ERROR ANALOGY OF ENGLISH PRONUNCIATION OF THE SIXTH SEMESTER STUDENTS OF ENGLISH LITERATURE DEPARTMENT AT UIN MAULANA MALIK IBRAHIM MALANG

THESIS

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UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM MALANG

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THESIS

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STATEMENT OF AUTORSHIP

I state that the thesis entitled **"Error Analogy of English Pronunciation of the Sixth Semester Students of English Literature Department at UIN Maulana Malik Ibrahim Malang"** is my original work. I do not include any materials previously written or published by another person, except those ones that are cited as references and written in the bibliography. Hereby, if there is an objection or claim, I am the only person who is responsible for that.

Malang, 12 September 2021
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This is to certify that Rizky Firdausy's thesis entitled **"Error Analogy of English Pronunciation of the Sixth Semester Students of English Literature Department at UIN Maulana Malik Ibrahim Malang"** has been approved for thesis examination at the Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang, as one of the requirements for the degree of *Sarjana Sastra* (S.S.).
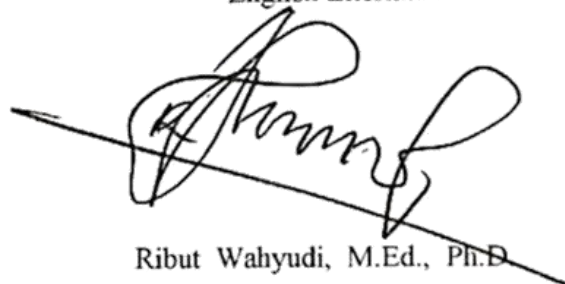
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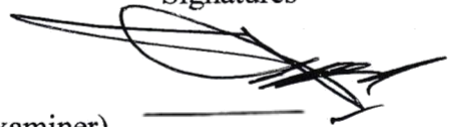The Board of Examiners   Signatures
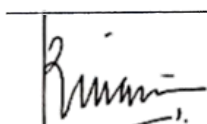
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MOTTO

"We seek excellence, by constant trial and error"

(Master Jin Kwon)

DEDICATION

This thesis is dedicated to

My beloved mother and father,

Suryati S.Pd and Dr. H. Rohmat Mulyana Sapdi M.Pd

ACKNOWLEDGMENT

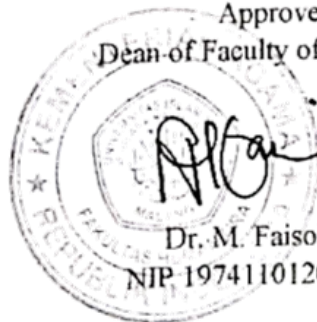The best and highest gratitude is delivered to Allah swt. for the unconditional mercy and blessing. He has guided me through the hard times and taught me with unsurpassed knowledge and abilities. May *Salawat* and *Salam* always be upon our Prophet Muhammad SAW, the most flawless person who exists.

This thesis could have been accomplished because of guidance, encouragement, and suggestion from some people. I would like to extend my sincere and special thanks to the Dean of Faculty of Humanities, Dr. M. Faisol, M.Ag. the Head of Department of English Literature, Ribut Wahyudi, M.Ed., Ph.D., my thesis advisor Nur Latifah, M.A., who has given her valuable time, advice, knowledge, and supports during the process of accomplishing this thesis from the very beginning. I am also extremely thankful to the Board of Examiners, Prof. Dr. H. Mudjia Rahardjo, M.Si., Rina Sari, M.Pd., and Nur Latifah, M.A. for their beneficial corrections and suggestions to me in completing this thesis. Finally, I would like to thank to all of the lecturers of English Literature Department who have taught, guided, and advised me throughout the academic years at UIN Maulana Malik Ibrahim Malang.

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sharing knowledge with me to help in completing my thesis. Last but not least, to my support system, my mother, father, and all of my brothers who were always there when I had to deal with my difficulties, with their prayers, Alhamdulillah, this thesis can finally be finished.

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Malang, 12 September 2021

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ABSTRACT

Firdausy, Rizky. (2021). *Error Analogy of English Pronunciation of the Sixth Semester Students of English Literature Department at UIN Maulana Malik Ibrahim Malang.* Undergraduate Thesis. Department of English Literature, Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang. Advisor: Nur Latifah, M.A.

Keywords: error analogy, imitation, pronunciation, Phonology

As a social phenomenon, phonetics is an important part of the formation of sound to convey messages. Other studies also discussed phonetics a lot, instead of discussing it in-depth, they only examined errors in segmental features through the mother tongue effect. They did not research phonetic errors through the English language itself by using the imitation concept. The object of this research is the recording from the 6th semester students of the English Literature Department at UIN Maulana Malik Ibrahim Malang. The researcher chose the 6th semester students of the English Literature Department because they had taken several Speaking courses which should be able to minimize pronunciation errors in presentation activities. The research aims to find out imitation words that are adapted through patterns of mispronunciation by students of sixth semester of the English Literature Department at UIN Maulana Malik Ibrahim Malang.

This study uses descriptive qualitative method because the researcher intended to deepen his understanding of the existing phenomenon about imitation words adapted through the patterns of mispronunciation. The instrument of this research is the researcher who collected and analyzed data from the recordings of the sixth-semester students of English Literature Department at UIN Maulana Malik Ibrahim Malang. The researcher collected data through two stages, first looking for 50 words in the range of 1% - 10% through the British Academic Written English (BAWE) Corpus which was analyzed through Antconc. The researcher only searched 50 words in the range of 1% - 10% to limit the range of search words analyzed through Antconc. Second, the researcher asked the 6th semester students of the English Literature Department at UIN Maulana Malik Ibrahim Malang to record 50 words given by the researcher. Then, the researcher presented the data in a table that was described in the form of a description, by using the theory of Chomsky and Halle (1968) to show the patterns of mispronunciation based on the linguistic environment effects. After that, the researcher used the theory of Copi (1961) to find the imitation words that were adapted through the patterns of mispronunciation.

The results of this research indicate that there are several changes in vowels and consonants that can be formed in the patterns of mispronunciation due to the influence of the linguistic environment, such as between environments A and B, after environment A, and before environment B. Moreover, from these patterns of mispronunciation, the researcher found a number of pronunciation models with the same environment or at least have the same conditions in the formed patterns of mispronunciation.

ABSTRAK

Firdausy, Rizky. (2021). *Kesalahan Analogi dalam Pengucapan Bahasa Inggris pada Mahasiswa Semester Enam Program Studi Sastra Inggris di UIN Maulana Malik Ibrahim Malang*. Skripsi. Program Studi Sastra Inggris, Fakultas Humaniora, Universitas Islam Negeri Maulana Malik Ibrahim Malang. Doen Pembimbing: Nur Latifah, M.A.

Kata kunci: kesalahan analogi, imitasi, pengucapan, Fonologi.

Sebagai fenomena sosial, fonetik merupakan salah satu bagian penting dalam pembentukan suara untuk menyampaikan pesan. Penelitian sebelumnya banyak membahas tentang fonetik, tetapi mereka hanya meneliti kesalahan pada fitur segmental melalui efek bahasa ibu, dan tidak melihat dari sudut pandang lain yaitu Bahasa Inggris itu sendiri yang berupa konsep imitasi. Objek penelitian ini adalah rekaman yang dikirim oleh mahasiswa Semester 6 Program Studi Sastra Inggris di UIN Maulana Malik Ibrahim Malang. Peneliti memilih mahasiswa semester 6 Program Studi Sastra Inggris karena mereka telah menempuh beberapa matakuliah *Speaking* yang seharusnya dapat meminimalisir kesalahan pengucapan dalam aktivitas presentasi. Tujuan utama penelitian ini adalah untuk mengetahui kata imitasi yang diadaptasi melalui pola salah ucap oleh mahasiswa Semester 6 Program Studi Sastra Inggris di UIN Maulana Malik Ibrahim Malang.

Penelitian ini menggunakan metode penelitian kualitatif deskriptif karena peneliti ingin memperdalam pemahaman pada fenomena yang ada yaitu tentang kata imitasi yang diadaptasi melalui pola salah ucap. Adapun instrumen dari penelitian ini adalah peneliti sendiri sebagai alat instrumen yang mengumpulkan dan menganalisis data dari hasil rekaman mahasiswa Semester 6 Program Studi Sastra Inggris di UIN Maulana Malik Ibrahim Malang. Peneliti mengumpulkan data melalui dua tahap, pertama mencari 50 kata dalam jangkauan 1% - 10% melalui Korpus *British Academic Written English* (BAWE) yang dianalisa melalui *Antconc*. Peneliti hanya mencari 50 kata dalam jangkauan 1% - 10% untuk membatasi jangkauan pencarian kata yang dianalisa melalui *Antconc*. Kedua, peneliti meminta mahasiswa semester 6 Prodi Sastra Inggris di UIN Maulan Malik Ibrahim Malang untuk merekam 50 kata yang diberikan oleh peneliti. Peneliti menyajikan data dalam bentuk tabel yang diuraikan dalam bentuk deksripsi, kemudian menggunakan teori Chomsky dan Halle (1968) untuk memperlihatkan pola salah ucap yang dilandasi efek suara disekitarnya. Setelah itu, peneliti menggunakan teori Copi (1961) untuk menemukan kata imitasi yang diadaptasi melalui pola salah ucap.

Hasil penelitian ini menunjukan bahwa terdapat beberapa perubahan vokal maupun konsonan yang dapat dibentuk pada pola salah ucap karena pengaruh *linguistic environment*, seperti di antara *environment* A dan B, setelah *environment* A, dan sebelum *environment* B. Selanjutnya, dari pola salah ucap tersebut, peneliti menemukan beberapa model pengucapan yang memiliki *environment* sama atau setidaknya memiliki kondisi karakteristik yang sama pada pola salah ucap.

مستخلص البحث

الفردوسي، رزقي. 2021. خطأ القياس في اللغة الإنجليزية نطق طلاب برنامج دراسة الأدب الإنجليزي في جامعة الدولة الإسلامية مولانا مالك إبراهيم مالانج. بحث جامعي. قسم الأدب الإنجليزي، كلية العلوم الإنسانية ، جامعة الدولة الإسلامية مولانا مالك إبراهيم مالانج. المشرفة : نور لطيفة، الماجستير.
الكلمات الرئيسية: خطأ القياس، التقليد، النطق، علم الأصوات.

كظاهرة اجتماعية، تعد الصوتيات جزءًا مهمًا في تكوين الصوت لنقل الرسائل. لقد ناقشت الدراسات السابقة كثيرًا حول الصوتيات، لكنها فحصت الأخطاء في السمات القطاعية فقط من خلال تأثير اللغة الأم، ولم تنظر إليها من وجهة نظر أخرى ، وهي اللغة الإنجليزية نفسها التي تعد مفهومًا تقليدًا. الهدف من هذا البحث هو التسجيل المرسل من طلاب الفصل السادس من قسم الأدب الإنجليزي في جامعة الدولة الإسلامية مولانا مالك إبراهيم مالانج. اختارت الباحثة طلاب الفصل السادس من قسم الأدب الإنجليزي لأنهم تلقوا عدة دورات في المحادثة والتي من المفترض أن تكون قادرة على تقليل أخطاء النطق في أنشطة العرض التقديمي. كان الغرض الرئيسي من هذا البحث هو لمعرفة الكلمات المقلدة التي تم تكييفها من خلال أنماط الأخطاء الإملائية من قبل طلاب الفصل السادس من قسم الأدب الإنجليزي في جامعة الدولة الإسلامية مولانا مالك إبراهيم مالانج.

يستخدم هذا البحث منهج البحث الوصفي النوعي، وذلك لأن الباحث يريد تعميق فهم الظاهرة القائمة ، وتحديداً الكلمات المقلدة التي يتم تكييفها من خلال أنماط الأخطاء الإملائية. أداة هذا البحث هي الباحث نفسه كأداة تجمع وتحلّل البيانات من تسجيلات طلاب الفصل السادس من قسم الأدب الإنجليزي في جامعة الدولة الإسلامية مولانا مالك إبراهيم مالانج. قامت الباحثة بجمع البيانات من خلال مرحلتين، حيث تقوم الباحثة أولاً بالبحث عن 50 كلمة في نطاق 1٪ - 10٪ من خلال مجموعة اللغة الإنجليزية الأكاديمية البريطانية المكتوبة والتي تم تحليلها من خلال (Antconc)، بحث الباحث فقط عن 50 كلمة في نطاق 1 ٪ - 10٪ للحد من نطاق البحث عن الكلمات.تحليلها من خلال (Antconc). ثانياً، طلبت الباحثة من طلاب الفصل السادس من برنامج دراسة الأدب الإنجليزي في جامعة مولان مالك إبراهيم مالانج تسجيل 50 كلمة قدمها الباحث. يعرض الباحث البيانات على شكل جدول موصوف في شكل وصف، ثم يستخدم نظرية تشومسكي وهالي (1968) لإظهار نمط الأخطاء الإملائية بناءً على المؤثرات الصوتية المحيطة. بعد ذلك استخدم الباحث نظرية ايرفينغ كوبي (1961) لإيجاد كلمات مقلدة تم تكييفها من خلال أنماط التهجئة.

تشير النتائج من هذا البحث لوجود العديد من التغييرات في حروف العلة والحروف الساكنة التي يمكن تشكيلها في نمط الأخطاء الإملائية بسبب تأثير البيئة اللغوية ، مثل بين البيئتين أ و ب، وبعد البيئة أ، وقبل البيئة ب. نفس الشروط المميزة أو على الأقل لها نفس الشروط المميزة في نمط الأخطاء الإملائية.
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CHAPTER I

INTRODUCTION

This chapter discusses the background of the study, research questions, objectives of the study, scope and limitations, significances of the study, definition of key terms, previous studies, and research method.

