CONTRASTIVE ANALYSIS STUDY OF PHONETIC VOWEL AND CONSONANT BETWEEN ENGLISH AND ACEHNESE LANGUAGE

SKRIPSI

Submitted

By

FurqanPrasetya 1042011175

English Education Department



TARBIYAH AND TEACHER TRAINING FACULTY
STATES INSTITUTE FOR ISLAMIC STUDIES (IAIN)
ZAWIYAH COT KALA LANGSA
2018 M/ 1439 H

ACKNOWLEDGMENT



Assalamualaikum Wr. Wb.

All praises be to Allah, king of the king, the lord of the world, the master of the day after, who has given us the blessings and guidances. Because of His graciousness and mercifulness the writer can write well. The writer realizes and feels very sure that without His blessing, mercy, and guidance, it would not be possible for himself to finish the paper.

Sholawat and sallam may Allah send them to our Prophet Muhammad SAW, (peace be upon him), his families, his companions, and his followers. The best messenger for people all over the world. This world becomes peace because of his hard effort in giving the human being advices.

On this opportunity, the writer herewith would like to express his profound gratitude, more than he can express, to:

- 1. Dr. H. Zulkarnaini, MA, as Rector of the State Institute for Islamic Studies (IAIN) Langsa who brings the campus to advances.
- 2. Dr. Ahmad Fauzi, M. Ag, as Dean of Faculty of Education and Teachers Training who manage the faculty excellently.
- 3. Mr. Ruly Adha, MS as main supervisor who has painstakingly spent his valuable time to guide and give excellent suggestions to the writer in preparing this paper.

4. Mrs. Shafridawati, MA as second supervisor who has guided me for the correction and invaluable criticism and suggestions he has rendered to me

in the completion of the paper.

5. Mr. Mauloeddin Afna, M.Pd who has given the writer suggestions and led

me to Dr. H. Abdul Gani Asyiek, MA as an expert in Acehnese Linguist.

6. Dr. H. Abdul Gani Asyiek, MA as an expert in Acehnese Linguist. His

books and literatures helped the writer accomplish the paper.

7. Lovely writer's parents and brother who have prayed a lot for my success

in working this research and always reminded the writer to finish this

paper as soon as possible.

8. All writer's lovely friends who always supported and encouraged to

challenge and accomplish this academic mission.

Last, but not least, writer's very sincere thanks to who are not mentioned

personally here. Without their patience, guidance, supports and coorperation, this

paper could not be written and finished.

Finally, the writer surrenders everything to Allah SWT and the writer

hopes it will be a useful thing for him personally and for people who want to

improve their education.

Wassalamualaikum Wr. Wb.

.

Langsa, September 20th, 2018

TABLE OF CONTENTS

ACI	KNOWLEDGMENT	ii
TAE	BLE OF CONTENTS	iv
LIS	Γ OF TABLES	vi
	Γ OF FIGURES	vii
	Γ OF APPENDIXES	viii
	TRACT	ix
CHA	APTER I:INTRODUCTION	1
A.	The Background of the Study	1
B.	The Research Questions	3
C.	The Objective of the Study	
D.	The Significant of the Study	3
CII		~
	APTER II:LITERATURE REVIEW	
A.	Vowel and Consonant In English	
	1. Vowel in English	5
	a. Defenition of Vowel	
	b. Kinds of Vowel	7
	c. Mechanism of Pronuncing Vowel	
	2. English Consonants	12
	a. Defenition of Consonants	12
	b. Kinds of Consonant	13
	c. Mechanism of Pronunciang Consonant	
B.	Vowel and Consonant in Acehnese Language	19
	1. Acehnese Vowel	19
	a. Defenition of Vowel	19
	b. Kinds of Vowel	20
	c. Mechanism of Pronuncing Vowel	
	2. Acehnese Consonants	
	a. Defenition of Consonant	23
	b. Kinds of Consonants	24
	c. Mechanism of Pronunciang Consonant	25
СН	APTER III: RESEARCH METHOD	33
A.	Research Design	
В.	The Source of Data	34
٠.	1. The Primary Data	34
	2. The Secondary Data	35
C.	The Procedure of Data Collections	35
D.	The Proedure of Data Analysis	36

CHA	PTER IV:FINDING AND ANALYSIS	38
A.	The Similarities of Vowel Between English and Acehnese Language	38
	1. Number of Vowels in Both Languages	38
	2. The Similarities of Kinds of Vowel in Both Languages	39
B.	The similarities of Consonants Between English and Acehnese Language	41
	1. Number of Consonants of Both Languages	41
	2. The Similarity of Consonants between English and Acehnese	42
C.	The dissimilarities of Vowel and Consonant between English and Acehnese	
	language	44
	1. The Dissimilarities of Vowel between English and Acehnese language	44
	2. The dissimilarities of Consonants between English and Acehnese	
	Language	45
СНА	PTER V: CONCLUSIONS AND SUGGESTIONS	51
A.	Conclusions	51
B.	Suggestions	52
BIBL	LIOGRAPHY	53

LIST OF TABLES

Tables	pages
Table 2.1English Consonant	12
Table 2.2the Acehnese Vowel Monophthong	20
Table 2.3 Acehnese nasal monophthong	20
Table 2.4 Acehnese diphthong sounds	21
Table 2.5 Acehnese diphthong sounds	22
Table 2.6 Acehnese Consonants sounds	23
Table 2.7 Acehnese Single Consonants sounds	25
Table 2.8 Acehnese Multi-Consonantsending sound with /h/sounds	28
Table 2.9 Acehnese Multi-Consonantsending sound with /l/sounds	30
Table 2.10 Acehnese Multi-Consonantsending sound with /r/sounds	31
Table 4.1The similarity of Vowel	39
Table 4.2The similarity of Consonant /ŋ/	39
Table 4.3The similarity of Consonant /s/	39
Table 4.4The similarity of Consonant /tr/	39
Table 4.5 The similarity of Consonant /cr/	40

LIST OF FIGURES

Figures	Pages	
Figure 2.1. English Vowel Chart	 8	
Figure 2.2. The diphthongs Vowel	 9	
Figure 2.3 English Triphthongs Vowel	 11	

ABSTRACT

Furqan Prasetya. 2017. Constrastive Analysis Study of Phonetic Vowels And Consonants Between English And Acehnese Language. *Skirpsi*. English Education Department, Tarbiyah and Teachers' Training Faculty, State Institute for Islamic Studies (IAIN) Zawiyah Cot Kala Langsa.

