

ANALYSIS OF SEGMENTAL AND SUPRA-SEGMENTAL ERRORS OF JAVANESE ENGLISH SPEAKERS IN PP. DARUL ULUM AL-FADHALI

Althaf Afida

English Language Teaching Study Program
Postgraduate School, Universitas Islam Malang, Indonesia
Email: althaf.afida88@gmail.com

Abstract

In the concept of second language acquisition, first language is able to influence second language skill. As international language, English is also become foreign language of Javanese speakers. This study analyze the errors of Javanese when pronouncing English text both is segmental (consonants and vowels) and supra-segmental (length, tone, intonation and stress) aspects. There are five participants who read the English text "The Greedy Lion". They have to be born in Java, speak Javanese since they are child, and have Javanese language surroundings. The result shows that: 1) In pronouncing consonants, they made errors in /v/, /θ/, /ð/, /s/, /z/, /r/, /k/, and /g/; 2) In pronouncing vowels, they made errors in /i/, /ɪ/, /u/, /ʊ/, /e/, /ə/, /ʌ/, /ɔ/, /æ/, and /a/; 3) in supra-segmental aspect, they made errors in stressing word, intonating sentence, and lengthening diphthong.

Keywords: Errors, Segmental Features, Supra-segmental Features, Javanese Language and Speakers.

INTRODUCTION

When people talk to one another, their general goal is to get listeners understand what they are saying. It happens while they are interacting. When people talk each other they use languages that they understand. But if they are from different country, they need to talk in English. For non-native English speakers, first language will intervene second language. As stated by Dulay, Burt, and Krashen (1982), language interference is the transfer due to habit, if the first or native language onto target language.

The interference of the first language to second language could be positive or negative. Negative transfer pertains to difficulties in using the target language which are mainly attributed to mother-tongue interference. Positive transfer however implies the ease or facilitation in learning the L2 resulting from similarities between

the L1 and the L2 (Patric, Didam, and Gyang: 2013). The most difficult part of the negative transfer is while the rule of the L2 is nothing in the L1. For example, in Indonesian, there is no change of 'verb' whether it is in the past, present, or future. Indonesian will say 'makan' whenever it happens. But English will say 'ate' for the past, 'eat' for present, 'be eating' for continuous, 'eaten' for the perfect tense. There would be in a different story for native Arabic who learns English.

In mastering English, every country has their self-problem. For those which of the second language is English (e.g. Philippine and India), it is not a big problem. But for Indonesia, which the second language is its National language, mastering English is quite difficult. Moreover, it has many regional languages. Quoted from Facts and Details, Indonesia has 730 regional language which Javanese is on the top, Sundanese in the second, and Madurese in the third place of everlasting regional language. Javanese language stays in the first position that it can be proven that this language is still spoken regularly.

Different type of rules influences mastering of second language. It is able to create error. Afida (2019) has studied the diphthong of Joko Widodo. It shows that Joko Widodo was able to pronounce English diphthong well if they are available in Javanese language. It is really interesting that first language hold strong interference for the second interference. Perwitasari (2018) has found that Javanese were less accurate in perceiving the new vowels /ɑ:/, /ʌ/, /æ/, /ɜ/, /ɪ/, and /ʊ/. Besides, Asyidiq et al. (2020) concluded that Javanese are really difficult to pronounce /z/. These two articles has showed that the first language is able to intervene the second language. Perwitasari (2018) and Asyidiq et al. (2020) proved that in segmental aspect, Javanese intervene their Javanese towards English in term of less accurate (e.g. pronouncing /d/ in /ð/). These articles have lackness in complicity. Therefore, I need to complete their studies about how Javanese speakers pronounce English both in segmental and suprasegmental features due to the development of Language. Because language is developing year by year, this really important to have this study.

Beside of these things, it has to be clear that intelligibility and fluency in pronouncing language is more important than the accuracy of pronunciation. So, it is more acceptable that language's purpose is to be understandable. But, in case of looking for errors, the need is what to be tendency. In spite of the existence of interlanguage of Global English, National American English, British English, and Australian English are the most accepted as international English accents to be tendency.

