PHONOLOGICAL INTERFERENCE OF BUGINESE INTO INDONESIAN BY BUGINESE SPEAKERS IN TOLITOLI CENTRAL SULAWESI
(A study of transformational-generative phonology)

A THESIS

In Partial Fulfillment of the Requirements
For Master Degree in Linguistics

Jaya
13020216410002

FACULTY OF HUMANITIES
DIPONEGORO UNIVERSITY
SEMARANG
2018

A THESIS

PHONOLOGICAL INTERFERENCE OF BUGINESE INTO INDONESIAN BY BUGINESE SPEAKERS IN TOLITOLI CENTRAL SULAWESI
(A study of transformational-generative phonology)

Submitted by

Jaya
13020216410002

Approved on March 26th, 2018 for plagiarism check and thesis examination to get master degree by

Advisor,

Dr. Agus Subiyanto, M.A.
NIP. 196408141990011001

Master Program in Linguistics
Head,

Dr. Deli Nirmala, M.Hum.
NIP. 196111091987032001

A THESIS VALIDATION

PHONOLOGICAL INTERFERENCE OF BUGINESE INTO INDONESIAN BY BUGIS SPEAKERS IN TOLITOLI CENTRAL SULAWESI
(A study of transformational-generative phonology)

Submitted by:
Jaya
13020216410002

Approved by
Strata II Thesis Examination Committee Master Degree in Linguistics
On April 2nd, 2018

Chairman,
Dr. Agus Subiyanto, M.A.
NIP. 196408141990011001 (13-4-2018)

First Member,
Dr. Suharno, M.Ed.
NIP. 196610041990012001 (13-4-2018)

Second Member,
Dr. Nurhayati, M.Hum.
NIP. 19661004199001200l (13-4-2018)

Third Member,
Dr. Deli Nirmala, M.Hum.
NIP. 196111091987032001 (13-4-2018)

Accepted and declared in Semarang
On..... April 13 2018 .....
Head of Master Program in Linguistics,

Dr. Deli Nirmala, M.Hum.
NIP. 196111091987032001

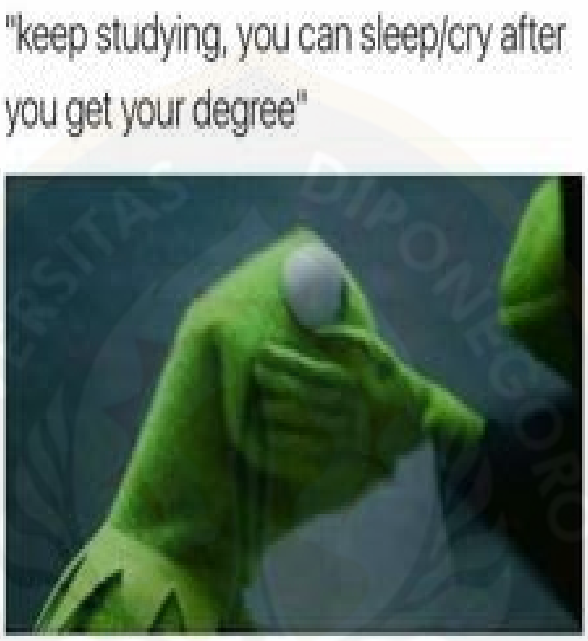
CERTIFICATION OF ORIGINALITY

I hereby declare that this research entitled "PHONOLOGICAL INTERFERENCE OF BUGINESE INTO INDONESIAN BY BUGINESE SPEAKERS IN TOLITOLI CENTRAL SULAWESI: A STUDY OF TRANSFORMATIONAL-GENERATIVE PHONOLOGY" is really my own work and that, to the best of my knowledge and belief, this research contains no material previously published or written by another or material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institute of higher learning, except where due acknowledgement is made in the text of the thesis.

Semarang, April 13th, 2018

Jaya

MOTTO



DEDICATION

This thesis is dedicated to:
Allah SWT, Rasulullah Muhammad SAW, my beloved parents, sibling, lecturers, teachers, seniors, best friends, and friends.

ACKNOWLEDGEMENTS

Alhamdulillahirabbil ‘alamin

Alhamdulillaahi Rabbil ‘Aalamiin. First of all, I would like to express my deepest gratitude to Allah Subhaanahu Wata’ala, for the huge mercy, grace and health so that I was able to finish writing this thesis. The invocation is always sent to the leader of mankind, *Rasulullah* Muhammad SAW, his family, friends and followers. He is the best motivator who brings spirits of Quran. In addition, I would like to express my wholehearted gratitude to many people who supported me in finishing this thesis.

1. Dr. Deli Nirmala, M.Hum as the Head of Master Program in Linguistics of Diponegoro University. My biggest thanks for all the motivations, encouragements, and the facilities given during the process of completing this thesis.
2. Dr. Agus Subiyanto, M.A as my supervisor, I would like to say thank you very much for the all guidance, comments, ideas, revisions, assistances, advices, suggestions, and supports since the beginning of my research starting from the research proposal, the journal article, and the thesis improvement.
3. Dr. Nurhayati, M.Hum., J. Herudjati Purwoko, Ph.D., Dr. Suharno, M. Ed., and all of the lecturers of Master Program in Linguistics of Diponegoro University who sharpen my knowledge for thesis couple years.

4. The most special thanks, I dedicate to my beloved parents, Asbat and Nisma; my sisters and brothers, Mira, Nikmat, Suka, Harun, and Mukmin, for their sincere love, support, and prayer for her success. I dedicate this thesis also to my beloved second parents in Palu City who always support and pray for my success, Sudirman Dg. Manasse and Sri Nurhania.
5. My biggest thanks also addressed to my best friends, Ni Putu Maryuni and Ifa Syariva. Besides, my deepest thanks to my friends in Master Program in Linguistics for their help, love, care, partnership, and support during my study: Azzahra Egeng, Mutiara Karna Asih, Chendy A.P Sulistyo, Prayudisti S.P, Wa Ode Nisrawati, Ardis Septi, Kartini Rahayu, Laili Mahmudah, Eva Endah, Islah Amelius, Noviana Dwi Yasinta, Cyntia Mutiara, Endah Diandari, Ropa Eiffel, Eva Endah, Konstantinus Kapu, Marselina Nugraha, Siti Yuliani, Prima Busana, Nurjannah, Claudia, Vamelia, Firda, Nur Faidatun Naimah and others whose names cannot be expressed one by one.

   May Allah SWT bless us all, Amen.

The Researcher

TABLE OF CONTENTS

TITLE ……..i

APPROVAL ……..ii

VALIDATION …….....iii

CERTIFICATION OF ORIGINALITY ……iv

MOTTO ……..v

DEDICATION ……vi

ACKNOWLEDGEMENTS ……vii

TABLE OF CONTENTS ……ix

LIST OF TABLES ……...xiii

LIST OF APPENDICES ……...xvi

ABSTRACT ……..xvii

INTISARI ……..xviii

CHAPTER 1 INTRODUCTION ……...1

1.1 Background of the Research ……...1

1.2 Problem Statement ……...3

1.3 Objective of the Research ……...4

1.4 Significance of the Research ……...4

1.5 Scope of the Research ……...5

1.6 Operational Definition of Key Terms……....5

1.7 Organization of the Writing……...6

CHAPTER 2 REVIEW OF THE LITERATURE

2.1 Previous Studies ……...8

2.2 Theoretical Framework ……13

2.2.1 Transformational Generative Phonology ……14

2.2.2 Distinctive Features ……16

2.2.2.1 Binary Features ……17

2.2.2.2 Major Class Features ……18

2.2.2.3 Manner Features ……19

2.2.2.4 Place of Articulation ……21

2.2.2.5 Body of Tongue Features ……22

2.2.2.6 Subsidiary Features ……23

2.2.2.7 Distinctive Feature Matrices ……24

2.2.2.8 Formulation of the Phonological Rules ……25

2.2.3 Bilingualism ……28

2.2.4 Language in Contact ……30

2.2.4.1 Languages in contact and linguistic borrowing ……30

2.2.4.2 Codeswitching ……30

2.2.4.3 Interference ……31

2.2.5 Language Interference ……31

2.2.6 Phonological Interference……32

2.2.6.1 Factors that Cause Language Interference ……34

2.2.6.2 Effects of Language Interference ……35

2.2.7 Phonological Process ……36

2.2.8 Phonological System of Buginese and Indonesian ……37

2.2.8.1 Consonant and Vowel Contrast ……38

2.2.8.2 Description of Troublesome Contrast……..39

CHAPTER 3 RESEARCH METHODS ……37

3.1 Research Design ……..37
3.2 Location, Time, and Object of the Research ……38
3.3 Population ……39
3.4 Sample ……39
3.5 Data and Source of Data ……40
3.6 Method of Obtaining Data ……40
3.7 Method of Data Analysis ……41
3.8 Method of Data Presentation ……44
CHAPTER 4 FINDINGS AND DISCUSSIONS ……45
4.1 Findings ……45
4.1.1 Glotalization Process ……46
4.1.2 Velarization Process ……54
4.1.3 Stoping Process ……..56
4.1.4 Lowering Process ……..59
4.1.5 Fronting Process ……..60
4.1.6 Highing Process ……..61
4.1.7 Weakening Process ……62
4.1.8 Vowelization Process ……63
4.1.9 Syllable Structure Process ……64
4.1.10 Assimilation Process ……68
4.2 Discussions ……..70

CHAPTER 5 CONCLUSION AND SUGGESTION ……75
5.1 Conclusion ……75
5.2 Suggestion ……76
REFERENCES ……77

APPENDICES

LIST OF TABLES

NUMBER OF TABLE	NAME OF TABLES	PAGE
2.1	Major Class Features	16
2.2	Manner Features 1	17
2.3	Manner Features 2	18
2.4	Place of Articulation	19
2.5	Body of Tongue Features (Back and Round)	20
2.6	Body of Tongue Features (High and Low)	20
2.7	Subsidiary Features	21
2.8	Distinctive Features Matric	22
2.9	Samples of Phonological Interference	28
2.10	Phonological Process	32
2.11	Consonant Contrast in Indonesian and Buginese	33
2.12	Vowel Contrast in Indonesian and Buginese	34
2.13	Distribution of consonant and vowel in Indonesian and Buginese	35
3.1	Consonant /p/ changes into sound [ʔ]	46
3.2	Consonant /b/ changes into sound [ʔ]	47
3.3	Consonant /t/ changes into sound [ʔ]	48
3.4	Consonant /d/ changes into sound [ʔ]	50
3.5	Consonant /k/ changes into sound [ʔ]	51
3.6	Sound /h/ changes into sound [ʔ]	53
3.7	Sound /m/ and /n/ changes into sound [ŋ]	54
3.8	Sound /f/ and /v/ changes into sound [ɒ]	57
3.9	Sounds Change of / ə / into [a], / ə / into [e], / ə / into [i], / i / into [e], / u / into [o], / o / into [u], / a / into [ə]	58

3.10	Sound /ai/ and /au/ changes into sound [e] and [o]	63
3.11	Sound deletion of phoneme /h/	64
3.12	Sound addition of /a/, /i/, and /o/ plus glottal /ʔ/	65
3.13	Assimilation of sound /k/ into [s] and [t]	68
3.14	Phonological Process of Buginese into indonesian	70

LIST OF APPENDIX

NUMBER OF APPENDIX	NAME OF APPENDIX	PAGE
1	Indonesian Consonant Chart	102
2	Buginese Consonant Chart	102
3	Indonesian Vowel Chart	103
4	Buginese Vowel Chart	103
5	List of Words	104

ABSTRACT

This research focuses on phonological interference of Buginese into Indonesian by Buginese speakers in Tolitoli Central Sulawesi. This research aims at finding out the kinds of phonological interferences of Buginese into Indonesian in Tolitoli and the factors influencing the occurrence of the phonological interference. This research is descriptive-qualitative. The data were collected using observation method with a recording technique. The method was used to observe daily conversations of Buginese in using Indonesian. When the data were sufficient, I transcribed orthographically and phonetically. I compared them to the standard phonetic transcription (KBBI) in order to get the form of the interference. The results of the analysis are: (a) glottalization processes: (1) plosive glottalization and (2) fricative glottalization, (b) velarization of nasal process, (c) stopping process, (d) lowering process, (e) fronting process, (f) highing process, (g) weakening process, (h) vowelization process, (i) sound deletion process, (j) sound addition process, and (k) assimilation process. The general factors influencing the phonological interference of Buginese into Indonesian are (1) bilingualism background, (2) unawareness to the standard Indonesian, and (3) similar word used from Buginese into Indonesia.

Key words: *Phonological Interference; Buginese Language: Indonesia Language, Generative Phonology*

INTISARI

Penelitian ini membahas interferensi fonologis bahasa Buginese ke dalam bahasa Indonesia yang dilakukan oleh penutur Buginese di Tolitoli Sulawesi Tengah. Penelitian ini bertujuan untuk menemukan interferensi fonologis bahasa Buginese ke dalam bahasa Indonesia di Tolitoli Sulawesi Tengah. Penelitian ini merupakan penelitian deskriptif kualitatif. Data diperoleh menggunakan metode observasi degan teknik perekaman. Setelah data cukup, saya mentranskrip rekaman ke dalam transkripsi ortografis dan transkripsi fonetis, kemudian, membandingkan dengan transkripsi fonetis standar (KBBI) guna mendapatkan bentuk interferensi. Hasil penelitian adalah; (a) proses glotalisasi bunyi: (1) glotalisasi plosive and (2) glotalisasi frikatif, (b) proses velarisasi bunyi nasal, (c) Proses hambat bunyi, (d) proses perendahan, (e) proses pemajuan, (f) proses penaikan, (g) proses pelemahan, (h) proses vowel, (i) proses penghilangan bunyi, (j) proses penambahan bunyi, (k) proses asimilasi konsonan. Faktor yang mempengaruhi interferensi bahasa Buginese ke dalam bahasa Indonesia adalah (1) latar belakang dwibahasawan, (2) ketidak pedulian pada bahasa Indonesia yang baku, dan (3) penggunaan kata yang sama dari bahasa Buginese ke Indonesia.

Kata kunci: *Interferensi Fonologi, Bahasa Bugis, Bahasa Indonesia,Fonologi Generatif*

CHAPTER I

INTRODUCTION

This chapter describes background of this research, research problems, objectives of the research, significance of the research, scope of the research, operational definition of key terms, and organization of the writing.

1.1 Background of the Research

Language of one community is different from another, and it depends on social environment. The existence of social groups causes language to vary as the result of the needs of speakers who choose the language to be used in accordance with the situation of its social context. Various languages in multilingual speech can be found in Tolitoli district. There are some major languages in Tolitoli which are Tolitoli language, Buginese language (BL) and Indonesia language (IL). The city is inhabited by various ethnicities, namely Tolitoli, Buginese, Toraja, Mandar, Kaili, and other ethnic groups in Indonesia.

Humans in communication are often influenced by the first or the second languages they have acquired. The first language can affect speakers' second language, and vice versa. Both languages can influence each other in terms of syntactical aspect, morphological aspect, or phonological aspect. The first language spoken by the speakers in everyday social interaction gives an influence on the other language that they have. Buginese in their daily communication use two languages:

Buginese language (BL) as their first language (mother tongue) and Indonesian language (IL) as their second language as the national language in Indonesia. The interference of the first language on the second language is enormous in the Buginese community in which sometimes they use Indonesian language in their daily communication.

The kind of interference of BL into IL in Tolitoli regency is in the form of the phonological system such as addition of sounds, sound deletion, and sound replacement. I assume that the phenomena are caused by the influence of the first language rules (BL) that are raised by the community itself unconsciously. The second language (IL) that is spoken by the Buginese community is essentially "deviant" from the IL based on the correct rules in *Kamus Besar Bahasa Indonesia* (KBBI) as the standard of IL system in Indonesia. The phonological interference of BL in the using of IL can be seen from the following conversation.

> [aŋkaʔ itu jəmuraŋ, suda hujaŋ di gunuŋ]-[aŋkat-itu-jəmuran-sudah-hujan-di-gunuŋ]-*(pick-that-laundry-already-rain-in-mountain)*
> [tiaʔ hari salasa ka itu pileŋ maiŋ di SCTP?]-[sətiap-hari-səlasa-kah-itu-film-tayang-di-SCTV?]-*(every-day-Tuesday-does-that-film-play-in-SCTV)*
> [suda i saya passa mamaʔ cuma tidaʔ mau banguŋ]-[sudah-saya-paksa-mama-cuman-tidak-mau-baŋun]-*(already-i-forced-mama-just-not-wake-up)*
> [ada mamaʔ Nisma yaŋ rawaʔ neneʔ di ruma sakiʔ]-[ada-mama-nisma-yaŋ-rawat-nenek-di-RS]-*(there-mother-Nisma-who-nurse-grandma-in-hospital)*

There are many dialects of Buginese spreading across Sulawesi such as Sigeri, Soppeng, Pinrang, Pare-pare, Bone, Barru, Sinjai, Pangkajene, Pangkep, Bulukumba, Luwu', Pasang Kayu, Sidrap, Polewali M, Wajo. In Central Sulawesi, Tolitoli regency uses BL as the first language. People in the other cities in Central Sulawesi use their own languages such as Kaili, Parigi, Dampal, and Bangkep. The reason why I chose Buginese in Tolitoli regency is because Tolitoli regency is the city with the biggest number of speakers who speak BL as their first language.