This study investigated the contrastive of phonological systems of English and Acehnese languages which supply several similarities and differences. The study aimed to discover the similarities of vowels and consonants between English and Acehnese and to investigate the dissimilarities of vowels and consonants between English and Acehnese. This study is a library research which used descriptive qualitative approach. It was applied to collect primary and secondary data. It is designed to report the description emerges following creative exploration, and serves to organize the findings in order to fit them with explanations, and then test or validate those explanations. The research found that there is similarities in the combination of the two vowels, open central unrounded vowel */a/ and high back vowel */u/ of English underwent changed into half close back vowel /o/ in Acehnese when it was preceded by any sound of consonants. The consonant sounds into voiceless consonant sounds in the end-position of a word, and this process occurs regularly, for instance, the sound */ŋ/, Single Consonant /s/, Double-Consonant /tr/, and so on. the dissimilarities, the sound pattern (pure vowel) of Acehnese and English language, we can see that English has tense and lax pure vowel whereas Acehnese has mid long and lax vowel. This difference puts a strain to the learners, then, there is a mismatch between sounds and letters: in English pronunciation, sometimes two letters combine to represent one sound, so that 's'+'h' combine to represent the sound /ʃ/ and 't'+ 'h' combine for θ , and sometimes one letter is pronounced as a sequence of two sounds, as 'x' is usually /ks/.

CHAPTER I

INTRODUCTION

A. Background of Study

Acehnese Spoken language is one of community language varies in Indonesia. It has unique phonics structures and articulations to its usage. The language is addressed as a colloquial language root on proto-Melanesian community migration. Quinn described that Languages and dialects spoken and written over the whole of the Indonesian archipelago, 150 to 250 in number are usually classified according to the above mentioned ethnic denominations. The main district local languages of Indonesia are among others is the Acehnese. ¹ The dialects are used for major rural and country-side for dwellers on Aceh Provinces regions, particularly north region community. The varieties of Acehnese Spoken language spread among the communities and each community own intimate way. Yet, it is the varieties of useable dialect as local communication.² Acehnese language is absolutely different from other local languages because Aceh has many local tribes that spread out in many regions which have varieties of local language as well such as Jamee, Gayo, Alas, and Singkil. Acehnese people have their ethic language which is a part of the proto-Melanesian language family. Acehnese can be divided into four major dialects. The name of the four dialects was given as Banda Aceh (dialect used in Aceh Rayeuk and Sabang), Pidie

¹ George Quinn, *The Learner's Dictionary of Today's Indonesian*. Sydney :Allen & Unwin 2001 ISBN 1864485434

 $^{^2}$ Wardhaugh. An Introduction to Sociolinguistics. London: Blackwell Publishing Ltd. (2006). P. $56\,$

(commonly used in *Pidie*), *Pase* (dialect commonly used in North Aceh and East Aceh).³ Therefore Acehnese phonology also can be different among the dialects because each dialect above has many sub dialects.⁴ Within this research, Acehnese Spoken language is take part of the researcher origin Mother Tongue (MT). The researcher observed that there are several phonetics systems that have shared similar phonics.

English and Acehnese basically come from different language family. Dealing with contrastive analysis study of consonant and vowel between Acehnese and English language, the writer is interested to find out the similarities, differences, and correspondences in different language family. Beside this reason, the writer also was born and living in Aceh. Therefore the writer points out that this study is interesting to be analyzed. Due to this reason, the writer chooses this topic in purpose to investigate and describe the reader about variety of phonological characters in term of vowels, and consonants. With respect to the above statement, Goldsmith stated broadly that each language is a structurally different system. When two languages are compared from the point of view of their structure and organization, it is recognized that the marvelous variety of the languages of mankind indicates astonishing similarities.⁵ Both languages possess phonemes, morphemes, words, sentences and clear sentence varieties, definite parts of speech, systems, meanings, etc. Therefore, the researcher decided to

³Abdul Gani Asyiek, *A Contextual Grammar of Acehnese Sentences*, (Michigan: University of Michigan, 1987) P. 3

⁴Abdul Gani Asyiek, *A Contextual Grammar of Acehnese Sentences*, (Michigan: University of Michigan, 1987) P. 4

⁵ Goldsmith, J., & Xanthos, A. *Learning phonological categories*. Language, 85(1), 4–38. 2006.

conduct a research entitle "Comparative Analysis Study of Phonetic Vowels and Consonants between English and Acehnese Spoken Language"

B. Research Questions

Based on this study, the problems which will be analyzed are as follows;

- 1. What are the similarities of vowels and consonants between English and Acehnese?
- 2. What are the dissimilarities of vowels and consonants between English and Acehnese?

C. The Objectives of Study

There are some objectives that are aimed through this study. They are as follows:

- To discover the similarities of vowels and consonants between English and Acehnese.
- 2. To investigate the dissimilarities of vowels and consonants between English and Acehnese

D. The Significances of Study

1. Theoritically

This research is expected to be the references for public who need the information about vowels and consonants in both languages.

2. Practically

The writer expected that the study shared detailed description of similarities and disimilarities between English and Acehnese. The study also can enrich the knowledge of the students who study English and Acehnese.

CHAPTER II

LITERATUREREVIEW

A. Vowel and Consonant in English

Vowel and Consonant are phonetics segments that signified the sound of existence and meaningful language. Every language composes their linguistics phonology characters within the vowel and consonant letters sound on the actual words productions. To identify the vowel of English language, the writer excluded about English vowel and consonant.