Furthermore, after looking at these problems studied by previous researchers, it is important to study the way Javanese speakers pronounce English. Analyzing errors is the way to see how Javanese speakers pronounce English correctly or incorrectly. It

would be proper if the study is conducted to research both in segmental and supra-segmental errors of pronunciation. Finally, this research objective is to answer the following questions: 1. What errors do Javanese speakers commit when they pronounce English consonants and English vowels? And 2. What errors do Javanese speakers commit when they pronounce length, intonation, stress, and tone in English?

METHOD

1. Research Design

The present study applied qualitative research paradigm. Specifically, case study is considered as an appropriate research method to be applied in this study since it can provide a holistic description of language learning or use within a specific population and setting (Mackey and Gass: 2005). To sum, case study enables the researcher to obtain rich contextualization that can possibly enlighten the complexities of the second language learning process (Mackey and Gass: 2005). This study aims to know whether Javanese speaks English properly both in segmental aspect and supra-segmental aspect. It is really proper if the study is conducted in Javanese language surroundings. Native Javanese speakers who live in Java and learn English, will show the real of how Javanese pronounce English. It is found in a real-life context in PP. Darul Ulum Al-Fadhali, Malang because taken participants are native Javanese and learn English.

2. Subject and Object of Study

The subject of this study is Javanese students of PP. Darul Ulum Al-Fadhali, Malang. They have to be originally born in Java, live in Java, and speak Javanese since they were child. In this case, these students are not in English department.

Object of this study is the production of segmental and supra-segmental aspect of Javanese students in PP. Darul Ulum Al-Fadhali. The segmental aspect consists of consonant and vowel. Because diphthong and triphthong belong to the vocal, they will be discussed directly with the entire vowel sounds. Concerning to supra-segmental aspect, there are only three aspects which will be discussed which are stress, length, and intonation. In this case the tone is not discussed because English is not tonal language. Both these segmental and suprasegmental aspects will be discussed when the participants read English short text entitled "The Greedy Lion".

3. Data Instrument

In this study, this research needs some steps to get the data. To get data, we need instrument which is observation. But in the qualitative research, the main instrument is the researcher himself. In this case researcher tends to be indirect participant of the research. He only listen to the subject of research while reading English text.

Observation

The observation was deeply conducted once. The observer had no interaction with all participants to maintain the validity of the result. In this case, there are five direct participants. These five direct participants have to be Javanese native speaker and live in Java Island. The steps of observing their pronunciations are as following:

- a. Preparing proper text (The Greedy Lion) for 5 participants.
- b. Having 5 participants read the text.
- c. Recording their voices while reading text using Oppo F7 recorder.
- d. Traslating their voices to phonetic transcription and intonation mark by listening to their recordings many times.
- e. Comparing their phonetic transcription with Oxford Dictionary's phonetic transcription (both National American English and British English).

4. Data Analysis

To analyze the data, we use four general steps of data analysis in qualitative study, namely data collection, data reduction, data display, conclusion and verification.

a. Data Collection

The data is collected as the result of reading aloud by Javanese students of PP. Darul Ulum Al-Fadhali. It used double blind steps where the participants read text given by researcher in covered room. Technically, all participants are required to read aloud a short passage meanwhile they recorded themselves. After that, all sounds were trascribed to phonetic transcription and intonation mark.

b. Data Reduction

In this step the data gotten from collecting data process is classified into consonants, vowels, stress, intonation, tone, and length. All aspects are classified into its own discussion. When the discussion is focusing on consonants, the others will not be discussed even though they are in the same word and so on.

c. Data Display

In this step, the classified data from data reduction is organized and compress to simplified form (sound by sound and person by person), e.g. Firjon's glottal stop pronunciation errors are in a paragraph. All errors are classified to be error when they are not similar to Oxford Dictionary phonetic transcription. Then, it is discussed about the reason why there had been errors.

d. Conclusion and Verification

In drawing data conclusion, researcher will make a wide understanding after discussing the pronunciation of Javanese speakers while reading English text.