A. Background of the Study

English language is taken into consideration as the only language used at meetings in the world (Northrup, 2013). Thus, English language has been studied a lot by various people who have diverse backgrounds such as English as Foreign Language (EFL) learners. The interference of EFL's mother tongue is commonly discovered during the learning process because there are many obstacles, such as difficulty in pronunciation which is caused by a property of sound that is not owned in a particular language. This matter can damage the mutual intelligibility between EFL learners and native speakers. However, this matter will not be a problem if the mutual intelligibility is not severely affected by the interference of Indonesian language.

Even in the university setting, as an EFL student in Indonesia, the issue of English pronunciation is still prevalent. Many individuals still say "focus" as [fokɪəs], "examine" as [ɪgˈzæmaɪn], and "conceive" as [kənˈseɪve] in the academic lexicon. Furthermore, the English spelling system is one of the most challenging and perplexing features of the language. There is frequently a mismatch between a word's pronunciation and its spelling. It is not always possible to determine how to spell a word based on its pronunciation or how to pronounce it based on its spelling.

For instance, in English, the sound [ʃ] can be spelled in twelve distinct ways, such as *anxious, nation, ocean, special, schist, mission, sure, machine, nauseous, mansion, shoe, and conscious*. Moreover, giving an opposite example, the diphthong [əʊ] can be spelled in at least five distinct ways; *through, out, although, tough, and thought*. As seen from those instances, the pronunciation issue can also be researched from the influence of imitation words, which eventually leads to pronunciation faults.

In understanding further, this research investigates the imitation words through the patterns of mispronunciation faced by the sixth-semester students of English Literature Department at UIN Maulana Malik Ibrahim Malang. The reason why the researcher selected this topic because the researcher observed the situation at UIN Maulana Malik Ibrahim Malang and as a student in the Department of English Literature, still hear pronunciation errors that occur while during presentation performances. In fact, the students of the sixth semester have passed Speaking based-courses to Advanced Speaking level like Intensive English Course II (Bahasa Inggris II), Public Speaking and Phonology. Hence, they should be able to minimize pronunciation errors during speaking performance. Considering this matter, the researcher makes an investigation on the error analogy through the patterns of mispronunciation of the sixth-semester students of English Literature Department at UIN Maulana Malik Ibrahim Malang. It is not only to research pronunciation errors, but also to gain a better understanding on the pattern of pronunciation errors.

In observing the patterns of mispronunciation, it requires the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang to employ words that they do not often use. Hence, during the speaking performance, they must go through an analytical process, which will finally result in forming a habit pattern. In this case, the researcher took data from the BAWE (British Academic Written English) Corpus, which was analyzed through AntConc linguistic software. The researcher uses the BAWE Corpus to get the results of the percentage of words that are rarely used in English vocabulary.

Several types of research about interference have been researched by several researchers, such as Septianasari et al. (2019), Anam (2018), Kaharuddin (2020), Irma et al. (2018), Noviyenti and Putri (2021), Widiantari et al. (2021), and Diani and Azwandi (2021). Furthermore, the difference between this research and previous studies is the use of a different theory by using the concept of error analogy, this is to show changes in vowels or consonants due to the influence of the pronunciation model based on the phonetics characteristics using the theory of Chomsky & Halle (1968). Therefore, this research focuses on error analogy through the patterns formed by the sixth-semester students using Chomsky and Halle's (1968) theory which refers to patterning and Copi's (1961) theory of logical errors.

B. Research Questions

This section contains the questions that the researcher wants to find the answers through the thesis research:

1. What are the patterns of mispronunciation used by the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang?

2. What are the imitation words used by the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang in the patterns of mispronunciation?

C. Objectives of the Study

The objectives of the research are;

1. To identify the patterns of mispronunciation used by the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang.

2. To find out the imitation words used by the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang in the patterns of mispronunciation.

D. Significances of the Study

This research has benefits theoretically and practically. Theoretically, this research findings will strengthen the theory concept used of error pronunciation in segmental features by Chomsky & Halle (1968). Practically, by reading this research, the researcher hopes the readers can increase their awareness to re-evaluate the vocabulary they have or new vocabulary using a dictionary or others.

E. Scope and Limitation

The scope and limitation are important things to be explained in this research so that it can focus. This research focuses on the concept of error analogy of words imitation based on Copi (1961) through the patterns of Chomsky and Halle's (1968) theory. In perceive far, the researcher limited the subject group. The subjects selected were five students of the English Department of UIN Maulana Malik Ibrahim Malang in sixth semester whose mother tongue is Indonesia. The researcher originally took the subjects from the sixth-semester students in the Department of English Literature because they had passed the Intensive English Course II (Bahasa Inggris II), Public Speaking, and Phonology. Furthermore, the researcher took 50 words on academic vocabulary based on the compiled data of BAWE corpus. The researcher took five subjects and 50 words of data due to limited time owned by the researcher.

F. Definition of Key Terms

This part contains important terms that need to be explained in this research.

1. Error analogy: the error logic that if B is similar to A (in whatever regard characteristics), then B can be applicable also to A - based on similar characteristics. This research is about the error analogy described by Copi (1961) to look for imitation due to the same linguistic items.

2. English pronunciation: the way in which making the sounds of English word. This research studies about English pronunciation produced by the sixth-semester students of English Literature Department at UIN Maulana Malik Ibrahim Malang.

G. Previous Studies

In recent years, many researchers have conducted on the topic of language interference. Septianasari et al. (2019) studied about mother tongue issues and challenge in learning English as Foreign Language. She examined the Indonesian interference to the target language in segmental features. She naturally used the qualitative method, precisely observation with 21 participants in Telkom University at intermediate English level. Within research, she used Musk's (2010) and McMahon's (2002) theory, which explains about vowels and consonants' English features. The research outcomes reveal some phonological problems caused by the mother tongue's interference and syntactical issue. She said, "Interferences in Indonesian learners' pronunciation and syntax occur because their first language has some different features or linguistic environment with the targeted language they learn."

A case study in IAIN Kediri about Thai and Indonesian English students' problems in pronouncing English fricative and affricate sounds was conducted by Anam (2018). This study investigated phonological problems in affricate and fricative English sounds produced by Indonesian and Thai English learners in the English Department of IAIN Kediri. The researcher used the qualitative method. Moreover, the data were recorded from a passage that the respondents read. There were 169 fricative and affricate sounds of words that he found. To elaborate the answer, he used Schane's theory (1973), in which the theory consists of four allotments: binary, manner features, major class features, and place of articulation

features. The research outcome revealed there are two phonological problems produced by subjects: substitution and deletion.

A research of problematic English segmental sounds by Indonesian learners of English was studied by Kaharuddin (2020). This research aimed at segmental features and supra-segmental features encountered by Indonesian-English speakers. The researcher used a descriptive qualitative study to examine the phonological problem in segmental features. Moreover, he used Nsakla (1995), which examined causal factors of error pronunciation. The subjects were selected in the English Education Department of UIN Alauddin Makasar referring to their TOEFL PBT (Paper Based Test) score. The research outcome showed problematic segmental sounds in consonants and vowels. Furthermore, lack of memory and motivation, a slip of the tongue, and mother tongue interference are all indicators of unnatural performance in this research.

A research of interference of the students' Indonesian language in delivering English presentation was conducted by Irma et al. (2018). This research examined the dominant type and the causes of Indonesian language intervention from 5 presenters in the presentation. The researcher used mix-method by using video recording and interviews. The data were collected from the students in the English Department of the State University of Makassar who delivered the proposal. The researcher used Lott's (1983) and Comrie's (1981) theory in phonological interference. The research outcome showed there are problems in phonological interference, precisely in speech sound and word stress.

A case study in IAIN Curup about mother tongue interference towards students' English pronunciation was conducted by Noviyenti and Putri (2021). This study investigated the interference of the Rejang language in pronouncing English and how they have interfered. This research used the descriptive qualitative method, precisely using the interviews technique. Moreover, the data were taken from 16 students who used the Rejang language in daily communication. To analyze the data, they took Miles and Huberman's (1994) theory. The findings revealed five interferences: short vowels into long vowels, long vowels into short vowels, changed vowels, changed diphthongs into vowels, and changed vowels into diphthongs. However, the interference was positive since Rejang's phonemic sounds have some similarities to English properties.

A research which analyzed of mother tongue interference in English pronunciation was conducted by Widiantari et al. (2021). This research investigated the interference of Malay in pronouncing English voiceless stop /p/, /t/, and /k/ by EFL students in Pontianak. This research used the quantitative method. Furthermore, they collected the data from 15 EFL students whose mother tongue is Malay. The results showed /p/ 56 times mispronounced from 105 chances, /t/ 42 times mispronounced from 105 chances, and /k/ 31 times mispronounced from 105 chances that mother tongue indicated interfere students' pronunciation.

Lastly, a research of phonological change processes of English and Indonesian language was conducted by Diani and Azwandi (2021). This research investigated the phonological process that occurs in Indonesia and English language. This research used the contrasting-descriptive method by comparing two

languages. The data were taken from 40 students in the first semester at the University of Bengkulu. The results showed five types of phonological changed processes: assimilation, metathesis, epithesis, epenthesis, and deletion.

Briefly, comparing this research from several studies above, such as (Spetianasari et. al., 2019), (Irma et al., 2018), (Kaharuddin, 2020), (Noviyenti and Putri, 2021), (Widiantari et al., 2021), (Diani and Azwandi, 2021), their study examined what and how the mother tongue interference affects the speech. Moreover, Anam (2018) researched more explicitly related to fricative and affricate sounds. Considering those studies, there are still parallels in this research related to identifying segmental features. On the other hand, this research focuses on the concept of error analogy through the patterns formed by the sixth-semester students rather than just detecting segmental characteristics. Thus, using the pronunciation model will make it clear that there is a change for vowels or consonants. This research combines the two theories of Chomsky and Halle's (1968) theory, which refers to patterning and Copi (1961) on the theory of logical fallacy to bring the novelty within this research.

H. Research Method

This part of the section discusses research method of the study. It covers research design, instrumental research, data source, data collection, and data analysis.

1. Research Design

This research tried to find out the imitation words through the patterns formed by sixth-semester students at UIN Maulana Malik Ibrahim Malang. Since it aimed to gain a deeper understanding of the phenomenon itself thus, this research used a qualitative approach based on the qualitative descriptive method. According to Fard (2007), qualitative research tries to help researcher to understand the phenomena itself.

From the explanation above, this research fits the objectives of the study that is to find out the imitation words and pattern mispronunciation by five subjects in the English Literature Department at UIN Maulana Malik Ibrahim Malang. To begin the analysis, the researcher had to listen to the speech errors made by the subjects. The researcher gave depth analysis by interpretation and elaboration on the phenomena of the topic. Hence, it fits with the goals of qualitative research methodology. The researcher used the sound pattern of English by Chomsky and Hale's (1968) theory and the theory of error analogy by Copi (1961).

2. Research Instrument

The researcher is a major instrument in this research. Thus he collected and analyzed the data of the research. Aside from it, the researcher used a record to collect the data that can be proven and repeated many times and also the BAWE Corpus to see the percentage of English vocabulary which was analyzed through the AntConc software.

3. Data Source

The data were collected from questionnaires online related to the words given by the researcher to the subjects of the research. The subjects were five sixth semester students of English Literature Department at UIN Maulana Malik Ibrahim Malang who have finished Speaking and Phonology courses with pronunciation skill medium or advanced.

4. Data Collection

The collecting data were done by the researcher in several stages. First, the researcher downloaded the BAWE Corpus. Second, the researcher used AntConc to get the frequency used in BAWE Corpus by uploading compiled data into the Antconc software. Third, the researcher searched the "Word List" tab in AntConc and pressed "start" to analyze the words used in the compiled data of BAWE Corpus. Fourth, the researcher took 50 words of academic vocabulary in the range 1-10 % frequency used in BAWE Corpus. The researcher used the range to limit the random selection of words and took 50 words of data due to limited time that owned by the researcher. Fifth, the researcher distributed questionnaires online on 15 August 2021 at Tarbiyah Mosque. Then, the suitable participants were contacted by the researcher via the number sent in the questionnaire. It was to record several English words given by the researcher and then the answers were submitted via the researcher's google form. Seventh, the researcher listened to the recordings and took note of the words that were mispronounced by subjects. Lastly, the researcher transcribed the audio from recordings into phonetic transcription to find out mispronunciation data. To check off mispronunciation, the Oxford Advanced Learner's Dictionary was needed to correct pronunciation accuracy.

5. Data Analysis

There are two steps to analyze the data. Firstly, after collecting the data, the researcher classified mispronunciation of English vowels and consonants. Then, he analyzed the data through the theory used. The researcher used Chomsky and Halle's (1968) theory to analyze the first question about what are the patterns of mispronunciation used by the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang and error analogy by Copi's (1961) theory to analyze the second question about what are the imitation words used by the students of sixth semester of English Literature Department at UIN Maulana Malik Ibrahim Malang in the patterns of mispronunciation

CHAPTER II
REVIEW OF RELATED LITERATURE

This chapter presents review of related literature used in this research. The purpose of this discussion is to set the theories and review concerning with Phonology, Phonetics, segmental features, English vowels, articulation of vowels, English consonants, articulation of consonants, phonological process, rules form, Sound Pattern of English (SPE) system in distinctive features, and error analogy.

A. Phonology

Phonology has been promoted in various definition by linguists. Phonology is the study of how the sound has a relation with language (Forel & Puskas, 2005). Katamba (1989) remarked that Phonology is a branch of linguistics which investigates how the sounds formed systematically in particular languages to build words or utterances. Besides, Phonology deals with person's competence, in which how the person has knowledge of the sound system in particular language (McMahon, 2001). In addition, Phonology is concerned with function and range of sounds in particular language (Crystal, 2008). Another linguist, Haynes (2009) states that Phonology tends to be more abstract, which does not deal directly with the physical properties of speech sounds, but with unconscious rules of sound patterns in a person's mind or brain in conveying a particular language. Yule (2006) states that Phonology is essentially the patterns and description of speech sound in a language. Overall, phonology is a branch of linguistics that study of how the sounds formed systematically through the rules of sound patterns in a person mind.