1. English Vowel

a. Definition of Vowel

Vowels may be classified as either rounded or unrounded, as either lax or tense, and as either long or short.⁴ In articulating a rounded vowel, the lips are rounded. The rounded vowels of Present-Day English are:

- i. /u/ (the phoneme spelled oo in food);
- ii. /U/ (the phoneme spelled u in put);
- iii. /o/ (the phoneme spelled oa in boat);
- iv. $\frac{\hat{o}}{\text{ (the phoneme spelled } au \text{ in caught).}^5}$

Note that there are different degrees of rounding in these different vowels. The other vowels of Present-Day English are unrounded. In articulating a tense vowel, the tongue and other parts of the vocal apparatus are relatively tense. With a lax vowel, on the other hand, the muscles of the

⁴ Andrew L. Sihler, *Language History: An Introduction*. John Benjamins, 2000

⁵ Victoria Fromkin, Robert Rodman, and Nina Hymes, *Introduction to language*, 10th Edition, New York, Holt Rinehart and Winston. P. 34-45, 2014.

vocal apparatus are relatively loose. The lax vowels in Present-Day English are:

- i. /I/ (the phoneme spelled i in bit);
- ii. /e/ (the phoneme spelled e in bet);
- iii. /*U*/ (*the* phoneme spelled u in put);
- iv. $\frac{\hat{o}}{\hat{t}}$ (the phoneme spelled au in caught)⁶.

Note that the degree of tenseness varies considerably in these different vowels. The other vowels of Present-Day English are relatively tense (also in different degrees). The distinction between long and short vowels cannot be illustrated in Present-Day English, because vowel-length is no longer "phonemic" for speakers of English. That is, there are no "minimal pairs" of words that differ only with respect to the length of a vowel, and so speakers typically do not "hear" differences in vowel length.

The distinction between long and short vowels was presumably phonemic in Old English and Middle English. Vowel length is presumably a matter of duration: that is, how long the vowel-sound is sustained in its articulation. Apart from the above distinctions, vowels may be classified according to the how far the tongue is from the roof of the mouth during articulation, and how far back in the oral cavity the vowel is articulated. If the lower jaw is relatively low (that is, if the mouth is relatively widely open), the tongue will be relatively far from the roof of the mouth. Vowels

⁶McCardle, P., & Chhabra, V. *The voice of evidence in reading research*. Baltimore: Paul H. Brookes Publishing Co.P 127-123, 2004.

⁷McCardle, P., & Chhabra, V. *The voice of evidence in reading research*. Baltimore: Paul H. Brookes Publishing Co.P 127-123, 2004.

⁸ Kingston, John & Randy L. Diehl. *Phonetic Knowledge*, Language 70: 1994. P. 419-54

for which the jaw is relatively low during articulation are called, unsurprisingly, low vowels; and vowels for which the jaw is relatively high (the mouth is more nearly closed) are called high vowels. This distinction can be appreciated, for example, by gripping the chin and successively articulating "ha-ha, hee-hee, ha-ha, hee-hee." The phoneme spelled a in ha is a low vowel, and the phoneme spelled ee in hee is a high vowel. The jaw can be felt to move up and down correspondingly.

A vibration is felt in the oral cavity when a vowel is articulated. If this vibration is felt toward the front of the cavity, say in the area of the alveolar ridge, the vowel is described as a front vowel. If the vibration is felt toward the back of the cavity, say in the area of the velum, the vowel is described as a back vowel. Thus, we get the following system of classification for vowels.

b. Kinds of Vowel

We can qualify them further by how high the tongue and lower jaw are when we make these vowel sounds, and by whether our lips are rounded or spread, and finally by whether they are short or long. This scheme shows the following arrangement as follow:

I. **Front vowels** /*i:*/ - cream, seen (long high front spread vowel) /*I*/ - bit, silly (short high front spread vowel) / \mathcal{E} / - bet, head (short mid front spread vowel); this may also be shown by the symbol /e/. / α / - cat, dad (short low front spread vowel); this may also be shown by

- II. **Central vowels** /3:/- burn, firm (long mid central spread vowel); this may also be shown by the symbol /a:/. /a/ about, clever (short mid central spread vowel); this is sometimes known as *schwa*, or the neutral vowel sound it never occurs in a stressed position. /α/ cut, nut (short low front spread vowel); this vowel is quite uncommon among speakers in the Midlands and further north in Britain.
- III. **Back vowels** /u:/ glue (long high back rounded vowel) /o/ put, soot (short high back rounded vowel); also shown by /u/. /o:/ corn, faun (long mid back rounded vowel) also shown by /o/ /v/ dog, rotten (short low back rounded vowel) also shown by /o/ /a:/ hard, far (long low back spread vowel).

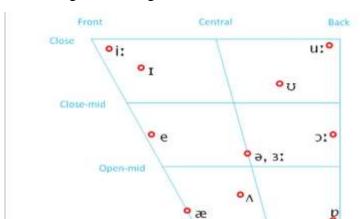


Figure 2.1. English Vowel Chart.¹⁰

⁹ Paul de Lacy. "*Transmissibility and the role of the phonological component*", Theoretical Linguistic . 2006. 32: 185-96.

¹⁰Paul de Lacy. "*Transmissibility and the role of the phonological component*", Theoretical Linguistic . 2006. 32: 185-96.

c. The Mechanisms of Pronouncing Vowel

Vowels are followed by colons /:/ most of the differences between British and American English are to do with the quality and length of the vowels.

