transcription. After comparing those transcriptions, the researcher observed what phonological processes that occurred in the students’ pronunciation, such as insertion and deletion. Lastly, the phonological processes appeared in the students’ pronunciation were formulated into patterns.

The third problem was answered by comparing the different phonological systems between Javanese and English. To strengthen the answer of the third problem, the researcher also held an online questionnaire to the students chosen. The questionnaire is found in the appendix 2.
CHAPTER IV
ANALYSIS RESULTS AND DISCUSSIONS

This chapter consists of three parts. The first part provides the students’ pronunciation in pronouncing the selected English word with the silent letter “b.”

The second part contains the analysis of phonological processes that occur in the students’ pronunciation. The third part contains the analysis of the reasons behind the students’ mispronunciation.

A. Students’ Mispronunciation of English Words with the Silent Letter “b”

This research observes how the students mispronounce English words containing silent letter “b.” There are total 18 words that the students must pronounce. The English words given are divided into two, monosyllabic words and bisyllabic words. The monosyllabic words contain 9 English words and the bisyllabic words contain 9 English words. The table below shows the students’ pronunciation in pronouncing the monosyllabic words:

Table 10. Students’ Mispronunciation of Monosyllabic Words with the Silent Letter “b”

<table>
<thead>
<tr>
<th>No.</th>
<th>Words</th>
<th>Dictionary Transcription</th>
<th>Students’ Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Climb</td>
<td>[ˈklʌm] [klem] [klem] [klʌm] [klʌm] [klʌm]</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Comb</td>
<td>[kəʊm] [kəm] [kəm] [kəm] [kəm] [kəm]</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Crumb</td>
<td>[ˈkrʌm] [krʌm] [krʌm] [krʌm] [krʌm] [krʌm]</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Dumb</td>
<td>[ˈdʌm] [dʌm] [dʌm] [dʌm] [dʌm] [dʌm]</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Debt</td>
<td>[ˈdet] [deb] [deb] [deb] [deb] [deb] [deb]</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Doubt</td>
<td>[ˈdaʊt] [dɔt] [dɔt] [dɔt] [dɔt] [dɔt]</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Plumb</td>
<td>[ˈplʌm] [plʌm] [plʌm] [plʌm] [plʌm] [plʌm]</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Thumb</td>
<td>[θʌm] [θʌm] [θʌm] [θʌm] [θʌm] [θʌm]</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Womb</td>
<td>[wʌm] [wʌm] [wʌm] [wʌm] [wʌm] [wʌm]</td>
<td></td>
</tr>
</tbody>
</table>

PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI
Based on Table 10, all of the students can omit the letter “b” in the word “climb,” but students number 1 and 2 cannot produce the correct vowel. They pronounce the word “climb” with vowel /e/ instead of /aɪ/. It creates the simplification in the pronunciation of the word “climb.” In the word “comb,” all of the students also can omit the letter “b,” but no one can pronounce the vowel correctly. Student number 1 pronounces the vowel in the word “comb” with /ɔ/ instead of /æ/, and the rest of the students pronounce it with /æ/. Hence, in the word “comb,” all of the students create the simplification in the vowel pronunciation of the word “comb.”

All of the students also can omit the letter “b” in the word “crumb.” They can pronounce the vowel correctly, except student number 1 that pronounce the vowel with /ɜ/ instead of /ʌ/, creating the substitution in the vowel pronunciation of the word “crumb.” For the word “dumb,” all of the students can pronounce the word correctly. They can omit the letter “b” and can produce the correct vowel.

In the word “debt,” all of the students failed to silence the letter “b,” but they succeed to pronounce the vowel correctly. Therefore, in the word “debt,” all of the students create the insertion by adding the letter “b,” but they also create deletion by omitting the letter “t.” However, the student number 5 also pronounces the letter “t” in the word “debt,” so the student number 5 only create a segment insertion.

For the word “doubt,” all of the students also failed to silence the letter “b.” Thus, in the word “doubt,” all of the students create the insertion by adding the letter “b,” but they also create deletion by omitting the letter “t.” Students number 2, 3 and 5 can pronounce the vowel correctly, but students number 1 and 4
pronounce the vowel with /a/ instead of /aʊ/, creating the simplification in the vowel pronunciation of the word “doubt.” All of the students can pronounce the word “plumb” correctly. They can produce the correct vowel as well.

For the word “thumb,” all of the students can omit the letter “b,” but they failed to pronounce the /θ/ and tend to pronounce it /t/, creating the substitution in the pronunciation of the word “thumb.” In the word “womb,” all of the students can omit the letter “b,” but they failed to pronounce the correct vowel. Students number 1, 2 and 4 tend to pronounce the vowel with /ɔ/ instead of /uː/. Student number 3 pronounces the vowel with /e/. Student number 5 also failed to pronounce the correct vowel, but the student also creates an insertion of the letter “r” before the vowel. Thus, all of the students create the substitution in the vowel pronunciation of the word “womb.”