After conclusion, researcher will verify the data to make sure the validity of the data by rechecking Javaneses' pronunciation (listening to the sound one by one). In this case, we need data triagulation which is a method to increase the credibility and

validity of the findings (Noble: 2019). The most proper data triangulation for this research is document. So, in data findings, the result is compared more and more with the document of the research.

RESULTS AND DISCUSSION

1. Error of Consonants

a. Labiodental Fricative Voiced /v/

Kelly (2001) stated "we all use the same speech organs to produce sounds we accustomed to producing". That is why Javanese are really difficult to pronounce /v/ sound correctly. While pronouncing 3 /v/ sounds, most of them committed errors by pronouncing /f/. They committed 2 errors of 3 /v/ sounds. When they pronounce /v/ in word "very" and "of" they could not pronounce /v/ very well because /v/ is rarely used in Javanese language. Eventhough when they pronounce product name, they will pronounce it as /f/. It happened also when I had Nasrul pronounce word "vivo", he pronounced it /fivo/.

Firjon, Nasrul, Asrof, Zainul, and Saifudin mispronounced "very" and "of" by pronouncing /v/ to /f/. It happened because that movements of speech organs have been set to produce speech sounds of speakers' own language (Simarmata and Pardede: 2019).

b. Interdental Fricative Voiceless /θ/

Javanese have no this sound (Wedhawati: 2001), but participants are demanded to pronounce 3 interdental fricative voiceless sounds in this study. All participants almost mispronounced all of them (2 errors of 3 sounds). These five participants pronounced the same. "With" could be either /wið/ or /wiθ/, but they pronounced /wið/. They preferred interdental fricative voiced or /ð/ instead of /θ/, but it does not belong to error. Besides, some of them also did not pronounce this sound fricatively.

The error of this sound happened when they pronounced /θ/ to /t/. It happened because there is no /θ/ sound in Javanese language. Maulidiana (2020) has found in her research that Gayonese Students in SMA Negeri 1 Takengon that the participants had made 87% errors in pronouncing /θ/. It can be reference also because both Javanese and Indonesia do not have interdental fricative voiced also.

c. Interdental Fricative Voiced /ð/

Irianto et al. (2018) concluded in their thesis that the cause of errors in pronouncing /ð/ and /θ/ are because these sounds are not exist in Indonesian language (which some Javanese speak Indonesian too), influence of similar sounds (/t/ and /d/), and also the carelessness. This sound has 21 repetition in the text. Most of the sounds were correctly pronounced. Little of them were pronounced /d/ as Firjon pronounced "the" with correct /ðə/ and with /də/. It is because the place of articulation between /ð/ is next to /d/. Besides, this sound is pronounced not

fricatively just like Zainul and Saifudin pronounced "the" /ðə/ not fricatively and just like Asrof pronounced "that" /ðæt/ not fricatively.

d. Alveolar Fricative Voiceless /s/

Eventhough Javanese and English have this sound, but there is still a problem in word "as" from 7 alveolar fricative voiceless sounds. In this case, Generalization of "s" form to be /s/ sound in Javanese is implemented into English pronunciation. I could be there also because participants' misformation (Odlin: 1993). Nasrul, Zainul, did an error because he pronounced "as" not in both British English and National American English (/əs/, strong form /æz/). He pronounced it /əz/. Asrof did an error because he pronounced "as" as /as/, and Saifudin pronounced /æs/.

e. Alveolar Fricative Voiced /z/

Participants had a generalization also towards /s/ sound in /z/. This generalization is commonly happen because the interference of the first language. It is showed 6 of 7 /z/ sounds in this study were pronounced in correct way. Most of errors were changing /z/ sound to /s/ sounds. Like "was" pronounced /wəs/, his pronounced /hɪs/ (which should be /hɪz/), Hesitation pronounced /,hɛsɪ'tæfən/ (which should be /,hɛzɪ'teɪfən/), and is /ɪz/ pronounced /ɪs/. It has been explained in Speech American English (2015) that the common error of pronunciation is /s/ for /z/, for example: instead of was I? say, wazai? Instead of saying is it, say izit.