/i:/ for eat, sleep

/// for under, enough, butter

/i/ for silly, baby (in final

/a:/ for father, calm, can't, apart

positions)

/// for it, swim,

/// for odd, want, cough

/// for edge, lead (=bly), said

/// for or, daughter, more,

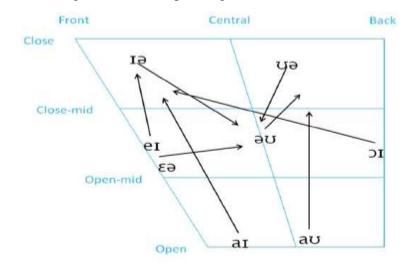
/// forapple, man

/// for put, full

/// for ooze, shoe, suit

Figure 2.2. The diphthongs Vowel. 12

/a/ for above, support, possible, Africa, mother



¹¹ Guenther, F. H. *Speech sound acquisition, articulation, and rate effects in a neural network model of speech production*, in contemporary RP, American English and most southern varieties of British English. In conservative RP and Northern varieties of British English, this is pronounced /1/, as in 'silly': /sɪlɪ/. Psychol. Rev.102, 1995. 594–621.

¹²Peter Ladefoged; Ian Maddieson. *The Sounds of the World's Languages*. Oxford: Blackwell. 1996. ISBN 0-631-19814-8.

The table above shows the diphthongs of RP (Received Pronunciation).

The arrows show the direction of the glide between two vowels. The most significant differences between British and American English are explained in bellow:

/eɪ/ for ache, pay /ɛə/ for air, dare

/aɪ/ for I'm, right /və/ pure, tour

/ɔɪ/ for oil, noise /aʊ/ for out, cow

/iə/ for ear,here /əu/ for own coat

In RP and many varieties of British English the final r of the diphthongs /1a/, /ea/, /va/ are not pronounced, but in General Amerika (GA) and most American Varieties of English, the final r is typically pronounced with an r-coloured vowel: /a/, e.g. 'ear' /1a/, , coat 'air' /ea/, 'pure' /pjva/ or /pja/. These can also be written /1r/, /er/, /pjvr/ in phonemic transcription. In some descriptions these are not listed as diphthongs. In GA and most American Varieties of English, there are two more possible diphthongs: /2a/ e.g. 'or', 'fourth' /aa/ e.g. 'are', 'car'. These can also be written e.g. /2r/, /ar/ in phonemic transcription. In many descriptions these are not listed as diphthongs in American English.

¹³ Garrett, Andrew & Keith Johnson. *Phonetic Bias in Sound Change*, in Alan C. L. Yu (ed.), Origins of Sound Change: Approaches to Phonology. Oxford: Oxford University Press, 2013. P. 51-97.

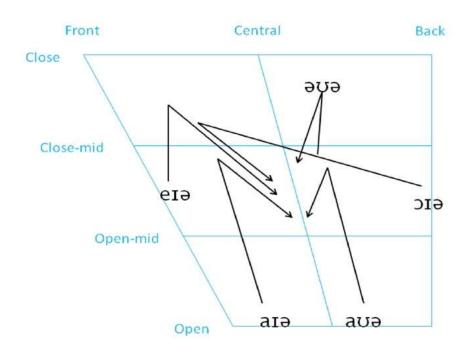


Figure 2.3 English Triphthongs Vowel¹⁴

The table above shows the triphthongs of RP (Received Pronunciation).

The arrows show the direction of the glides between three vowels. The most significant differences between British and American English are explained in the footnotes.

/eɪə/ for layer, bayonet /əʊə/ for mower, lower
/aɪə/ for fire, higher /aʊə/ for hour, shower
/ɔɪə/ for lawyer, royal

In RP and many varieties of British English the final r of all triphthongs is not pronounced, but in GA and most American Varieties of English,

¹⁴ Garrett, Andrew & Keith Johnson. *Phonetic Bias in Sound Change*, in Alan C. L. Yu (ed.), Origins of Sound Change: Approaches to Phonology. Oxford: Oxford University Press, 2013. P. 51-97.

the final r is typically pronounced with an r-coloured vowel: /ə/, e.g. 'layer' /leɪə/, 'fire' /faɪə/, 'lawyer' /lɔɪə/, 'lower' /loʊə/, 'hour' /aʊə/.

These can also be written 'layer' /ˈlejər/, 'fire' /ˈfajər/, 'lawyer' /ˈlɔjər/ or /ˈlajər/, 'lower' /ˈlowər/, 'hour' /ˈawər/ in phonemic transcription. ¹⁵

In many descriptions these are not listed as triphthongs in American English.

2. English Consonant

a. Definition of Consonant

A consonant is a speech sound that is refers to letters of the alphabet that represent those sounds: $\langle z/, /b/, /t/, /g/,$ and $\langle h/, \rangle$ are all consonants. Consonants are all the non-vowel sounds, or their corresponding letters: $\langle N/, /e/, /i/, /O/, /v/ \rangle$ and sometimes $\langle y/, \rangle$ are not consonants. In $\langle h/, \rangle$ and $\langle T/, \rangle$ are consonants. Consonant can also be an adjective that describes things that seem like they should go together, things that are "agreeable".

_

¹⁵ Foulkes, Paul & Marilyn Vihman. "First language acquisition and phonological change", in Patrick Honeybone & Joseph C. Salmons (eds), The Oxford Handbook of Historical Phonology. Oxford: Oxford University Press, 289-312. 2015.