Table 11. Students’ Mispronunciation of Bisyllabic Words with the Silent Letter “b”

<table>
<thead>
<tr>
<th>No.</th>
<th>Words</th>
<th>Dictionary Transcription</th>
<th>Students’ Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Climber</td>
<td>[ˈklaɪmər]</td>
<td>[klembər]</td>
</tr>
<tr>
<td>2</td>
<td>Combing</td>
<td>[ˈkəʊmɪŋ]</td>
<td>[kəmbɪŋ]</td>
</tr>
<tr>
<td>3</td>
<td>Crumby</td>
<td>[ˈkrʌmi]</td>
<td>[krʌmbi]</td>
</tr>
<tr>
<td>4</td>
<td>Dumbly</td>
<td>[ˈdʌmli]</td>
<td>[dʌmblɪ]</td>
</tr>
<tr>
<td>5</td>
<td>Debtor</td>
<td>[ˈdetər]</td>
<td>[debtər]</td>
</tr>
<tr>
<td>6</td>
<td>Doubting</td>
<td>[ˈdɔutɪŋ]</td>
<td>[dɔʊtɪŋ]</td>
</tr>
<tr>
<td>7</td>
<td>Plumber</td>
<td>[ˈplʌmər]</td>
<td>[plʌmbr]</td>
</tr>
<tr>
<td>8</td>
<td>Thumbling</td>
<td>[ˈθʌmblɪŋ]</td>
<td>[θʌmblɪŋ]</td>
</tr>
<tr>
<td>9</td>
<td>Womby</td>
<td>[ˈwuːmɪ]</td>
<td>[wʌmbɪ]</td>
</tr>
</tbody>
</table>

Based on Table 11, all of the students failed to silence the letter “b” in the word “climber,” creating an insertion of the letter “b.” The students number 1 and 2 also failed to produce the correct vowel for the first syllable. Student number 1
pronounces the vowel in the first syllable with /e/, creating simplification, and student number 2 pronounces the vowel in the first syllable with /eɪ/, creating substitution.

In the word “combing,” all of the students also failed to silence the “b” letter in the word “combing,” creating an insertion of the letter “b.” They also failed to produce the correct vowel for the first syllable, which is /əʊ/, and create simplification in the vowel pronunciation of the word “combing.” Students number 1 and 4 pronounce the vowel in the first syllable with /ɔ/. Students number 2, 3, and 5 pronounce the vowel in the first syllable with /ʌ/.

For the word “crumby,” all of the students failed to silence “b” letter, creating the insertion of the letter “b.” Besides that, some of the students also create substitution in the vowel pronunciation of the word “crumby.” Student number 1 pronounces the vowel in the first syllable with /æ/ instead of /ʌ/. Student number 5 also failed to pronounce the correct sound by pronouncing the vowel in the first syllable with /ʌ. However, the student number 3 failed to pronounce the vowel in the second syllable by pronounce it with /ʌɪ/. Besides, the students number 1, 2, 4, and 5 also create substitution by changing the second vowel /i/ with /ɪ/.

In the word “dumbly,” all of the students can produce the correct vowel in the first syllable, but not in the second syllable. They change the second syllable /i/ with /ɪ/, creating the substitution. They all also failed to omit the letter “b.” It creates the insertion of the letter “b” in the pronunciation of the word “dumbly.” For the word “debtor,” all of the students failed to omit the letter “b,” creating the insertion of the letter “b” in the pronunciation of the word “debtor.” All of the students can
produce the correct vowel for the first syllable, but they failed to produce the correct vowel for the second syllable, except student number 4. Students number 1, 2, 3, and 5 pronounce the vowel in the second syllable with /ɔ/ instead of /ə/. It creates the substitution in the vowel pronunciation of the word “debtor.” However, student number 5 also insert the letter “s,” creating the insertion of the letter “s” in the pronunciation of the word “debtor.”

All of the students failed to silence “b” letter in the word “doubting,” creating the insertion of the letter “b” in the pronunciation of the word “doubting.” They all can produce the correct vowel for the word “doubting” both the first and second syllable, except the student number 1 that produce the vowel in the first syllable with /a/. It creates the simplification in the vowel pronunciation of the word “doubting.” Besides that, the student number 5 also adds the letter “s”, creating the insertion of the letter “s” in the pronunciation of the word “doubting.”

For the word “plumber,” all of the students succeed to produce the correct vowel for both first and second syllable, but they failed to silence “b” letter in the pronunciation of the word “plumber.” It creates the insertion of the letter “b” in the pronunciation of the word “plumber.” In the word “thumbling,” all of the students can produce the correct vowel for both first and second syllable. In addition to that, all of the student cannot produce the correct consonant for the sound /θ/. They replace the sound /θ/ with /t/, creating the substitution in the pronunciation of the word “thumbling.”

Lastly, in the word “womby,” all of the students still failed to silence “b” letter, creating the insertion of the letter “b” in the pronunciation of the word
“womby.” None of the students can produce the correct vowel both in the first and second syllables, creating the substitution in the vowel pronunciation of the word “womby.” Student number 1, 2, 4, and 5 pronounce the vowel in the first syllable with /ɔ/ instead of /u/. Student number 3 pronounces the vowel in the first syllable with /e/. All of the students also pronounce the second vowel /ɪ/ with /i/, creating the substitution in the vowel pronunciation of the word “womby.” Moreover, the student number 5 also adds the letter “r” in the first syllable, creating the insertion of the letter “r” in the pronunciation of the word “womby.”

In order to summarize the result of the students’ pronunciation, a table consisting the total percentage of corrects and incorrects pronunciation by the students number 1 until 5 is provided. The summarized table is shown below:

<table>
<thead>
<tr>
<th>Words</th>
<th>Correct Pronunciation</th>
<th>Incorrect Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Monosyllabic</td>
<td>16 35.5</td>
<td>29 64.4</td>
</tr>
<tr>
<td>Bisyllabic</td>
<td>0  0</td>
<td>45 100</td>
</tr>
</tbody>
</table>

The table above shows the percentage of the student’s mispronunciation. All mistakes are counted, it is not only the insertion of the letter “b.” From the table, it is clear that the bisyllabic words given is 100% mispronounced by the students. Besides, the monosyllabic words only 64.4% mispronounced by the students.
B. Phonological Processes Ignored in Students’ Pronunciation

The students’ pronunciation of the English words containing silent letter “b” has been presented in the previous section. The way of the students mispronouncing the English words with the silent letter “b” also has been discussed above. From the results and the previous discussion, it shows that the students ignored the deletion phonological process since they mostly pronounced the letter “b” in every word given. By ignoring the deletion phonological process, the students created the insertion phonological process. In Javanese phonological system, every letter must represent a sound, so actually the students already pronounce the words correctly according to the Javanese phonological system. In English phonological system, all of the letter “b” in every word given should be silenced, but the students failed to recognize it to be silenced. They tend to apply the Javanese phonological system into the way they pronounce every word given. They expect that English also has the consistency that Javanese has.