f. Alveolar Retroflex-Liquid Voiced /r/

This sound is sometimes pronounced as the /r/ or no voice. It depends on the accents. British accent tends to not pronounce the /r/ in the last sound but American does it (Rachel: 2019). The characteristic of /r/ sound in English is rolled tongue. Most of the errors were in the way they rolled the tongue when pronouncing it. For example: Firjon pronounced "greedy" /'gri:di/ (which the /r/ is not rolled). Javanese tends to pronounce /r/ sound with vibration not rolled. That is the reason.

g. Velar Stop Voiceless /k/

Javanese and English have the same /k/ sound. The error is just because the generalization of the /si:/ when pronouncing "c" form. The change from /k/ to /s/ in word "incredible" is because "c" is pronounced /si:/. Besides, a change from /k/ to /tʃ/ in word "stomach" (/ˈstʌmək/ to /ˈstɒmætʃ/) is because the misconception of "ch" form. Javanese tends to pronounce this form as /tʃ/ because they are used to saying it as /tʃ/ like in China, Chili, etc.

h. Velar Stop Voiced /g/

Not all the things exist is the first language is in the second language. the form "ng" is pronounced as /ŋ/ (Wedhawati: 2001). The g is not pronounced (/ˈhʌŋgri/ which is pronounced /ˈhʌŋri/). In this case, because the different form of Javanese and

English language, the 'g' is omitted. This omission is commonly happening because the different type of languages rules (e.g. tenses).

2. Vowels Errors

a. /i/

Different rule in the first language and the second language tends to hold the most influencing factor of the errors made participants in this sound. This sound form makes the participants feel difficult to pronounce the sound because the /i/ sometimes is made from "ee" form. This form is not used in Javanese, even when it is found the same form, it will be pronounced as /e:/. So, there is no wonder when Javanese pronounce the "ee" as /e/. For example, (e.g. *supe*: means forget (Khodijah: 2021) and /ə/ (e.g. *engko'*: means later (Ridho: 2021). Nasrul pronounced it incorrectly because he was influenced by his Javanese literature.

b. /ɪ/

In this sound, there are some error which change diphthong which happen in all participants' pronunciation. The first error is when diphthong /aɪ/ was changed to diphthong /æ/ (/faɪnd/ pronounced /faend/). This is weird because Javanese do not have diphthong /æ/ but /aɪ/ e.g. *balai*/townhall. Besides, there is diphthong /eɪ/ to monophthong /æ/ in word "came" (/keɪm/ pronounced /kæm/). It happened because Javanese speaker, Asrof, was influenced by his first language to read "a" as monophthong instead of diphthong. It happed also when Nasrul pronounce "here" as regular "e" form as /her/ instead of /hɪə(r)/ in British English or /hɪr/ in American English. In "hesitation" diphthong /eɪ/ is also pronounced monophtong /æ/. Furthermore, all participants committed errors in word "forest". The /ɪ/ sound in /'fɒrɪst/ is pronounced /e/ sound as /'fɒrest/.

c. /u/

It happened again. When Javanese and English have the same sound, it would be easy for Javanese to pronounce the sound in English. Eventhough the form is sometime different, /u/ is also pronounced in Javanese language. That is why there is only an error made by Asrof by pronouncing "to" with /tɔ/.

d. /ʊ/

The complexity of the second language may cause error from speaker of the first language (Mistar: 2019). Because sometimes the /ʊ/ sound is gathered with other vowels as become diphthong which is nothing in the Javanese language, participants tend to commit error in it. Furthermore, Most of them are made in diphthong form (/aʊ/ and /əʊ/). We can see in word "out" diphthong /aʊ/ become lengtethened /ɔ:/ (/aʊt/ to /ɔ:t/), and monophthong in word "could" which is pronounced /kod/ instead of /kəd/ (strong form: /kʊd/), and diphtong /əʊ/ in word "only" which is pronounced

/ˈanli/ instead of /ˈəʊnli/, and diphthong /əʊ/ in word "go" /gəʊ/ which is pronounced /go:/. It happened to all participants which means that Javanese is really difficult to pronounce diphthong /əʊ/.

e. /e/

This sound appear 16 times in the text both in monophthong and diphthong which are day, a, came, den, hare, better, let, went, and felt. Most of errors are in pronouncing diphthong /eə/. In term of complexity, Javanese does not have diphthong /eə/ (Wedhawati: 2001).