There are many other data that are needed to be analyzed in order to get a complete and comprehensive understanding about phonological interference of Buginese into Indonesian in Tolitoli Central Sulawesi. According to Moleong (2009:49), research is essentially an attempt to discover the truth or to justify the truth. Therefore, this research focuses on the study of phonological interference of Buginese into Indonesian by Tolitoli speakers in Central Sulawesi.

1.2 Problem Statements

This research is aimed at answering the following questions:

1. What are the kinds of the phonological interferences of BL into IL by Buginese speaker community in Tolitoli regency?
2. What are the factors influencing the occurrence of the phonological interference?

1.3 Objectives of the Research

Objective is a purpose that can be reasonably achieved by the researcher in order to get right solution of a right problem, so clearly defined objectives are very important. Therefore, based on the previous formulation of the problems, the purposes of this research are as follows:

1. To describe the kinds of the phonological interferences of BL into IL by Buginese speaker community in Tolitoli regency.

2. To explain the factors influencing the occurrence of the phonological interference through phonological rules governing the phonological process of BL into IL.

1.4 Significance of the Research

The benefit of this research is theoretically expected to give a contribution to linguistic studies in the form of linguistic phenomena especially on phonological aspects of Buginese in Tolitoli regency. In addition to the theoretical benefits, the practical benefits of this research are: (1) to increase the insight of Buginese speakers and Indonesian speakers (teachers, language observers, and other researchers) on the phenomena related to the phonological interference of Buginese through the study of trasformational-generative phonology, (2) to give a reference to the next researchers who are interested in the phonological aspects of Buginese Indonesian.

1.5 Scope of the Research

This research focused on the daily conversations of Buginese speakers in Tolitoli regency. The object of this research is the utterances that contain elements of the phonological interference. The utterances must be produced spontaneously without any prior arrangement or setting. Because of the spontaneous speech, it is expected to collect comprehensive data. In addition, this research also links the form of phonological interference with a set of rules that can govern the phonological process. In examining the forms of interference, I used the theory of *bilingualism* proposed by Steinberg and Sciarini (2006), *Language Interference* proposed by Dulay (1982) and Ellis (1986), and *distinctive features* written by Odden (2005) and Schane (1973).

1.6 Operational Definition of Key Terms

In order to give a clear meaning of the terms used in this research, I provide some definitions related to Indonesian Language (IL), Buginese Language (BL), Phonological Interference, and the last term is related to Generative Phonology.

Indonesian Language (IL) is the Malay language which is used as the official language of the Republic of Indonesia and the language of Indonesian unity. Indonesian was officially inaugurated after the Indonesian Independence Proclamation, exactly the following day, along with the entry into force of the constitution.

Buginese Language (BL) is one of the Austronesian languages used by ethnic Buginese in South Sulawesi which is spoken by about five million people mainly in the southern part of Sulawesi, Indonesia. It spreads across parts of Maros, Pangkep, Barru, Parepare, Pinrang, Enrekang, Majene, Luwu, Sidenreng, Rappang, Soppeng, Wajo, Bone, Sinjai, Bulukumba, and Bantaeng. Besides, it also spreads across Central Sulawesi where BL is also used in Tolitoli regency as the first language.

Phonological interference is a disturbance of the language system which is related to the phoneme. It is a general problem occurring in bilingual society. Some speakers use a different sound system of any language which is different from the appropriate system. This might include the articulation of certain consonants or vowel sounds that is influenced by the speakers' first language (another language).

Generative phonology is a component of generative grammar assigning the correct phonetic representations to utterances in such a way as to reflect a native speaker's internalized grammar. A phonetic representation is the form of a word that is spoken and heard. Generative phonology is a subsystem of generative grammar transformation introduced in 1957 by Avram Noam Chomsky through his book "Syntactic Structure".

1.6 Organization of the Writing

This chapter is divided into five chapters and organized as follows. Chapter One describes background of the research, problem of the research, objective of the research, significance of the research, scope of the research, and organization of the

writing. In general, this chapter provides the framework of the research to link the following chapters.

Chapter Two deals with the related literatures; it provides previous studies regarding phonological interference of one language into another language and theories used in this research. Those attend fundamental references in analyzing the research.

Chapter Three concerns the research method; it provides the description of the research design, the population and the sample, the data collection method, and the data analysis procedures.

Chapter Four runs the results and discussions of the phonological interference of Buginese into Indonesian by Buginese speakers in Tolitoli Central Sulawesi**.**

Chapter Five is the conclusion and suggestion; it delivers the conclusion of analysis and suggestion for the next researchers.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter consists of two sections. The first section is previous studies and the second section is theoretical framework of this research.

2.1 Previous Studies

Previous research means that previously conducted studies which have the same research focus, word or key words (Hamidi, 2010:35). Prior research is important because it serves to provide information or evidence that the research to be conducted is new, never done before or it does not contain plagiarism. There have been some studies related to the phonological interference of Buginese and other languages. I classify my previous studies into two groups namely (1) Bugis language interference and (2) language interference in general. The first research to the third research includes into the group 1 and the fourth research until the tenth research is included into the group 2.

The first research entitled *Kendala Penutur Bahasa Buginese dalam Berbahasa Indonesia* was written by Mochtar (1994). The result of her research related to the phonological problems in Buginese (I did not include the morphological and syntactical result from her research) are that in Buginese, there are only two consonant sounds that occupy the final position of a word i.e. sound [ŋ] and [ʔ], whereas in Indonesian [p], [b], [t], [d], [k], [s], [h], [m], [n], [g], [I], and [r] can

occupy the final positions of a word. I noted some points from this research that making different with my research, (1) the researcher did not focus on the phonological interference of Buginese into Indonesian; it can be seen from her findings that limited only on the consonant change, (2) the researcher did not mention the change of vowels at all, (3) the researcher did not classified the phonological process of the consonant changes such as whether or not sounds /p/, /b/, /t/, and /d/ are included in glottalization process, (4) the researcher did not discuss the change of other sounds such as /k/, /h/, /f/, and /v/, and (5) the researcher did not talk about the change of any diphthong, syllable structure process as well as the assimilation process. Based on the problems above that have not been discussed, I try to cover all of the five problems in my research as part of my novelties.

The second research entitled *Studi Kasus Interferensi Bahasa Buginese dalam Pembelajaran Bahasa Indonesia di Sekolah Dasar Tanjung Jabung Timur* was done by Akhyaruddin (2011). The result of the research related to the phonological problems in Buginese (I did not include the morphological and syntactical result from his research) shows that the phonological interference covers (1) the change of vowel / ə / into / a /, / o / into / u /, / ə / into / I /, and / a / into / I /, (2) the change of diphthong / au / into / o /, and the last (3) deletion of sound / h / and the change of consonant / n / into / ŋ /, / b / into / w /, / d / into / k / and / j /, and sound / p / into / k /. Based on his findings, I noted some problems that have not been discussed (1) the researcher did not use the *distinctive features theory* in analyzing his data; he used

only descriptive which could not answer the question of why do the sounds change, (2) the researcher did not classified the phonological process of the consonants and vowels changes, (3) the researcher used limited data where the Buginese speakers were children in the elementary school, (4) the researcher's findings are almost totally different with mine; I assume that it happened because of the different dialect of Buginese they used, the differences can be seen from the change of consonants /p/ into /k/, /b/ into /w/, /d/ into /k/, and /d/ into /j/, it was different with my findings where they show that all plosive consonants include /p/, /b/, and /d/ will be changed into glottal /ʔ/ in the final position of a word. Based on the problems above that have not been discussed, I try to cover all of the four problems in my research as part of my novelties.

The third research was written by Saharuddin (2016) "The Interference of Buginese to the using Indonesian Language in the Sioyong Traditioal Market Donggala Regency". The result of the research related to the phonological problems in Buginese (I did not include the morphological and syntactical result from his research) shows that the phonological interference covers the change of phoneme /o/ into /u/, phoneme /ə/ into /i/, and the missing of phoneme /e/, /h/ and /k/. Based on his findings, I noted some problems that have not been discussed (1) the researcher only discussed the change of two vowels and the deletion of vowel /ə/ and /h/ (2) the researcher did not classified the phonological process of the vowels changes, and (3) the researcher only used descriptive theory in analyzing his data. Based on the

problems above that have not been discussed, I try to cover all of the three problems in my research as part of my novelties.

The fourth research entitled *Interferensi Fonologis Bahasa Indonesia pada Lafal Pembelajar Bahasa Jepang Universitas Dian Nuswantoro Semarang* was from Ulfah (2010). The result showed that Japanese intonation that was spoken by Indonesian learners was mostly influenced by Indonesian intonation. The Japanese learners tended to employ a wide pause in every phrase accents, and Japanese intonation contour was divided into three phrase accents.

The fifth research entitled *Interference of Syntactic, Lexical and Phonological Aspects from Arabic into English for Syrian University Students: A Cross-Sectional Study in the HIL at Aleppo University* was from Adnan Azzouz (2013). Findings reveal statistically significant differences between the performances of students. It shows that negative interference plays a major role in the rate and frequency of errors committed by the subjects in this study.

The sixth research entitled *Phonological Interference in the Spoken English Performance of the Izon Speaker in Nigeria: A Product of Systemic and Interlanguage Factors* written by Apeli and Ugwu (2013). The research exposes some troublesome contrasts in the two languages. The three factors that determine the level of interference are: the level of immersion of the individual in Izon; the level of the individual's education; the individual's oral English education exposure.

The seventh research entitled *Phonic Interference of First Language into Second language: A Case Study of Non-Indonesian Native Speaker* was written by Anjarsari (2015). The results of her study show that there are four types of phonic interference produced by the learners where the biggest phonic interference is re-interpretation, followed by substitution, over-differentiation, and under-differentiation.

The eighth research entitled *The Interference of First Language and Second Language Acquisition* was from Derakhshan and Karimi (2015). It discussed factors that play an important role in the acquisition of second language. It reveals about a general belief that first language has an effect on the second language acquisition, and it is claimed that L1 can interfere with the acquisition of L2.

The ninth research entitled *Interference of First Language in Pronunciation of English Segmental Sounds* was from Chaira (2015). The results of her research are (1) sounds [p^h], [t^h], and [k^h], [f] change into [p], [t], and [k], (2) sounds [v], [θ], [ð], [z] change into [s], (3) sounds [ʃ], [k^s] change into [x], and (4) sounds [iː], [uː], and [æ] change into [i], [u], and [e].

The tenth research was from Kuwing (2016). The title is *Interferensi Fonologi Bahasa Melayu Pattani dalam Berbahasa Indonesia Mahasiswa Thailand di Universitas Muhammadiyah Surakarta.* The findings of her research showed that interference of phonological elements contained in the phoneme replacement, phoneme deletion, substitution of syllables, and syllables deletion.

The ten previous studies above can be used to see the novelty of this research. Unlike the ten previous studies above, this present research discusses phonological interference of Buginese into Indonesian by Buginese speakers in Tolitoli regency Central Sulawesi. To analyze the data, I used *distinctive features theory* for answering the sound-change process by explaining the phonological rules. I found out from the previous research that there is no prior study that specializes in the study of phonological interference on the language of Buginese against the use of the Indonesian in Tolitoli regency. In this research, I tried to find out comprehensive data in order to know the complex phenomena related to the phonological interference of Buginese into Indonesian by Buginese speakers in Tolitoli regency.

2.2 Theoretical Framework

In this section, I elaborate the theoretical framework of my research. Some major issues related to the phonological interference: (1) transformational generative phonology, (2) distinctive features (3) bilingualism, (4) languages in contact, (5) language interference, (6) phonological interference, (7) phonological process, (8) contrastive analysis, (9) comparison of phonological system differences in Buginese and Indonesian.

2.2.1 Transformational Generative Phonology

Transformational grammar, which is usually generative grammar, describes a language with the help of transformational rules. It involves the logical reasoning to understand fully the meaning of the selected words. According to Jensen (2004:4), the generative phonology is a basic, thorough introduction to phonological theory and practice. It aims to offer a fixed foundation in the theory of distinctive features, phonological rules and rule ordering.

According to Zheng (2013: 1681), the Generative phonology goes to generative linguistics, the study of the surface structure of language, which connects with the deep structure of language such as grammar, meaning, lexicology and context. Generative or modern phonologists tried to define the phonology as the component of a grammar made up of the elements and principles that determine how sounds vary and pattern in a language. These theories lead to a concept of allophones and syllables which proved that speech sounds are changed with different contexts.

Realizing the fact that every speech sound people utter is an allophone of the same phoneme. Zheng (2013:1682) said that different phones happen in different linguistic contexts and represent the same phoneme which is called the allophones of that phoneme. The two or more allophones of one phoneme never occur in the same environment (complementary distribution). For example, in English phoneme which is phonetically realized or pronounced as either or [p] or [ph], then, sounds [p] and

[ph] are the allophones of the phoneme. All of the theories on allophones, syllables, and supra-segments prove the generative phonology in the context. The transformational grammar leads to the generative phonology which establishes series of universal rules for covering the change of phonemic representations into phonetic representations. So the generative phonology focuses on the process of conversion from abstract to concrete and vice versa.

Phonology is one of the basic fields in linguistics and it is defined as the scientific study of sound structure of human language. It is different from the study of sentence structure (syntax) or word structure (morphology) (Odden, 2005:3). According to Crystal (2008:365), phonology is a branch of linguistics which focuses on the sound systems of languages. Phonology is concerned with the sound structure of language; generative phonology is a theory of this structure (Schane, 1973:1). Studying phonology is all about how human producing sound and the form of the sound system of a language.

History of the phonology development is mostly related to the ideas regarding the phoneme. There are two branches of phonology study: they are segmental and supra-segmental. Segmental phonology studies speech into discrete segments such as phonemes and supra-segmental or non-segmental phonology examining features which extend over more than one segment, such as intonation contours (Crystal, 1991:261).

According to Crystal (2008:363), phonetics is the science related to the characteristics of human sound production such as sounds used in speech. Phonetics also provides methods in order to get description, classification and transcription of sounds. There are three branches discussed in phonetics: (a) articulatory phonetics is the study about the way speech sounds are produced or articulated by the vocal organs, (b) acoustic phonetics discuss the physical properties of speech sound, as transmitted between mouth and ear, (c) auditory phonetics is stressed on the perceptual response to speech sounds, as mediated by ear, auditory nerve and brain.

According to (Ramelan, 2003) phonetics is divided into two kinds called 'Articulatory Phonetics' and 'Acoustics Phonetics'. Articulatory phonetics focused on the speech sounds from the perspective of ways in producing sounds by the speech organs. It is related to the ways in which the speech organs are moved for the production of speech sound. On the contrary, Acoustic phonetics studies the speech sound from the perspective of physical attributes such as measuring the loudness, pitches, and other natural characteristics of sounds. In phonetics, we must be able to use a particular symbol in order to represent a particular sound.

2.2.2 Distinctive Features Theory

Distinctive features are a generative linguistic theory first introduced by Chomsky and Halle in 1968. According to Pastika (2005:9), the basic concept of generative phonology is that each morpheme has a basic form in its original form. It

can have more than one phonetic form. Generative phonology is no longer based on the phoneme, because there is still a smaller element of the phoneme that is called distinctive features. Odden (2005:136) explains that distinctive features theory is addressed to a small set, around two dozen, of phonetically based properties; it defines not only the possible phonemes, but also provides phonological rules. It means that distinctive features are the smallest element of lexical phonetics and a phonological transcription formed by combinations and sequences.

Distinctive features are used to find the similarities and differences of segments in one language. Distinctive features are considered appropriate for answering the sound-change problem or commonly referred to as the assimilation process because it is able to explain the phonological rules from the smallest unit of the sound in a language. This theory is able to answer scientifically the various obstacles that arise related to the sound change process of a word, explain the sound representation of a phoneme, and provide the boundary (environment) the emergence of a sound. Schane (1973: 25-36) divided features into eight features; binary features, major class features, manner features, place of articulation features, body of tongue features, subsidiary features, prosodic features, and segment redundancy.

2.2.2.1 Binary Features

Distinctive features is usually represented in binary features with plus (+) and minus (-) symbols. This is supported by the statement of Katamba (1989:40) "Plus aspect of the Jakobsonian feature system was its binarism." Plus (+) indicates the presence of the features and minus (-) signifies absenteeism. Katamba (1989:42)

stated "They have only two coefficients or values, plus (+) indicating the presence of a feature and minus (-) its absence." According to Schane (1973:25), we can use a binary system (plus and minus) in order to show whether or not the attribute is present as [+ voiced] and [- voiced]. This binary notation is best for all features indicating opposite qualities.