Besides creating the insertion, as the results’ of the students’ ignorance of the deletion phonological system, the students also create other phonological processes. There are deletion, simplification and substitution. According to Sahula (1998), a phonological process is a dynamic system in which units change as they come in contact with other units in the system. In this section, all of the phonological processes found will be explained.
The table below shows the phonological processes found in the students’ mispronunciation:

**Table 13. Phonological Processes Found in Students’ Mispronunciation**

<table>
<thead>
<tr>
<th>No.</th>
<th>Phonological Processes</th>
<th>Monosyllabic Words</th>
<th>Bisyllabic Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Insertion</td>
<td>debt, doubt, womb</td>
<td>climber, combing, crumby, dumbly, debtor, doubting, plumber, thumbling, womby</td>
</tr>
<tr>
<td>2.</td>
<td>Deletion</td>
<td>debt and doubt</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Simplification</td>
<td>climb, comb, doubt</td>
<td>climber, combing</td>
</tr>
<tr>
<td>4.</td>
<td>Substitution</td>
<td>crumb, womb, thumb</td>
<td>climber, crumby, dumbly, debtor, womby, thumbling</td>
</tr>
</tbody>
</table>

In Table 13, the words that have undergone certain phonological processes can be seen. The table shows that the most phonological process occurred in the students’ mispronunciation is insertion and the least phonological processes occurred is deletion. Those phonological processes that appear in the students’ mispronunciation will be explained in the next section which is divided into four subparts: Insertion, Deletion, Simplification, and Substitution.

In order to summarize the result of phonological processes found in the students’ pronunciation, a table consisting the total percentage of each phonological processes cases is provided. The summarized table is shown below:
Table 14. Summary of Phonological Processes Observed

<table>
<thead>
<tr>
<th>Phonological Processes</th>
<th>Words</th>
<th>Pronunciation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Insertion</td>
<td>Monosyllabic</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Bisyllabic</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>Deletion</td>
<td>Monosyllabic</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td>Bisyllabic</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Simplification</td>
<td>Monosyllabic</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Bisyllabic</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>Substitution</td>
<td>Monosyllabic</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Bisyllabic</td>
<td>6</td>
<td>66.6</td>
</tr>
</tbody>
</table>

From Table 14, it is clear that insertion is the most phonological process happened in the students’ pronunciation with the percentage of 66.6%. Besides, the deletion is the least phonological processes found with the percentage of 11.1%.

1. Insertion

Insertion is defined as a process when a certain sound is inserted into an intended pronunciation. As the previous discussion, insertion comes out as the most phonological process occurred in the students’ mispronunciation. The students, mostly, insert the letter “b” since they are not aware of the term of a silent letter “b” in English. Besides adding the letter “b,” some of the students also insert other letters such as “r” and “s.” All of the insertion cases that are found in the students’ mispronunciation will be explained in the following sections.
In the total 9 (nine) monosyllabic words given, the students created insertion only in 3 (three) words: “debt” /det/, “doubt” /daʊt/, and “womb” /wuːm/. Both the words “debt” /det/ and “doubt” /daʊt/, all of the students failed to silence the letter “b.” From students number 1 until 5, they all insert the letter “b” in the intended pronunciation.

S1 : /ˈdet/ → [deb]  S1 : /ˈdaʊt/ → [dab]
S2 : /ˈdet/ → [deb]  S2 : /ˈdaʊt/ → [daob]
S3 : /ˈdet/ → [deb]  S3 : /ˈdaʊt/ → [daob]
S4 : /ˈdet/ → [deb]  S4 : /ˈdaʊt/ → [dab]
S5 : /ˈdet/ → [debt]  S5 : /ˈdaʊt/ → [daobs]

According to the students’ pronunciation above, it shows that all of the students pronounce the letter “b.” In the word “debt” /det/, four of the students (S1, S2, S3, and S4) insert the letter “b” in the intended pronunciation, but they omit the letter “t” that is supposed to be in the intended pronunciation. One of the students, the student number 5 (S5), also inserts the letter “b” as the four students did, but S5 did not omit the letter “t.” Therefore, S5 pronounces two consonants at the end of the word “debt.” In the word “doubt” /daʊt/, all of the students failed to silence the “b” letter. They all insert the letter “b” in the intended pronunciation, but they omit the letter “t” that is supposed to be in the intended pronunciation. Again, student number 5 pronounces two consonants in the final position. Unlike the pronunciation of the word “debt,” in the pronunciation of the word “doubt,” S5 inserts another sound that is not supposed to be there. Besides insert the letter “b,” S5 also adds the letter “s” in the intended pronunciation.
The last insertion that appears in the monosyllabic words given is shown in the pronunciation of the word “womb” /wuːm/ by the student number 5.