Velar Unvoiced (-V) Voked (+V) Stops (Plosives) 71 d b Fricatives h Z 1 Affricates tf dz Nasais m n Lateral (approximants)

Table 2.1. English consonant¹⁶

The consonants in the table above are the consonant phonemes of RP (Received Pronunciation) and GA (General American), that is, the meaning-distinguishing consonant sounds (c.f. pat - bat). Phonemes are written within slashes //, e.g. /t/.

j

w²

b. Kinds of Consonant

W₂

Approximants

Each symbol is treated separately, with explanation and examples that are at the same time a link to a dictionary where the sound can be listened to the word pronounced both in American and British English; the first three examples always contain the consonant at the beginning, the other three at the end (unless there are no such words). Remark: when the spoken uttered "most languages", it is mean that "most languages that use the Latin alphabet"). Voiced consonants are those in

¹⁶ Ladefoged, Peter; Maddieson, Ian. The Sounds of the World's Languages. Oxford: Blackwell. ISBN 0-631-19814-8. (1996).

which the vocal chords are active while pronouncing it (e.g. /b/, /v/, /z/, /d/, /g/), and unvoiced conson-ants are the rest (e.g. /p/, /s/, /t/, /k/, /f/). ¹⁷

c. The Mechanism of Pronouncing Consonant

Within the mechanism of pronouncing talking about sounds, not letters. And there is a mismatch between sounds and letters: sometimes two letters combine to represent one sound, so that 's'+'h' combine to represent the sound /// and 't'+'h' combine for / θ /, and sometimes one letter is pronounced as a sequence of two sounds, as 'x' is usually /ks/. So the number of consonant letters in our alphabet is irrelevant when considering the number of consonant sounds (phonemes) in English. The basic answer to the original question is that there are 24 consonant sounds in English:

6 plosives :/p/,/b/,/t/,/d/,/k/ 9 fricatives :/f/,/v/,/ θ /,/ δ /,/s/,/z/,/f/

2 affricates : /t//,/d/ 3 nasals : $/m/,/n/,/\eta/$

1 lateral-approximant : /l/ 3 approximants :/w/./j/,/r/

However, things are never quite as simple as that in the study of languages, and there are a number of issues that we might consider in more depth in the phonology systems as mentioned by Roach¹⁸

¹⁷ Ladefoged, Peter; Maddieson, Ian. The Sounds of the World's Languages. Oxford: Blackwell. ISBN 0-631-19814-8. (1996).

¹⁸ Roach, P. *English phonetics and phonology: A practical course* (3rd edition). Cambridge: Cambridge University Press. 2000, P. 65

i. Manner of Articulations

- (a). A stop consonant completely cuts off the airflow through the mouth. In the consonants /t/, /d/, and /n/, the tongue tip touches the alveolar ridge and cuts off the airflow at that point. In /t/ and /d/, this means that there is no airflow at all for the duration of the stop. In /n/, there is no airflow through the mouth, but there is still airflow through the nose. It is distinguish betweennasal stops, like /n/, which involve airflow through the nose, andoral stops, like /t/ and /d/, which do not.Nasal stops are often simply called nasals. Oral stops are often called plosives. Oral stops can be either voiced or voiceless. Nasal stops are almost always voiced. (It is physically possible to produce a voiceless nasal stop, but English, like most languages, does not use such sounds.)
- (b). Fricative in the stop /t/, the tongue tip touches the alveolar ridge and cuts off the airflow. In /s/, the tongue tip approaches the alveolar ridge but doesn't quite touch it. There is still enough of an opening for airflow to continue, but the opening is narrow enough that it causes the escaping air to become turbulent (hence the hissing sound of the /s/). In a fricative consonant, the articulators involved in the constriction approach get close enough to each other to create a turbluent airstream. The fricatives of English are /f/, /v/, $/\theta/$, $/\delta/$, /s/, /z/, /f/, and /3/.

- (c). In an approximant, the articulators involved in the constriction are further apart still than they are for a fricative. The articulators are still closer to each other than when the vocal tract is in its neutral position, but they are not even close enough to cause the air passing between them to become turbulent. The approximants of English are /w/, /j/ and /l/.
- (d). An affricate is a single sound composed of a stop portion and a fricative portion. In English /tf/, the airflow is first interuppted by a stop which is very similar to /t/ (though made a bit further back). But instead of finishing the articulation quickly and moving directly into the next sound, the tongue pulls away from the stop slowly, so that there is a period of time immediately after the stop where the constriction is narrow enough to cause a turbulent airstream. In /tf/, the period of turbulent airstream following the stop portion is the same as the fricative /f/. English /dʒ/ is an affricate like /tf/, but voiced.
- (e). Laterals Sounds pay attention to what the process are doing with tongue when saying the first consonant of /lif/ leaf. The tongue tip is touching the alveolar ridge (or perhaps the upper teeth), but this doesnot make /l/ a stop. Air is still flowing during an /l/ because the side of the tongue has dropped down and left an opening. (Some people drop down the right side of their tongue during an /l/; others drop down the left; a few drop down both

sides.) Sounds which involve airflow around the side of the tongue are called laterals. Sounds which are not lateral are called central. /l/ is the only lateral in English. The other sounds of English, like most of the sounds of the world's languages, are central. More specifically, /l/ is a lateral approximant. The opening left at the side of the tongue is wide enough that the air flowing through does not become turbulent.

ii. Place of Ariculations

Articulators are the parts of the oral tract that are used in producing speech sounds. There are two kinds of Articulations, active and passive articulation. Active articulators are ones that move: the tongue tip is an active articulator in sounds like /s t n/, since it moves up to behind the teeth. Passive articulators are articulators that cannot move, but are the target for active articulators. In the case of sounds like /s t n/, the passive articulator is the bony ridge behind the upper teeth, known as the alveolar ridge. Most places of articulation are described by reference to the passive articulator. We start our description of them with the lips, working our way down the vocal tract.