As it is known that Phonology deals with sounds, there always come up a situation when a word is uttered, there is a sound that surrounded by other sounds. It is so-called phonological environment (Hayes, 2009). The example is the word 'howl' or pronounce /haʊl/, the vowel [a] in position between the consonant and the vowel, it is preceded by consonant [h] and followed by vowel [ʊ].

B. Phonetics

According to Katamba (1989), Phonetics is the study of all inventories about speech sound which are produced by a person. Just as other linguists claimed that Phonetics is a part of Phonology that studies about the pronunciation and understanding of sounds that can be seen physically and directly (Firth, 2008; Richard, 2009). In other words, Phonetics deals with identifying the sounds formed through the parts of the speech organ, thus they can form different sounds. The sounds function is to transmit a meaning that is formed to obtain information from the speaker to the listener.

C. Segmental Features

According to Gut (2009), segmental feature or segmental phonology is concerned with the units and phonological rules of the lowest level of the prosodic hierarchy - the speech sounds. Hence, segmental phonology deals with the characteristics of vowels and consonants. These matters are categorized as in vowel and consonant articulation.

D. English Vowels

Yule (2006) said that vowels are produced by aggressive airstream without a disruption. Gimson (2001) characterized the vowels as resonant, central, and continual oral sounds. Vowels are distinct from consonants in which they do not have "places of articulation". They refer to key constriction locations in the vocal tract. Different timbres are imparted to the basic sound produced at the vocal cords by changing the form of this chamber. There are three fundamental changes to the shape of the vocal tract that can be made with motions of the tongue, jaw, and lips.

1. **Monophthong**

   Monophthong always produces one vowel element at one point of articulation, there consists of 12 monopthong sounds in English which are; /iː/, /ɪ/, /ʊ/, /uː/, /e/, /ə/, /ɜː/, /ɔː/, /æ/, /ʌ/, /ɑː/ and /ɒ/.

2. **Diphthong**

   Diphthong always produces two elements of vowel in one straight position and there consists of eight diphthong in English language, three of them glide with /i/; /ei/, /ai/, and /ɔi/, two of them glide with /ʊ/; /əʊ/ and aʊ/, and last three of them glide with /ə/; /iə/, /eə/, and /ʊə/.

3. **Tripthong**

   According to Roach (2000), tripthong is the complex vowel sounds in English language, it is because the combination of diphthong and schwa /ə/ in sequence of a word.

E. **Articulation of Vowels**

Vowels are classified according to how they are produced. The articulatory description for each vowel encompass three pieces of information: rounding, height, and backness.
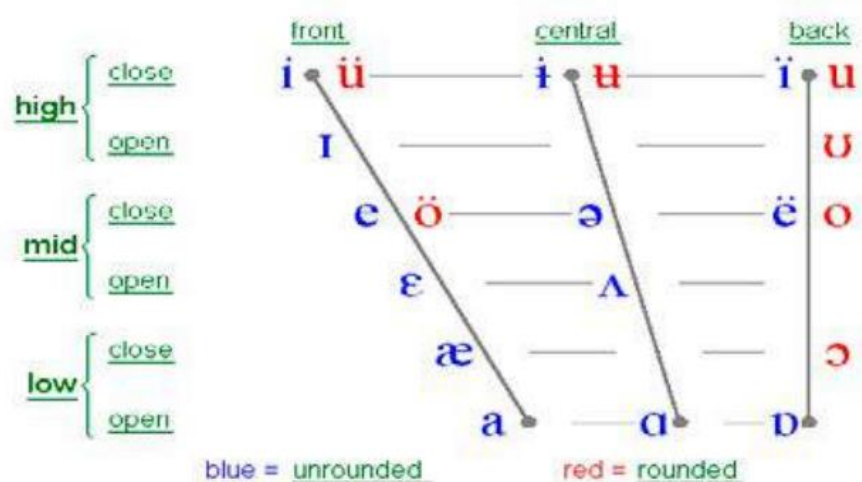
Figure 1: Articulation of Vowels

1. **Rounding**

   A recognizable modification one of vocal tract can be created by rounding the lips, in order to narrow the passage at the exit. It happens, for instances are the vowels which many English dialects have for book [ä], boot [u], and boat [o]. Those are called simply round vowels or rounded. Other vowels, like beet [i] or car [a], are called unrounded.

2. **Height**

   Another way to alter the vocal tract is to narrow or widen the path through the mouth. The mouth can be widened by expanding the jaw or lowering the tongue's body at the bottom. Nonetheless, narrowing is accomplished by lifting the jaw or the tongue's body. Low, mid, and high vowels are the three levels of vowels.

In fact, low vowels have wide passage. However, high vowels have narrow passage for air to pass through. Another term on IPA Chart, called the low vowels open and high vowels close, for instance low vowels in the word bat [æ] and high vowels in the word beat [i]. The other way is to feel the oral passage narrowing or widening by pronouncing vowels changing between high and low, such as [i æ i æ].

3. Backness

The other modification of vocal tract can be created by placing the body of the tongue towards the front part of the mouth or back of the mouth. Vowels are classified into three part of backness: front, central and back. For instances, beat [i] is a high front unrounded vowel, boot [u] is a high back rounded vowel and cat [æ] is a low front unrounded vowel. The other way to feel backness is by pronouncing vowel [i u i u], body of the tongue will be slide forward and backward along the roof of the mouth.

F. English Consonants

Ekundayo (2005) said that consonants are produced by the air flow through the vocal tract and disrupt them by particular place of articulation. There consists of 24 phonemes for consonant in English language.

G. Articulation of Consonants

Consonants are classified according to how they are produced. The articulatory description for each consonant includes three pieces of information: the voicing, the place of articulation, and the manner of articulation.

1. Voice or voiceless

Vibration is formed by closing and opening rapidly of the vocal folds. The process of vibration creates a quiet buzz sound in the larynx, but after it passes through the articulatory system, this buzz sound will change into sound as I understand as voice. In fact, this buzz in the larynx does not create by vocal folds itself, but the air passes through vibrating vocal folds. The sounds formed in articulatory system are not always generated by vibration of the vocal folds. Thus, speech sounds can be classified into two variables: voice and voiceless. The voice is sounds produced by vocal folds vibration, otherwise voiceless is technically vocal folds which are opened and do not vibrate (Gut, 2009, p. 18).

2. Place of Articulation

Place of articulation refers to the place in the vocal tract where the airstream is obstructed in the production of a consonant (Katamba, 1989, p. 8).

Classification of NAE Consonant Phonemes

Manner of Articulation	Place of Articulation						
	Bilabial	Labiodental	Dental	Alveolar	Palatal	Velar	Glottal
Stop Voiceless Voiced	p b			t d		k g	
Fricative Voiceless Voiced		f v	θ ð	s z	ʃ ʒ		h
Affricate Voiceless Voiced					tʃ dʒ		
Nasal Voiced	m			n		ŋ	
Liquid Voiced				l	r		
Glide Voiced	w				y		

Figure 2: International Phonetic Alphabet
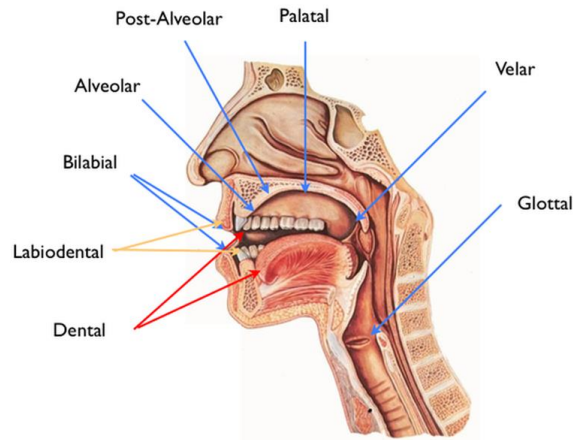
Figure 3: Articulation of Consonants

a) Bilabial

These sounds are formed through the lower and upper lips when they come into contact each other, such as the words *pike* and *bike*, which represent the symbols [p] and [b]. The symbol [p] has voiced and [b] has voiceless characteristic. The other symbols are [m] and [w] as voiced in *might* and *wipe*.

b) Labiodental

These sounds occur when the upper teeth touch the lower lip. The phoneme symbol representations in this place are [f] and [v]. The two symbols are distinguished by voiced for [v] and voiceless for [f], for example *safe* and *save*.

c) Dental

These sounds are formed when the tip of the tongue touches the upper teeth. The symbolic representations of this sound are [θ] in the words *thin* and *bath*, and

[ð] in the words *there* and *thus*. Symbols [θ] has voiceless and [ð] has voiced characteristic.

d) Alveolar

The front half of the tongue is placed on the alveolar ridge, which is the rough, bony ridge directly behind and above the upper teeth, to produce these sounds. For instances such the initial sound as *toy, dog, sound, zip, look,* and *night* are alveolar sounds. The symbols for alveolar sounds are [t], [d], [s], [z], [n].

e) Post Alveolar

This sound is formed when the front of the tongue is on the post alveolar ridge. The representations of the sound symbols are [ʃ] 'sh' in *ship*, [ʒ] 'si' in invasion, [tʃ] 'ch' in church, [dʒ] 'ju' in judge, and [r] sound at the beginning of *right* and *write*. Sometimes, it is difficult to distinguish between alveolar and post alveolar, but when someone tries [s] and [ʃ '] there will be a difference when suck the air, it feels dry and cold on the alveolar and post alveolar areas.

f) Palatal

This sound is formed when the front of the tongue touches the hard part of the roof our mouth. There is only one symbol representation of this sound [j] as in the initial word *you* and *yet*.

g) Velar

These sounds are formed when the back of tongue touches the soft area of the velum. The symbolic representations are [k] in *cold*, [g] in *mug,* and [ŋ] in *king*. Symbols [k] has voiceless and [g ŋ] has voiced.

h) Glottal

This sound is formed without activating the tongue or other parts of mouth. This sound is formed in glottis which is located at the larynx. The symbol for representing this sound is [h], as in the words *house* and *have* which are voiceless.

3. Manner of articulation

Manner of articulation refers to the way in which the airstream is interfered with in producing a consonant (Katamba, 1989, p. 8).

a) Stop

The sounds [p], [b], [t], [d], [k], [g] are formed due to "stopping" where airflow is blocked by place of the articulation sites. The result of this blocked airflow is called a "stop" or "plosive".

b) Fricative

The producing sounds [f], [v], [θ], [ð], [s], [z], [ʃ], [ʒ] are formed due to block air flow and push through the very narrow opening area. The result of this effect is called 'fricative'.

c) Affricative

The sounds [tʃ] and [dʒ] are produced due to the combination of the brief stopping with an obstructed release which causes friction. The result of this effect is called 'affricative' and occur in initial word such as *jeep* and *cheap.*

d) Nasal

The sounds [m], [n], and [ŋ] are categorized as nasal, these sounds are created when the velum or soft palate is lowered to make the airstream passing through the nose such as *mobile, knife,* and *sing*.

e) Liquid

The sounds [l] and [r] are produced by letting the airstream flow around the sides of the tongue as the tip of the tongue makes contact with the middle of the alveolar ridge. The result of this effect is called 'liquid' such as in *red* and *led.*

f) Glide

The sounds [w] and [j] are categorized as glides. These sounds are voiced such as *wipe, yet,* and *yes.* The sounds [w] and [j] are created by the tongue in motion or gliding from the position of vowel.

H. Phonological Process

Wolfram and Jhonson (1974) in their book said that Phonology is not a static system that a unit will not be constantly changed in all occurrences. Instead, dynamic system in which can be interfered as they come into contact with other

units in system. This change is so-called *phonological process*. Phonological process in language system can be applied in every language in the world.

1. **Deletion**

   Deletion process is a process of speech sound that disappear or delete from syllable structure of a word, in which eventually creating type of syllable pattern. For instance is 'police' [pəˈliːs] word become [pliːs]. Vocal [ə] is disappear to make first syllable is more convenient to utter in a fast manner.

2. **Epenthesis**

   Epenthesis process is a process of speech sound that inserting sound into a word. It could say that it is almost the same as the deletion process, but inverted. Both consonants and vowels can be included in Epenthesis process. For instance is 'hamster' [ˈhæmstə] to [ˈhæmpstə]. In effect, since fricative voiceless [p] and nasal consonant [m] in same place articulation and mid syllable, it will occur Epenthesis process.

3. **Substitution**

   Substitution process is a process of speech sound that change sound class to another class of sound. For instance is bark [bɑːk] to [pɑːk]. This change because, [p] and [b] in same articulation place and also in first syllable it might occur this process, but also not always in first syllable, middle or final syllable can be happened.

4. **Assimilation**

   Assimilation process is a process of speech sound that change of a unit sound under the influence of other nearby sound. For instance is 'sandwich' [sænwɪʤ] to

[sæmwɪʤ]. This is because the alveolar nasal [n] assimilates to bilabial [w] by shifting alveolar bilabial [m] (Fromkin, et al, 1974; 301). This process compare to substitution, definitely different, Substitution process occur in same articulation place, but not under the influence of nearby sound.

5. Dissimilation

Dissimilation process is a process of speech sound in which becomes less similar to other sound. For instance is 'three' [θriː] to [triː] or 'the' [ðiː] to [diː]. These changes [t] instead of [θ] and [d] instead of [ð] become dissimilar or less similar to the preceding fricative by becoming stop. This process has no relation on articulation place and articulation manner, only focus on less similar to other sound.