S5 : /wuːm/ → [wrɔm]

Actually, all of the students, including student number 5, succeed to silence letter “b” in the pronunciation of the word “womb” /wuːm/. As the previous discussion, the students tend to pronounce only one consonant at the end of the word and the consonant must be the closest one to the vowel. In the word “womb,” the closest consonant to the vowel is /m/. Thus, all of the students pronounce the /m/ sound instead of /b/ sound at the end of the word. Even though student number 5 has successfully silenced “b” letter, S5 still inserts another letter that is not supposed to be appearing even in the spelling of the word “womb.” S5 inserts the letter “r.” The notation of the insertion of the letter “b” appears in the monosyllabic words given is presented below:

∅ → /b/ / _____ #

(insert the letter “b” at the end of the word)

Though the students only create insertion in 3 (three) words in the monosyllabic words given, in the bisyllabic words given, the students create insertion in all of the 9 (nine) words given. All of the students failed to silence the “b” letter in every word since the letter “b” appears in the beginning of syllable and not at the end of the words as the monosyllabic words before. In the pronunciation of the words “climber” /ˈklæmər/ and “combing” /ˈkɔmɪŋ/, the students insert one sound, which is /b/. They insert the letter “b” between consonant /m/ and vowel /a/ for the word “climber” and vowel /u/ for the word “combing.”
In the word “crumby” and “plumber,” all of the students also insert the letter “b” in the pronunciation of the words. They insert the letter “b” between consonant /m/ and vowel /ɪ/ for the word “crumby” and vowel /ə/ for the word “plumber.”

For the word “womby,” all of the students also insert the letter “b.” They insert the letter “b” between consonant /m/ and vowel /u/. One of the students, student number 5, again, inserts other sound in the pronunciation of the word “womby” /ˈwuːmi/. S5 still inserts another letter that is not supposed to be appearing even in the spelling of the word “womby.” Besides adding the letter “b,” S5 also adds the letter “r.”
If in the words “climber,” “combing,” “crumby,” and “dumbly” the students only insert one sound, which is /b/, in the words “debtor” and “doubting” the students did not insert one sound only. Though, in reality, the students number 1 until 4 only insert one sound, that is “b” /b/ sound, but the student number 5, over and over again inserts two sounds in the pronunciation of the word.

S1 : /ˈdɛtər/ → [debər] S1 : /ˈdəʊtnɪŋ/ → [daʊtnɪŋ]
S2 : /ˈdɛtər/ → [debər] S2 : /ˈdəʊtnɪŋ/ → [daʊbtɪŋ]
S3 : /ˈdɛtər/ → [debər] S3 : /ˈdəʊtnɪŋ/ → [daʊbtɪŋ]
S4 : /ˈdɛtər/ → [debər] S4 : /ˈdəʊtnɪŋ/ → [daʊbtɪŋ]
S5 : /ˈdɛbstər/ → [debstər] S5 : /ˈdəʊbstɪŋ/ → [daʊbstɪŋ]

According to the pronunciation shown above, student number 5 inserts two sounds in the pronunciation of the word “debtor” and “doubting.” S5 inserts both letters “b” and “s” in each pronunciation.

In the word “dumbly” and “thumbing,” all of the students also failed to silence “b” letter. Besides the letter “b,” the students did not insert any other sound.

S1 : /ˈdʌmbli/ → [dʌmbli] S1 : /ˈθʌmblɪŋ/ → [θʌmblɪŋ]
S2 : /ˈdʌmbli/ → [dʌmbli] S2 : /ˈθʌmblɪŋ/ → [θʌmblɪŋ]
S3 : /ˈdʌmbli/ → [dʌmbli] S3 : /ˈθʌmblɪŋ/ → [θʌmblɪŋ]
S4 : /ˈdʌmbli/ → [dʌmbli] S4 : /ˈθʌmblɪŋ/ → [θʌmblɪŋ]
S5 : /ˈdʌmbli/ → [dʌmbli] S5 : /ˈθʌmblɪŋ/ → [θʌmblɪŋ]
The notation of the insertion of the letter “b” appears in the bisyllabic words given is presented below:

∅  \rightarrow /b/ /__

(insert the letter “b” at the beginning of the second syllable)

From the discussion and explanation above, it can be concluded that mostly the students insert the letter “b” in every pronunciation of the words. This has happened because most of the students were not aware of the term of silent letter “b” in the English phonological system. The insertion is only created in some words from the monosyllabic words given, but it occurred in all of the bisyllabic words given. It shows that the letter “b” will always be pronounced in the middle of the words.

2. Deletion

Deletion is one of phonological processes that occurs in the students’ mispronunciation. If insertion happens when a sound is inserted into an intended pronunciation, in contrary, deletion happens when a sound is deleted from an intended pronunciation. According to the result of the students’ pronunciation, the frequency of deletion cases is very low. There are only two cases of deletion and it happens only in the monosyllabic words given. The previous section already explains that the students have difficulty in pronouncing a word with two consonants (two sounds) at the final position. Eventhough the monosyllabic words given actually only have one sound (pronounce only one consonant) at the final position, the ignorance of the English silent letter makes the students think that every word ended with two consonants should be pronounced two sounds too.
The deletion cases only appear in the pronunciation of the word “debt” /ˈdet/ and “doubt” /ˈdaʊt/. In the word “debt,” students number 1 until 4 omit the letter “t.”