In word "hare", four of five participants (unless Nasrul) made error in pronouncing diphthong /eə/ or /e/ towards monophthong /ə/ and diphthong /iə/. In British English, "here" is pronounced /heə(r)/, and In American English it is pronounced /her/, but participants pronounced it as /hɜr/, /hər/, and /hiər/. They are still difficult to pronounce /eə/.

In word "came", instead of pronouncing in diphthong /keɪm/, two of them pronounced it in monophthong /kæm/. Besides, there is an error in "den" by changing /e/ to /ə/. Furthermore, when we see word "day", four of them correctly pronounced it, but Asrof read it /daɪ/. It happened because he read it as the form "a" in Javanese language.

f. /ə/

Most of easy English sounds are made from /ə/ sounds (Oxford: 2020). That is why there are 56 appearances of this sound. Most of them are in easy way to pronounce certain word, for example: could /kəd/ (strong form /kʊd/). Most of errors are in the changing of this sound both diphthong and monophthong like /ɪnˈkredəbli/ pronounced /ɪnˈkrədibəl/, /əv/ pronounced /ʌf/, /ˈəʊnli/ pronounced /ˈanli/, and /gəʊ/ pronounced /go:/ (all participants mispronounced "go"), and /ˈstʌmək/ pronounced /ˈstɔməʃ/.

We can see that they sometime pronounced the sound as in the form of the real form, moreover in the vowel. In Javanese, diphthong and triphthong are written in the real two vowels (e.g. balai). That is why they still mispronounced diphthong in English, because English diphthong appears in a letter.

g. /ʌ/

There are only seven appearance of this sound in the text. They are in was, hungry, of, some, and stomach. So, this sound appear in the 'a' and 'o' form. The errors are only in word stomach and some. In word "stomach" they tend to pronounce it as /o/ not /ʌ/ (/ˈstɔməʃ/ instead of /ˈstʌmək/). Besides, in word "some" the error is in the changing /ʌ/ to /ɔ/ (/sɔm/ instead of /səm/ (/strong form /sʌm)).

h. /ɔ/

There are 8 appearances of this sound in the text. They are in word small, caught, thought, small, forest, for, and off. It means that /ɔ/ sound is in the following forms: all, aught, ought, o, or, and off.

The errors comes from changing the sound, word "caught" was pronounce /kaut/ instead of /kɔ:t/. It happened because /ɔ/ is created from two letters (au). Besides, "small" /smɔ:l/ is pronounced /smel/. This is weird to be identified. The last one, in word "thought", we can find that form 'ou' made Saifudin mispronounced /θɔ:t/ as /tɔ:t/ (error from monophthong to diphthong).

i. /æ/

There 13 appearance of this sound. They are in and, can't, as, ran, that, rather, than, and, had, and vanished. All of them are in 'a' letter. So let us discuss the error.

There is a generalization of pronouncing "a" to /a/. In "ran", /ræn/ was pronounced /rʌn/ because sometime /ʌ/ sound comes from 'a' letter. Word "vanished" is pronounced /'væniʃt/ in Oxford Dictionary. But it was mispronounced to /'vaniʃt/, again, because 'a' letter sometime is pronounced as /a/. In word "as" /æs/ (strong form /æz/) was incorrectly pronounced as /as/, again, because participant read it as the real /a/ in 'a' form.

j. /a/

The last sound of vowel, /a/ appears 12 times which are: lion, out, find, my, lion, about, behind, and now. It means that this sound appear in i, ou, y, and o.

As always, participants tend to mispronounce when there is a form in a letter pronounced diphthong. It does not exist in Javanese because the diphthong is made by two letters (Wedhawati: 2001). Let see in word "out" /aʊt/ which is pronounced /ɔ:t/, the change is from /aʊ/ to /ɔ:/. Besides, diphthong in "behind" /bɪ'haɪnd/ was pronounced /bɪ'hænd/ (diphthong to monophthong). It happened also on "out" (/aʊt/ to /ɔ:t/), "find" (/aɪ/ to /ɪ/), "about" /ə'baʊt/ pronounced /ə'bɔ:t/, "behind" (/bɪ'haɪnd/ to /bə'hɪnd/), "lion" (/ˈlaɪən/ to /ˈlɔ:n/), and now (/naʊ/ to /nɔ:/).