Schane (1973:26) noted that one of the advantages of using a binary system is that it can show explicitly how members of the pair such as voiced-voiceless are characterized by a single feature [voiced], then, the two member of the pair are differentiated by the value plus or minus (+ or -).

2.2.2.2 Major Class Features (Syllabic, Sonorant, Consonant)

Schane (1973:26) explains similarities and differences between vowels and consonants. Those are showed by reference to properties relating to syllabicity, sonority, and type of constriction. The three features such as [syllabic], [sonorant], and [consonant], are covered in these properties.

In general, vowels are syllabic (+syllabic), while consonants are marked minus syllable (-syllabic). According to Schane (1973:26), this characteristic is required to distinguish nasals and syllabic sounds (syllabic) from non-syllabic sounds.

The sonorant character refers to the resonance quality of a sound. Sounds that are characterized sonorant according to linguists include vowel, nasal, liquid, and semivowel sounds. The rest are [-sonorant] sounds (schane, 1973:26).

Furthermore, consonant [+consonant] characteristic refers to a narrowed

constraint in the oral cavity of both total and sliding resistance. Schane mentions that sounds indicating consonant [+consonant] include the sounds of resistor, fricative, affricate, nasal, liquid, and laryngeal glide; while the vowel and semivocal sounds are [-cononantal]. The following table shows the major class features.

Table 2.1 Major Class Features

	Oral cavity obstruents	Nasal Liquids	Syllabic nasals, liquids	Laryngeal glides	Semi-vowels	Vowels
Syllabic	–	–	+	–	–	+
Sonorant	–	+	+	–	+	+
Consonant	+	+	+	–	–	–

The table above shows that syllabic nasals, liquids, and vowels are plus syllabic, nasals liquids, syllabic nasals, liquids, semi vowels, and vowels are plus sonorant, and oral cavity obstruents, nasals liquids, syllabic nasals, and liquids are plus consonant.

2.2.2.3 Manner Features (Continuant, Delayed Release, Strident, Nasal, Lateral)

Obstruent sounds include (1) fricative sounds with continuous shear [+ continuant], (2) affricate sounds i.e. the sound starting with the total resistance [- continuant]. According to Schane, these features also distinguishe between glottal ʔ [-continuant] from h [+ continuant]. Although the resonant and affricate consonants start with a total obstacle, but the way of discharging differs according to Schane.

The affricate consonant has delayed release (delayed release), whereas the consonant resistor has an immediate release ([-delayed release]). Blanks in the table means that the particular features play no role in classifying the segment. The following table shows the detail features of each sound.

Table 2.2 Manner Features 1

	t	$t^{ɵ}$	t^{s}	ɵ	s	ʔ	h
Sonorant	–	–	–	–	–	–	–
Consonant	+	+	+	+	+	–	–
Continuant	–	–	–	+	+	–	+
Delayed release	_	+	+				
Strident		–	+	–	+		

The above table shows that all of the sounds are minus sonorant. Sounds /ʔ/ and /h/ has characteristic minus consonant and the rest are plus consonant. Both sounds are different in continuant feature where sound /ʔ/ is minus continuant and sound /h/ is plus continuant. According to Schane (1973:29), nasal and lateral features can distinguish sonorant consonants. The following table shows the features of four sounds. The following table shows the detail features of sounds /y/, /n/, /l/, and /r/.

Table 2.3 Manner Features 2

	y	n	l	r
Sonorant	+	+	+	+

Consonant	−	+	+	+
Nasal		+	−	−
Lateral			+	−

The above table shows that the nasal consonant has a [+ nasal] while the liquid consonant has no nasal [-nasal] features. Among liquids, laterals are opposed to non-laterals as [+ lateral] to [- lateral].

2.2.2.4 Place of Articulation Features (Anterior and Coronal)

Odden (2005: 39) categorizes some principal places for consonant articulation; bilabial, labiodental, dental, alveolar, post alveolar, palatal, velar, and glottal. The following table shows the place of articulation of each sound in detail.

Table 2.4 Place of Articulation

	Bilabial	Labiodental	Dental	Alveolar	Post alveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	q G		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	N		
Trill	B			r					R		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

The table above is adopted from Odden (2005: 39). This table shows the place of articulation of English sounds. It can be seen from the above table that

sounds /p/, /p/, and /m/ belong to bilabial place, sounds /f/ and /v/ belong to labiodental, sounds /t/, /d/, /n/, /r/, /s/, /z/, and /l/ belong to alveolar, sound /ɲ/ belong to palatal, sounds /k/, /g/, and /ŋ/ belong to velar, sounds /ʔ/ and /h/ belong to glottal. The rest sounds are not explained because they do not exist in Indonesian sound system.

2.2.2.5 Body of Tongue Features (High, Low, Back, and Lip Shape Feature: Round)

According to Schane (1973:30) vowels are classified based on several parameters that include parameters high, medium, low, front, rear, and round.

Table 2.5 Body of Tongue Features (Back and Round)

	i	Ü	u	ɨ
Back	−	−	+	+
Round	−	+	+	−

According to Schane (1973:30), he divided three kinds of vowels (high, medium, low). We need two features detailing with the value of the two qualities [+high] and [+low] as seen in the following table.

Table 2.6 Body of Tongue Features (High and Low)

	High Vowel	Mid Vowel	Low Vowel

High	−	−	+
Low	−	+	+

The table above means that a segment can be either a non-high or not a moderate segment, but there are no segments that can be either high segments or low segments.

2.2.2.6 Subsidiary Features

According to Schane (1973:32), subsidiary features include tense, voiced, aspirated, and glottalized. This subsidiary features can help in explaining some vowels that look similar such as /i/ and /I/, some consonants which are plus voiced and minus voiced as well as plus aspirated or minus aspirated.

Table 2.7 Subsidiary Features

[+ tense] = Tense	[- tense] = Lax
[+ voiced] = Voiced	[- voiced] = Voiceless
[+ aspirated] = Aspirated	[- aspirated] = Unaspirated
[+ glottalized] = Glottalized	[- glottalized] = nonglottalized

The feature [tense] arises with both vowels and consonants. This feature can also be used for the non-lateral liquids in order to distinguish a trilled *r* ([+ tense]) from a flap **(**[**–** tense]). The feature [voiced] happens with all types of segments, although it is rarer for sonorants to have voicing differences. The features [aspirated]

and [glottalized], which go by different names in *Sound Pattern of English,* are uniquely used with consonants, and most of the time only with obstruent.

2.2.2.7 Distinctive Features Matric

We can formally represent a phonological system in a matrix, in which the columns stand for phonemes and the rows for distinctive features. The sign of [+] or [-] entry in a particular cell (where a column and a row interconnect) indicates whether that phoneme has the features in question. Features matrices of some segments are given below based on Odden (2005:151).

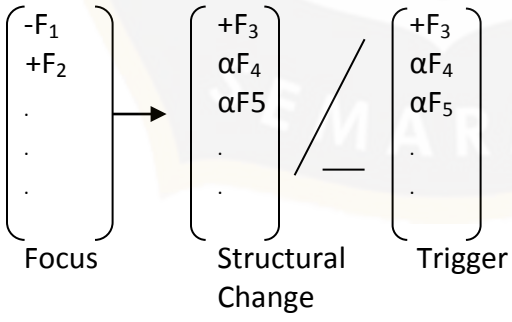
Table 2.8 Distinctive Features Matric

	cons	son	syl	voi	cont	nas	lat	ant	cor	hi	bk	low	rd
p	+	−	−	−	−	−	−	+	−	−	−	−	−
t	+	−	−	−	−	−	−	+	+	−	−	−	−
k	+	−	−	−	−	−	−	−	−	+	+	−	−
b	+	−	−	+	−	−	−	+	−	−	−	−	−
d	+	−	−	+	−	−	−	+	+	−	−	−	−
g	+	−	−	+	−	−	−	−	−	+	+	−	−
f	+	−	−	−	+	−	−	+	−	−	−	−	−
s	+	−	−	−	+	−	−	+	+	−	−	−	−
x	+	−	−	−	+	−	−	−	−	+	+	−	−
v	+	−	−	+	+	−	−	+	−	−	−	−	−
γ	+	−	−	+	+	−	−	−	−	+	+	−	−
w	−	+	−	+	+	−	−	−	−	+	+	−	+
y	−	+	−	+	+	−	−	−	−	+	−	−	−
l	+	+	−	+	+	−	+	+	+	−	−	−	−
m	+	+	−	+	−	+	−	+	−	−	−	−	−
n	+	+	−	+	−	+	−	+	+	−	−	−	−
a	−	+	+	+	+	−	−	−	−	−	+	+	−
e	−	+	+	+	+	−	−	−	−	−	−	−	−
i	−	+	+	+	+	−	−	−	−	+	−	−	−
o	−	+	+	+	+	−	−	−	−	−	+	−	+
u	−	+	+	+	+	−	−	−	−	+	+	−	+
ü	−	+	+	+	+	−	−	−	−	+	−	−	+

The above matric shows that (1) sounds which have plus consonant (+cons) feature are /p/, /b/, /t/, /d/, /k/, /g/ /f/, /v/, /s/, /z/, /x/, /l/, /m/, and /n/, while the others sounds are minus consonants (-cons), (2) sounds which have plus sonorant (+son) feature are /w/, /y/, /l/, /m/, /n/, and all vowels, (3) sounds which have plus syllable (+syl) are all vowels, (4) sounds which have plus voice (+voi) are /b/, /d/, /g/, /z/, /x/, /v/, /w/, /y/, /l/, /m/, /n/, and all vowels, (5) sounds which have plus continuant are /f/, /x/, /v/, /s/, /z/, /w/, /y/, /l/, and all vowels, (6) sounds which have plus nasal (+nas) are /m/ and /n/, (7) sounds which have plus lateral (+lat) is /l/, (8) sounds which have plus anterior (+ant) are /p/, /b/, /t/, /d/, /f/, /v/, /s/, /z/, /l/, /m/, and /n/, (9) sounds which have plus coronal (+cor) are /t/, /d/, /s/, /z/, /l/, and /n/.

2.2.2.8 Formulation of the Phonological Rules

According to Odden (2005:155), the main function of features is the basis for formulating rules, which are crucial in understanding what defines a possible phonological rule. The general form of a phonological rule is as follows:



The above rule shows that F_1, F_2, F_3, F_4, and F_5 are features and plus (+) or minus (-) values are indication of the presence of feature. The matrix to the left of the

arrow is the segment changed by the rule; that segment is referred to as the focus or target of the rule. The matrix immediately to the right of the arrow is the structural change, and describes the way in which the target segment is changed. The reminder of the rule constitutes the trigger (also known as the determinant or environment), stating the condition outside of the target segment which are necessary for application of the rule.

Each element is given as a matrix, which expresses a conjunction of features. The matrices of the target and trigger mean "all segments of the language which have the features [αF_1] as well as [aF_1]" The matrix of the structural change means that when a target segment undergoes a rule, it receives whatever feature values are specified in that matrix.

There are some symbols which enter into rule formulation. One which we have encountered is the word boundary, symbolized as ''#''. A rule which lengthens a vowel before a word-final sonorant would be written as follows:

[+syl] → [+long] / _ [+son] #

A rule which devoices a word-initial consonant would be written as:

[- son] → [- voice] / # _

A word boundary can come between the target and the trigger segments, in which case it means "when the trigger segment is in the next word." such processes

are relatively infrequent, but, for example, there is a rule in Sanskrit which voices a consonant at the end of a word when it is followed by a sonorant in the next word, so /tat#aham/ becomes [tad#aham] 'that I'; voicing does not undergo voicing. This rule is formulates below:

[- son] → [+voice] / _ # [+son]

Another symbol is null (Ø), used in the focus or structural change of a rule. As the focus, it means that the segment described to the right of the arrow is inserted in the stated context; and as the structural change, it means that the specified segment is deleted. Thus a rule that deletes a word-final short high vowel which is preceded by a sonorant would be written as follows;

$$\begin{bmatrix} +\text{ syl} \\ -\text{ hi} \\ -\text{ long} \end{bmatrix} \rightarrow \emptyset \,/\, [+\text{ son}]\ \_\ \#$$

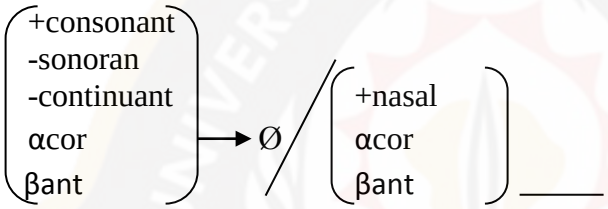
The following rules below show how to govern the process of sound change from the word *mengpukul* to the acceptable *memukul* in Indonesian.

Sound assimilation [ŋ] becoming [m] in mem- before sound [p]

$$\begin{bmatrix} +\text{nasal} \\ -\text{coronal} \\ -\text{anterior} \end{bmatrix} \rightarrow \begin{bmatrix} \alpha\text{cor} \\ \beta\text{ant} \end{bmatrix} \Big/ \underline{\quad} \begin{bmatrix} +\text{consonant} \\ -\text{sonoran} \\ -\text{continuant} \\ \alpha\text{cor} \\ \beta\text{ant} \end{bmatrix}$$

The sound [ŋ-] will change into [m] in the position before the sound [p], this is because the sound [m] and the sound [p] have the same articulation characteristic that is [-coronal] and [+ anterior]. Then it goes on to the second rule governing the sound [p] on the base *pukul* which becomes *memukul* after the affix *mem-* is given.

Rule 2: Sound expression [p] when meeting sound [m] in word *memukul*



The sound [p] will experience such deletion when it meets the sound [m], this is because the sound [p] and the sound [m] have the same articulation characteristic that is [-coronal] and [+ anterior].

2.2.3 Bilingualism

Thornbury (2006:25) explains the term 'bilingualism' as the use of two languages, either by an individual, or by a social group. Bilingual speakers in Indonesian use Indonesian as their second language alongside one or more other languages, but between two or more languages can be unequal proficiently. Other experts think that bilingualism is not as simple as knowing or using two languages (languages like English and Indonesia, or Javanese and Buginese) because language in its all complexity can be acquired through a variety of modalities such as sound (speech), sight (writing), and visual motion (signs).

People who remark themselves as bilingual only if they know two points: (1) two languages in the same modality, for example, two speech-based languages such as spoken English and spoken Indonesia, or, two sign-based languages such as Javanese Sign Language and Buginese Sign Language, and (2) two languages based on different modalities, for example spoken English and Indonesian Sign Language, or, spoken Javanese and written Buginese language (Steinberg and Sciarini, 2006:160).

According to Brown (2007:72), most bilinguals engage in code-switching (act of inserting words, phrases, or even longer stretches of one language into the other), especially when communicating with another bilingual. The use of two or more languages result on influence among the languages controlled. The interplay between the languages will result in the language contact.

The occurrence of language contact is caused when two or more languages are used interchangeably by the same speaker. Language contacts actually take place within speakers individually but in social contexts. Weinreich (1970:4) argues that language contact can occur because of the use of two or more languages so that interference between languages is used. Suwinto (1983:8) argues that language contact is an event in which the use of two or more languages resulting on the language contact.

2.2.4 Languages in Contact

According to Weinreich (1970:1), Language contacts became the focus of some experts since they aware of the fact that there is no language which would be free of foreign aspects and that languages influence one another on different aspects such as in term of phonology, morphology, or syntax.

Philologists became to focus on *mixed languages* as something to be considered as an important issue of language research at the end of the eighteenth century. This interest leads to the growth of linguistic borrowing, language influences, interference, bilingualism, and code-switching. They became common topics of the numerous researches.

2.2.4.1 Languages in contact and linguistic borrowing

Weinreich introduced the term *languages in contact* firstly in his book that became widely accepted and used by most of the scholars dealing with problems of language contact. At the same time Haugen introduced the term *linguistic borrowing.* Both terms have been used simultaneously to the present day (Weinreich, 1970:4).

2.2.4.2 Codeswitching

The term of *codeswitching* is defined as the alternate use of more than one linguistic system (code) by a bilingual individual within a single conversation (Weinreich, 1970:5). The bilingual speakers sometimes produce some words from different languages in their speaking. According to Weinreich (1970:5), codeswitching is

common phenomena in bilingual families where people easily switch from one language into the other.

2.2.4.3 Interference

Weinreich replaced the traditional term *interlingual influence* with the new term called *interference* that was later adopted by Haugen in the meaning of *simultaneous overlapping of two norms* where bilinguals could not or would not keep the two language codes separated (Weinreich, 1970:5).

According to Weinreich (1970:5), interference is defined as a deviation to the norm of both languages which occurs in the speech of a bilingual speaker. Interference appears on all language aspects such as phonological, morphological, syntactic, semantic, and lexical. This interference appears when bilingual speakers include the aspects of another language into the one he is speaking (it is mostly not being aware).

2.2.5 Language Interference

Language interference is the language contact of one language on the using of other language. It can be seen in any speakers' first language on the using of their second language. It can be seen from any speakers' first language on the using of their second language. Thornbury (2006:232) defines that language interference has the same meaning as the language transfer which is the effect from one language particularly the first language into another language.