S1 : /ˈdet/ → [deb]  
S2 : /ˈdet/ → [deb]  
S3 : /ˈdet/ → [deb]  
S4 : /ˈdet/ → [deb]  
S5 : /ˈdet/ → [deb]

S1 : /ˈdaʊt/ → [dab]  
S2 : /ˈdaʊt/ → [daʊb]  
S3 : /ˈdaʊt/ → [daʊb]  
S4 : /ˈdaʊt/ → [daʊb]  
S5 : /ˈdaʊt/ → [daʊb]

As the discussion explained in the insertion section before, the students number 1 to 4 delete the letter “t” since the letter “b” is closer to the vowel. They omit the letter “t” since in their mother tongue, which is Javanese, every word will only end up with one consonant or one sound only. Though the students number 1 to 4 omit the letter “t,” student number 5 pronounces the /t/ sound.

From the discussion and explanation above, it can be concluded that the students tend to omit the last consonant (if there are two consonants) at the end of the word. It means the students can only pronounce one consonant or produce one sound at the end of the word. That is why the deletion cases only happen in the monosyllabic words given, that are “debt” and “doubt.”

Although almost all of the students pronounce only one consonant at the end of the word in all monosyllabic words given, the words that are classified as deletion cases only “debt” and “doubt.” It is because, in the other monosyllabic words, the students omit the correct consonants or the consonants that have to be silenced, which is the letter “b”.
3. Simplification

Another phonological process that appears in the students’ mispronunciation is simplification. Simplification happens when the students simplify a sound in a pronunciation, in this cases is vowel sound. Therefore, the students did not pronounce the correct vowel as the intended pronunciation.

In the monosyllabic words given, there are 3 (three) cases of simplification. Simplification occurs in the pronunciation of the words “climb,” “comb,” and “doubt.” In addition, in the bisyllabic words given, there are 2 (two) cases of simplification. Simplification occurs in the pronunciation of the words “climber” and “doubting.” In the word “climb” and “climber” there are only two students that cannot produce the correct vowel, which are student number 1 and student number 2. The rest of them, which are students number 3, 4 and 5 can produce the vowel correctly.

S1 : /ˈklaɪm/ → [klem]  
S1 : /ˈklaɪmər/ → [klembər]

S2 : /ˈklaɪm/ → [klem]  
S2 : /ˈklaɪmər/ → [kleimbr]

S3 : /ˈklaɪm/ → [klam]  
S3 : /ˈklaɪmər/ → [kləmbər]

S4 : /ˈklaɪm/ → [klam]  
S4 : /ˈklaɪmər/ → [kləmbər]

S5 : /ˈklaɪm/ → [klam]  
S5 : /ˈklaɪmər/ → [kləmbər]

Student number 1 simplifies the vowel /aɪ/ into /e/ in both the word “climb” and “climber.” In contrary, student number 2 only simplifies the vowel /aɪ/ into /e/ in the pronunciation of the word “climb.”
In the word “comb,” all of the students cannot produce the correct vowel. Student number 1 produces /ɔ/ sound rather than /əʊ/. The rest of them, which are students number 2, 3, 4, and 5, produce /ʌ/ rather than /əʊ/.

S1 : /kəʊm/ → [kəm]
S2 : /kəʊm/ → [kəm]
S3 : /kəʊm/ → [kəm]
S4 : /kəʊm/ → [kəm]
S5 : /kəʊm/ → [kəm]

All of the students simplify the vowel in the pronunciation of the word “comb.” The vowel in the pronunciation of the word “comb” is supposed to be a diphthong, but all of the students pronounce it with monophthong.

In the pronunciation of the word “doubt” and “doubting,” there are two students that cannot produce the correct vowel. They are student number 1 and student number 4. The rest of the students, which are students number 2, 3, and 5, can produce the correct vowel for the word “doubt” and “doubting.”

S1 : /ˈdaʊt/ → [dab]
S2 : /ˈdaʊt/ → [daʊb]
S3 : /ˈdaʊt/ → [daʊb]
S4 : /ˈdaʊt/ → [dab]
S5 : /ˈdaʊt/ → [daʊb]

S1 : /ˈdaʊtnɪŋ/ → [daʊtnɪŋ]
S2 : /ˈdaʊtnɪŋ/ → [daʊtnɪŋ]
S3 : /ˈdaʊtnɪŋ/ → [daʊtnɪŋ]
S4 : /ˈdaʊtnɪŋ/ → [daʊtnɪŋ]
S5 : /ˈdaʊtnɪŋ/ → [daʊtnɪŋ]

Student number 1 simplifies the vowel /aʊ/ into /a/ in both the word “doubt” and “doubting.” In contrary, student number 4 only simplifies the vowel /aʊ/ into /a/ in the pronunciation of the word “doubt.”
From the discussion and explanation above, it can be concluded that the students tend to pronounce the vowel differently from the intended pronunciation. They tend to replace the vowel in every word given. In general, they change the dipththong into monophthong.

4. Substitution

The last phonological process that appears in the students’ mispronunciation is substitution. Substitution happens when the students substitute a sound in a pronunciation. Therefore, the students did not pronounce the correct sounds as the intended pronunciation.

In the monosyllabic words given, there are 3 (three) cases of substitution. Substitution occurs in the pronunciation of the words “crumb,” “womb,” and “thumb.” In addition, in the bisyllabic words given, there are 6 (six) cases of substitution. Substitution occurs in the pronunciation of the words “climber,” “crumby,” “dumbly,” “debtor,” “womby,” and “thumbling.” In the pronunciation of the word “climber,” student number 2 substitute the first vowel /a/ with /e/.

S1 : /ˈklaɪmər/ → [klembər]
S2 : /ˈklaɪmər/ → [kleɪmbər]
S3 : /ˈklaɪmər/ → [kləmər]
S4 : /ˈklaɪmər/ → [kləmər]
S5 : /ˈklaɪmər/ → [kləmbər]

In the word “crumb” and “crumby,” there are only two students that cannot pronounce the vowel in the first syllable correctly, which are the students number 1 and 5. The rest of them, which are students number 2, 3, and 4, can produce the
vowel in the first syllable correctly. However, there is one student, which is student number 3, that produce the vowel in the second syllable with /ʌɪ/.