I. The Rules Form

In linguistic research, there is an established formation rules or they called Sound Pattern of English (SPE). Chomsky and Halle (1968) claimed SPE in Phonology:

> *A word is represented by a sequence of segments, each compromised of a matrix of binary valued distinctive features. That is any segment of any language is characterized by assigning a (+) and (-) to each possible features, each of which has a specific phonetic interpretation* (Sandler, 1989, p.10).

The classic rule in SPE Phonology can be seen through this form X -> Y / A _ B. This simple formation at least gives an assumption about mental representation of set forms to language speaker that underlies the sounds produced and perceived in speech, the changing sound to become the observed one in systematic way, and also those changes have been influenced by other surrounding sounds. The

formation of SPE can be understood as "X becomes Y (in the environment) between A and B", there are as follows;

- *Input;* the unit of sound which has been affected by the process.

- *Change;* the phonological process.

- *Output;* the resultant of change.

- *Linguistic environment;* where the change takes place.

The X stands as *input,* W stands as *output*, arrow stands as change, and diagonal stands as "in the environment".

J. The SPE system in distinctive features

Distinctive features are the universal set of cognitive properties associated with the speech sounds that are used in language. They determine the contrast which may exist between speech sounds, account for the ways in which these sounds may change or alternate and define the sets of sounds. The distinctive features are divided into four pieces of information, major class features, cavity features, manner of articulation features, and source features (Katamba, 1989, p. 42).

1. Major class features

The major classes were determined by Chomsky and Halle (1968) based on the constrictions of air flow from the lungs. Sonorants-nonsonorants, vocalic-nonvocalic, and consonant-nonconsonant were the three major groups.

a) Sonorant – Nonsonorant (Obstruent)

When there is resonant voicing and the restriction to the flow of air stream is not tighter than in glides [y] and [w], a sound is sonorant. As a result, all stops, fricatives, or affricates are not sonorant. (Chomsky & Halle; 1968, 302).

b) Vocalic-Nonvocalic

All vowels are considered as [+vocalic], and the rest sounds are considered as [-vocalic]. Vocalic sounds are produced with an oral cavity in which they refer to key constriction locations in the vocal tract (Chomsky & Halle, 1968, p. 302).

c) Consonantal-Nonconsonantal

Consonantal sounds are generated with a large obstruction in the vocal tract. However, non-consonantal sounds are generated without such an obstruction. (Chomsky & Halle, 1968, p. 302).

2. Cavity Features

The cavity features include nasal and lateral, which are used in the same sense as they were in the section on articulatory phonetics, and the features that determine the place of articulation of consonants and the quality of vowels.

a) Coronal-Noncoronal

The blade of the tongue is lifted from its neutral position to produce coronal sounds; the blade of the tongue is in the neutral position to produce noncoronal sounds. (Chomsky & Halle, 1968, p. 304).

b) Anterior-Nonanterior

At or in front of the alveolar ridge, the anterior segments are articulated with the tongue's tip or blade. Therefore dental, labiodental, bilabial, and alveolar ridge consonants are [+ant]. (Chomsky & Halle, 1968, p. 304).

c) High-Nonhigh

Non-high sounds are created without elevating the tongue body above the level it occupies in the neutral position; high sounds are produced by lifting the

tongue body above the level it occupies in the neutral position. (Chomsky & Halle, 1968, p. 304).

d) Back-Nonback

Back sounds are generated by retracting the tongue body from its neutral position. However, non-back sounds are generated without such a retraction of tongue body from the neutral position (Chomsky & Halle, 1968, p. 305).

e) Rounded-Nonrounded

Non-rounded sounds are made without a narrowing of the lip orifice, whereas rounded sounds are made with one. (Chomsky & Halle, 1968, p. 309).

3. Manner of articulation features

It explains how the various speech organs work together to produce a consonant sound, and how the airflow is impeded.

a) Continuant-Noncontinuant

The flow of air in continuants is unobstructed at any point throughout the sound's articulation. All sounds except stops and affricates are not continuant.

b) Tense-Nontense (Lax)

Muscles at the base of the tongue are contracted to produce tense vowels. There are four vowels [+tense], they are; [i, u, e, o]. The other vowels are considered as [-tense] (Chomsky & Halle, 1968, p. 324).

4. Source features

The vocal cords' motion is referred to as the source feature (voice).

a) Voice-Non voice

The vibrating vocal chords make voiced sounds [+voice]. However, if not vibrating is not voiced sounds [-voice].

Error Analogy

According to Gula (2002), he stated that it is about an error analogy of reasoning. In perceive far, error analogy is one of the fifteen types of fallacy theory. Error analogy is assuming that two variables alike in one or more respect, they necessarily alike in some other respect (Copi, 1961). Simply, it can be understood as if Y is the same as the linguistic item X, it is considered similar in certain respects, therefore, Y is treated exactly like X (i.e. it is made to imitate X).

CHAPTER III
FINDING AND DISCUSSION

This chapter contains of finding and discussion to gain the result of the research. The findings are to answer the two research questions of this research. Besides, the findings are in the form of analyzed data of mispronunciation encountered by five students of English Literature Department at UIN Maulana Malik Ibrahim Malang. Moreover, the analysis of the findings are discussed in a brief elaboration in the discussion part.

A. Finding

In this part, the objects of this research are fifty words of rarely used English vocabulary. The data provided below are based on the mispronunciation words. Before analyzing the data, the researcher collected all the utterances that were uttered by five students of English Literature Department at UIN Maulana Malik Ibrahim Malang.

1. The Mispronunciation of Vowels

The mispronunciation of vowels discusses the alteration of monophthong vowels. This process only involves the changing of monophthong to other monophthongs.

a. Substitution of [ɑ] to [æ]

word	Correct Pronunciation	R1	R2	R3	R4
Blast	/blɑːst/	/blæst/	/blæst/	/blæst/	/blæst/
Chancellor	/ˈtʃɑːnsələ(r)/	-	-	/ˈtʃænsələ(r)/	-

word	Correct Pronunciation	R5
Blast	/blɑːst/	/blæst/
Chancellor	/ˈtʃɑːnsələ(r)/	/ˈtʃænsələ(r)/

Substitution of [ɑ] occurs to the word "blast" monosyllable. This happened to all the subjects R1, R2, R3, R4, and R5. When they tried to utter [ɑː], their tongues on the middle and rear should be fully opened so that their lips are neutrally open and there is no contact between the rims and the upper teeth. In contrast, their front of the tongue elevated to just below half-open position and rims made very slight contact with upper back teeth. Hence, the tense of long vowel changed to the short vowel [æ]. In brief, the height vowel change towards of the front of mouth. This naturally substitutes [ɑ] sound into [æ] on the word "blast".

According to its features, [ɑ] sound has [+low], [+central], [+unrounded] and [æ] has features [+low], [+front], [+unrounded]. The vowel [ɑ] is preceded by consonant [l] and [tʃ] and followed by consonant fricative [s] and [n] in which should produce correct pronunciation. The consonant [l] and [tʃ] in natural classes are specified as [+consonantal] and [+coronal] and followed by consonant [s] and [n] which are classified as [+consonantal], [+anterior], and [+coronal]. In the form of pattern will be like;

$$(1.1) \quad \begin{bmatrix} ɑ \end{bmatrix} \rightarrow \begin{bmatrix} æ \end{bmatrix} / \begin{pmatrix} \textbf{+consonant} \\ \textbf{+coronal} \end{pmatrix} \underline{\quad} \begin{pmatrix} \textbf{+consonant} \\ \textbf{+anterior} \\ \textbf{+coronal} \end{pmatrix}$$

Concerning at the pattern above, in general, it can be concluded that R1, R2, R3, R4, and R5 tend to replace vowels [ɑ] to [æ] if it is between A and B

environment. At the beginning in junior high school, pupils recognized nouns and adjectives such as the word "Class", "Last", "Channel", and "Chance". These words are strong resemblance which affect the subjects in analyzing the vocabulary "blast" and "chancellor". The subjects imitated the word "blast" such as the words "class" and "last" which pronounced the sound [æ] between [l] and [s] environment. another case, specifically for R3 and R5 imitated the word "chancellor" such as the word "channel" or "chance" which sounds [æ] between [tʃ] and [n] environment. As for looking at the pattern above, in general, the relationship between existing features may also be influenced by imitation words such as "rat", "task", "sat", "sad" because phonetic [r] and [t] are [+consonant] and [+coronal] and followed by [t] and [s] which are [+consonant], [+anterior] and [+coronal].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Class /klæs/ Last /læst/	blast	/blæst/	/blɑːst/
Channel /ˈtʃænl/ Chance /tʃæns/	chancellor	/ˈtʃænsələ(r)/	/ˈtʃɑːnsələ(r)/

b. Substitution of [ə] to [ɪ]

word	Correct Pronunciation	R2	R3	R4
Uncivilized	/ʌnˈsɪvəlaɪzd/	-	/ʌnˈsɪvɪlzd/	-
Recipe	/ˈresəpi/	/ˈrəsɪp/	/ˈrisɪp/	/ˈrəsɪp/

word	Correct Pronunciation	R5
Uncivilized	/ʌnˈsɪvəlaɪzd/	-
Recipe	/ˈresəpi/	/ˈrəsɪp/

The vowel [ə] sound is phonetically described as mid central unrounded vowel. It is produced when the center of the tongue lifted between half-open and half-close position, so the lips neutrally spread and no contact between rims and upper teeth. Regarding on the data above, R2, R3, R4, and R5 violate the **height vowel** and the **backness**, in which part of the tongue nearer center than front lifted to just above half-close position, so lips loosely spread and rims made light contact with upper teeth. In short, they raised their tongue body from middle position to high position and placed the tongue body towards front position and naturally substitutes [ə] sound to [ɪ] on the word "recipe" for all subjects, but it does not apply to R2, R4, and R5 on the word "uncivilized".

According to its features, [ə] sound has [+mid], [+central], [+unrounded] and [ɪ] has features [+high], [+front], [+unrounded]. The vowel [ə] is preceded by consonant [v] and [s] and followed by consonant [l] and [p] in which should generate correct pronunciation. The consonants [v] and [s] in natural classes are specified as [+consonantal], [-sonorant], [+anterior] and [+continuant] and followed by [l] and [p] which are classified as [+consonantal] and [+anterior]. In the form of pattern will be like;

$$(1.2) \quad \begin{bmatrix} ə \end{bmatrix} \rightarrow \begin{bmatrix} ɪ \end{bmatrix} / \begin{bmatrix} +\text{consonant} \\ -\text{sonorant} \\ +\text{anterior} \\ +\text{continuant} \end{bmatrix} \underline{\quad} \begin{bmatrix} +\text{consonant} \\ +\text{anterior} \end{bmatrix}$$

Concerning at the pattern above, in general, it can be concluded that R2, R3, R4 and R5 tend to replace vowels [ə] to [ɪ] if it is between A and B environment.

At the beginning in high school, pupils recognized more nouns by reading comic literacy, such as the word "village", "villain", and "Gossip". These words are strong resemblance which affect the subjects in analyzing the vocabulary "uncivilized" and "recipe", specifically for R3 imitated the word "uncivilized", such as the words "village" or "villain" which pronounced [vɪl] in the third syllable. Another case, for all subjects imitated the word "recipe" as if the word "gossip" which sounds [ɪ] between [s] and [p] environment. In general, regarding on the pattern above, it can be concluded that substitution can also be influenced by imitation words such as "visit", "fist", "sister" because [v], [f], and [s] sounds in the environment A are [+consonantal], [-sonorant], [+anterior], and [+continuant] and followed by [s] sound which has [+consonantal and [+anterior]

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Village /ˈvɪlɪdʒ/ Villain /ˈvɪlən/	Uncivilized	/ʌnˈsɪvɪlzd/	/ʌnˈsɪvəlaɪzd/
Gossip /ˈgɒsɪp/	Recipe	/ˈrəsɪp/	/ˈresəpi/

c. Substitution of [ə] to [ʌ]

word	Correct Pronunciation	R3
Companion	/kəmˈpænjən/	/kʌmˈpænjən/
Supplies	/səˈplaɪs/	/sʌˈplaɪs/

Regarding to the data above, the substitution process of [ə] to [ʌ] occurred to R3 on the "companion' and "supplies" words. When someone uttered [ə], his center of the tongue should be lifted between half-open and half-close position, so the lips neutrally spread and no contact between rims and upper teeth. But it did not apply

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to R3, his center of the tongue lifted to just above fully open position, so the lips neutrally open and no contact between tongue and upper teeth. This happened when he violated the **height vowel.** In brief, R3 descended the tongue body into lower position from middle close position to middle open position and this naturally substituted [ə] to [ʌ].

According to its features, [ə] sound has [+mid], [+central], [+unrounded] and [ʌ] has features [+mid], [+central], [+unrounded]. The vowel [ə] is preceded by consonants [k] and [s] and followed by consonants [m] and [p] in which should produce correct pronunciation. The consonants [k] and [s] in natural classes are specified as [+consonantal], [-sonorant], and [-voice] and followed by [m] and [p], consonants which are classified as [+consonantal], [+anterior], [-coronal] and [-continuant]. In the form of pattern will be like;

$$
\text{(1.3)} \quad \begin{bmatrix} ə \end{bmatrix} \longrightarrow \begin{bmatrix} ʌ \end{bmatrix} \bigg/ \begin{bmatrix} \text{+consonant} \\ \text{-sonorant} \\ \text{-voice} \end{bmatrix} \underline{\quad} \begin{bmatrix} \text{+consonant} \\ \text{-coronal} \\ \text{+anterior} \\ \text{-continuant} \end{bmatrix}
$$

Concerning at the pattern above, in general, it can be concluded that R3 tend to replace vowels [ə] to [ʌ] if it is between A and B environment. As for this substitution for R3, it affects by the word imitation, the subjects imitated the word "supplies" such as the words "supplement" or "supper" which pronounced the sound [ʌ] between [s] and [p] environment. Another case, can be influenced by the root word when there are additional suffixes in a basic word, it forms a new category and the pronunciation is slightly different, such as the base words "company".