Dulay et al (1982) describe interference as the automatic transfer, due to habit, of the surface structure from the first language onto the surface of the second language. Lott (1983:256) defines interference as 'errors in the learner's use of the foreign language that can be traced back to the mother tongue'. The form of the interference can be appeared in any aspects of the language such as vocabulary, phonology, morphology, syntax and so on. This statement leads to the definition of Ellis (1986:51) and Thornbury (2006:109), they refer the interference as the term 'transfer' that occurs at all levels such as pronunciation, vocabulary, grammar, and discourse.

2.2.6 Phonological Interference

Phonological interference is the confusion or disturbance of a language system which is related to the phoneme (Briere, 1966:768). This phonological interference occurs at the level of vowels, diphthongs and consonants. Phonological interference is a common type of interference, and its most prominent manifestation is a second language.

According to James (1998:121) pronunciation errors of L2 speakers do not just present random attempts to produce unfamiliar sounds but rather reflect the sound inventory, rules of combining sounds, the stress, and intonation patterns of their native languages.

Chaira (2015: 472) stated several samples of phonological interference of Indonesian into English in consonant and vowel sounds that were found randomly in the observations.

Table 2.9 Samples of Phonological Interference

English Sound		Indonesian sound	Word	English pronunciation	Students' pronunciation
[ph]	→	[p]	Pen	[phɛn]	[pɛn]
[th]	→	[t]	Tea	[thiː]	[tiː]
[kh]	→	[k]	Can	[khæn]	[kæn]
[f] for "ph"	→	[p]	Photo	[fəʊtəʊ]	[phəʊtəʊ]
[v]	→	[f]	Seven	[sɛvən]	[sɛfən]
[θ]	→	[t^h]	Anything	[ɛnɪθiŋ]	[ɛnɪthiŋ]
[ð]	→	[t^h]	Without	[wɪðaʊt]	[wɪthaʊt]
[z] for "s"	→	[s]	Does	[dʌz]	[dʌs]
[ʃ]	→	[s]	Shoes	[ʃuːs]	[suːs]
[ks] for "x"	→	[k]	Box	[bɒks]	[bɒk]
[iː]	→	[I]	Sheep	[ʃiːp]	[ʃɪp]
[uː]	→	[u]	Cooler	[khuːlə]	[khʊlə]
[æ]	→	[ɛ]	Mad	[mæd]	[mɛd]
[e]	→	[ɛ]	Make	[mek]	[mɛk]

The data above show the phonological interference of sound /p/, /t/, and /k/ where the sound [ph], [th], and [kh] as in "pen", "tea", and "can" are pronounced as [pɛn] instead of [phɛn], [tiː] instead of [thiː], and [kæn] instead of [khæn] by the students. The students pronounce those sounds without any aspiration as they think they are equivalent with the released non-aspirated ones. These phenomena occur because in Indonesian, the phonemes /p/, /t/, and /k/ are never aspirated. The students pronounce the sounds as they would in Indonesian, with no aspiration.

2.2.6.1 Factors that Cause Language Interference

According to Weinreich (1970:64-65), interference is a general problem that occurs in bilingualism. There are some factors that contribute to language interference: (1) bilingualism background, (2) disloyalty to target language; this will lead to disobedience to target language structure and further force the bilingual to put uncontrolled structure of his first language elements to output in practicing words utterances both oral and written, (3) the limited vocabularies of second language that is mastered by a learner, (4) the needs for synonym that can be contributed to interference in the form of adoption and borrowing of new words from the first language into the second language, (5) prestige and style – it is aimed to get a pride by using unfamiliar words.

In addition, Lott (1983:258-259) divides three factors that cause the interference: (1) interlingua factor which stresses upon the negative interference of the mother tongue as the only source of errors (such as grammatical error that is caused by the differences between the first and the second language system), (2) over extension of the analogy that can be caused by similarity of the element between first language and second language, and (3) transfer of structure.

Interference is the nonconformity of the target language as the result of their familiarity with more than one language. Dulay et.al (1982:98) differentiates interference into two parts, the psychological and sociolinguistic. The psychological

refers to the influence from the old habits when the new language is being learned, whereas sociolinguistic refers to the interactions of the languages when the two language communities are in contact. Therefore, people will find some difficulties in mastering the second language due to the interference, which is influenced by the old habit, the familiarity with the mother tongue, and the interaction of two languages in the communities.

2.2.6.2 Effects of Language Interference

The effect of language interference could be positive and also negative (Thornbury, 2006). The effects of the first language in producing the second language have both advantages and disadvantages. According to Brown (2007:73), adult second language linguistic processes are more susceptible to the effect of the first language on the second language, especially the farther apart the two events are. Adults in producing a second language are influenced by the first language greater than children are. According to Steinberg and Sciarini (2006:161), some people believe that if a second language is given to be learned by children at their early age, it can be harmful in two main aspects: first is related to the learning of the second language would delay or negatively influence the learning of the first language, and the second is concerned to the delay of thinking development (cognitive capacities such as mathematics and reading).

Language interference is reflected as one of the error sources (negative transfer) and also it might be resulted in the correct language production (positive transfer) where the relevant feature of both languages is the same. The more change of differences between two languages, the more negative interference effects will happen. The negative effect happens in any situation where speaker has not mastered a second language fluently.

2.2.7 Phonological Process

According to Leung and Brice (2012: 43), phonological processes are patterns of sound errors that typically developing children use to simplify speech as they are learning to talk. A phonological disorder occurs when phonological processes persist beyond the age when most typically developing children have stopped using them or when the processes used are much different than what would be expected. The following table is adapted from Bowen (2011).

Table 2.10 Phonological Process

Phonological Process	**Definition**	**Example**
Backing	When alveolar sounds like /t/ and /d/ are substituted with velar sounds like /k/ and /g/	[**g**og] for [**d**og]
Fronting	When velar or palatal sounds like /k/ and /g/ are substituted with alveolar sounds like /t/ and /d/	[**t**oo**t**ie] for [**c**oo**k**ie]
Gliding	When /r/ and /l/ becomes sound /w/ or /y/	[**w**abbit] for [**r**abbit]
Stopping	When fricative sounds like /f/ or /s/ is substituted with a stop consonant sound like /p/ or /d/	[**p**an] for [**f**an] or [**d**ump] for [**j**ump]

Vowelization	When the sounds /l/ or /r/ are replaced with a vowel	[app**o**] for [app**le**]
Affrication	When non-affricate sound is replaced with affricate sound like /j/	[**j**oor] for [**d**oor]
Deaffrication	When affricate sound like /c/ or /j/ is replaced with fricative sound or stop sound like /ʃ/ or /d/	[**ʃ**ips] for [**c**hips]
Alveolarization	When non-alveolar sound is substituted with alveolar sound	[**t**u] for [**ʃ**u:]
Depalatalization	When palatal sound is substituted with non-palatal sound	[fi**t**] for [fi**ʃ**]
Labialization	When non-labial sound is replaced with labial sound	[**p**ie] for [**t**ie]
Assimilation	When consonant sound starts to sound like another sound in the word	[bub] for [bus]
Cluster Reduction	When consonant cluster is reduced to a single consonant	[pane] for [p**l**ane]
Final Consonant Deletion	When the final consonant in a word is left off	[toe] for [toa**d**]
Initial Consonant Deletion	When the initial consonant in a word is left off	[unny] for [**b**unny]
Weak Syllable Deletion	When the weak syllable in a word is deleted	[nana] for [**ba**nana]

2.2.8 Phonological System of Buginese and Indonesian

In this section, the consonant and the vowel sound system of IL and BL are compared. These sounds are set out in the similar consonant charts to make an easy comparison.

2.2.8.1 Consonants Contrast

I started this part with the explanation about consonant and vowel comparison of the IL and BL. The following tables show the consonant and vowel contrast in Indonesian (I) and Buginese (B). The tables are divided into rows and columns. The

columns show manner of articulation, while the rows show place of articulation. The consonant charts also show whether sounds are voiced or voiceless.

Table 2.10**:** Consonant Contrast in Indonesian and Buginese

Approximant		**Nasal**		**Trills/ Flap**		**Lateral**		**Fricative**		**Affricates**		**Stops**		**Manner of Articulation**	**Place of Articulation**
I	**B**	**I**	**B**	**I**	**B**	**I**	**B**	**I**	**B**	**I**	**B**	**I**	**B**	**Language** ←	
												p	p	**Voiceless**	**Billabial**
w	w	m	m									b	b	**Voiced**	
								f						**Voiceless**	**Labio-dental**
								v						**Voiced**	
								s	s			t	t	**Voiceless**	**Alveolar**
		n	n	r	r	l	l	z				d	d	**Voiced**	
								ʃ		c	c			**Voiceless**	**Palate-alveolar**
										j	j			**Voiced**	
								ɭ						**Voiceless**	**Palatal**
y	y													**Voiced**	
								x				k	k	**Voiceless**	**Velar**
		ɴ	ŋ									g	g	**Voiced**	
								h	h			ʔ	ʔ	**Voiceless**	**Glottal**
														Voiced	

Adapted from Chaer (2009: 50) and Abigail et all (1999: 587)

Table 2.11: Vowel Contrast in Indonesian and Buginese

Backness		**Front**		**Central**		**Back**	
Height	**Language**	**Unrounded**	**Rounded**	**Unrounded**	**Rounded**	**Unrounded**	**Rounded**
Height	**I**	i					u
	B	i					u
Mid	**I**	e		ə			o
	B	e		ə			o
Low	**I**			a			

	B			a			

Adapted from Muslich (2008:95) and Abigail et all (1999: 588)

Table 1 above shows that Indonesian and Buinese have the plosive sound /p/, /b/, /t/, /d/, /k/, and /g/. Buginese does not have the labio-dental fricatives /f/ and /v/, alveolar fricative /z/. Indonesian has the palate-alveolar fricatives /ʃ/ and velar /x/ but Buginese does not have those sounds. Indonesian and Buginese have fricative alveolar /s/ and /h/. Affricates, both languages have sound /c/ and /j/. Nasals, /m, n, ɲ, and ŋ/ are common to both languages and they behave alike in both languages. Laterals, both languages have sound /1/ and /ʎ/. Lateral Approximant, both languages have sound /w/. Approximants, Indonesian and Buginese have alveolar approximant /r/. Table 2 shows that: Indonesian and Buginese have the same vowels system.

2.2.8.2 Description of Troublesome Contrasts

In describing the contrasts, we focus on the elements in the IL which are absent in the BL. The table related to consonants and vowels in Buginese and Indonesian, and their allophones as well as the distributions are displayed as follows:

Table 2.12: Distribution of consonant and vowel in Indonesian and Buginese

NO	Phonemes	Availabilty		Allophones		Distriuibutions					
						Initial		Medial		Final	
		Indo	Buginese	Indo	Buginese	Indo	Buginese	Indo	Buginese	Indo	Buginese
1	p	yes	yes	[p]	[p]	yes	yes	yes	No	yes	No
2	b	yes	yes	[b]	[b]	yes	yes	yes	No	yes	No
3	t	yes	yes	[t]	[t]	yes	yes	yes	No	yes	No
4	d	yes	yes	[d]	[d]	yes	yes	yes	No	yes	No
5	k	yes	yes	[k]	[k]	yes	yes	yes	No	yes	No
6	g	yes	yes	[g]	[g]	yes	yes	yes	No	yes	No
7	tʃ	yes	yes	[tʃ]	[tʃ]	yes	yes	yes	No	yes	No
8	ʤ	yes	yes	[ʤ]	[ʤ]	yes	yes	yes	No	yes	No
9	f	yes	No	[f]	No	yes	No	yes	No	yes	No
11	s	yes	yes	[s]	[s]	yes	yes	yes	No	yes	No
12	z	yes	No	[z]	No	yes	No	yes	No	yes	No
13	ʃ	yes	No	[ʃ]	No	yes	No	yes	No	yes	No
14	h	yes	yes	[h]	[h]	yes	yes	yes	No	yes	No
15	x	yes	No	[x]	No	yes	No	yes	No	yes	No
16	l	yes	yes	[l]	[l]	yes	yes	yes	No	yes	No
17	r	yes	yes	[r]	[r]	yes	yes	yes	No	yes	No
18	m	yes	yes	[m]	[m]	yes	yes	yes	No	yes	No
19	n	yes	yes	[n]	[n]	yes	yes	yes	No	yes	No
20	ŋ	yes	yes	[ŋ]	[ŋ]	yes	yes	yes	No	yes	yes
21	w	yes	yes	[w]	[w]	yes	yes	yes	No	yes	No
22	y	yes	yes	[y]	[y]	yes	yes	yes	No	yes	No
23	i	yes	yes	[i]	[i]	yes	yes	yes	yes	yes	yes
24	u	yes	yes	[u]	[u]	yes	yes	yes	yes	yes	yes
25	e	yes	yes	[e]	[e]	yes	yes	yes	yes	yes	yes
26	ə	yes	yes	[ə]	[ə]	yes	yes	yes	yes	yes	yes
27	o	yes	yes	[o]	[o]	yes	yes	yes	yes	yes	yes
28	a	yes	yes	[a]	[a]	yes	yes	yes	yes	yes	yes
29	ʔ	yes	yes	[ʔ]	[ʔ]	No	No	yes	yes	yes	yes
30	ai/oi/a	yes	No	[ai/oi	No	yes	No	yes	No	yes	No

	u/ei			/au/ei]							

Adapted from Muslich (2008:105) and Sidauruk (2017:8)

It has been established that the Buginese does not have the Indonesian fricatives /f/ and /v/, the alveolar /z/, palate-alveolar /ʃ/, and fricative /x/. All the plosive consonants /p/, /b/, /t/, /d/, and /k/ do not occur in Buginese in the final position of the word. Bilabial nasal /m/ and alveolar nasal /n/ in Indonesian also do not occur in Buginese in the final position of the word. The only nasal which can take the final position is velar nasal /ŋ/. Buginese also does not have diphthong such as /ai/, /oi/, /au/, and /e/.

CHAPTER III

RESEARCH METHODS

In solving the problems that have been formulated in the previous chapter, it takes several successive stages of strategy; there are three stages: (1) data provision, (2) data analysis, and (3) presentation of data analysis.

3.1. Research Design

The type of this research is descriptive-qualitative. According to Nazir (1988:63), descriptive method is a method used to examine the status of a group of people, objects, sets of conditions, thinking systems, as well as a class of events in the present. Meanwhile, Arikunto (2006:12) states that qualitative research is a type of research in which researchers do not use numbers in data collection and in interpreting the results of research. Those statements were also supported by Strauss et. al (2009:4) who explain that the term "qualitative" may be intended as a type of research whose findings are not obtained through statistical procedures or other forms of calculation.

This research used phonology transformation generative approach. The utterances were examined using the theory of *bilingualism* proposed by Steinberg and Sciarini (2006), the theory of *Language Interference* proposed by Dulay (1982) and Ellis (1986), and the theory of *distinctive feature* written by Odden (2005) and Schane (1973). In addition, this research used observation method with a recording

technique in obtaining the data. After the data were sufficient, I transcribed the recordings into the orthographic transcription and the phonetic transcription, then, I compared them with the standard phonetic transcription that were taken from *Kamus Besar Bahasa Indonesia* (KBBI) in order to get the form of the interference.

3.2. Location, Time, and Object of the Research

This research took place in Tolitoli Central Sulawesi as the city with the biggest number of Buginese speakers. The reason for choosing Tolitoli as the research location is because the majority of Buginese speakers who use Buginese as their first language in daily communication live in Tolitoli.

The locations chosen for this research include villagers' homes, workplaces such as plantations, various village events such as weddings, markets and other shopping centers in Tolitoli regency. The four places were chosen because in those places people often gather and tell stories, so their conversation flows as it is without being limited by a particular topic. I took recordings from teenagers up to adults (15 up to 40 years old), there are 25 teenagers and 15 adults were involved. It aims to derive comprehensive data and to bring up more varied data related to the first language interference (BL) with the second language (IL).

The object of this research was the daily conversation of Buginese using Indonesian language. Therefore, the population in this research was the whole speech

that contains BL interferences into IL in Indonesian daily conversations of Buginese speakers.

3.3. Population

The population has a sense as a whole region consisting of subjects and objects with certain characteristics determined by researchers to be investigated and taken conclusions. The object of this research was the daily conversation of Buginese using Indonesian language. Therefore, the population in this research was the whole speech that contains BL interferences to the use of IL in Indonesian daily conversations. I collected 77 recordings in an effort to obtain the data in this research.

3.4. Sample

The sample is a partial or representative of the population to be studied. This research used purposive sampling technique. It was because of a certain purpose in accordance with the purposes of the researcher. It is stated clearly by Hamidi (2010:89), he explains that purposive sampling is to have key words: the carefully considered group (intuition) and the best group (which is considered to provide sufficient information), to be selected as the research respondents.