S1 : /ˈkrʌm/ → [krəm]  S1 : /ˈkrʌmi/ → [krəmbɪ]
S2 : /ˈkrʌm/ → [krəm]  S2 : /ˈkrʌmi/ → [krəmbɪ]
S3 : /ˈkrʌm/ → [krəm]  S3 : /ˈkrʌmi/ → [krəmbʌɪ]
S4 : /ˈkrʌm/ → [krəm]  S4 : /ˈkrʌmi/ → [krəmbɪ]
S5 : /ˈkrʌm/ → [krəm]  S5 : /ˈkrʌmi/ → [krəmbɪ]

In the word “womb” and “womby,” all of the students cannot produce the correct vowel. All of the students failed to pronounce the first vowel, which is /u/. Most of the students, which are students number 1, 2, 4, and 5 change the first vowel /u/ with /ɔ/. Student number 3 changes the first vowel /u/ with /e/. It is applied both in the word “womb” and “womby.”

S1 : /wuːm/ → [wəm]  S1 : /wuːmi/ → [wəmbɪ]
S2 : /wuːm/ → [wəm]  S2 : /wuːmi/ → [wəmbɪ]
S3 : /wuːm/ → [wəm]  S3 : /wuːmi/ → [wəmbɪ]

In the pronunciation of the word “debtor,” all of the students can produce the first vowel correctly, but only one student, student number 4, that can produces both the first and the second vowel correctly. It means the students number 1, 2, 3 and 5 failed to produce the second vowel correctly. All of them pronounce the second vowel /ə/ with /ɔ/.
In the pronunciation of the word “dumbly,” all of the students failed to produce the second vowel correctly. The second vowel is supposed to be the tense vowel /i/, but all of the students pronounce it with lax vowel /ɪ/. This case also happened in the pronunciation of the second vowel in the word “crumby” and “womby.” For the word “crumby,” the students that substitute the vowel /i/ with /ɪ/ are students number 1, 2, 4, and 5. For the word “womby,” all of the students substitute the vowel /i/ with /ɪ/.

In the pronunciation of the word “thumb” and “thumbling,” all of the students failed to produce the initial consonant correctly. The letter “t” in the initial position of those words should be pronounced as /θ/, but all of the students pronounced it as /t/. 
From the discussion and explanation above, it can be concluded that the students tend to pronounce the words differently from the intended pronunciation. They tend to replace the sound in every word given.

C. The Reasons of Students’ Mispronunciation

In the previous discussion, it shows that the students mispronounce almost all of the English words given, both monosyllabic and bisyllabic words. The students’ mispronunciation is inseparable from their ignorance of the silent letter term that exists in the English phonological system since from the questionnaires that had been done shows that 3 out of 5 students already know the term of silent letter. Besides, all of the students also understand that the writing system in English does not represent the way the words spelled. The influence of the students’ mother tongue, which is Javanese, also takes part in their mispronunciation.

In this section, the reasons of the students’ mispronunciation will be explained. The reasons will be divided into 3 (three) parts. There are English phonological system, Javanese phonological system, and English orthography.

1. English Phonological System

Every language has a different phonological system that arranges what sounds are in language, how they do and can combine into words, and explains why certain phonetics features are important in identifying a word. As each language might has different systems in arranging their language, it can make the foreign language learners have difficulty in pronouncing words and lead them to mispronounce the words. According to the results of the students’ pronunciation in the previous discussion, it shows that the different phonological system between
English and Javanese, the students’ mother tongue, leads the students to mispronounce the words given.

In English phonological system, it is acceptable to have a letter that is not pronounced in the pronunciation of the word, such as the silent letter “b” term. In contrary, the term of the silent letter “b” is absent in Javanese since every letter that present in the word must be pronounced. The absent of the silent letter term in Javanese makes the students pronounce almost all of the letter “b” in the words given and creates mispronunciation. That is why the English phonological system can be one of the reasons of the students mispronunciation.

2. Javanese Phonological System

Javanese, as a language, has its own phonological system. It consists of the Javanese syllabification and Javanese phonotactic constraint. As the students’ mother tongue, Javanese has a big part in making the students mispronounce the words given. The students tend to adapt what is in the Javanese language and it influences the way the students pronounce English words given. In this section, Javanese phonological system, as one of the reasons in the students’ mispronunciation, will be explained.

a. Javanese Syllabification

In the monosyllabic words given, most of the students can omit the letter “b,” except for the words “debt” and “doubt,” since in Javanese double consonants (CC) cannot end a word. Hence, the students failed to silence the “b” letter only in the word “debt” and “doubt” for the monosyllabic words given. It means their
correct pronunciation of /b/ sound is not based on their knowledge of the silent letter “b” term.

It is different from the bisyllabic words cases. All of the students failed to omit or silence the “b” letter since it is clear that in Javanese, every letter that is present in a word must be pronounced. The pronunciation of the word “climber” and “thumbling,” for example. The students pronounce those words in the same pattern with the word “krambil” (Coconut) and “gemblung” (Stupid) in Javanese. The students put the letter “m” in both “climber” and “thumbling” in the coda of the first syllable and make the letter “b” as the onset of the second syllable. They pronounce both “climber” and “thumbling” the same way as they pronounce “krambil” and “gemblung.”