3. Length Errors

Most of errors made by participants are made by lengthening diphthong, e.g. came, out, there, deer and go which were pronounced /ke:m/, /v:t/, /de:r/, /dɪ:r/ and /go:/. It means that participants are easier to produce lengthened sounds than diphthong. Again and again because English diphthong is in a letter form, but Javanese in two letter form. The others are in monophthong /ɛ/ to lengthened /ɛ:/ (/dɛn/ to /dɛ:n/), "better" (/ˈbɛtər/ to /ˈbɛtə:r/) and "can't" (/kænt/ to /kæ:nt/).

4. Intonation Errors

Intonation is the pattern of rises and falls in pitch across a stretch of speech such as a sentence. The meaning of a sentence can depend in part on the sentence's intonation contour. In this case, the made error is only one. The reason why there is

no so many error is because the coplexitiy of the error kinds is so little. The variation of flat, question, and imperative statement. Most of the text are in normal expression. The error was only made by Saifudin in word "thought the lion". It was similar to question intonation.

5. Stress Errors

In this case, the stress could influence the meaning. It happens when sometime there are two syllables (e.g. 'entrance (n) and en'trance (v)). So, stress could change meaning. Besides, text "The Greedy Lion" has 7 stressed words in the first paragraph, 4 stressed words in the second paragraph, 7 stressed words in the third and fourth paragraph. So that, there are 25 stressed words in the text. This is incredible because most of participants has stressed the syllables correctly unless Firjon. Firjon did an error in word "letting", he stressed the two syllables in stress which is /'lɛ'tɪŋ/.

6. Tone

There is no analysis in tone because English is not tonal language.

CONCLUSION

In the consonant sounds, five participants made no errors in /b/, /m/, /w/, /f/, /t/, /d/, /n/, /l/, /ʃ/, /ŋ/ and /h/. 8 of them (/v/, /θ/, /ð/, /s/, /z/, /r/, /k/, and /g/) were incorrectly pronounced by all participants due to some reasons. /v/ sounds were mostly pronounced /f/. /θ/ sounds were mostly pronounced /t/. /ð/ sounds were mostly pronounced as /d/. /s/ sound was mispronounced once because of different regular type (/əs/) and strengthened type (/æz/). /z/ sounds were most pronounced to /s/ sound. /r/ sounds were mostly pronounced with lip vibration not rolling the lip. /k/ sounds were changed from /k/ to /tʃ/, /s/, and /t/. /g/ sound was not pronounced because "ng".

In pronouncing vowels, All participants made error in the whole read vowels unless in /ɛ/. /i/ sounds were incorrectly pronounced only 1% (1 of 135 sounds). /ɪ/ sounds were incorrectly pronounced 12.8% (23 of 180 sounds). /u/ sounds were incorrectly pronounced 10% (1 of 10 sounds). /ʊ/ sounds were incorrectly pronounced 60% (18 of 30 sounds). /e/ sounds were incorrectly pronounced 18.75% (15 of 80 sounds). /ə/ sounds were incorrectly pronounced 10.7% (30 of 280 sounds). /ʌ/ sounds were incorrectly pronounced 17.1% (6 of 35 sounds). /ɔ/ sounds were incorrectly pronounced 12.5% (5 of 40 sounds). /æ/ sounds were incorrectly pronounced 9.2% (6 of 65 sounds). /a/ sounds were incorrectly pronounced 15.4% (17 of 110 sounds).

Suprasegmental features are length, stress, intonation, and tone. They made little errors in suprasegmental features. The participants tends to lengthened diphthongs. It happened because most of diphthongs are made in a letter. In intonating sentences, there is only an error in this case in sentence "thought the lion". It means that there is no massive error of this feature beside its lackness in variousity

of intonations. In stressing words, the text "The Greedy Lion" has 7 stressed words in the first paragraph, 4 stressed words in the second paragraph, 7 stressed words in the third and fourth paragraph. So that, there are 25 stressed words in the text. This is incredible because most of participants has stressed the syllables correctly unless Firjon. Firjon did an error in word "letting", he stressed the two syllables in stress which is /'le'tɪŋ/.