In obtaining the expected sample, I set some criteria based on Samarin's theory: (1) that participants are native speakers of Buginese language, (2) the data must be about speech that contains L1 interference elements to L2, (3) subsequent participants in the conversation should be participants who use Buginese and

Indonesian language mixing in certain conversation, (4) the speakers have a normal sound productivity, and (5) the speakers must have low mobility which means that they never leave the village for a long time. After establishing some of these criteria, I collected 77 conversations in the form of recordings each of which lasted between five minutes to an hour and more with the varying age of the speakers from young learners up to elder (15 up to 40 years old). The reason for choosing this age was because in this age, language competence is fully acquired.

3.5. Data and Source of the Data

The data in this research were obtained from the conversations of 35 Buginese in everyday conversations using Indonesian as well as containing the form of phonological interference.

3.6. Method of Obtaining Data

In obtaining the data, I used observation method. The observation method is a method of data acquisition by listening or observing the use of language (Sudaryanto, 1993:203).

Type of research technique on the observation method used in my research was recording technique. Recording Technique is a technique of data collection by tapping the conversation or the use of a person's language conducted by me without known by the object of research (Sudaryanto, 1993:203). Recording technique is used

to record everyday people's conversations in using two languages. In collecting the data, I used a simple recording device which was found on the cell phone or smart phone. Recording techniques in this research were assisted by many parties who have been given direction by me clearly to assist the recording process without being noticed by the object of the research. The whole technique used aims to obtain conversation results that run as is or naturally without coercion or direction or intervention from me.

In addition to such Recording techniques, another advanced technique used was the noting technique. This technique was used to record data for later classified into several categories of phonological interference. This noting technique was done right after the recording process was done.

3.7. Method of Data Analysis

The method used in analyzing the data is articulatory phonetic method in which the deciphering device is a language-forming organ. The recorded data were reviewed for later classified as needed by me. The need was a classification of the interference form of BL into IL. Then the result of the classification was made into a phonetic transcription corresponding to the IPA as a world standard used in phonological studies. Due to the qualitative research, process of the method analysis involved verbal data which must be transcribed: it includes objects, situations, or events with the same or even completely different actors. Idrus (2009:147) explained

that when the data is still in rough form (the record has not been transcribed) then it needs to be arranged, edited, corrected, and then re-typed. After all those processes, then the amount of the data that has been obtained needs to be reduced and grouped into categories that were fixed. In addition, activities such as storage and retrieval processes are very important activities to do when starting to analyze data. Failure to create schemes of work, coding, and inappropriate labeling will make it difficult for me to call (re-locate) data that has been available as needed. The following points are the steps in analyzing the data in this research.

1. Selecting the data

   All the transcribed data were selected to obtain data in the form of phonological interference from the BL into IL. Speeches containing interference forms will be analyzed, whereas the non-interference speech will be ignored.

2. Grouping the data

   The selected data would then be grouped into the following example. Examples of how to group the data as follows:

NO	Sound Interference	BL	IL
1	/ŋ/	[maka**ŋ]**	[maka**n]**
2	/ʔ/	[tapla**k]**	[tapla**ʔ**]

The table above shows the sound interference of velar nasal sound /ŋ/ and glottal sound /ʔ/ in word [*makaŋ*] and [*tapla?*]. I grouped the data based on what is the sound interference and in what word it is appear. I gave a bold marker to sign the sound changes such as from sound /n/ into /ŋ/ and sound /k/ into /ʔ/.

3. Coding the data

The next step is to provide code on the data in order to give identity and facilitate the data to be analyzed. The following example shows the way how to code the data:

Suara 001_17/11/17

S1: [saya] [yaŋ] [**batelpoŋ**]^{2} [ini].
S2: [saya] [**jugaʔ**]^{3} [**baɲaʔ**]^{4} [ini], [ada] [səratus] [**ləbi**]^{5}.
S3: [**kaloʔ**]^{6} [saya] [habis], [baru] [kau] [**telpoŋ**]^{7} [**baleʔ**]^{8}
S4: [**tidaʔ**]^{9}, [bukaŋ] [itu] [yaŋ] [pərtama] [kali]. [**masi**]^{10} [ada] [**mamaʔ**]^{11} [waktu] [saya] [kəna] [bisul] [pərtama] [kali]

The example above shows that code 001 means recording one, 001 refers to the order of the recording. 17/11/17 means that the recordings were taken on November 17th 2017. Bolded words (eg. [baɲaʔ] means banyak) is the word getting interferences from BL, then the superscript is a sign for the order number of interference word so that it will be easy to see and categorized them into a certain sound change. S1 and S2 are referred to speakers and partner said.

4. Analyzing the data

The data that have been grouped and coded is then analyzed. The first data is analyzed from the language aspects and the form of phonological interference of BL to the using IL.

3.8. Method of Data Presentation

To present the data, I used informal and formal methods. The informal method was done by formulating ordinary words using technical terminology, while the formal method was done by using symbols. Sudaryono (1993:145) explains that the symbols and signs used in the presentation of the result analysis can be a plus sign (+), less sign (-), asterisks (*), arrows (→), parentheses (()), brackets ([]), symbolic symbols as name abbreviations (S, P, O, V, K), sigma symbols (Σ), and various other symbols. In this research, I used plus symbol (+) indicating the presence of features, minus symbol (-) indicating the absence of features, brace symbol ([]) expressing a conjunction of features, arrow symbol (()) indicating the structural change of features, slash symbol (/) indicating the environment of features, hedge symbol (#) indicating the word boundary, and null symbol (Ø) indicating deletion or addition.

CHAPTER IV

FINDINGS AND DISCUSSIONS

This chapter consists of two sections. The first section is the findings that consist of phonological interference of Buginese into Indonesian by Buginese speakers in Tolitoli Central Sulawesi. The second section is the discussion that involves the factors influencing the phonological interference of Buginese into Indonesian in Tolitoli Central Sulawesi.

4.1 Findings

In this chapter, I present the results of the analysis as follows: (1) the kinds of phonological interference, and (2) the factors influencing the occurrence of the phonological interference. The phonological processes noted in this study include: (a) glottalization process, divided into two processes (1) plosive glottalization where / p /, / b /, / t /, / d /, / k / change into glottal sounds [ʔ] and (2) fricative glottalization where / h / changes into glottal sounds [ʔ] at the final position of a word, (b) velarization of nasal process, the change of nasal / n / and / m / into nasal [ŋ] at the final position of a word, (c) stopping process of / f / and / v / into [p] sound at the final position of a word, (d) lowering process of vowel / ə / changes into [a], / i /changes into [e], and / u / changes into [o], (e) fronting process of vowel / ə / changes into [e] and / ə / changes into [i], (f) highing process of vowel / o / changes into [u], (g) weakening process of vowel / a / changes into [ə], (h) vowelization process of diphtong / ai / and / au / into vowel [e] and [o], (i) sound deletion process of fricative sound / h / in any position of a word, (j)

sound addition process, and (k) assimilation process of sound / k / into [s] and [t]. The following is the detailed explanation of the process.

4.1.1 Glotallization Process

Glotalization process is a process in forming non-glottal sounds such as sounds / p /, / b /, / t /, / d /, / k /, and /h/ into glottal sounds [ʔ]. The process includes (1) Plosive Glottalization of sound / p /, / b /, / t /, / d /, / k / into glottal sounds [ʔ] and (2) Fricative Glottalization of sound / h / into glottal sounds [ʔ] at the final position of a word**.** The following data show the glottalization process.

1. Consonant /p/ changes into sound [ʔ]

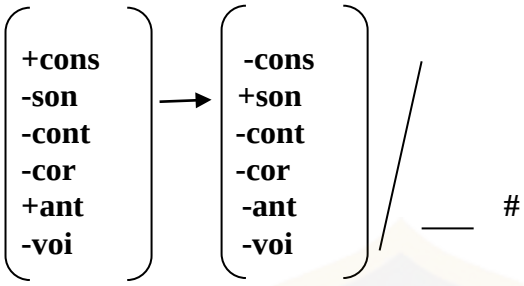
I found some data related to the change of sound / p / into [ʔ] at the final position of a word. The following data show the glottalization process of /p/ into [ʔ].

Table 3.1: Consonant /p/ changes into sound [ʔ]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[tutup]	→	[tutuʔ]	Close
[stop]	→	[stoʔ]	Stop
[lap)]	→	[laʔ]	Towel
[tiup]	→	[tiuʔ]	Blow
[atap]	→	[ataʔ]	Roof

It can be seen from the above table that the sound /p/ at the final position changed into sound /ʔ/. The following rule shows the features of each sound.

/p/ ⟶ [ʔ]/_ #



The above rule shows that sound / p / will change into glottal [ʔ] in the final position of a word. Both the two sounds share similarities in feature such as minus continuant [-cont], minus coronal [-cor], and minus voice [-voi]. The rest of the features are different where sound /p/ has characteristics such as plus consonant [+cons], minus sonorant [-son] and plus anterior [+ant], while the glottal /ʔ/ has characteristics such as minus consonant [-cons], plus sonorant [+son] and minus anterior [-ant].

2. Consonant / b / changes into sound [ʔ]

There are a few words in IL ending with sound / b /. I found two words that should be ended with sound / b / instead of / ʔ / that are used by BL speaker. The following data show the change of / b / into [ʔ].

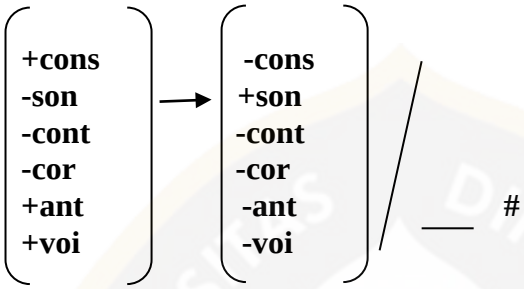
Table 3.2: Consonant /b/ changes into sound [ʔ]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[səbab]	→	[səbaʔ]	Because
[ɑdɑb]	→	[ɑdɑʔ]	Manner

The above data shows that the word in IL ending with sound / b / then change into sound [ʔ]. The interference of sound / ʔ / occurs in the last position

of the word replacing the sound / b /. This change can be predicted by making a phonological rule as follows:

/b/ ⟶ [ʔ]/_ #



The rule above shows that sound / b / will change into glottal [ʔ] in the final position of a word. Both the two sounds share similarities in feature such as minus continuant [-cont] and minus coronal [-cor]. The rest of the features are different where sound /p/ has characteristics such as plus consonant [+cons], minus sonorant [-son], plus anterior [+ant], and plus voice [+voi], while the glottal /ʔ/ has characteristics such as minus consonant [-cons], plus sonorant [+son], minus anterior [-ant], and minus voice [-voi].

3. Consonant /t/ changes into sound [ʔ]

In everyday speech, I found words that fall within the category of this change. The following data show the change of / t / into [ʔ]:

Table 3.3: Consonant /t/ changes into sound [ʔ]

Standard Pronunciation		Buginese Pronunciation	Meaning
[jaket]	→	[jakeʔ]	Jacket
[pəsawat]	→	[pəsawaʔ]	Plane
[lanjut]	→	[lanjuʔ]	Continue
[lihat]	→	[liaʔ]	See
[lompat]	→	[lompaʔ]	Jump
[aŋkat]	→	[aŋkaʔ]	Lift
[rawat]	→	[rawaʔ]	Nurse

[sakit]	→	[sakiʔ]	Sick
[dapat]	→	[dapaʔ]	Get
[dompet]	→	[dompeʔ]	Wallet
[laŋit]	→	[laŋiʔ]	Sky
[ribut]	→	[ribuʔ]	Noisy
[moɲet]	→	[moɲeʔ]	Monkey
[lambat]	→	[lambaʔ]	Slow

It can be seen from the data above, the change of / t / into glottal [ʔ] at the final position of a word. The rule that can be made from the change process is as follows:

Rule: /t/ → **[ʔ]**/_ #

$$\begin{bmatrix} \textbf{+cons} \\ \textbf{-son} \\ \textbf{-cont} \\ \textbf{+cor} \\ \textbf{+ant} \\ \textbf{-voi} \end{bmatrix} \rightarrow \begin{bmatrix} \textbf{-cons} \\ \textbf{+son} \\ \textbf{-cont} \\ \textbf{-cor} \\ \textbf{-ant} \\ \textbf{-voi} \end{bmatrix} / \underline{\quad} \; \#$$

The above rule shows that sound / t / will change into glottal [**ʔ**] in the final position of a word. The two sounds have differences almost in all features such as consonant, sonorant, coronal, and anterior. Sound /t/ have characteristics plus consonant [+cons], minus sonorant [-son], plus coronal [+cor], and plus anterior [+ant], while the sound /ʔ/ is on the contrary where the characteristics are minus consonant [-cons], plus sonorant [+son], minus coronal [-cor], and minus anterior [-ant]. The two sounds share the similarities only in two features such as minus continuant [-cont] and minus voice [-voi].

4. Consonant /d/ changes into sound [ʔ]

I found data related to the change of sound /d/ into [ʔ] as follows:

Table 3.4: Consonant /d/ changes into sound [ʔ]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[akad]	→	[akaʔ]	Contract
[ahad]	→	[ahaʔ]	Sunday

Based on the above table, it is categorized as the change of sound / t / into sound [ʔ]. Based on this case, it can be made a phonological rule as follows;

Rule: /d/ → **[ʔ]**/_ #

+cons	→	**-cons**	/	
-son		**+son**		
-cont		**-cont**		
+cor		**-cor**		
+ant		**-ant**	___	#
+voi		**-voi**		

The above rule shows that sound / d / will change into glottal **[ʔ]** at the final position of a word. Sound /t/ has characteristics plus consonant [+cons], minus sonorant [-son], plus coronal [+cor], plus anterior [+ant], and plus voice [+voi], while the sound /ʔ/ is on the contrary where the characteristics are minus consonant [-cons], plus sonorant [+son], minus coronal [-cor], minus anterior [-ant], and minus voice [-voi]. The two sounds only share one similarity of feature that is minus continuant [-cont].

5. Consonant /k/ changes into sound [ʔ]

I found some data related to the consonant change of / k / into glottal sound [ʔ] at the final position of a word. The following data show the change of both sounds:

Table 3.5: Consonant /k/ changes into sound [ʔ]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[kotak]	→	[kotaʔ]	Box
[masak]	→	[masaʔ]	Cook
[bapak]	→	[bapaʔ]	Father
[jəlek]	→	[jəleʔ]	Ugly
[tidak]	→	[tidaʔ]	No
[gosok]	→	[gosoʔ]	Brush
[cantik]	→	[cantiʔ]	Beautiful
[anak-anak]	→	[anaʔ-anaʔ]	Children
[naik]	→	[naiʔ]	Up
[becak]	→	[becaʔ]	Pedicab
[sendok]	→	[sendoʔ]	Spoon
[ɲamuk]	→	[ɲamuʔ]	Mosquito
[duduk]	→	[duduʔ]	Sit
[ləmbek]	→	[ləmbeʔ]	Soft
[rusak]	→	[rusaʔ]	Broken

From the above data, it can be seen that all sounds in IL that end with consonant / k / hence will change into sound [ʔ] at the final position of a word. The following rule shows the detail features.

Rule: /k/ → [**ʔ**]/_ #

+cons	→	**-cons**	/	
-son		**+son**		
-cont		**-cont**		
-cor		**-cor**		
-ant		**-ant**	___	#
-voi		**-voi**		

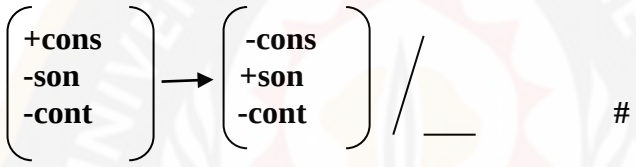
The above rule shows that sound / k / will change into glottal [**ʔ**] in the final position of a word. There are two differences between sound /k/ and sound /ʔ/ which appear in the above formula, the differences are on the main type of the characteristics where the sound /k/ has plus consonant characteristic [+cons], while sound /ʔ/ has no consonant characteristic or it can be say as minus consonant [-cons] based on the characteristics given by

Odden in his book 2005 page 148. This change occurs only in the final position of a word.

Summarizing the five rules

The five previous rules can be made into one simple rule that can cover all the features from the sound /p/, /b/, /t/, /d/, and /k/. The following rule shows the detail features.

Rule: /p/, /b/, /t/, /d/, /k/ → [ʔ]/_ #



The above rule shows that sound /p/, /b/, /t/, /d/, and /k/ will change into glottal sound [ʔ] in the final position of a word. Sound /p/, /b/, /t/, /d/, and /k/ have characteristics plus consonant [+cons], minus sonorant [-son], and minus continuant [-cont], while the sound /ʔ/ is on the contrary where the characteristics are minus consonant [-cons], plus sonorant [+son], and minus continuant [-cont]. There are two differences between sound /p/, /b/, /t/, /d/, and /k/ with sound /ʔ/ which appears on the above formula, the differences are on the main type characteristics from the both type of the sounds, sound /p/, /b/, /t/, /d/, and /k/ are plus consonant [+cons] and minus sonorant [-son], on the contrary, sound /ʔ/ has features: minus consonant [-cons] and plus sonorant [+son].