In the tree diagram above, it shows that the letter “m” in the word “climber” actually become the coda of the first syllable and become the onset for the second syllable. Since the students are influenced by their mother tongue, which is Javanese, they tend to pronounce it like a word that exists in their language and has the closest pattern, which is “krambil.”
As the tree diagram shown in the pronunciation of the word “krambil” above, it is clear that the letter “m” is only placed in the coda of the first syllable and the second syllable has the letter “b” as the onset.

The letter “b” in the pronunciation of the word “climber” is supposed to be silenced, but since the students were not aware of the silent letter “b” term in English, they pronounce the letter “b.” The students’ ignorance of the English phonological system, which is the silent letter “b,” makes them mistakenly thought that the pattern of the word “climber” is the same with the word “krambil.” This reason also explained the students’ mispronunciation of the word “combing,” “crumby,” “plumber,” and “womby.”
In the tree diagram of the word “thumbling” above, it shows that the letter “m” is placed in the coda of the first syllable and the letter “l” is placed in the onset of the second syllable. In pronouncing the word “thumbling,” the students are influenced with the pronunciation of the word “gemblung” in their mother tongue since it has the same pattern.

In the tree diagram of the word “gemblung” above, it shows that the letter “m” is placed in the coda of the first syllable, while the consonant cluster /bl/ is placed in the onset of the second syllable.

The letter “b” in the pronunciation of the word “thumbling” is supposed to be silenced, but the students pronounce it. It is because they are influenced with the pronunciation of the word “gemblung,” as one of the Javanese vocabulary, in their mother tongue. Moreover, the students were not aware of the silent letter “b” term, thus they mistakenly thought that the pattern of the word “thumbling” is the same with the word “gemblung.” This reason also explained the students’ mispronunciation of the word “dumbly.”

Based on the explanation above, it is clear that Javanese syllabification has the influence in making the students mispronounce the words given. Therefore, the
Javanese syllabification become one of the reasons of the students’ mispronunciation.

b. Javanese Phonotactic Constraint

As stated by Laurel and Donna, phonotactic constraints organize the combinations of certain sounds that permitted in a language, including the possible positions of sounds (2010, p. 59). Though it means each language has different phonotactic constraint, it cannot be ignored that some might have the same sequences of sounds. A sequence of sounds in one language might exist in some languages too, but it occurs in the different positions. This possibility, later, can leads the students to mispronounce the words given.

In Javanese phonotactic constraint, consonant clusters will never occur in the final positions. The Table 6 has proved it. All Javanese words only ended with single consonant. This is in accordance with Horne statement, that in Javanese, it is possible to have more than one consonant in the initial position, but it is impossible to end with more than one consonant (1961, p. 35). This rule answered the mispronunciation happened in the word “debt” and “doubt.”

Since the students habitually to pronounce only one consonant at the end of a word in their mother tongue, they did it too in the pronunciation of the word “debt” and “doubt.” The students pronounce the closest consonant to the vowel at the pronunciation of those words and omit the second consonant at the end of the word.

Now, it makes sense that the students can successfully omit /b/ sound in the pronunciation of the words “climb,” “comb,” “crumb,” “dumb,” “plumb,” “thumb,” and “womb,” but they failed to silence the “b” letter in the pronunciation of the
word “debt” and “doubt.” This explanation strengthen the fact that the students’ success in omitting the letter “b” is not because of their knowledge of the silent letter “b” term in English, but because of the influence of their mother tongue’s phonotactic constraint.

According to the explanation above, it can be concluded that Javanese phonotactic constraint also takes part in making the students mispronounce the words given. Therefore, Javanese phonotactic constraints become one of the reasons of the students mispronunciation.

3. English Orthography

Since orthography stands for the standardized writing system of a language, it means every language has different orthography. Both English and Javanese have their own orthography. English orthography has irregularities in their spelling system. There are only 26 letters in English, but it stands for more than 40 phonemes. According to Yamini, most English sounds undergo changes in spoken language, but the written form retains the old spelling pattern (2011, p. 45). It creates diversity between the orthography and the spoken word that make the non-native English speakers have difficulty in pronouncing the English words.

Silent letter “b” is one of the examples of English irregularities. For the non-native English speakers, as the students number 1 until 5, it is not clear when the letter “b” is pronounced and when it is not pronounced. Since they are not aware that, in English, sometimes the letter “b” written in the word, but not pronounced, the students mistakenly pronounce almost all of the letter “b” in the words given. They mistakenly thought that the letter “b” always be pronounced in English since
in their mother tongue, every letter that present in the writing of the word must be pronounced. This explanation also answered the mispronunciation happened in the word “debt,” “doubt,” “climber,” “combing,” “crumby,” “dumbly,” “debtor,” “doubting,” “plumber,” “thumbling,” and “womby.”

Besides the irregularities happens in the consonants present, English also has irregularities in the pronunciation of the vowel. In English, a vowel letter might have more than one sounds in its pronunciation. For example the letter “i” can be pronounced either /aɪ/ such as in the word “time” /taɪm/ or /ɪ/ such as in the word “give” /ɡɪv/. The vowel irregularities in English can make the students confuse to predict what sound they should produce. For the students that have limited knowledge about English pronunciation, it can be tricky to know that vowels in English have several sounds because they only memorize how the vowel pronounced in some common English vocabulary they found in their daily life. The English irregularities in vowel makes the students mispronounce almost all of the vowel in the words given. This explanation answered all of the simplification and substitution cases happened in the students’ mispronunciation.