(a). Bilabial consonants occur when blocking or constricting airflow out of the mouth by bringing the lips together. English contains

¹⁹ Roach, P. *English phonetics and phonology: A practical course* (3rd edition). Cambridge: Cambridge University Press. 2000, P. 65

- the following three bilabial consonants: /p/ as in "purse" and "rap" /b/ as in "back" and "cab" /m/ as in "mad" and "clam"
- (b). Labio-Dental consonants occur when constricting airflow by curling the lower lip back and raising it to touch the upper row of teeth. English contains the following two labio-dental sounds:

 /f/ as in "fro" and "calf", /v/ as in "vine" and "have.
- (c). Dental consonants occur when constricting airflow by placing the slimy tongue against the upper teeth. English contains the following two labio-dental sounds: $/\theta/$ as is "thick" and "bath" $/\delta/$ as in "the" and "rather".
- (d). The alveolar ridge is where the teeth meet the gums. The creations of Alveolar consonants when raising the tongue to the alveolar ridge to block or constrict airflow. The English alveolar consonants are as follows: /n/ as in "no" and "man"/t/ as in "tab" and "rat" /d/ as in "dip" and "bad" /s/ as in "suit" and "bus" /z/ as in "zit" and "jazz" /l/ as in "luck" and "fully"
- (e). Post-Alveolar retracts the tongue back just a bit from the alveolar ridge, the sounds change enough to be recognized as distinct consonants. So post-alveolar consonants are those that occur when the tongue blocks or constricts airflow at the point just beyond the alveolar ridge. The post-alveolar english consonants are as follows: /// as in "shot" or "brash" /3/ as in "vision" or

- "measure" /tf/ as in "chick" or "match" /d3/ as in "jam" or "badge"
- (f). Palatal is the roof of mouth on the hard palate. it may know it as "the place that burns like hell when I eat pizza that is too hot." The Soundis is create palatal consonants when raising the tongue to this point and constrict airflow. English has only one palatal consonant: /j/ as in "yes" and "bayou".
- (g). Velar sound is placed on behind the hard palate have the velum or soft palate. Unlike the bony hard palate in front of it, the this consists of soft, mucousy tissue. It make Velar Consonants when raising the back of tongue to the velum to block or restrict airflow. English has the following velar consonants: /ŋ/ as in "going" and "uncle" (note that the 'n sound' in these words is NOT made at the alveolar ridge, which is why it is distinct from /n/). /k/ as in "kite" and "back" /g/ as in "good" and "bug". /w/ as in "wet" and "howard".
- (h). The glottis is actually two vocal folds (i.e. vocal cords). It acts as a sort of bottle cap to windpipe.Next, Inhale and then hold breath for a few seconds while keeping mouth open. What people are actually doing to keep the air from expelling out of their lungs by closing glottis. Glottal consonants aren't actually consonants; they just play consonant roles in the language. In English, the following things happen at the glottis: /h/ as in "hi"

and "Bahamas." Say these words and notice how you're not actually constricting or blocking airflow for this /h/ sound. You're just exhaling a little bit harder than you would for a normal vowel sound in transition to the following vowel sound. /?/ — This is actually the culprit behind many of the "silent syllables" we discussed in the first lesson. For example, in the phrase "wha(t) time is it?" the /t/ in "what" is dropped and the vowel sound before it is closed at the glottis.

B. Vowel and Consonant in Acehnese Language

1. Acehnese Vowel

a. Definition of Vowel

Vowels are speech sounds produced without blocking the flow of air from the lungs so that the breath stream escapes easily through the mouth. However, there are about twenty-nine vowel sounds in the Acehnese language divided into monophthongs and diphthongs. A monophthong consists of only one vowel sound, which isnot changed during its articulation. In addition, these are called pure vowels, simple vowels, or stable vowels.²⁰

P. 7

 $^{^{\}rm 20}$ Wildan. Tata Bahasa Aceh, Banda Aceh : Global Educational Consultant Institut, 2002.

b. Kinds of Vowel

This paper has discovered nine vowel sounds and six nasal sounds, namely /uu/, /u/, /i/, mid-high /e/, /e/, /o/, mid-low /a/, /o/, /e/, and low /a/ (see Table. 2.5).

Tabel 2.2. The Acehnese Vowel Monophthong²¹

Acehnese Vowel
/a/
/i/
/u/
/é/
/è/
/e/
/eu/
/ô/
/ö/
/o/
/'i/
/'u/
/'o/
/'ö/
/'a/
/è/
/'è/

However, Acehnese has a considerable number of diphthong vowels in its phonetics system. A diphthong consists of two components; the tongue changes position to produce the sound of two vowels. There are nine diphthongs in Acehnese. They are/ië/,/uë/,/eë/,/oë/,/'uë/,/Ui and /Oi/.

-

²¹ Wildan. *Tata Bahasa Aceh*, Global Educational Consultant Institute, 2002. P. 8-10

Table 2.3 Acehnese diphthong sounds²²

Acehnese Diphthong
/ië/
/uë/
/èë/
/oë/
/'uë/
/ui/
/ëi/
/oi/
/ai/

Many aspects affect our ability to learn other languages; most important is the effect of informant mother language. Different errors in sounds depend on the native language of the speaker. Phonetic perception and pronunciation can contribute to the majority of difficulties speakers have. Without paying attention to these problems, learners may continue to make the same mistakes and may never pronounce the sounds of new language vocabularies properly. However, English speakers may face a considerable number of difficulties, such as unfamiliar consonants, new vowels, voiced and voiceless sounds, and hushing sounds. Each contrastive will be illustrated separately.

c. The Mechanism of Pronouncing Vowel

 $^{^{\}rm 22}$ Wildan. Tata~Bahasa~Aceh, Global Educational Consultant Institute, 2002. P. 11-14

Most literature works in Acehnese which are written in Roman alphabet basically use the spelling developed by Snouck Hurgronje (1893).²³ After Indonesia became independent, Acehnese spelling changed several times following the changes in Indonesian spelling, but the changes are mostly the replacement of certain symbols by some others. Then the vowel sound also get assimilate process include in changing the sound from /a:/ into /u:/. The first discussion the researcher focuses on assimilation vowel-consonant. From the pattern above we can see that the sound /a:/ make an assimilation process with initial consonant of the word. Assimilation of place of articulation, the sound /a:/ change into /u:/ when it is placed before consonant /b/, /p/, /m/ and /w/. See the data below:

Table 2.5 Acehnese diphthong sounds

Acehnese Words	Phonetics Symbols	Meaning		
peubetoi	/pu: bə:tô/	Making right		
реиwи	/pu:wo:/	Making go home		
peulet	/pə:lėt/	Run after		
peusom	/pə:som/	Hide		
peumameh	/pu:mamėh/	Making sweet		