Fricative Glotallization

Fricative Glotalization is a process in forming non-glottal fricative sounds such as sounds /h/ into glottal sounds [ʔ]. This process involves the change of plus continuant /h/ into minus continuant [ʔ]. The following data is the detail explanation.

Consonant /h/ changes into sound [ʔ]

The change of the fricative sound / h / into glottal [ʔ] can be seen in the following data.

Table 3.6: Sound /h/ changes into sound [ʔ]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[bodoh]	→	[bodoʔ]	Stupid
[səkolah]	→	[səkolaʔ]	School

The change of the fricative sound / h / into glottal [ʔ] can be predicted by making a phonological rule as follows.

Rule: /h/ → **[ʔ]**/ _ #

-cons	→	**-cons**	/	
+son		**+son**		
+cont		**-cont**		
-cor		**-cor**		
-ant		**-ant**	___	#

The above rule shows that fricative sound / h / will change into glottal **[ʔ]** at the final position of a word. The two sounds share some similarities of feature such as minus consonant [-cons], plus sonorant [+son], minus coronal [-cor], and minus anterior [-ant]. The difference only in continuant feature

where sound / h / is plus continuant [+cont], while sound / ʔ / has characteristic minus continuant [-cont].

4.1.2 Velarization of the Nasal Process

The change of the front nasal to the back nasal or non-velar nasal to the velar nasal leads to the process that is called velarization of the nasal process. Bilabial nasal /m/ and alveolar nasal /n/ are changed into velar nasal /ʔ/. The following is the detail explanation of the processes.

Nasal /n/ and nasal /m/ changes into nasal [ŋ]

In general BL speakers always replace the nasal / n / and / m / sounds into nasal [ŋ] at the final position of a word. The phenomena happen because the BL itself has a feature in which there is only one nasal sound that can occupy in the final position of a word, it is nasal / ŋ / sound. The following data present the change of the non-velar nasal / n / and / m / into velar nasal [ŋ].

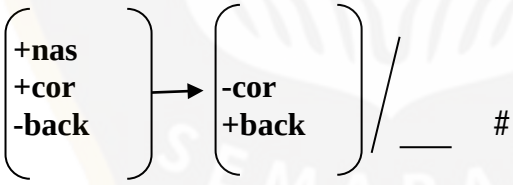
Table 3.7: Sound /m/ and /n/ changes into sound [ŋ]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[pohon]	→	[pohoŋ]	Tree
[papan]	→	[papaŋ]	Board
[hujan]	→	[hujaŋ]	Rain
[diŋin]	→	[diŋiŋ]	*Cold*
[bukan]	→	[bukaŋ]	*Not*
[jaŋan]	→	[jaŋaŋ]	*Do not*
[siaran]	→	[siaraŋ]	*Broadcast*
[durian]	→	[duriaŋ]	*Durian*
[bikin]	→	[bikiŋ]	*Make*
[taŋan]	→	[taŋaŋ]	*Hand*
[makan]	→	[makaŋ]	*Eat*
[jualan]	→	[jualaŋ]	*Merchandise*

[gantuŋan]	→	[gantuŋaŋ]	*Hanger*
[ikan]	→	[ikaŋ]	*Fish*
[pəcahan]	→	[pəcahaŋ]	*piece*
[jalan]	→	[jalaŋ]	*Road*
[koran]	→	[koraŋ]	*Newspaper*
[pulpen]	→	[pulpeŋ]	*Pen*
[al-quran]	→	[al-quraŋ]	*Alquran*
[cərmin]	→	[cərmiŋ]	*Mirror*
[tuhan]	→	[tuhaŋ]	*God*
[kawin]	→	[kawiŋ]	*Married*
[setan]	→	[setaŋ]	*Devil*
[hitam]	→	[hitaŋ]	Black
[lem]	→	[leŋ]	Glue
[jam]	→	[jaŋ]	Watch
[tanam]	→	[tanaŋ]	*Plant*
[minum]	→	[minuŋ]	*Drink*
[jarum]	→	[jaruŋ]	*Needle*
[garam]	→	[garaŋ]	*Salt*

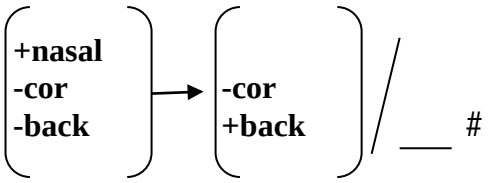
From the above data, it can be understood that all words in IL that end with the nasal sound / n / and / m / will then be changed into the sound [ŋ] at the final position of word. The following rules show the process of the change of nasal sound / n / and / m / into [ŋ].

Rule: /n/ → [**ŋ**]/_ #



The above rule shows that alveolar nasal / n / will change into velar nasal [**ŋ**] in the final position of a word. The two nasal sounds are different in the coronal feature and the anterior feature, nasal/ n / has the characteristics plus coronal [+cor] and plus anterior [+ant], while the nasal / ŋ / has features such as minus coronal [-cor] and minus anterior [-ant]. The following rule governs the change of bilabial nasal /m/ into velar nasal / ŋ /.

Rule: /m / ⟶ [ŋ]/ _ #



The above rule shows that bilabial nasal / m / will change into velar nasal [ŋ] in the final position of a word. The two sounds share differences and similarities in feature. Both nasal sounds are similar in minus coronal [-cor] feature, the difference is on the anterior feature where nasal / m / is plus anterior [+ant] while nasal / ŋ / is minus anterior [-ant].

The two rules above can be made into one simple rule that can cover all the features from the front nasal sound /m/ and /n/. The following rule shows the detail features.

Rule: /m/, /n/ ⟶ [ŋ]/_ #

The two sounds /m/ and /n/ share the same features plus nasal [+nas] and minus back [-back] change into plus back [+back] nasal /ŋ/.

4.1.3 Stopping Process

Stopping process is a process in forming fricative sounds such as /f/ and /v/ into stop consonant such as /p/. I noted the change of fricative sounds /f/ and /v/ into plosive sound /p/ as the Stopping Process. The following data explain the detail explanation.

Consonant /f/ and /v/ changes into sound [p]

Unlike IL, BL has no sounds such as / f / and / v / so those sounds will be changed into / p / wherever it is placed. For Information, Indonesian phonologists have a different opinion about the presence of sound / v / in Indonesian phonological system. The existence of the word *Survey* and *Television* in Big Indonesian Dictionary (KBBI) become the evidence of the difference between sounds / f / and / v /. Muslich (2008: 94) in his book entitled *Fonology Bahasa Indonesia*, he does not include the / v / sounds in his table of consonant, but unlike Chaer (2009: 72) in his book entitled *Fonologi Bahasa Indonesia*,he lists the sound / v / in his table. The following data show the change of fricative sounds / f / and / v / into plosive sound / p /.

Table 3.8: Sound /f/ and /v/ changes into sound [p]

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[survey]	→	[surpei]	Survey
[tələvisi (tivi)]	→	[tipi]	Television
[foto]	→	[poto]	Photo

The word *survei*, *tivi*, and *foto* are pronounced as *surpei*, *tipi*, and *poto* by Buginese speaker. The following rule presents the detail feature of the sounds.

Rule: /f/, /v/ → [**p**]/elsewhere

$$\begin{bmatrix} \textbf{+cons} \\ \textbf{-son} \\ \textbf{+cont} \\ \textbf{-cor} \\ \textbf{+ant} \end{bmatrix} \rightarrow \begin{bmatrix} \textbf{+son} \\ \textbf{-cont} \\ \textbf{-cor} \\ \textbf{+ant} \end{bmatrix}$$

The above rules show that consonant / f / and / v / will change into [p] in the final position of a word. The three sounds share different and similarity

feature. Those sounds are similar in minus coronal [-cor] feature and plus anterior [+ant] feature, the differences are on the sonorant feature and continuant feature where sound / f / and / v / has characteristics such as minus sonorant plus anterior [+ant] while / ŋ / is minus anterior [-ant].

4.1.4 Vowel Changes

I found seven kinds of vowel changes; they are replacement of phoneme / ə / into [a], / ə / into [e], / ə / into [i], / i / into [e], / u / into [o], / o / into [u], / a / into [ə]. Those changes can be classified into four phonological processes: (1) lowering process, (2) fronting process, (3) highing process, and (4) weakening process. The following table shows the data and the change processes.

Table 3.9: Sounds Change of / ə / into [a], / ə / into [e], / ə / into [i], / i / into [e], / u / into [o], / o / into [u], / a / into [ə].

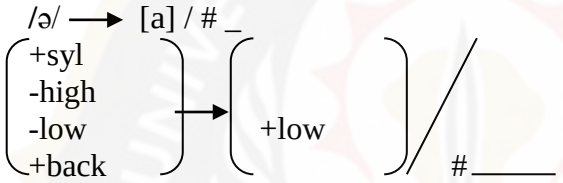
Standard Pronunciation			**Buginese Pronunciation**	**Meaning**
Lowering Process				
/ə/→/a/	[səpeda]	→	[sapeda]	Bicycle
	[cərita]	→	[carita]	Story
/i/→/e/	[mati]	→	[mate]	Die
/u/→/o/	[taruh]	→	[taro]	Put
	[pəluk]	→	[pəloʔ]	Hug
Fronting Process				
/ə/→/e/	[təlәpon]	→	[telpoŋ]	Telephone
/ə/→/i/	[səkolah]	→	[sikolaʔ]	School
	[cəlaka]	→	[cilaka]	Misfortune
Highing Process				
/o/→/u/	[toloŋ]	→	[tuluŋ]	Help
Weakening Process				
/a/→/ə/	[atap]	→	[atəʔ]	Roof
	[lalat]	→	[lalәʔ]	Fly

1. Lowering Process

I found the data related to the change of minus high [-high] vowel into plus low [+low] vowel. There are three vowel changes; /ə/ into /a/, /i/ into /e/, and /u/ into /o/.

a. The change of /ə/ into [a]

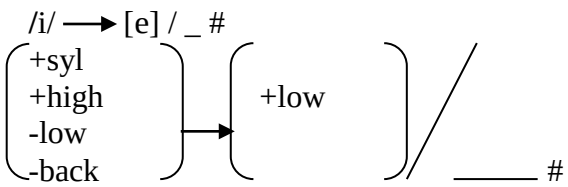
The first data in the table above show the change of vowel / ə / into vowel [a] at the first syllable position in a word. The following rule governs how the process of the change.



The above rule shows that sound / ə / will change into [a] in the first syllable of a word. The sound / ə / has the character minus low [-low] and will change into sound / a / which has the plus low [+low] feature and the sound change occurs when the sound / ə / occupies the first syllable position in a word.

b. The change of /i/ into [e]

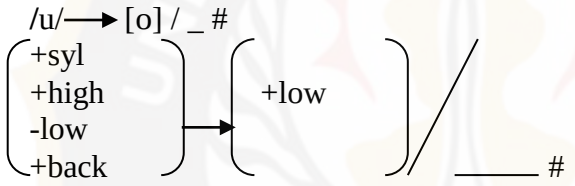
The previous data in the table show the change of vowel sound / i / into vowel [e] at the final syllable of a word. The following rule governs how the process of the change.



The above rule shows that vowel / i / will change into [e] in the final syllable of a word. The vowel / i / has the characteristics: plus high [+high], minus low [-low], and minus back [-back], then, will be changed into sound / e / which has the characteristics: plus low [+low] and minus back [-back].

c. The change of /u/ into [o]

The previous data in the table also show the change of vowel / u / into vowel [o] in the final syllable of a word. The following rule governs how the process of the change.



The above rule shows that vowel / u / will change into vowel [o] in the final syllable of a word. The sound / u / has the characteristics: plus high [+high], minus low [-low], and plus back [+back], then, will be changed into sound / o / which has minus plus low [+low] and plus back [+back].

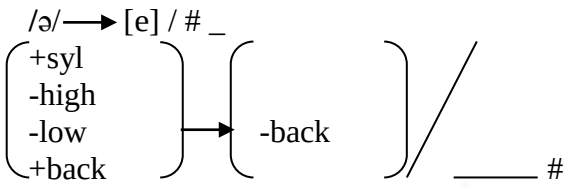
2. Fronting Process

The second vowel process is fronting process. This process shows the change of plus back vowel into minus back vowel. There are three vowel changes that were included in this process; /ə/ into /e/, and /ə/ into /i/.

a. The change of /ə/ into [e]

The second data in the table show the change of vowel / ə / into vowel [e] at the

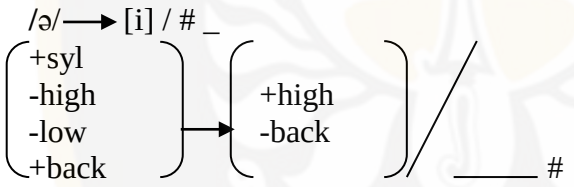
first syllable of a word. The following rule governs how the process of the change:



The above rule shows that sound / ə / will change into [e] in the first syllable of a word. The sound / ə / has the characteristic plus back [+back] and vowel / e / has the minus back [-back] feature.

b. The change of /ə/ into [i]

The following rule governs how the changing process of the vowel / ə / into vowel [i] at the first syllable of a word.



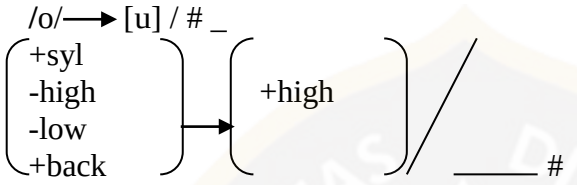
The above rule shows that vowel / ə / will change into [i] in the first syllable of a word. The sound / ə / has the characteristics minus high [-high] and plus back [+back] and sound / e / has characteristics plus high [+high] and minus back [-back].

3. Highing Process

The third vowel process is fronting process. This process shows the change of minus high vowel into plus high vowel. There is only one vowel change that was included in this process. It is /o/ into /u/.

The change of /o/ into [u]

The following rule governs how is the changing process of vowel / o / into vowel [u] at the first syllable of the word.



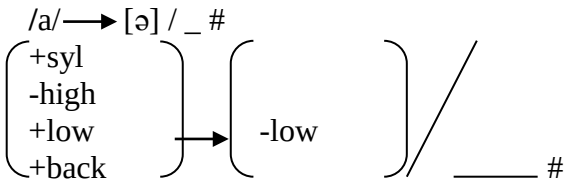
The above rule shows that vowel / o / will change into vowel [u] in the first syllable of a word. The vowel / o / has the characteristics: minus high [-high], minus low [-low], and plus back [+back], and vowel / u / has the plus high characteristic.

4. Weakening Process

The last vowel process is weakening process. This process shows the change of plus low vowel into minus low vowel. There is only one vowel change that was included in this process. It is /a/ into /ə/.

The change of /a/ into [ə]

The following rule governs how the process of the change of vowel / a / into vowel [ə] at the final syllable of a word.



The above rule shows that vowel / a / will change into [ə] in the final syllable of a word. Vowel / a / has the characteristics: minus high [-high], plus low [+low], and plus back [+back], while vowel / ə / has the minus low [-low] characteristic.

4.1.5 Vowelization Process

I found data related to the vowelization process where the diphtong change into vowel. The following data show the process of the vowelization.

Table 3.10: Sound /ai/ and /au/ changes into sound [e] and [o]

	Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
/ai/→[e]	[rantai]	→	[rante]	Chain
	[ramai]	→	[rame]	Crowded
	[lantai]	→	[lante]	Floor
	[pakai]	→	[pake]	Use
	[santai]	→	[santé]	Relax
	[pantai]	→	[pante]	Beach
/au/→[o]	[pisau]	→	[piso]	Knife
	[pulau]	→	[pulo]	Island
	[kalau]	→	[kalo]	If

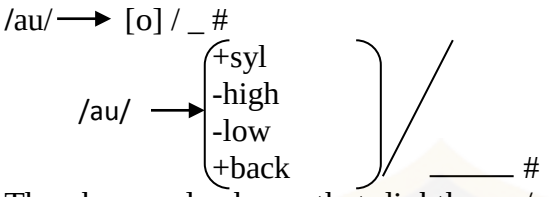
The following rule governs the change of diphthong / ai / into vowel / e / at the final syllable of a word.

/ai/ ⟶ [e] / _ #

/ai/ ⟶ [+syl, -high, -low, -back] / _____ #

The above rule shows that diphthong / ai / will change into vowel [e] in the final position of a word. Vowel / e / has the characteristics: plus syllable [+syl], minus high [-high], minus low [-low], and minus back [-back]. The

following rule governs the change of diphthong /au/ into vowel /o/ at the final position of a word.



The above rule shows that diphthong / au / will change into vowel [o] in the final position of a word. Vowel / o / has the characteristics: plus syllable [+syl], minus high [-high], minus low [-low], and plus back [+back].

4.1.6 Syllable Structure Processes

Syllable structure processes cover: (1) sound deletion, (2) sound addition, and (3) assimilation of consonant. The following is the detail explanation.

1. Sound Deletion of phoneme /h/

I found some data related to the phenomena of the sound deletion. Sound / h / will be deleted in any position of a word, yet, it doesn't mean Buginese does not have this sound. When Buginese speak Indonesian, they always delete this sound. The following data show the deletion process of phoneme / h /.