REFERENCES

- Adam Augustyn. (2020). Suprasegmental: Additional Information. Britannica: Britannica.com.
- Afendi Widayat Suwardi. (2005). Sejarah Sastra Jawa. Yogyakarta: Universitas Negeri Yogyakarta.
- Andre Zaidan. (2016, November 14). Updated on Brainly.co.id (blog web). Retrieved from <https://brainly.co.id/tugas/8377389>.
- Arum Perwitasari. (2018). Perception of English Vowels by Javanese and Sundanese Speakers, Universitas Indonesia.
- Deliana Simarmata and Hilman Pardede. (2019). Error Analysis of Students' Pronunciation in Pronouncing English Vowels and Consonants.
- Donald Ary, Cheser Lucy Jacobs, and Chris Sorenson, (2010). Introduction to Research in Education, Eight Edition. Canada: Wadsworth, Cengage Learning.
- Gasper Begus. (2019). Segmental Phonetics and Phonology. Oxford: Oxford University Press.
- Gerrald Kelly. (2001). How to Teach Pronunciation. Oxfordshire: Bluestone Press.
- Hanna Y. Touchie. (1986). Second Language Learning Errors Their Types, Causes, and Treatment. Austin: JALT Journal.
- Helen Noble. (2019). Triangulation in Research, with Examples. Belfast: Evidence Based Nursing.
- M. Asysyauqir Ridho and Siti Chodijah. (Private conversation, June 21st 2021)
- Muhamad Nazarudin Asyidiq, Nenden Sri Fujiya, Pajrian Noor, and Didik Murwanto. (2020). The Most Frequent Fricative Error in Javanese and Sundanese in Ethnographical Method, Why Not? Semarang: International Journal of Scientific and Technology Research.
- Niken Adisasmito-Smith. (2016). Influence of Javanese Vowel Patterning on Indonesian: An Acoustic Investigation, USA: Cornell University.
- Nofpian Andesta Irianto, Imranuddin, and Syafrizal S. (2018). An Analysis of Pronunciation Errors of English Consonants: /ð/ and /θ/ by The Students of The English Education Study Program of University of Bengkulu. Bengkulu: Journal of English Education and Teaching.

- Novalita Pradnya Paramitha. (2019). The Pronunciation of Alveolar-alveolar and Bilabial-alveolar Consonant Clusters in English Words by Indonesian Learners of English. Universitas Sanata Dharma: Yogyakarta.
- Paul Skandera, Peter Bulreigh,. (2005). A Manual of English Phonetics and Phonology. Germany: Studeinbutcher Press.
- Reska K. Nistanto. (2018). Spesifikasi dan Harga Oppo F7 di Indonesia. Kompas.com.
- Resti Purwaningsih. (2018). The Influence of Javanese Accent toward the Students' English Consonant Pronunciation at English Education Study Program Perdaban University. Peradaban University: Brebes.
- Richard Nordquist. (2020). Suprasegmental Definition and Examples. ThoughtCo.: Dotteddash.
- Richard Ogden. (2009). An Introduction to English Phonetics. Edinburgh: Edinburgh University Press.
- Rozita Ilani. (2016). Linguistics Error Anlysis in Learning a Foreign Language. Istanbul: Universite Azad.
- Stefany Jannedy, Robert Poletto, Tracey L. Weldon, (1994). Language File. Ohio: Ohio University Press.
- Sugiono. (2014). Metode Penelitian Kulitatif Analisis Data. Jakarta: Rajawali Pers.
- Tirto Suwondo. (2001). Tata Bahasa, Kamus, dan Sejarah Sastra Jawa. Yogyakarta: Balai Bahasa Daerah Yogyakarta.
- Wedhawati. (2001). Tata Bahasa Jawa Mutakhir, Departemen Pendidikan Nasional.