Hence, the pronunciation cannot be equated with the pronunciation of basic word. However the word "companion" can be influenced by imitation words like verb "come". According to the pattern above, in general, may also be influenced by imitation words such as "puppy", "public", "bathtub". Since phonetic [p] and [t] are [+consonantal], [-sonorant], and [-voice] and followed by [p] and [b] which are [+consonantal], [+anterior], [-coronal] and [-continuant].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Company /ˈkʌmpəni/ Come /kʌm/	Companion	/kʌmˈpænjən/	/kəmˈpænjən/
Supplement /ˈsʌplɪmənt/ supper /ˈsʌpər/	Supplies	/sʌˈplaɪs/	/səˈplaɪs/

d. Epenthesis of [ɔ:]

word	Correct Pronunciation	R2	R4
Intertribal	/ɪnˈtɜ:(r)traɪbl/	/ɪnˈtɜ:(r)traɪbɔ:l/	/ɪnˈtɜ:(r)traɪbɔ:l/

Regarding with the data above, there is a process of insertion of [ɔ] sound in the final syllable of "intertraibal" by R2 and R4. The sound [ɔ:] is produced when rear of the tongue lifted between half-close and half-open positions, so the lips are rounded and no contact between rims and upper teeth. In this case, they created the **rounding lips** to generate [ɔ:] sound between phonetic [b] and [l], instead of pronouncing [traɪbl] as final syllable, they added long vowel [ɔ:] sound to make other syllable of [bɔ:l].

According to its features, the epenthesis process is preceded by consonant [b] and followed by consonant [l]. The consonant [b] in natural classes is specified

as [+consonantal], [-sonorant], [-coronal], [+anterior], [-continuant], and [+voice] and followed by [l] which is classified as [+consonantal], [+sonorant], [+anterior], [+coronal], [+continuant], and [+voice]. In the form of pattern will be like;

$$
\text{(1.4)} \quad [\emptyset] \rightarrow [\text{ɔ}] \Big/ \begin{bmatrix} \text{+consonant} \\ \text{-sonorant} \\ \text{-coronal} \\ \text{+anterior} \\ \text{-continuant} \\ \text{+voice} \end{bmatrix} \underline{\quad} \begin{bmatrix} \text{+consonant} \\ \text{+sonorant} \\ \text{+coronal} \\ \text{+anterior} \\ \text{+continuant} \\ \text{+voice} \end{bmatrix}
$$

Concerning with the pattern above, in general, it can be concluded that R2 and R4 tend to add vowel [ɔ] if it is between A and B environment. In the word "intertraibal", the process of adding vowels occurs at the end of the syllable, this is influenced by the imitation model of the word "eyeball". This word is strong resemblance which affect the subjects in analyzing the vocabulary "intertribal", in which added [ɔ] between [b] and [l] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
eyeball/ˈaɪbɔːl/	Intertribal	/ɪnˈtɜː(r)traɪbɔːl/	/ɪnˈtɜː(r)traɪbl/

e. Epenthesis of [e]

word	Correct Pronunciation	R2	R3	R4	R5
Vegetable	/ˈvedʒtəbl/	/ˈvedʒetəbl/	/ˈvedʒetəbl/	/ˈvedʒetəbl/	/ˈvedʒetəbl/

Regarding with the data above, there is a process of insertion of [e] sound in the middle syllable of "vegetable". The [e] sound is produced when the front of the tongue lifted to between half-close and half-open position, so the lips loosely spread and rims made light contact with upper teeth. In this case, they created vowel [e] sound between phonetic [dʒ] and [t] to pronounce [dʒet]

According to its features, the epenthesis process is preceded by consonant [dʒ] and followed by consonant [t]. The consonant [dʒ] in natural classes is specified as [+consonantal], [-sonorant], [+coronal], [-anterior], [-continuant] and [+voice] and followed by [t] which is classified as [+consonantal], [-sonorant], [+coronal], [+anterior], [-continuant], and [-voice]. In the form of pattern will be like;

$$(1.5) \quad \left[\emptyset \right] \longrightarrow \left[e \right] / \begin{pmatrix} \textbf{+consonant} \\ \textbf{-sonorant} \\ \textbf{+coronal} \\ \textbf{-anterior} \\ \textbf{-continuant} \\ \textbf{+voice} \end{pmatrix} \underline{\quad} \begin{pmatrix} \textbf{+consonant} \\ \textbf{-sonorant} \\ \textbf{+coronal} \\ \textbf{+anterior} \\ \textbf{-continuant} \\ \textbf{-voice} \end{pmatrix}$$

Concerning with the pattern above, in general, it can be concluded that R2, R3, R4, and R5 tend to add vowel [e] if it is between A and B environment. In the word "vegetable", the process of adding vowels occurs at the second of the syllable, this is influenced by the imitation model of the word "energetic" or "jet". This word is strong resemblance which affect the subjects in analyzing the vocabulary "vegetable", in which added [e] between [dʒ] and [t] environment

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Energetic /ˌenəˈdʒetɪk/ Jet /dʒet/	Vegetable	/ˈvedʒetəbl/	/ˈvedʒtəbl/

2. Monopthongization

Monophthongization is a sound change by which a diphthong becomes a monophthong.

a) Substitution of [aɪ] to [ɪ]

word	Correct Pronunciation	R1
Confines	/ˈkɒnfaɪnz/	/ˈkɒnfɪnz/

Regarding with the data above, this process of substitution only occurs to R1, when she pronounced the word "confines", she changed [aɪ] to [ɪ] sound. Practically the [aɪ] sound is produced when glide begins slightly behind front open position and moves upwards towards [ɪ], so the lips change from neutral to loosely spread and closing movement of the lower jaw. Briefly, the diphthong [aɪ] is specified as close diphthong in which starts to open vowel [a] sound glide to the close vowel [ɪ], but instead of performed correct pronunciation, she substituted it into monophthong sound [ɪ].

According to its features, [aɪ] sound has [-voc] and [-consonant] and [ɪ] has features [+high], [+front], and [+unrounded]. The diphthong [aɪ] is preceded by consonant [f] and followed by consonant [n] in which should produce correct pronunciation. The consonant [f] in natural classes is specified as [+consonantal], [-sonorant], [+anterior], [-coronal], [+continuant], and [-voice] and followed by [n]

which is classified as [+consonantal], [+sonorant], [+anterior], [+coronal], [-continuant], and [+voice]. In the form of pattern will be like;

$$(2.1) \quad \begin{bmatrix} aɪ \end{bmatrix} \longrightarrow \begin{bmatrix} ɪ \end{bmatrix} / \begin{pmatrix} \text{+consonant} \\ \text{-sonorant} \\ \text{+anterior} \\ \text{-coronal} \\ \text{+continuant} \\ \text{-voice} \end{pmatrix} \underline{\quad\quad} \begin{pmatrix} \text{+consonant} \\ \text{+sonorant} \\ \text{+anterior} \\ \text{+coronal} \\ \text{-continuant} \\ \text{+voice} \end{pmatrix}$$

Concerning with the pattern above, in general, it can be concluded that R1 tend to monohpthongize the diphthong vowel [aɪ] to [ɪ] if it is between A and B environment. There also pronunciation models that can be taken such as noun and adjective like the words "puffin" and "finish". These words are strong resemblance which affect the subjects in analyzing the vocabulary "confine". The subjects imitated the word "confines" in final syllable such as the words "puffin" or "finish" which pronounced the sound [ɪ] between [f] and [n] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Puffin /ˈpʌfɪn/ Finish /ˈfɪnɪʃ/	Confines	/ˈkɒnfɪnz/	/ˈkɒnfaɪnz/

b) Substitution of [eɪ] to [æ]

word	Correct Pronunciation	R2	R3	R4	R5
Incapabili ty	/ˌinkeɪpəˈbɪl əti/	/ˌinkæpaˈbɪ liti/	/ˌiŋkæpe ˈbɪliti/	/ˌinkæpaˈbɪ liti/	/ˌinkæpaˈbɪ liti/

Spontane ous	/spɒnˈteɪniə s/	-	/spɒnˈtæni əs/	-	-
Plague	/pleɪg/	/plæg/	-	/plæg/	/plæg/

Regarding with the data above, these process of substitution occurs to R2, R3, R4, and R5 on the word 'incapability", R3 on the word "spontaneous", and R2, R4 and R5 on the word "plague". When someone pronounced [eɪ], the glide begins from slightly below half-close front position and moves upwards then slightly backwards towards [ɪ] so the lips spread. In short, the diphthong [eɪ] is specified as close diphthong in which starts to open vowel [e] sound glide to the close vowel [ɪ], but instead of performed correct pronunciation, they substituted it into monophthong sound [æ], as in practice their front of the tongue elevated to just below half-open position and rims made very slight contact with upper back teeth.

According to its features, [eɪ] sound has [-voc] and [-consonant] and [æ] has features [+low], [+front], and [+unrounded]. The diphthong [eɪ] is preceded by consonant [k], [t], and [l] and followed by consonant [p], [n], and [g] in which should produce correct pronunciation. The consonant [k], [t], and [l] in natural classes are specified as [+consonantal] and followed by [p], [n], and [g] which are classified as [+consonantal] and [-continuant]. In the form of pattern will be like;

$$
(2.2) \quad \begin{bmatrix} eɪ \end{bmatrix} \rightarrow \begin{bmatrix} æ \end{bmatrix} / \begin{bmatrix} +consonant \end{bmatrix} \underline{\quad} \begin{bmatrix} +consonant \\ -continuant \end{bmatrix}
$$

Concerning with the pattern above, in general, it can be concluded that R2, R3, R4, and R5 tend to replace diphthong vowel [eɪ] to monophthong vowel [æ], if it is between A and B environment. As for vocabulary that can affect pronunciation

errors such as the word "cap", "tan", and "flag", these words are strong resemblance which affect the subjects in analyzing the vocabulary "incapability", "spontaneous", and "plague". All subjects imitated the word "incapability" such as the words "cap" which pronounced the sound [æ] between [k] and [p] environment. Another case, specifically for R3 imitated the word "spontaneous" such as the word "tan" which sounds [æ] between [t] and [n] environment. And finally, R2, R4 and R5 imitated the word "plague" such as the word "flag". As for looking at the pattern above, in general, may also be influenced by imitation words such as "lad", "bad", "cat", "sad", "ram", and etc. Since phonetic [l], [b], [k], [s], and [r] are [+consonant] and followed by [d], [t] and [m] which are [+consonant], [-continuant].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Cap /kæp/	Incapability	/ˌɪŋkæpe ˈbɪliti/	/ˌinkeɪpəˈbɪləti/
Tan /tæn/	Spontaneous	/spɒnˈtæniəs/	/spɒnˈteɪniəs/
Flag /flæg/	Plague	/plæg/	/pleɪg/

c) **Substitution of [əʊ] to [ɔ:]**

word	Correct Pronunciation	R3	R4	R5
Railroad	/ˈreɪlrəʊd/	/ˈreɪlrɔ:d/	/ˈreɪlrɔ:d/	/ˈreɪlrɔ:d/

Regarding with the data above, this process of substitution occur to R3, R4, and R5, when they pronounced the word "railroad". They substituted [əʊ] to [ɔ:] sound. The sound [əʊ] is produced when glide begins in central position between half-open and half-close and moves upwards then back towards [ʊ], so the lips neutral changing to slightly rounded. But, instead of performed correct pronunciation, they substituted it into monophthong sound [ɔ:], as in practice rear

of the tongue lifted between half-close and half-open positions, so the lips are rounded and no contact between rims and upper teeth

According to its features, [əʊ] sound has [-voc] and [-consonant] and [ɔ] has features [+low], [+back], [+tense], and [+rounded]. The diphthong [əʊ] is preceded by consonant [r] and followed by consonant [d] in which should produce correct pronunciation. The consonant [r] in natural classes is specified as [+consonantal], [+sonorant], [+anterior], [+coronal], [+continuant], and [+voice] and followed by [d] which is classified as [+consonantal], [-sonorant], [+anterior], [+coronal], [-continuant], and [+voice]. In the form of pattern will be like;

$$
(2.3) \quad \begin{bmatrix} əʊ \end{bmatrix} \longrightarrow \begin{bmatrix} ɔ: \end{bmatrix} \Big/ \begin{pmatrix} +\text{consonant} \\ +\text{sonorant} \\ +\text{anterior} \\ +\text{coronal} \\ +\text{continuant} \\ +\text{voice} \end{pmatrix} \underline{\quad} \begin{pmatrix} +\text{consonant} \\ -\text{sonorant} \\ +\text{anterior} \\ +\text{coronal} \\ -\text{continuant} \\ +\text{voice} \end{pmatrix}
$$

Concerning with the pattern above, in general, it can be concluded that R3, R4 and R5 tend to replace vowels [əʊ] to [ɔ:] if it is between A and B environment. Pronunciation model which can be adapted is "broad", this words is strong resemblance which affect R3, R4 and R5 in analyzing the vocabulary "railroad". The subjects imitated the word "railroad" such as the words "broad" which pronounced the sound [ɔ:] between [r] and [d] environment. As for looking at the pattern above, in general, the relationship between existing features may also be influenced by imitation words such as "rat", "task", and etc. Since phonetic [r] and

[t] are [+consonant] and [+coronal] and followed by [t] and [s] which are [+consonant], [+anterior] and [+coronal].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Broad /brɔːd/	Railroad	/ˈreɪlrɔːd/	/ˈreɪlrəʊd/

3. Diphthongization

Diphthongization is a sound change by which a monophthong becomes a diphthong.

a) Substitution of [ɑ] to [eɪ]

word	Correct Pronunciation	R1
Chancellor	/ˈtʃɑːnsələ(r)/	/ˈtʃeɪnsələ(r)/

The vowel [ɑ] is phonetically described as low central unrounded vowel. This only occur to R1, the subject tried to substitute [ɑ] into [eɪ] close diphthong. The sound close diphthong [eɪ] is generated when the glide begins from slightly below half-close front position and moves upwards then slightly backwards towards [ɪ] so the lips spread or simply can be described by starting with open vowel [e] then glides to close vowel [ɪ]. The diphthongization occur in initial position of syllable [ˈtʃɑː] to [ˈtʃeɪ].