2. Acehnese Consonant

a. Definition of Consonant

In the phonetics system, consonants are speech sounds that are produced by partly or completely stopping the air from proceeding through the mouth, particularly by closing the lips or touching the teeth with the

²³ Interview session on Abdul Gani Asyik, PhD, on Phonetics Study of Aceh vowel and consonants constrastive to English Language. 30 December 2016, Banda Aceh

tongue.²⁴ For instance, the sound /p/ is pronounced with the lips; /f/ is pronounced by forcing air through a narrow channel; and /m/ is a nasal sound that is created with air flowing through the nose. In this paper the Acehnese consonants sounds will be described based on the place of articulation, voicing, and manner of articulation.²⁵First of all, the place of articulation refers to an area in one of the resonating cavities (larynx and mouth) where the articulators oppose some kind of stricture or obstacle to the passing of air. Second, the aspect of voicing concerns the character of voiced and voiceless consonants. If the vocal cords vibrate when a sound is produced, it is a voiced consonant; if they do not vibrate, it is a voiceless sound. Lastly, the manner of articulation refers to the way the articulators are set so that the resonance effect is possible.

Table 2.6 Acehnese Consonants sounds

Place of Articulation						
Place Descriptions						
	Produced by front of the tongue and the hard palate,					
Palatal	like /n/, /c/, /j/.					
	Produced by blade of the tongue and the Alveolar					
Alveolar	gum, like /n/, /d/, /t/, /S/,/l/, /r/.					
	Produced by lower and upper lips, like /m/, /w/, /b/,					
Bilabial	/p/.					
Produced by back of the tongue and the velum,						
Velar	/ŋ/, /g/, /k/.					
Glottal	Produced in the epiglottis /h/.					

²⁴ Gani, Abdul Asyik, *Bunyi dalam bahasa Aceh*, Banda Aceh; Universitas Syiah Kuala, 1978a.

¹⁹⁷⁸a. ²⁵ Abdul Gani Asyik, *Bunyi dalam kata tituan bunyi bahasa Aceh*, Banda Aceh; Universitas Syiah Kuala, 1978b.

b. Kinds of Consonant

In *kaedah Bunyi*, Wildan stated that Acehnse produces two consonants of sound classification, i.e. single and multiple systems.²⁶

- i. Single consonant sound, the Acehnese Language shares 24 characters single sounds, As follow:/p/, /t/, /c/, /k/, /b/, /d/, /j/, /g/,/f/, /s/, /sy/, /h/, /m/, /n/, /ny/, /ng/, /mb/, /nd/, /nj/, /ngg/, /l/, /r/, /w/, and /y/.
- ii. Multiple consonant sound, the the Acehnese Language shares23 characters single sounds, within these three classifications,as follow:
 - (a). The ending sound with /h/ i.e. /ph/, /th/, /ch/, /kh/,/bh/, /dh/, /jh/, /gh/, /lh/, and/rh/
 - (b). The ending sound with l/l i.e. pl/, /cl/, /kl/, /bl/, dan /gl/
 - (c). The ending sound with /r/ i.e/pr/, /tr/, /cr/, /kr/, /br/, /dr/, /jr/, dan /gr/.

c. The Mechanism of Pronouncing Consonant

 The mechanism of pronuncing Single consonant sounds as stated on the bellow table are as follow:

_

²⁶ Wildan. Tata Bahasa Aceh, Banda Aceh : Global Educational Consultant Institut, 2002.

Table 2.7 Acehnese SingleConsonants sounds²⁷

1. Consonan	t /p/					
Acehnese Transcript Indonesian English Trans						
pajôh	/pajôeɪʧ/	Makan	eat	/i:t/		
рареиеп	/papeuen/	Papan	Wood-Board	/wʊd-bɔrd/		
gopnyan	/gopnyan/	Beliau	Не	/hi/		
kap	/kap/	Gigit	Bite	/baɪt/		
jakhap	/jakhap/	Terkam	pounce	/paons/		
2. Consonan	t/t/					
tangké	/tangké/	ʻtangkai'	Rod	/rpd/		
takue	/takue/	'leher'	Neck	/nɛk/		
bateue	/bateue/	'batal'	Pillow	ˈpɪləʊ		
intat	/intat/	ʻantar'	Drop on	/drvp vn/		
brat	/brat/	'berat'	weight	/weɪt/		
3. Consonan	t /c/					
cah	/cah/	ʻtebas, babat'	Slash on	/slæʃɒn/		
cabeueng			/bra:ntf/			
pancang	/pancang/	'pancang'	Stake	/steɪk/		
pucôk	/pucôk/	ʻpucuk	Top of	/tvpvv/		
4. Consonant /k/						
ka	/ka/	ʻsudah'	Finished	/ˈfɪnɪʃt/		
lakoe	/lakoe/	'suami'	Husband	/ˈhʌzbənd/		
likôt	/likôt/	'belakang'	Behind	/bɪˈhaɪnd/		
galak	/galak/	ʻsuka'	Facinate	/Facinate/		
jak	/jak/	ʻpergi'	Go	/gəʊ/		
5. Consonan	t /b/					
baroe	/baroe/	'kemarin'	Yesterday	/jɛstərde/		
bunoe	/bunoe/	ʻtadi '	Just now	/dʒəst naw/		
cabeueng	abeueng /cabeueng/ 'cabang' Branch		/brænts/			
keubeue						
sabab	sabab /sabab/ 'sebab' Caused by /kazd baj					
kitab ²⁸ /kitab/ 'kitab' Book /bok/						
6. Consonant /d/						
deuh /deuh/ 'tampak' Vivid /vɪvəd/						
Duroe	/Duroe/	ʻduri'	Thorns	/θərnz/		
gadôh	/gadôh/	ʻlalai'	Neglect	/nəglɛkt/		