Table 3.11: Sound deletion of phoneme /h/

Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[tambah]	→	[tamba]	Add
[rumah]	→	[ruma]	House
[tahu]	→	[tau]	Know
[tanah]	→	[tana]	Ground
[hilaŋ]	→	[ilang]	Lost

The following rule governs the deletion process of the phoneme /h/ in a word.

Rule: /h/ → Ø

[-cons
  +son
  +cont
  -cor
  -ant] → Ø

The above rule shows that sound / h / will be deleted (becomes zero) in any position of a word. Sound / h / has characteristics: minus consonant [-cons], plus sonorant [+son], plus continuant [+cont], minus coronal [-cor], and minus anterior [-ant].

2. Sound Addition

I found data related to the sound addition of Buginese into Indonesian. The following data show the process of the sound addition.

Table 3.12: Sound addition of /a/, /i/, and /o/ plus glottal /ʔ/

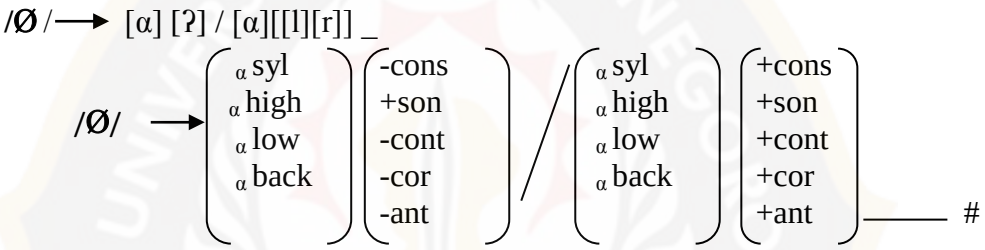
Standard Pronunciation		Buginese Pronunciation	Meaning
[kapal]	→	[kappalaʔ]	Ship
[sandal]	→	[sandalaʔ]	Slipper
[halal]	→	[hallalaʔ]	Permitted
[hafal]	→	[hapalaʔ]	Memorize
[pensil]	→	[pensiliʔ]	Pencil
[hasil]	→	[hassiliʔ]	Result
[botol]	→	[botoloʔ]	Bottle
[asar]	→	[assaraʔ]	Asar
[motor]	→	[motoroʔ]	motor
[putar]	→	[putaraʔ]	Turn

The data above show that there are three kinds of sound addition: (a) addition of sound /a/, (b) addition of sound /i/, and (c) addition of sound /o/. All

the three sounds appear in the positions after the consonants /l/ and /r/ proceeded by vowel /a/, /i/, and /o/. The following formulas govern the process of the additions.

a. Addition of sound /a/ and glottal /ʔ/

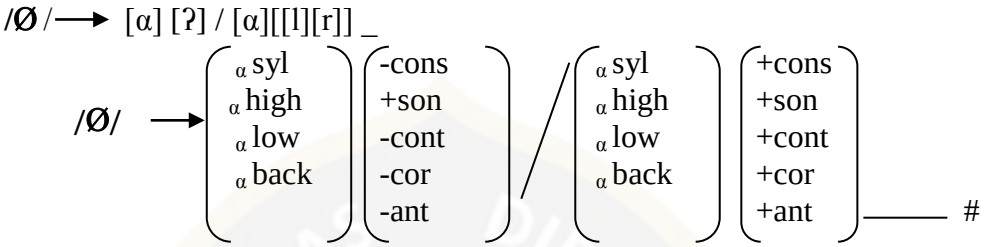
The following formula presents the detail features of each sound.



The above rule shows that sound / a / and /ʔ/ will be added (additional process) in the position after vowel / a / followed by consonants /l/ or /r/ at the final position of a word. Symbol alpha (α) refers to the same vowel sound that is / a /. Vowel / a / has characteristics: plus syllable [+syl], minus high [-high], plus low [+low], and plus back [+back], and glottal sound / ʔ / has the characteristics are minus consonant [-cons], plus sonorant [+son], minus coronal [-cor], minus anterior [-ant], and minus voice [-voi]. Those sounds are added after vowel / a / and followed by consonant sounds / l / and / r / that have the same characteristics: plus consonant [+cons], plus sonorant [+son], plus continuant [+cont], plus coronal [+cor], and plus anterior [+ant].

b. Addition of sound /i/ and glottal /ʔ/

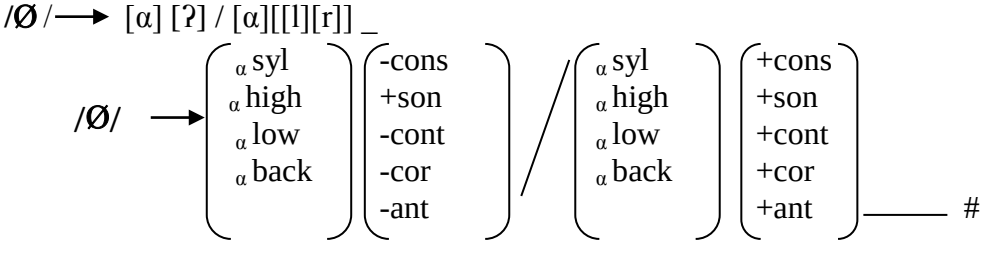
The following formula presents the detail features of each sound.



The above rule shows that sound / i / and /ʔ/ will be added (additional process) in the position after vowel / i / followed by consonants /l/ or /r/ at the final position of a word. Symbol alpha (α) refers to the same vowel sound that is / i /. Vowel / i / has characteristics: plus syllable [+syl], plus high [+high], minus low [-low], and plus back [+back], and glottal sound / ʔ / has the characteristics are minus consonant [-cons], plus sonorant [+son], minus coronal [-cor], minus anterior [-ant], and minus voice [-voi]. Those sounds are added after vowel / i / and followed by consonant sounds / l / and / r / that have the same characteristics: plus consonant [+cons], plus sonorant [+son], plus continuant [+cont], plus coronal [+cor], and plus anterior [+ant].

c. Addition of sound /o/ and glottal /ʔ/

The following formula presents the detail features of each sound.



The above rule shows that sound / o / and /ʔ/ will be added (additional process) in the position after vowel / o / followed by consonants /l/ or /r/ at the final position of a word. Symbol alpha (α) refers to the same vowel sound that is / o /. Vowel / o / has characteristics: plus syllable [+syl], minus high [-high], minus low [-low], and plus back [+back], and glottal sound / ʔ / has the characteristics are minus consonant [-cons], plus sonorant [+son], minus coronal [-cor], minus anterior [-ant], and minus voice [-voi]. Those sounds are added after vowel / o / and followed by consonant sounds / l / and / r / that have the same characteristics: plus consonant [+cons], plus sonorant [+son], plus continuant [+cont], plus coronal [+cor], and plus anterior [+ant].

3. Assimilation of Consonant

I found data related to the consonant assimilation of sound / k / into sounds [s] and [t]. The following data show the process of the assimilation.

Table 3.12: Assimilation of sound /k/ into [s] and [t]

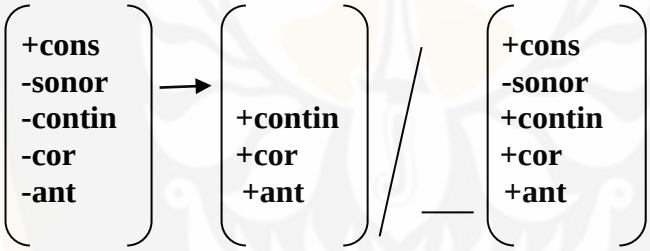
Standard Pronunciation		**Buginese Pronunciation**	**Meaning**
[taksi]	→	[tassi]	Taxi
[paksa]	→	[passa]	Forced
[siksa]	→	[sissa]	Torture
[waktu]	→	[wattu]	Time
[piksiŋ]		[pissiŋ]	Piksin

Assimilation process occurs in the words which have first syllable with the suffix sound / k / preceded by the sounds / s / and / t / as in the words 'taksi', 'paksa', 'waktu', and 'piksin', which then the sound / k / is assimilated with the

following syllable which is sound / s / so that the adjacent sound clusters become similar or same. Those sounds change into 'tassi', 'passa', 'sissa', 'wattu', and 'pissing'. This fits perfectly with the sound characteristics in Buginese language that have double consonants in the middle position.

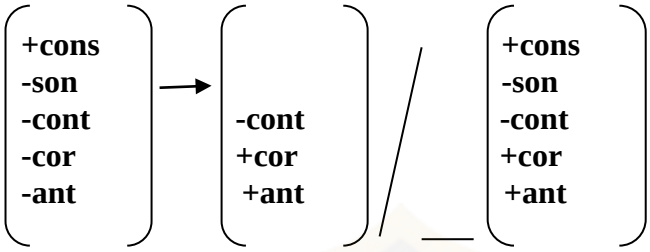
The consonant change process above leads to the rule governing the process of the phonological phenomenon. There are two rules: the first rule governs the change of sound / k / into sound / s / and the second rule is to adjust the sound change / k / into sound / t /. The following rule shows the assimilation process of sound /k/ into /s/.

Rule: /k/ → [s]/_ [s]



The above rule shows that sound / k / will change into [s] in the position before sound / s /. This phenomena happen because the sound / s / can produce the same articulation such as [+cont], [+cor] and [+ant]. This makes easier for the speakers to pronounce the word. The following rule shows the assimilation process of sound /k/ into /s/.

Rule: /k/ → [t]/_ [t]



Based on the above rule, there are similarities between the characteristics of rule one and rule two. The striking difference lies only in one feature that is the continuant feature in which the sound / s / has plus continuant [+cont] feature while sound / t / is the opposite, minus continuant [-cont]. Then the above rule describes the sound / k / will change to sound [t] at position before sound [t].

4.2 DISCUSSION

Phonological interference of Buginese into Indonesian that I found can be seen in the following table.

Table 3.13: Phonological Process of Buginese into indonesian

Indonesian Sound		Buginese sound	Position	English pronunciation	Students' pronunciation
/p/	→	[ʔ]	Final	[tutup]	[tutuʔ]
/b/	→	[ʔ]	Final	[səbab]	[səbaʔ]
/t/	→	[ʔ]	Final	[takut]	[takuʔ]
/d/	→	[ʔ]	Final	[adat]	[adaʔ]
/k/	→	[ʔ]	Final	[kotak]	[kotaʔ]
/h/	→	[ʔ]	Final	[bodoh]	[bodoʔ]
/n/	→	[ŋ]	Final	[makan]	[makaŋ]
/m/	→	[ŋ]	Final	[minum]	[minuŋ]
/f/	→	[p]	Elsewhere	[foto]	[poto]
/v/	→	[p]	Elsewhere	[survey]	[surpey]
/ə/	→	[a]	First	[səpeda]	[sapeda]

/i/	→	[e]	Final	[mati]	[mate]
/u/	→	[o]	Final	[taruh]	[taro]
/ə/	→	[e]	First	[tələpon]	[telpoŋ]
/ə/	→	[i]	First	[səkolah]	[sikola]
/o/	→	[u]	First and Final	[toloŋ]	[tuluŋ]
/a/	→	[ə]	Final	[atap]	[atəʔ]
/ai/	→	[e]	Final	[rantai]	[rante]
/au/	→	[o]	Final	[pulau]	[pulo]
/h/	→	Ø	elsewhere	[tambah] [tahu] [hilaŋ]	[tamba] [tau] [ilaŋ]
Ø	→	[a]+[ʔ]	Final	[kapal]	[kapalaʔ]
Ø	→	[i]+[ʔ]	Final	[hasil]	[hasiliʔ]
Ø	→	[o]+[ʔ]	Final	[botol]	[botoloʔ]
/k/	→	S	Midle	[waktu]	[wattu]
/k/	→	T	Midle	[siksa]	[sissa]

The above table shows that there are 25 phonological processes of Buginese into Indonesian spoken by Buginese in Tolitoli Central Sulawesi. These interferences happen in daily conversation of Buginese in using Indonesian to other people from other cultures such as Kailinese, Buol, Javanese, and Toli-toli itself. These phenomena can be seen in the following coversations.

The following conversation between a woman from Buginese and her friend from Javanese in their class room, the woman asked her friend to go to canteen because she was hungry, but her friend refuse to go to canteen because she felt full already. “W” stands for woman and “F” stands for friend.

W: [abis kəlas ini ke kantiŋ kita e saya lapar] - [habis-kəlas-ini-kə-kanti**n**-kita-e-saya-lapar] *(after-class-this-go-canteen-okay-I-hungry)*
F: [saya masih kenyaŋ, kamu kə kantin saja səndiri ya] *(I-still-full-you-go-canteen-alone-okay)*

The conversation above indicates that the woman as the first speaker prefer to use the word [kanti**ŋ**] instead of the right word [kanti**n**] in IL. The next conversation was between the student who is Buginese and his lecturer who is Kailinese in the class room. “L” stands for lecturer and “S” stands for student.

> L: [yaŋ iŋin bərtaɲa silahkan aŋkat taŋan] - [yaŋ-iŋin-bertaɲa-silahkan-aŋkat-taŋan] *(who-wants-to-ask-please-raise-hand)*
> S: [maa**p** pa**ʔ**, yaŋ mau saya taɲaka**ŋ** məŋənai contoɲa dala**ŋ** ma**s**araka**ʔ** nanti bag**e**mana di lapaŋa**ŋ**?] - [maa**f**-pa**k**-yaŋ-mau-saya-taɲaka**n**-məŋənai conto**h**ɲa-dala**m**-ma**ʃ**araka**t**-nanti-bag**ai**mana-di-lapaŋa**n**?] *(sorry-sir-that-want-I-ask-about-example-in-society-later-how-in-field?)*

The conversation above indicates that the student as the second speaker prefer to use the words such as [maa**p**], [pa**ʔ**], [taɲaka**ŋ**], [contoɲa], [dala**ŋ**], [ma**s**araka**ʔ**], [bag**e**mana], and [lapaŋa**ŋ**] instead of the right word in IL [maa**f**], [pa**k**], [taɲaka**n**], [conto**h**ɲa], [dala**m**], [ma**ʃ**araka**t**], [bag**ai**mana], and [lapaŋa**n**].

The general factors influencing the phonological interference of Buginese in the using of Indonesian are (1) bilingualism background; because they use two languages in their daily life, (2) unawareness to the standard Indonesian, and (3) borrowing the word from Buginese.

The first factor influencing the change of sounds is bilingualism background. Buginese people use two languages in their daily communication. Both languages are Buginese and Indonesian. Buginese becomes the first language that they master and it dominates the people’s conversation. Indonesian becomes the second language and less dominates. Because of this bilingualism background, people use Indonesian based on the Buginese phonological system.

The second factor is unawareness to the standard Indonesian (Indonesian based on KBBI). Buginese speakers especially those who are well educated sometimes realize the right rules of Indonesian phonological system, but instead of using it correctly, mostly they ignore the correct Indonesian pronunciation. It is because of the acceptance of society. Some people speak Indonesian in Buginese version in order to be accepted in the society. And it is easier for them to speak in that way rather than speaking Indonesian correctly.

The third reason is that Buginese always borrow some word from Buginese itself. It happens when they are difficult to find Indonesian word in expressing their meaning. The loan words are similar from the Buginese and Indonesian language such as [tassi] instead of [taksi] or [passa] instead of [paksa]. The words [tassi] and [passa] are Buginese in which people use them to change the correct Indonesian words.

The Glottalization Processes (the change of sound /p/, /b/, /t/, /d/, /k/, and /h/ into /ʔ/) in the previous explanation are influenced by the phonological rule in Buginese Language where there is no plosive consonant at the final position of a word. All the plosive consonants change into glottal sound /ʔ/ in the final position of a word automatically. This rule leads to the change of every plosive consonant in the final position of a word in Indonesian into glottal sound /ʔ/.

The Velarization Processes (the change of nasal sound /m/ and /n/ into velar nasal /ŋ/ at the final position of a word) happen because in Buginese, the only nasal sound which can take place in the final position of a word is velar nasal

/ŋ/; other nasals such as /m/ and /n/ only take place in the initial and medial position of syllable. This rule gives an influence to the using of Indonesian where standardly the three nasals can take the final position of a word. The factor influences the change is that the phonological rule of Buginese language still exist in the using of Indonesian.

The Stopping process (the change of fricative sound /f/ and /v/ into plosive sound /p/) happen because the difficulty of Buginese in pronouncing those sounds (/f/ and /v/) because the consonant difference between Buginese and Indonesian where Indonesian has fricative sounds /f/ and /v/ while Buginese does not have /f/ and /v/. As the result, Buginese use the sound which has close features as those sounds, because Buginese only has plosive sound /p/ as the close features to /f/ and /v/ then they use it to replace the fricative sound (/f/ and /v/) into plosive sound /p/ in any position of a word.