According to its features, [ɑ] sound has [+low], [+central], [+unrounded] and [eɪ] has features [-voc] and [-cons]. The vowel [ɑ] is preceded by consonant [tʃ] and followed by nasal [n] in which should produce correct pronunciation. The consonant [tʃ] in natural classes is specified as [+consonantal], [-sonorant], [-anterior], [-continuant], [+coronal], and [+voiceless] and followed by [n] which is

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classified as [+consonantal], [+sonorant], [+anterior], [+coronal], [-continuant], and [+voice]. In the form of pattern will be like;

$$(3.1) \quad \left[\alpha \right] \rightarrow \left[eɪ \right] / \left(\begin{array}{c} \textbf{+consonant} \\ \textbf{-sonorant} \\ \textbf{-anterior} \\ \textbf{+coronal} \\ \textbf{-continuant} \\ \textbf{+voice} \end{array} \right) \underline{\quad} \left(\begin{array}{c} \textbf{+consonant} \\ \textbf{+sonorant} \\ \textbf{+anterior} \\ \textbf{+coronal} \\ \textbf{-continuant} \\ \textbf{+voice} \end{array} \right)$$

Regarding with the pattern above, in general, it can be concluded that R1 tends to diphthongize the vowel [ɑ] to [eɪ] if it is between A and B environments. In this case, they understand about the nouns "change" or "chain", those words are strong resemblance which affect the subjects in analyzing the vocabulary "chancellor" in the first syllable. The subjects imitated the word "chancellor", such as the words "change" or "chain" which pronounced the sound [eɪ] between [tʃ] and [n] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Change /ˈtʃeɪndʒ/ Chain /ˈtʃeɪn/	Chancellor	/ˈtʃeɪnsələ(r)/	/ˈtʃɑːnsələ(r)/

b) Substitution of [ə] to [əʊ]

word	Correct Pronunciation	R1	R2	R3
Innocent	/ˈɪnəsnt/	/ˈɪnəʊsnt/	/ˈɪnəʊsnt/	/ˈɪnəʊsnt/
Suffocation	/ˌsʌfəˈkeɪʃn/	-	/ˌsʌfəʊˈkeɪʃn/	/ˌsʌfəʊˈkeɪʃn/
Condensed	/kənˈdens/	-	-	/kəʊnˈdens/
Advocacy	/ˈædvəkəsi/	/ˈædvəʊkəsi/	/ˈædvəʊkəsi/	/ˈadvəʊkəsi/

word	Correct Pronunciation	R4	R5
Innocent	/ˈɪnəsnt/	/ˈɪnəʊsnt/	-
Suffocation	/ˌsʌfəˈkeɪʃn/	/ˌsʌfəʊˈkeɪʃn/	/ˌsʌfəʊˈkeɪʃn/
Condensed	/kənˈdens/	-	/kəʊnˈdens/
Advocacy	/ˈædvəkəsi/	/ˈædvəʊkəsi/	-

The vowel [ə] is phonetically described as mid central unrounded vowel. This occur to R1, R2, R3, R4, and R5 in different circumstances. The subjects tried to add glide [ʊ] into [ə] sound to become close diphthong. Practically, [əʊ] sound is produced when glide begins in central position between half-open and half-close and moves upwards then back towards [ʊ], so the lips neutral changing to slightly rounded.

According to its features, [ə] sound has [+mid], [+central], [+unrounded] and [əʊ] has features [-voc] and [-cons]. The vowel [ə] are preceded by consonant [n], [f], [k], and [v] and followed by consonants [s], [k], and [n] in which should produce correct pronunciation. The consonant [n], [f], [k], and [v] in natural classes are specified as [+consonantal] and followed by [s], [k], and [n] which are classified as [+consonantal]. In the form of pattern will be like;

$$(3.2) \quad \begin{bmatrix} ə \end{bmatrix} \longrightarrow \begin{bmatrix} əʊ \end{bmatrix} \Big/ \begin{bmatrix} \textbf{+consonant} \end{bmatrix} \underline{\quad} \begin{bmatrix} \textbf{+consonant} \end{bmatrix}$$

Regarding with the pattern above, in general, it can be concluded that R1, R2, R3, R4, and R5 tend to diphthongize vowel [ə] to [əʊ], if it is between A and B environments. This can be seen through the environment, the pronunciation model can be imitated through words noun "hypnosis" and "cone", adjective like "vocal" and verb like "focus". Respectively the tested words have strong resemblance to

these imitation words which affect R1, R2, R3, R4, and R5. The subjects R1, R2, R3, R4, and R5 imitated the word "innocent" in middle syllable such as the words "hypnosis" which pronounced the sound [əʊ] between [n] and [s] environment. The other case, R2, R3 and R4, imitated the word "suffocation" like "focus". Moreover, R3 and R5 imitated the word "condensed' such as "cone' in the first syllable. Finally, all subjects except R5 imitated the word "advocacy" like "vocal" in the first syllable. According to the pattern above, in general, the relationship between existing features may also be influenced by imitation words such as "tone", "gold", "hope", "hold", "goal", and et cetera since [t], [g], and [h] are [+consonant] and followed by [n], [p], and [l] which are [+consonant].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Hypnosis /hɪpˈnəʊsɪs/	Innocent	/ˈɪnəʊsnt/	/ˈɪnəsnt/
Focus /ˈfəʊkəs/	Suffocation	/ˌsʌfəʊˈkeɪʃn/	/ˌsʌfəˈkeɪʃn/
Cone /kəʊn/	Condensed	/kəʊnˈdens/	/kənˈdens/
Vocal /ˈvəʊkl/	Advocacy	/ˈadvəʊkəsi/	/ˈædvəkəsi/

c) **Substitution of [æ] to [eɪ]**

word	Correct Pronunciation	R1	R2	R3	R4	R5
Nomad	/ˈnəʊmæd/	/ˈnəʊmeɪd/	-	/ˈnəʊmeɪd/	-	-
Faction	/ˈfækʃn/	-	/ˈfeɪkʃn/	/ˈfeɪkʃn/	/ˈfeɪkʃn/	/ˈfeɪkʃn/

The vowel [æ] is phonetically described as low front unrounded vowel. This occurs to R1 and R3 on the word "nomad", R2, R3, R4, and R5 on the word "faction". The subjects tried to substituted sound to [æ] become close diphthong [eɪ], in which the close diphthong [eɪ] is produced when the glide begins from

slightly below half-close front position and moves upwards then slightly backwards towards [ɪ] so the lips spread.

According to its features, [æ] sound has [+low], [+front], [+unrounded] and [eɪ] has features [-voc] and [-cons]. The vowel [æ] are preceded by consonant [m] and [f] and followed by consonants [d] and [k] in which should produce correct pronunciation. The consonants [m] and [f] in natural classes are specified as [+consonantal], [-coronal], and [+anterior], and followed by [d] and [k] which are classified as [+consonantal], [-sonorant], and [-continuant]. In the form of pattern will be like;

$$
\textbf{(3.3)} \quad \begin{bmatrix} æ \end{bmatrix} \rightarrow \begin{bmatrix} eɪ \end{bmatrix} \Big/ \begin{pmatrix} \textbf{+consonant} \\ \textbf{-coronal} \\ \textbf{+anterior} \end{pmatrix} \underline{\quad} \begin{pmatrix} \textbf{+consonant} \\ \textbf{-sonorant} \\ \textbf{-continuant} \end{pmatrix}
$$

Regarding with the pattern above, in general, it can be concluded that R1, R2, R3, R4, and R5 tend to diphthongize vowel [æ] to [eɪ] if it is between A and B environment. There also pronunciation models such as verb "made" and adjective "fake". These words are strong resemblance which affect the subjects in analyzing the vocabulary "made" and "fake". The subjects, R1 and R3 imitated the word "nomad" in final syllable such as the words "made" which pronounced the sound [eɪ] between [m] and [d] environment. The other case, the word "fake", R2, R3, R4, and R5 can influence the tested word "faction" which pronounced [eɪ] between [f] and [k] environment. According to the pattern above, it may also be influenced by imitation words such as "vapor", "bake", "page", and etc. Since phonetic [v], [b],

and [p] are [+consonantal], [-coronal], and [+anterior] and followed by [p], [k] and

[dʒ] which are [+consonantal], [-sonorant], and [-continuant].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Made /meɪd/	Nomad	/ˈnəʊmeɪd/	/ˈnəʊmæd/
fake/feɪk/	Faction	/ˈfeɪkʃn/	/ˈfækʃn/

d) Substitution of [ɪ] to [aɪ]

word	Correct Pronunciation	R3
Trigger	/ˈtrɪɡə(r)/	/ˈtraɪɡə(r)/
Mythical	/ˈmɪθɪkl/	/ˈmaɪθɪkl/

Regarding with the data above, the words "trigger" and 'mythical" only

mispronounced by R3. He tried to substituted monophthong vowel [ɪ] to close

diphthong [aɪ]. Practically [aɪ] sound is produced when the glide begins slightly

behind front open position and moves upwards towards [ɪ], so the lips change from

neutral to loosely spread and closing movement of the lower jaw. The

diphthongization occur in first syllable of [ˈtrɪ] and [ˈmɪ].

According to its features, [ɪ] sound has [+high], [+front], [+unrounded] and

[aɪ] has features [-voc] and [-cons]. The vowel [ɪ] is preceded by consonant [r] and

[m] and followed by none consonant, in which should pronounce correct

pronunciation. The consonant [r] and [m] in natural classes are specified as

[+consonantal, [+sonorant], [+anterior], and [+voice]. In the form of pattern will be

like;

$$(3.4) \quad \begin{bmatrix} \text{ɪ} \end{bmatrix} \longrightarrow \begin{bmatrix} \text{aɪ} \end{bmatrix} \Big/ \begin{pmatrix} \text{+consonant} \\ \text{+sonorant} \\ \text{+anterior} \\ \text{+voice} \end{pmatrix} \underline{\qquad}$$

According to the pattern above, in general, it can be concluded that R3 tend replace vowel [ɪ] to [aɪ] if it is after A environment. In this case, of course when they were pupils understand about numeral prefix such as mono, bi, or tri. When we pronounced tri and combine to the noun based word like "tricycle", it would be pronounced [ˈtraɪsɪkl]. Similarly, when R3 pronounced the tested word with the same environment like "trigger", he also uttered [traɪ] in the first syllable. The other case, R3 imitated the word "mythical" in the first syllable such as possessive pronoun "my". In this case, it was due to a syllable separation error, since R3 separated the first syllable "tri-" and "my-" as the first separate syllable in the word test, thus he automatically converted it to [**aɪ**].

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Tricycle /ˈtraɪsɪkl/	Trigger	/ˈtraɪgə(r)/	/ˈtrɪgə(r)/
My /maɪ/	Mythical	/ˈmaɪθɪkl/	/ˈmɪθɪkl/

e) Substitution of [ə] to [eɪ]

word	Correct Pronunciation	R2	R4
Fatigue	/fəˈtiːg/	/feɪtiːg/	/feɪtiːg/

The vowel [ə] is phonetically described as mid central unrounded vowel. This substitution occur to R2 and R4, the subjects tried to substitute [ə] into [eɪ] close diphthong, in which the glide begins from slightly below half-close front position and moves upwards then slightly backwards towards [ɪ] so the lips spread. The diphthongization occur in initial position of syllable [fəˈt] to [feɪt].

According to its features, [ə] sound has [+mid], [+central], [+unrounded] and [eɪ] has features [-voc] and [-cons]. The vowel [ə] is preceded by consonant [f] and followed by consonant [t] in which should produce correct pronunciation. The consonant [f] in natural classes is specified as [+consonantal], [-sonorant], [-coronal], [+anterior], [+continuant], and [-voice] and followed by [t] which is classified as [+consonantal], [-sonorant], [+coronal], [+anterior], [-continuant], and [-voice]. In the form of pattern will be like;

$$(3.5) \quad \begin{bmatrix} ə \end{bmatrix} \rightarrow \begin{bmatrix} eɪ \end{bmatrix} / \begin{bmatrix} +\text{consonant} \\ -\text{sonorant} \\ -\text{coronal} \\ +\text{anterior} \\ +\text{continuant} \\ -\text{voice} \end{bmatrix} \underline{} \begin{bmatrix} +\text{consonant} \\ -\text{sonorant} \\ +\text{coronal} \\ +\text{anterior} \\ -\text{continuant} \\ -\text{voice} \end{bmatrix}$$

According to the pattern above, in general, it can be concluded that R2 and R4 tend to diphthongize vowel [ə] to [eɪ] if it is between A and B environment. Pronunciation model which can be adapted is "fate". This word is strong resemblance which affect the subjects in analyzing the vocabulary "fatigue". The

subjects imitated the word "fatigue" in the first syllable such as the words "fate" which pronounced the sound [eɪ] between [f] and [t] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Fate /feɪt/	Fatigue	/feɪtiːɡ/	/fəˈtiːɡ/

4. The Mispronunciation of Consonants

The mispronunciation of consonants discuss the alteration of consonants. This process only involves the changing of consonant to other consonant.

a) Substitution of [z] to [s]

word	Correct Pronunciation	R3	R4
Museum	/mjuˈziːəm/	/muˈsiːəm/	/muˈsiːəm/

Regarding with the data above, the subjects R3 and R4 substituted [z] to [s] on the word "museum". They instead of produce voice manner for [z], they negated the voice [z] sound to have [s] sound and this naturally substitution process.