Based on the discussion above, it is clear that English orthography also takes part in influencing the students’ mispronunciation. Therefore, the English orthography becomes one of the reasons of the students’ mispronunciation.
CHAPTER V

CONCLUSION

Based on the result of the students’ pronunciation, the students mispronounce most of the words given. The students failed to silence the letter “b” only in two monosyllabic words given, which are “debt” and “doubt,” but failed to silence the letter “b” in all bisyllabic words given. Their ignorance of the deletion phonological process in English, makes them create the insertion of the letter “b.” Besides insertion, the students also create other phonological processes as the result of their mispronunciation. They create deletion, simplification and substitution. Insertion become the most phonological process occurred in the students’ mispronunciation. The deletion become the least phonological process found in the students’ mispronunciation.

According to the analysis, the researcher find out that there are 3 (three) reasons that caused the students’ mispronunciation. There are English phonological system, Javanese phonological system and English orthography. The term of the silent letter “b” that exists in the English phonological system, in fact, absents in the Javanese phonological system. The absences of the silent letter “b” term can easily influence the students’ pronunciation. They did not know that in a certain condition the letter “b” in English can be present in the written of the word, but it is not pronounced.

Besides the absences of the silent letter “b” term, the Javanese syllabification and Javanese phonotactic constraint, that belong to Javanese
phonological system, are also the reasons of the students’ pronunciation. Most of the students mistakenly thought that the English words given have the same pattern as some Javanese words, so they pronounce it the same way as they pronounce the Javanese vocabulary.

In Javanese phonotactic constraint, it is impossible to have more than one consonant at the end of a word. This rule makes the students successfully omit /b/ sound in the most monosyllabic words given. However, it is also become the reason why the students mispronounce the words “debt” and “doubt.”

The last reason of the students’ mispronunciation is the English irregularities. The uncertainty of the English pronunciation makes the students have difficulty in pronouncing the English words given. The students become confuse to predict which sounds should they produce.

In conclusion, based on the result and analysis, this research proves the researcher hypothesis that the different phonological system between Javanese and English can lead the students to mispronounce English words containing silent letter “b.” It also proves that mother tongue can influence someone pronunciation.
REFERENCES


APPENDICES

Appendix 1: The Pronunciation Instrument

Pronunciation Test

Respondent identity

Age :
Mother Tongue :
Daily Language :
Major :

Instruction: Please read the following words once.

<table>
<thead>
<tr>
<th>No.</th>
<th>Word</th>
<th>No.</th>
<th>Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Climb</td>
<td>10.</td>
<td>Climber</td>
</tr>
<tr>
<td>2.</td>
<td>Comb</td>
<td>11.</td>
<td>Combing</td>
</tr>
<tr>
<td>3.</td>
<td>Crumb</td>
<td>12.</td>
<td>Crumby</td>
</tr>
<tr>
<td>5.</td>
<td>Debt</td>
<td>14.</td>
<td>Debtor</td>
</tr>
<tr>
<td>6.</td>
<td>Doubt</td>
<td>15.</td>
<td>Doubting</td>
</tr>
<tr>
<td>8.</td>
<td>Thumb</td>
<td>17.</td>
<td>Thumbling</td>
</tr>
<tr>
<td>9.</td>
<td>Womb</td>
<td>18.</td>
<td>Womby</td>
</tr>
</tbody>
</table>

Thank you for participating in this research.
Appendix 2: The Questionnaire

The online questionnaire can be accessed in the url:

https://docs.google.com/forms/d/e/1FAIpQLSfPJ94F1tikdwIM_jYhGWyJ3mhONIKvVFsfTFYGsONTiP7Aw/viewform
Kuesioner Pengaruh Bahasa Jawa terhadap Pengucapan Kata-Kata dalam Bahasa Inggris

Sebuah survey yang bertujuan untuk mengatahui sejauh mana pengaruh pelafalan bahasa Jawa terhadap pelafalan bahasa Inggris, khususnya tentang pelafalan kata-kata yang mengandung silent letter. Survey ini ditujukan untuk mahasiswa.

* Required

Petunjuk Pengisian Kuesioner

1. Isilah identitas Anda dengan lengkap!
2. Silakan Anda membaca dan memahami setiap pernyataan dalam kuesioner ini. Pilihlah salah satu jawaban yang paling sesuai dengan keadaan diri Anda dengan menandai pada salah satu opsi berikut:
   a. STS : Sangat Tidak Setuju
   b. TS : Tidak Setuju
   c. ATS : Agak Tidak Setuju
   d. CS : Cukup Setuju
   e. S : Setuju
   f. SS : Sangat Setuju
3. Pastikan Anda menjawab kuesioner ini tanpa ada satupun butir pernyataan yang terlewat.
4. Sebelum mengirim kuesioner ini, periksalah kembali jawaban Anda sampai yakin bahwa semua jawaban sesuai dengan keadaan diri Anda.

1. Berapakah usia Anda? (Tulis Angka Saja) *

2. Apakah bahasa ibu Anda? (cth: Jawa, Sunda, Batak) *

3. Apakah jurusan Anda? (cth: Kimia, Biologi, Teknik Mesin) *

4. *

<table>
<thead>
<tr>
<th>Saya menggunakan bahasa Jawa dalam kehidupan sehari-hari.</th>
<th>STS</th>
<th>TS</th>
<th>ATS</th>
<th>CS</th>
<th>S</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saya pernah belajar pronunciation dalam bahasa Inggris.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Saya mengetahui aturan silent letter dalam bahasa Inggris.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Saya mengetahui bahwa tata cara penulisan dalam bahasa Inggris belum tentu sama dengan pengucapannya.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saya mengetahui bahwa tata cara penulisan dalam bahasa Jawa konsisten dengan pengucapannya.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Terima kasih sudah berpartisipasi dalam penelitian ini :)