The vowel change processes include lowering process, fronting process, highing process, and weakening process. (1) Lowering processes of vowel /ə/ into /a/, /i/ into /e/, and /u/ into /o/ happen because of the loan word of Buginese language from Indonesian such as [cərita] and [səpeda] in Buginese language becomes [carita] and [sapeda]. In Buginese dialect, vowel /a/ in the first syllable of a word is very common. Besides, Buginese always change vowel /i/ into /e/ as well as /u/ into /o/. There is no previous research discuss the reason or the factor why it can happen. (2) The factor influences the fronting process of vowel /ə/ into /e/ and /ə/ into /i/ is that the Buginese borrow the word from the Buginese language into Indonesian even though at the beginning the words are borrowed

from Indonesian then Buginese changed the vowel /ə/ into /e/ and /i/. This factor also gives an influence to next vowel change process. (3) The change of low vowel /o/ into high vowel /u/ as in word [toloŋ] into [tuluŋ] because the word [tuluŋ] is a Buginese diction. (4) The change of /a/ into /ə/ has the same reason as the previous explanation above.

The general factor influencing the syllable structure processes is the phonological system differences between Indonesian and Buginese (the using of sound / h /, consonant gemination, and the using of sound /ʔ/ at the final position of a word preceded by vowels). Buginese always delete sound /h/ in any positon of a word because in BL, it is hard to find word contains this sound. The additional sound processes happen because in BL, the only non-nasal consonant that can takes place in the final position of a word is sound / ʔ /, and of course, the Buginese when facing the word such as “kapal”, “hasil”, and “motor”, they could not change it directly without adding vowels because the meaning of the words must be different. Those sounds must be pronounced correctly such as “kappalaʔ”, “hassiliʔ”, and “motoroʔ” instead of the incorrect forms such as “kapaʔ”, “hasiʔ”, and “motoʔ”. The assimilation processes happen because the phonological system in Buginese requires double consonant (consonant gemination) in the middle position of a word, so they also apply it in Indonesian word.

CHAPTER V

CONLUSION AND SUGGESTION

In this chapter, I present the conclusion and suggestion dealing with the data findings and discussions of this research.

5.1 Conclusion

Based on the findings and discussion above, I conclude that language transfer from Buginese has a negative impact into Indonesian. The negative impact leads to the interference of Buginese as the first language on the production of Indonesia as the second language of Buginese speakers. The interference is in phonological aspects of language. I realized that it is a kind of language error (negative transfer). The greater phonological system differences between the two languages (Buginese and Indonesian) the more negative the effects of interference are likely to be. I summarize my findings and discussions as follows: (a) glottalization process, divided into two processes (1) plosive glottalization where / p /, / b /, / t /, / d /, / k / change into glottal sounds [ʔ] and (2) fricative glottalization where / h / changes into glottal sounds [ʔ] at the final position of a word, (b) velarization of nasal process, the change of nasal / n / and / m / into nasal [ŋ] at the final position of a word, (c) stopping process of / f / and / v / into [p] sound at the finale position of a word, (d) lowering process of vowel / ə / changes into [a], / i /changes into [e], and / u / changes into [o], (e) fronting process of vowel / ə / changes into [e] and / ə / changes into [i], (f) highing

process of vowel / o / changes into [u], (g) weakening process of vowel / a / changes into [ə], (h) vowelization process of diphtong / ai / and / au / into vowel [e] and [o], (i) sound deletion process of fricative sound / h / in any position of a word, (j) sound addition process, and (k) assimilation process of sound / k / into [s] and [t].

The general factors influence the phonological interference of Buginese into Indonesian are (1) bilingualism background; because they use two languages in their daily life, (2) unawareness to the standard Indonesian, and (3) the needs of synonym from Buginese. In this research, I did not investigate the cross-linguistic factors such as intonation, level of word stress, and rhythm whether these factors might have influence in producing the IL as the second language of Buginese.

5.2 Suggestion

I did not consider another form of phonological interference. I hope that the next researchers can cover the cross-linguistics aspects from BL that might give an influence into IL phonological system in order to find the phonological interference. Besides, I hope that the next researcher can complete this research with sociolinguistic apsects.

References

Abigail, C., William, H., Robert, P. (1999). *The Phonetic Realization of Singleton-Geminate Contrasts in Three Languages of Indonesia.* San Francisco: ICPhS99

Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik.* Jakarta: Rineka Cipta.

Akhyaruddin. (2011). "Studi Kasus Interferensi Bahasa Bugis dalam Pembelajaran Bahasa Indonesia di Sekolah Dasar Tanjung Jabung Timur". *Pena*, 1 (1), 29-39.

Anjarsari, N. (2015). "Phonic Interference of First Language into Second language: A Case Study of Non-Indonesian Native Speaker". Thesis in Faculty of Humanities. Semarang: Diponegoro University.

Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik.* Jakarta: Rineka Cipta.

Azzouz, A. (2013). "Interference of Syntactic, Lexical and Phonological Aspects from Arabic into English for Syrian University Students: A Cross-Sectional Study in the HIL at Aleppo University". Thesis in Faculty of Humanities. Aleppo: Aleppo University.

Bouza, N. Y. (2015). *Grammar, Rhetoric and Usage in English.* Cambridge: Cambridge University Press.

Bowen, C. (2011). "Table 2: Phonological Processes". Retrieved from http://www.speech-language-therapy.com/on [March 2, 2018].

Briere, E. (1996). "An Investigation of Phonological Interference". *Language.* 42, 768-798

Brown, D. (2007). *Principles of Language Learning and Teaching.* New York: Pearson Education, Inc.

Chaer, A. (2009). *Fonologi Bahasa Indonesia.* Jakarta: PT Rineka Cipta.

Chaira, S. (2015). "Interference of First Language in Pronunciation of English Segmental Sounds*". English Education Journal (EEJ).* 6 (4), 469-483.

Crystal, D. (1991). *A Dictionary of Linguistics and Phonetics.* Massachusetts: Blackwell Publishes Inc.

Crystal, D. (2008). *A Dictionary of Linguistics and Phonetics.* Oxford: Blackwell Publishing.

Derakhshan, Ali; Elham Karimi. (2015). "The Interference of First Language and Second Language Acquisition: Theory and Practice in Language Studies" Vol. 5, No. 10, pp. 2112-2117.

Dulay, H., Burt, M. and Krashen, S. . (1982). *Language Two.* Oxford: Oxford University Press.

Ellis, R. (1986). *Understanding Second Language Acquisition.* Oxford: Oxford University Press.

Hamidi. (2010). *Metode Penelitian Kualitatif.* Malang: UMM Press.

Idrus, M. (2009). *Metode Penelitian Ilmu Sosial; Pendekatan Kualitatif dan Kuantitatif.* Jakarta: Penerbit Erlangga.

James, C. (1998). *Errors in Language Learning and Use*: *Exploring Error Analysis*. London: Longman

Jensen, T. (2004). *Principles of Generative Phonology*. Amsterdam: Jhon Benjamins Publishing Company

Katamba, F. (1989). *An Introduction to Phonology.* NewYork: Addison Wesley Longman Limited.

Kuwing, M. A. (2016). "Interferensi Fonologi Bahasa Melayu Pattani dalam berbahasa Indonesia Mahasiswa Thailand di Universitas Muhammadiyah Surakarta". Thesis in Faculty of Humanities. Surakarta: Universitas Muhammadiyah Surakarta.

Leung, C., Brice, A. (1983). "An Analysis of Phonological Processes Involved in Spoken English of Hong Kong Primary Pre-service Teachers". *Language Testing in Asia.* 2 (2), 42-60.

Lot, D. (1983). "Analyzing and counteracting Interference Errors". *English Language Teaching Journal.* 37 (3), 256-262.

Mochtar, M. (1994). *Kendala Penutur Bahasa Bugis dalam Berbahasa Indonesia.* Masyarakat Linguistik Indonesia.

Moleong, L. J. (2009). *Metodologi Penelitian Kualitatif.* Bandung: PT. Remaja Rosdakarya.

Muslich. (2010). *Garis-Garis Besar Tata Bahasa Baku Bahasa Indonesia.* Bandung: PT. Refika Aditama.

Nazir, M. (1988). *Metode Penelitian.* Jakarta: Ghalia Indonesia.

Odden, D. (2005). *Introducing Phonology.* New York: Cambridge University Press.

Pastika, I. W. (2005). *Fonologi Bahasa Bali: Sebuah Pendekatan Generatif Transformatif.* Bali: Pustaka Larasan.

Ramelan. (2003). *English Phonetics.* Semarang: UPT UNNES PRESS.

Roach, P. (2001). *Phonetics.* China: Oxford University Press.

Saharuddin. (2016). "Interferensi Bahasa Bugis Terhadap Penggunaan Bahasa Indonesia di Pasar Sioyong Kabupaten Donggala". *e-Jurnal Bahasantodea*, 4 (1), 68-78.

Schane, S. A. (1973). *Generative Phonology.* New Jersey: Prentice-Hall Inc.

Steinberg, Danny D.; Natalia V. Sciarini. (2006). *An Introduction to Psycholinguistics.* London: Pearson Education Limited.

Strauss, Anselm. Juliet Corbin. (2009). *Dasar-dasar Penelitian Kualitatif.* Yogyakarta: Pustaka Pelajar Offset.

Sudaryanto. (1993). *Metode dan Aneka Teknik Analisis Bahasa.* Yogyakarta: Duta Wacana University Press.

Suwinto. (1983). *Pengantar Awal Sosiolinguistik Teori dan Problema.* Surakarta: Henari Offset Solo

Thornbury, S. (2006). *An A-Z of ELT: A Dictionary of Terms and Concepts.* London: Macmillan Publishers Limited.

Weinreich, U. (1970). *Language in Contact: Finding and Problems*. Paris: The Hague.

Zheng, Y. (2013). “The Application of the Individual Teaching Based on Generative Phonology in the University”. *Theory and Practice in Language Studies*, 3 (9), 1680-1684.

APPENDIX

Table 1: Indonesian Consonant Chart

	BILABIAL	LABIO-DENTAL	DENTAL	ALVEOLAR	POST-ALVEOLAR	PALATO-ALVEOLAR	PALATAL	VELAR	GLOTTAL
PLOSIVES	p b			t d				k g	ʔ
FRICATIVES		f v		s z		ʃ		x	h
AFFRICATES						c j			
NASALS	m			n			ɲ	ŋ	
TRILL				R					
LATERAL									
APPROXIMAN	w								
LAT.APPROX				L			ʎ		

Adapted from Chaer (2009: 50)

Table 2: Buginese Consonant Chart

	BILABIAL	LABIO-DENTAL	DENTAL	ALVEOLAR	POST-ALVEOLAR	PALATO-ALVEOLAR	PALATAL	VELAR	GLOTTAL
PLOSIVES	p b			t d			c j	k g	ʔ
FRICATIVES				s					h
AFFRICATES									
NASALS	m			n			ɲ	ŋ	
TRILL				r					
LATERAL FRICATIVE									
APPROXIMAN	w								
LAT.APPROX				l			ʎ		

Adapted from Abigail et all (1999)

Table 4: Buginese Vowel Chart

	Front	Mid	Back
Close	i	U	u
Mid	e	ə	o
Open		a	

Adapted from Robert et all (1999: 535)

Table 5: Indonesian Vowel Chart

	Front	Mid	Back
Close	i		u
Mid	e	ə	o
Open		a	

Adapted from Muslich (2008: 95)

LIST OF WORDS

[tutup]	→	[tutuʔ]	Close
[stop]	→	[stoʔ]	Stop
[lap)]	→	[laʔ]	Towel
[tiup]	→	[tiuʔ]	Blow
[atap]	→	[ataʔ]	Roof
[səbab]	→	[səbaʔ]	Because
[adab]	→	[adaʔ]	Manner
[jaket]	→	[jakeʔ]	Jacket
[pəsawat]	→	[pəsawaʔ]	Plane
[lanjut]	→	[lanjuʔ]	Continue
[lihat]	→	[liaʔ]	See
[lompat]	→	[lompaʔ]	Jump
[aŋkat]	→	[aŋkaʔ]	Lift
[rawat]	→	[rawaʔ]	Nurse
[sakit]	→	[sakiʔ]	Sick
[dapat]	→	[dapaʔ]	Get
[dompet]	→	[dompeʔ]	Wallet
[laŋit]	→	[laŋiʔ]	Sky
[ribut]	→	[ribuʔ]	Noisy
[moɲet]	→	[moɲeʔ]	Monkey
[lambat]	→	[lambaʔ]	Slow
[akad]	→	[akaʔ]	Contract
[ahad]	→	[ahaʔ]	Sunday
[kotak]	→	[kotaʔ]	Box
[masak]	→	[masaʔ]	Cook
[bapak]	→	[bapaʔ]	Father
[jəlek]	→	[jəleʔ]	Ugly
[tidak]	→	[tidaʔ]	No
[gosok]	→	[gosoʔ]	Brush
[cantik]	→	[cantiʔ]	Beautiful
[anak-anak]	→	[anaʔ-anaʔ]	Children
[naik]	→	[naiʔ]	Up
[becak]	→	[becaʔ]	Pedicab
[sendok]	→	[sendoʔ]	Spoon
[ɲamuk]	→	[ɲamuʔ]	Mosquito
[duduk]	→	[duduʔ]	Sit
[ləmbek]	→	[ləmbeʔ]	Soft
[rusak]	→	[rusaʔ]	Broken
[bodoh]	→	[bodoʔ]	Stupid
[səkolah]	→	[səkolaʔ]	School
[pohon]	→	[pohoŋ]	Tree
[papan]	→	[papaŋ]	Board
[hujan]	→	[hujaŋ]	Rain

[diŋin]	→	[diŋiŋ]	*Cold*
[bukan]	→	[bukaŋ]	*Not*
[jaŋan]	→	[jaŋaŋ]	*Do not*
[siaran]	→	[siaraŋ]	*Broadcast*
[durian]	→	[durianŋ]	*Durian*
[bikin]	→	[bikiŋ]	*Make*
[taŋan]	→	[taŋaŋ]	*Hand*
[makan]	→	[makaŋ]	*Eat*
[jualan]	→	[jualaŋ]	*Merchandise*
[gantuŋan]	→	[gantuŋaŋ]	*Hanger*
[ikan]	→	[ikaŋ]	*Fish*
[pəcahan]	→	[pəcahaŋ]	*piece*
[jalan]	→	[jalaŋ]	*Road*
[koran]	→	[koraŋ]	*Newspaper*
[pulpen]	→	[pulpeŋ]	*Pen*
[al-quran]	→	[al-quraŋ]	*Alquran*
[cərmin]	→	[cərmiŋ]	*Mirror*
[tuhan]	→	[tuhaŋ]	*God*
[kawin]	→	[kawiŋ]	*Married*
[setan]	→	[setaŋ]	*Devil*
[hitam]	→	[hitaŋ]	Black
[lem]	→	[leŋ]	Glue
[jam]	→	[jaŋ]	Watch
[tanam]	→	[tanaŋ]	*Plant*
[minum]	→	[minuŋ]	*Drink*
[jarum]	→	[jaruŋ]	*Needle*
[garam]	→	[garaŋ]	*Salt*
[survey]	→	[surpei]	Survey
[tələvisi (tivi)]	→	[tipi]	Television
[foto]	→	[poto]	Photo
[tambah]	→	[tamba]	Add
[rumah]	→	[ruma]	House
[tahu]	→	[tau]	Know
[tanah]	→	[tana]	Ground
[hilaŋ]	→	[ilang]	Lost
[kapal]	→	[kappalaʔ]	Ship
[sandal]	→	[sandalaʔ]	Slipper
[halal]	→	[hallalaʔ]	Permitted
[hafal]	→	[hapalaʔ]	Memorize
[pensil]	→	[pensiliʔ]	Pencil
[hasil]	→	[hassiliʔ]	Result
[botol]	→	[botoloʔ]	Bottle
[asar]	→	[assaraʔ]	Asar
[motor]	→	[motoroʔ]	motor

[putar]	→	[putaraʔ]	Turn
[taksi]	→	[tassi]	Taxi
[paksa]	→	[passa]	Forced
[siksa]	→	[sissa]	Torture
[waktu]	→	[wattu]	Time
[piksiŋ]	→	[pissiŋ]	Piksin
[səpeda]	→	[sapeda]	Bicycle
[cərita]	→	[carita]	Story
[mɑti]	→	[mɑte]	Die
[tɑruh]	→	[tɑro]	Put
[pəluk]	→	[pəloʔ]	Hug
[tələpon]	→	[telpoŋ]	Telephone
[səkolɑh]	→	[sikolɑʔ]	School
[cəlɑkɑ]	→	[cilɑkɑ]	Misfortune
[toloŋ]	→	[tuluŋ]	Help
[ɑtɑp]	→	[ɑtəʔ]	Roof
[lɑlɑt]	→	[lɑləʔ]	Fly
[rantai]	→	[rante]	Chain
[ramai]	→	[rame]	Crowded
[lantai]	→	[lante]	Floor
[pakai]	→	[pake]	Use
[santai]	→	[santé]	Relax
[pantai]	→	[pante]	Beach
[pisau]	→	[piso]	Knife
[pulau]	→	[pulo]	Island
[kalau]	→	[kalo]	If