According to its features, [z] sound has [+cons], [-sonorant], [+continuant], [+anterior], [+coronal] and [+voice] and [s] has features has [+cons], [-sonorant], [+continuant], [+anterior], [+coronal] and [-voice]. The consonant [z] is preceded by vowel [u] and followed by none in first syllable. The vowel [u] in natural classes is specified as [+high], [+tense], [+back], and [+rounded]. In the form of pattern will be like;

$$(4.1) \quad [z] \rightarrow [s] / \begin{pmatrix} \text{+high} \\ \text{+back} \\ \text{+rounded} \\ \text{+tense} \end{pmatrix} \underline{\quad}$$

Regarding with the pattern above, in general, it can be concluded that R3 and R4 tend to substitute consonant [z] to [s] after A environment. This can be seen through the environment, the pronunciation model can be imitated through word "usage". This word is strong resemblance which affect the subjects in analyzing the vocabulary "museum". The subjects imitated the word "museum" such as the words "usage" which pronounced the sound [s] after vowel [u] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Usage /ˈjuːsɪdʒ/	Museum	/muˈsiːəm/	/mjuˈziːəm/

b) Assimilation of [n] to [ŋ]

word	Correct Pronunciation	R3
Incapability	/ˌinkeɪpəˈbɪləti/	/ˌiŋkepe ˈbɪliti/

Regarding with the data above, the process of assimilation only occur for R3. The subject R3 assimilated [n] to [ŋ] on the word first syllable of "incapability". He instead of produce in alveolar place, he produce in velar place, because the [n] sound started to sound like [ŋ] sound by the effect of the environment.

According to its features, [n] sound has [+cons], [+anterior], [+coronal], [+nasal], and [+voice] and [ŋ] has features has [+cons], [-anterior], [-coronal],

[+nasal], [+back], and [+voice]. The consonant [ŋ] is followed by consonant [k] in first syllable. The vowel [k] in natural classes is specified as [+cons], [-sonorant], [-coronal], [-anterior], [-continuant], and [-voice]. In the form of pattern will be like;

$$(4.2) \quad \begin{bmatrix} n \end{bmatrix} \rightarrow \begin{bmatrix} ŋ \end{bmatrix} / \underline{\quad} \begin{pmatrix} \textbf{+consonant} \\ \textbf{-sonorant} \\ \textbf{-coronal} \\ \textbf{-anterior} \\ \textbf{-continuant} \\ \textbf{-voice} \end{pmatrix}$$

According to the pattern above, in general, it can be concluded that R3 tend to assimilate [n] to [ŋ] before B environment. In this case, the subject tried to abbreviate the first and second syllables, as the result the sound [n] is influenced the [k] sound which causes the sound like [ŋ]. Pronunciation model that can be adapted is "ink" word. This word is strong resemblance which affect the subjects in analyzing the vocabulary "incapability". The subjects imitated the word "incapability" in the first syllable such as the words "ink" which pronounced the sound [ŋ] before [k] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Ink /ɪŋk/	Incapability	/ˌɪŋkepe ˈbɪliti/	/ˌinkeɪpəˈbɪləti/

c) Substitution of [dʒ] to [g]

word	Correct Pronunciation	R1	R2	R4	R5
Wager	/ˈweɪdʒə(r)/	-	/ˈweɪgə(r)/	/ˈweɪgə(r)/	/ˈweɪgə(r)/
Exaggerated	/ɪgˈzædʒəreɪtɪd/	/ɪgˈzægəreɪtɪd/	-	-	-

Regarding with the data above, the subjects R2, R4 and R5 substituted [dʒ] to [g] on the word "wager" and R1 substituted [z] to [s] sound for the word "exaggerated". This happened when they stopped the airstream and not to produce the friction for [dʒ] sound in palatal place.

According to its features, [dʒ] sound has [+cons], [+coronal] and [+voice] and [g] has features has [+cons], [-coronal] and [+voice]. The consonant [dʒ] is followed by vowel [ə]. The vowel [ə] in natural classes is specified as [+mid], [+central], [-tense], and [+unrounded]. In the form of pattern will be like;

$$\text{(4.3)} \quad \begin{bmatrix} dʒ \end{bmatrix} \rightarrow \begin{bmatrix} g \end{bmatrix} / \underline{\quad} \begin{bmatrix} \text{-low} \\ \text{-high} \\ \text{-back} \\ \text{-front} \\ \text{-tense} \\ \text{-rounded} \end{bmatrix}$$

Regarding with the pattern above, in general, it can be concluded that R1, R2, R4, and R5 tend to replace consonant [dʒ] to [g] before B environment. There also pronunciation models such as verb "trigger" and adjective "eager". These words are strong resemblance which affect the subjects in analyzing the vocabulary "wager"

and "exaggerated". The subjects, R2, R4, and R5 imitated the word "wager" such as the words "eager" which pronounced the sound [g] before [ə] environment. The other case, the word "trigger", only R1 can influence the tested word "exaggerated".

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Eager /ˈiːgə(r)/	Wager	/ˈweɪgə(r)/	/ˈweɪdʒə(r)/
Trigger /ˈtrɪgə(r)/	Exaggerated	/ɪgˈzægəreɪtɪd/	/ɪgˈzædʒəreɪtɪd/

d) Substitution of [ð] to [θ]

word	Correct Pronunciation	R1	R3
Leather	/ˈleðə(r)/	/ˈleθə(r)/	/ˈleθə(r)/

Regarding with the data above, the subjects R1 and R3 substituted [ð] to [θ] on the word "leather". They instead of produce voice manner for [ð], they negated the voice [ð] sound to have [θ] sound and this naturally substitution process.

According to its features, [ð] sound has [+cons], [+continuant], [+anterior], [+coronal] and [+voice] and [θ] has features has [+cons], [+continuant], [+anterior], [+coronal] and [-voice]. The consonant [ð] is preceded by vowel [e]. The vowel [e] in natural classes is specified as [+mid], [+front], [+tense], and [+unrounded]. In the form of pattern will be like;

$$(4.4) \quad \begin{bmatrix} ð \end{bmatrix} \rightarrow \begin{bmatrix} θ \end{bmatrix} \bigg/ \begin{bmatrix} \text{-low} \\ \text{-high} \\ \text{-back} \\ \text{-rounded} \\ \text{+tense} \end{bmatrix} \underline{\quad}$$

According to the pattern above, in general, it can be concluded that R1 and R3 tend to replace [ð] to [θ] after A environment. It can be seen through the environment, that the "death" word can be adapted as pronunciation model. This word is strong resemblance which affect the subjects in analyzing the vocabulary "leather". The subjects imitated the word "leather" in the first syllable such as the words "death" which pronounced the sound [θ]after [e] environment.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Death /deθ/	Leather	/ˈleθə(r)/	/ˈleðə(r)/

e) Deletion of [j]

word	Correct Pronunciation	R2	R3	R4	R5
Furious	/ˈfjʊəriəs/	/ˈfʊəriəs/	/ˈfʊəriəs/	/ˈfʊəriəs/	/ˈfʊəriəs/
Museum	/mjuˈziːəm/	-	/muˈsiːəm/	/muˈsiːəm/	-

Regarding with the data above, the subjects R1, R2, R3, R4, and R5 represented deletion process on the word "furious", and R3 and R4 also deleted [j] sound for the word "museum". They instead of pronouncing [j] sound, they omitted it.

According to its features, [j] or [y] sound has [-voc] and [-cons]. The glide [j] or [y] is preceded by consonant [f] and [m] and followed by [ʊ] and [u]. The consonants [f] and [m] in natural classes are specified as [+consonantal], [-coronal], and [+anterior] and followed by vowel [ʊ] and [u] which are classified as [+high], and [+back]. In the form of pattern will be like;

$$(4.5) \quad \begin{bmatrix} \text{j} \end{bmatrix} \rightarrow \begin{bmatrix} \emptyset \end{bmatrix} / \begin{pmatrix} +\text{consonant} \\ -\text{coronal} \\ +\text{anterior} \end{pmatrix} \underline{\hspace{1cm}}$$

Regarding with the pattern above, in general, it can be concluded that R2, R3, R4 and R5 tend to omit glide [j] after A environment. Pronunciation model that can be adapted are "museum" and adjective "full". These words are strong resemblance which affect the subjects in analyzing the vocabulary "furious" and "museum". The subjects, R2, R3, R4, and R5 imitated the word "furious" in the first syllable such as the words "full". The other case, the word "muslim", R3 and R4 can influence the tested word "museum".

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Full /fʊl/	Furious	/ˈfʊəriəs/	/ˈfjʊəriəs/
Muslim /ˈmuslɪm/	Museum	/muˈsiːəm/	/mjuˈziːəm/

f) Epenthesis of [r]

word	Correct Pronunciation	R4	R5
Hardness	/ˈhɑːdnəs/	/ˈhɑːrdnəs/	/ˈhɑːrdnəs/

Regarding with the data above, there is a process of insertion of [r] sound in the first syllable of "hardness". They created consonant, [r] sound between phonetic [ɑː] and [d] to pronounce [ˈhɑːrd].

According to its features, the epenthesis process is preceded by consonant [ɑː] and followed by consonant [d]. The consonant [ɑː] in natural classes is specified as [+low], [+central], [+tense], and [+unrounded] and followed by [d] which is

classified as [+consonantal], [-sonorant], [+anterior], [-continuant], [+coronal], and [+voice]. In the form of pattern will be like;

$$(4.6) \quad \begin{bmatrix} \emptyset \end{bmatrix} \rightarrow \begin{bmatrix} r \end{bmatrix} / \begin{pmatrix} +low \\ -front \\ -back \\ +tense \\ -rounded \end{pmatrix} \underline{\hspace{1cm}} \begin{pmatrix} +consonant \\ -sonorant \\ +anterior \\ -continuant \\ +coronal \\ +voice \end{pmatrix}$$

Concerning with the pattern above, in general, it can be concluded that R4 and R5 tend to add liquid [r] if it is between A and B environment. The nouns "yard" and "card" are the closest pronunciation model that can be adapted by subjects. These words are strong resemblance which affect the subjects in analyzing the vocabulary "hardness". The subjects, R4 and R5 imitated the word "hardness" in the first syllable such as the words "card" or "yard" which added the sound [r] between vowel [ɑː] and [d] environments.

Model of Pronunciation	Words Pronounced Incorrectly	Incorrect Pronunciation	Correct Pronunciation
Card /kɑːrd/ Yard /jɑːrd/	Hardness	/ˈhɑːrdnəs/	/ˈhɑːdnəs/

B. Discussion

In this discussion, the researcher discusses specifically the findings of the research questions. According to Wolfram and Johnson (1974), there are 5 types of phonological processes including substitution, assimilation, dissimilation, deletion, and epenthesis. Based on the explanation of the finding above, the subjects created

4 patterns of substitution, assimilation, deletion, and epenthesis. The formed patterns also have different variations due to the effects of the existing environment, in which the pattern is caused between environments A and B, after environment A, and before environment B.

Substitution patterns can occur in three kinds of patterns. Firstly, the mispronunciation patterns occurred between A and B environments for vowels [ɑ] and [ə] within data; (1.1), (1.2), and (1.3). This research can be exemplified when they uttered /blɑːst/ and /kəmˈpænjən/, they were replaced by the subjects with the vowel [æ] and [ʌ], as the result they pronounced /blæst/ and /kʌmˈpænjən/ in initial syllable, especially for "companion". The imitation of the words "class" and "come" can cause the phonetic alteration, the subjects attempt to modify them through the pronunciation model. As a result of this example, it is clear that the subject's pronunciation for substitution is influenced by the environment.

Another case, the subject also substituted diphthong into monopthong sounds or so-called monopthongization between A and B environments for vowels [aɪ], [eɪ], and [əʊ], within data; (2.1), (2.2), and (2.3). They were substituted by other vowels [ɪ], [æ], and [ɔ] in the words "confines", "plague", and "railroad". Phonetically, instead of to utter /ˈkɒnfaɪnz/, /pleɪg/, and /ˈreɪlrəʊd/, they pronounce /ˈkɒnfɪnz/, /plæg/, and /ˈreɪlrɔːd/. These are also proven by the "finish", "flag", and "broad" pronunciation models, especially for the pronunciation model "finish" has the same environment in the initial syllable as in the final syllable "confines".

The diphthongization also occurred for vowels [ɑ], [ə], [æ], and [ə] between A and B environments within data; (3.1), (3.2), (3.3), and (3.5). They substituted

the monopthong vowels to [eɪ] and [əʊ], particularly for [eɪ] occurred in 3 vowels; [ɑ], [æ], and [ə]. In this section, it can be exemplified such as the words "chancellor", and "advocacy", in which phonetically /ˈtʃɑːnsələ(r)/ and /ˈædvəkəsi/. Instead of pronouncing the correct pronunciation, they substituted phonetically by pronouncing /ˈtʃeɪnsələ(r)/ and /ˈædvəʊkəsi/. This can be accomplished by using pronunciation models like "chance" and "vocal," particularly for "vocal," which has the same environment in the initial syllable as the medial syllable "advocate."

The substitution process is not limited to the pattern between A and B environments; there is also a procedure for diphthongization [ɪ] to [aɪ] within data; (3.4), that occurs after A environment. The word "mythical" is an example of this substitution. The subject attempted to separate the syllable "myth-ic-al" into "my-thic-al." As a result, the subject automatically imitated "my" as in the possessive pronoun "my."

Other cases can be found in data for the consonants [z] and [ð] within data; (4.1) and (4.4). The words "museum" and "leather," which are phonetically pronounced /muˈziːəm/ and /ˈleðə(r)/. Respectively, they were substituted by the subjects with the consonants [s] and [θ], as the results /muˈsiːəm/ and /ˈleθə(r)/. In perceiving far, subjects change the consonants based on orthographic influences or the written symbols "s' and "th", in which an exception to Chomsky's theory that there is an influence from the Indonesian language system in this circumstance.

There is also a pattern generated before B environment within datum; (4.3), which occurs in the process of substituting consonants [dʒ] to [g]. In this case, it can be exemplified as the word "wager", instead of uttering /ˈweɪdʒə(r)/, they

pronounce /ˈweɪɡə(r)/. The substitution is caused by model pronunciation such as "eager".

The assimilation pattern only occured in consonant, such as datum; (4.2) before the B environment. When the consonant [n] comes into contact with the phonetically [k] such as the word "incapability", the subject assimilates it and hears the sound [ŋ]. The subject adapted to the effect of the pronunciation model, which has the same environment as the word "ink."

The deletion pattern is only formed on semi-consonants or semi-vowels after A environment, within datum; (4.5). In this case it is also influenced by the orthographic system or writing symbols such as data (4.1) and (4.4). This case can be exemplified such as the word "furious" which is phonetically /ˈfjʊəriəs/, the subjects remove the sound [j] that eventually result /ˈfʊəriəs/ sound. As can be seen that the subject changed the tripthong vowel to diphthong by removing the sound [j].

The epenthesis pattern occured in vowels [ɔ], [e] and consonant [r] between environments A and B, within data; (1.4), (1.5), (4.6). This research can be exemplified like in the words "intertribal", "vegetable" and "hardness". The subjects added vowels and consonants between environments A and B, hence they pronounced /ɪnˈtɜː(r)traɪbɔːl/, /ˈvedʒetəbl/ and /ˈhɑːrdnəs/. The pronunciation models that can be adapted by the subjects are "ball", "energetic" and "card".

Patterns can be made more complex by removing some of the different elements from distinct phonetics, allowing imitation words to be traced back to patterns created in similar settings. In datum (3.3) if the subjects did not know the

"fake" pronunciation model that is environmentally similar to the test the word "faction" between [f] and [k], then it can be traced through the pattern formed, in which the pronunciation model also applies to the words like "vapor," "bake," and "page".

Regarding with the findings data, basically, the imitation words used by students of sixth semester, refer to the empirical characteristics of environment matrix and certain phonetic errors. It shows that there are similar characteristics between the patterns and the pronunciation models. Hence, it can be proven that the sixth-semester students adapted the pronunciation models which were searched through the formed patterns. According to Crystal (1987), the imitation words are evidence that can occur mispronunciation in unconscious condition. This is because the imitation words will be adapted unconsciously when someone finds a similarity in the pattern to something new and also the word imitation will be adapted when the vocabulary is often used or known by person himself.

From some of the research findings, there are similarities between this research and previous studies related to phonological changed processes, namely assimilation, epenthesis, and deletion in Diani and Azwandi (2021) and Anam (2018) regarding with substitution. The findings of this research are not only related to the phonological changed process but also add insight regarding the function of the environment that also makes changes in the existing process. In addition, it is also found that imitation words affect phonetic changes in the pattern of mispronunciation formed.

CHAPTER IV
CONCLUSION AND SUGGESTION

This chapter presents the conclusion and suggestion of the present research. It is elaborated from the previous chapters which are the answers to the research questions. Then, suggestions contain recommendations for the readers or further researchers who are willing to explore further studies on the same fields.

A. Conclusion

The conclusion of this research is based on the formation of a mispronunciation pattern and a pronunciation model that can be adapted to the formed pattern by the sixth-semester students at UIN Maulana Malik Ibrahim Malang. The conclusion is as follows:

During the test, there were several pronunciation errors on vowels and consonants uttered by the sixth-semester students. Based on the results, it was found that substitution processes occurred in monophthong vowels; [ɑ] and [ə]. In perceive far, subject replaced vowel [ɑ] into [æ], and [ə] into [ɪ] and [ʌ]. Furthermore, monophthongization also occurred in the process of substitution of diphthong vowels; [aɪ], [eɪ], and [əʊ], subjects substituted vowel diphthong to monophthong sequentially into [ɪ], [æ], and [ɔ]. In accordance with diphthongization, it also occurred in monophthong vowels; [ɑ], [ə], [æ], [ɪ] and [ə]. The subject replaced vowels [ɑ] into [eɪ], [ə] into [əʊ] and [eɪ], [æ] into [eɪ], and [ɪ] into [aɪ]. Next, consonant alterations occurred when the subject substituted, assimilated, deleted, and inserted consonants to create a pattern. Consonant

substitution happened when the subject replaced consonants [z], [dʒ] and [ð] with [s], [g], and [θ]. Furthermore, due to the impact of the surroundings [k], the subject assimilated the sound [n] into [ŋ], also the subject deleted the sound [j] and inserted glide [r] to the word being tested.

Regarding with the patterns of mispronunciation, the patterns can be found in vowels and consonants. The students of sixth semester formed the patterns of mispronunciation between A and B environments, after A environment, and before B environment. The formed patterns also have different variations due to the effects of the existing environment, in which the pattern is caused between environments A and B, within data; (1.1), (1.2), (1.3), (1.4), (1.5), (2.1), (2.2), (2.3), (3.1), (3.2), (3.3), (3.5), and (4.6). There are also changes that is caused after environment A, such as data; (3.4), (4.1), (4.4), and (4.5). Lastly, there are changes that occur before environment B, such as data; (4.2) and (4.3).

The pronunciation models used in the formed patterns are found when they have similarities in the empirical characteristics of environment matrix and certain phonetic errors. The pronunciation models or word imitation affect to the speech of the sixth semester students of English Literature Department at UIN Maulana Malik Ibrahim Malang that led to errors in pronunciation because the same patterns of mispronunciation.

B. Suggestion

Following the completion of this research, the researcher gives recommendation to the sixth semester students of English Literature Department to be aware of their unique speech patterns, look up unfamiliar words, and correct the

mispronunciation when they are aware of them. Moreover, they should relearn Phonetics to re-evaluate their vocabulary pronunciation. This is not only applied to sixth-semester students, but also to the students who take English majors, to ensure that there are no misunderstandings during speaking performance. Furthermore, the researcher suggests the teachers or lecturers to always pay attention to the students' pronunciation during presentation.

To the further researchers, the researcher suggests to them to investigate the supra segmental features, which are related to rhyme, intonation, syllable, and stress so that the readers can know the changes in meaning that occur during speaking performance. To assist researchers in analyzing stress, intonation and rhythm, it is recommended that the researchers use computer linguistics for speech analysis in phonetics called PRATT.

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CURRICULUM VITAE

Rizky Firdausy was born in Bandung on February 4, 1999. He graduated from SMA Negeri 1 Cimahi in 2017. He started his higher education in 2017 at English Literature Department in UIN Maulana Malik Ibrahim Malang and finished his study in 2021.

APPENDIX

Table of phonetic errors by sixth-semester students at UIN Maulana Malik Ibrahim Malang

WORDS	CORRECT PRONUNCIATION	Dara (R1)	Alif (R2)	Helmi (R3)	Najeelyn (R4)	Rully (R5)
Revulsion	/rɪˈvʌlʃn/	/rɪˈvʊlʃn/	/rɪˈvʊlʃn/	/rɪˈvʊlʊʃn/	/rɪˈvʊlʃn/	/rɪˈvʊlʃn/
Incapability	/ˌinkeɪpəˈbɪləti/	/ˌinkeɪpʌˈbɪləti/	/ˌinkæpaˈbɪliti/	/ˌiŋkæpeˈbɪliti/	/ˌinkæpaˈbɪliti/	/ˌinkæpaˈbɪliti/
Condensed	/kənˈdens/	-	-	/kəʊnˈdens/	-	/kəʊnˈdens/
Cleave	/kliːv/	-	-	-	-	-
Chancellor	/ˈtʃɑːnsələ(r)/	/ˈtʃeɪnsələ(r)/	-	/ˈtʃænsələ(r)/	-	/ˈtʃænsələ(r)/
Wretched	/ˈretʃɪd/	-	/ˈretʃ/	-	/ˈretʃ/	/ˈretʃ/
Scheming	/ˈskiːmɪŋ/	/ˈsiːmɪŋ/	-	-	-	-
Peculiar	/pɪˈkjuːliə(r)/	/peˈkjuːliə(r)/	-	/peˈkjuːliə(r)/	-	-
Nomad	/ˈnəʊmæd/	/ˈnəʊmeɪd/	-	/ˈnəʊmeɪd/	-	-
Furious	/ˈfjʊəriəs/	-	/ˈfʊəriəs/	/ˈfʊəriəs/	/ˈfʊəriəs/	/ˈfʊəriəs/
Uncivilized	/ʌnˈsɪvəlaɪzd/	-	-	-	-	-

Confines	/ˈkɒnfaɪnz/	/ˈkɒnfɪnz/	-	-	-	-
Lunatic	/ˈluːətɪk/	-	-	-	-	-
Fatigue	/fəˈtiːg/	-	/feɪtiːg/	-	/feɪtiːg/	-
Innocent	/ˈɪnəsnt/	/ˈɪnəʊsnt/	/ˈɪnəʊsnt/	/ˈɪnəʊsnt/	/ˈɪnəʊsnt/	-
Museum	/mjuˈziːəm/	-	-	/muˈsiːəm/	/muˈsiːəm/	-
Derive	/dɪˈraɪv/	-	/dəˈraɪv/	/dəˈraɪv/	/dəˈraɪv/	/dəˈraɪv/
Suffocation	/ˌsʌfəˈkeɪʃn/	-	/ˌsʌfəʊˈkeɪʃn/	/ˌsʌfəʊˈkeɪʃn/	/ˌsʌfəʊˈkeɪʃn/	/ˌsʌfəʊˈkeɪʃn/
Intertribal	/ɪnˈtɜː(r)traɪbl/	-	/ɪnˈtɜː(r)traɪbɔl/	-	/ɪnˈtɜː(r)traɪbɔl/	-
Plague	/pleɪg/	-	/plæg/	-	/plæg/	/plæg/
Preying	/preɪŋ/	-	/priːŋ/	-	-	/priːŋ/
Companion	/kəmˈpænjən/	-	-	/kʌmˈpænjən/	-	-
Vegetable	/ˈvedʒtəbl/	-	/ˈvedʒetəbl/	/ˈvedʒetəbl/	/ˈvedʒetəbl/	/ˈvedʒetəbl/
Disposal	/dɪˈspəʊzl/	-	-	-	-	-
Supplies	/səˈplaɪs/	-	-	/sʌˈplaɪs/	-	-
Occasional	/əˈkeɪʒənl/	/oˈkeɪʒənl/	/oˈkeɪʒənl/	/oˈkeɪʒənl/	/oˈkeɪʒənl/	/oˈkeɪʒənl/
Possession	/pəˈzeʃn/	-	-	-	-	-

Railroad	/ˈreɪlrəʊd/	-	-	/ˈreɪlrɔːd/	/ˈreɪlrɔːd/	/ˈreɪlrɔːd/
Spontaneous	/spɒnˈteɪniəs/	-	-	/spɒnˈtæniəs/	-	-
Tangible	/ˈtændʒəbl/	-	-	-	-	-
Trigger	/ˈtrɪɡə(r)/	-	-	/ˈtraɪɡə(r)/	-	-
Reluctant	/rɪˈlʌktənt/	-	/reˈlʊktənt/	-	/reˈlʊktənt/	/reˈlʊktənt/
Edges	/edʒəs/		-	-	-	-
Hardness	/ˈhɑːdnəs/	-	-	-	/ˈhɑː(r)dnəs/	/ˈhɑː(r)dnəs/
Emphasize	-	-	-	-	-	-
Exaggerated	/ɪɡˈzædʒəreɪtɪd/	/ɪɡˈzæɡəreɪtɪd/	/eɡˈsædʒəreɪtɪd/	/eɡˈzædʒəreɪtɪd/	/eɡˈsædʒəreɪtɪd/	/eɡˈsædʒəreɪtɪd/
Faction	/ˈfækʃn/	-	/ˈfeɪkʃn/	/ˈfeɪkʃn/	/ˈfeɪkʃn/	/ˈfeɪkʃn/
Suspicious	-	-	-	-	-	-
Wager	/ˈweɪdʒə(r)/	-	/ˈweɪɡə(r)/	-	/ˈweɪɡə(r)/	/ˈweɪɡə(r)/
Advocacy	/ˈædvəkəsi/	/ˈædvəʊkəsi/	/ˈædvəʊkəsi/	/ˈadvəʊkəsi/	/ˈædvəʊkəsi/	-
Blast	/blɑːst/	/blæst/	/blæst/	/blæst/	/blæst/	/blæst/
Height	/haɪt/	-	-	-	-	-
Leather	/ˈleðə(r)/	/ˈleθə(r)/	-	/ˈleθə(r)/	-	-

Mythical	/ˈmɪθɪkl/	-	-	/ˈmaɪθɪkl/	-	-
Prestigious	/preˈstɪdʒəs/	-	-	-	-	-
Pseudo	/suːdəʊ/	-	-	-	-	-
Recipe	/ˈresəpi/	-	/ˈrəsipi/	/ˈrisip/	/ˈrəsipi/	/ˈrəsip/
Sheltered	/ˈʃeltəd/	/ˈʃeltə(r)d/	/ˈʃeltə(r)d/	/ˈʃeltə(r)d/	/ˈʃeltə(r)d/	/ˈʃeltə(r)d/
Thrust	-	-	-	-	-	-
Torture	/ˈtɔːtʃə(r)/	/ˈtɔː(r)tʃə(r)/	/ˈtɔː(r)tʃə(r)/	/ˈtɔː(r)tʃə(r)/	/ˈtɔː(r)tʃə(r)/	/ˈtɔː(r)tʃə(r)/