 $^{\rm 27}$ Wildan. Tata Bahasa Aceh, Banda Aceh : Global Educational Consultant Institut, 2002. P. 7

 $^{^{28}}$ Wildan. Tata Bahasa Aceh, Banda Aceh: Global Educational Consultant Institut, 2002. The word "*kitab*" was derived from Arabic Language, and its sound as well, For Older Aceh-hand writing also know by *Arab-Jawi* transcription of texts. T. Wildan also confimed that these cultural impacted to consonant /b/ sound.

gadöh	/gadöh/	'hilang'		Lost		/lɔst/	
7. Consonant /j/						/1031/	
						/dɪlɪdʒənt/	
jén	/jen/			Genie		/diiid/oni/	
bajèe	/bajèe/			Clothes		/kloðz/	
bajeueng	/bajeueng/	'bejat'		Depraved		/diprevd/	
8. Consona		осјаг		Вергичес	*	/aipreva/	
gabuek	/gabuek/	ʻsibuk'		Busy		/bɪzi/	
gidöng	/gidöng/	'injak'		Step on		/step an/	
Lagèe	/Lagèe/	seperti, las	σu'	As it like	·S	/æz it	
20,800	, 20,600,		5**	135 It HACS		lajks/	
lagôt	/lagôt/	ʻlaku'		Well-solo	d out	-	
		(dagang)				awt/	
9. Consona	nt /f/			•		•	
faké	/fake/	'fakir		Destitute		/dɛstətut/	
10. Consona	nt/s/						
su	/su/	'suara'		Sound		/sawnd/	
sipak	/sipak/	'sepak'		Kick on		/kɪk an/	
asoe	/asoe/	ʻisi '		Contents		/kantents/	
gasien	/gasien/	'miskin'	'miskin'			/pavərti/	
11. Consona	nt /sy/						
syaé	syaé /syaé/ 's		ʻsyair'			/proz/	
dèsya	/dèsya/	ʻdosa'	'dosa'			/sin/	
kasy'ak /kasy'ak/		'becek'		Muddying		/mədiɪŋ/	
12. Consona	12. Consonant /h/						
h'iem	/h'iem/	'teka-teki'	Ric	ldles /rıdə		ləlz/	
hôm	/hôm/	'entah '	No			t dəfajnd/	
jeuheut	/jeuheut/	ʻjahat'	Evi		/ivəl/		
meuh'ai	/meuh'ai/	mahal'	exp	ensive	/ikspɛnsɪv/		
dah	/dah/	ʻsumbu'	_	ve-fuse	/stov-fjuz/		
beukah	/beukah/	'pecah' Broken		oken	en /brokən/		
13. Consona		1			1		
mat	/Mat/	'pegang'	Ho		/ho		
mantöng	/mantöng/	'masih'	Exi		/igzist/		
tamöng	/Tamöng/	'masuk'	Ent			ntər/	
timu	/timu/	'timur' Eas				ist/	
gulam	/Gulam/					ld an/	
tém	/tém/	'mau'	'mau' Wi		/wii	lıŋnəs/	
14. Consonant /n/							
na	/na/ 'ada'		Availiable				
niet	/niet/	'niat'		Motive		/motiv/	
mantöng	/Mantöng/	'masih'		Left-over		/lɛft-ovər/	
keunöng	/keunöng/	'kena'		Hit Cook		/hɪt/	
taguen	/taguen/	_	'memasak'			/kok/	
kheun /kheun/ 'baca, kata' Read /red/				red/			

	rt y/									
nivan /	'nyan/	15. Consonant /ny/ nyan /nyan/ 'itu' That - Those /ðæt-ðoz/								
	nyan/ nyoe/	'ini'				:002/ :-thees/				
	siny'ok/		pas'	†		/tos				
	pany'ot/	'lam			sh - L	ight		sı/ eʃ-lajt/		
16. Consonant /		iam	ри	114	SII - L	igiii	m	ej-iuji/		
ngeut	ng/ /ngeut/		'hod	$\frac{1}{2}$		Fool		/ful/		
ngui	/ngeui/ /ngui/		ʻbodoh' ʻpakai'			Use on		/jus an/		
bang'ai '	/ngut/ /bang'ai '/	,	'bodoh'		Foolish		/fulis/			
teungeut	/teungeut/					Sleepy		/slipi/		
ieungeui	/ieungeui/		ʻkantuk, ʻtidur'		Бісеру		•			
teugageueng	/teugageue	ng/	'terpelanting'		Darted off		/dartəd ɔf/			
17. Consonant/n	nb/									
mbôn /m	nbôn/	'emb			Dew			/du/		
mbông /m	nbông/	'som	bong'		Arro	gance		/erəgəns/		
leumbéng /le	eumbéng/	ʻlem	bing'		Spea	r		/spir/		
tumbôn /tu	ımbôn/	'gem	uk'		Fat			/fæt/		
18. Consonant /	nd/									
kandét /	kandét/	-	tan (k bagid		Fold-away		/fold-əwe/			
		ping	gang)	,						
ganda /	ganda/	'gan	ganda' Multiple		iple		/məltəpəl/			
tandéng /	tandéng/	ʻtana	ling'		Mato	ch		/mætʃ/		
19. Consonant/nj/										
panjo //	panjo/	'po	honka	puk	k' Cotton-plant		/katən plænt/			
meunjéng /	meunjéng/		icin iur'		Rin	ıg-wel	1	/rɪŋ wɛl/		
anjông /	anjông/		as (ru	mah	Ter	race		/tɛrəs/		
, J O	J =O'	ace	,							
kunjông /	kunjông/		njung	,	Vis	Visit		/vɪzət/		
· ·	/kanji/ '(penganan) Chiken-so		oup	/tʃɪkən						
	•	kan	_	,	Gruel		sup			
					\perp			gruəl/		
20. Consonant/n	igg/									
nggang	1		bangau'		Ib	Ibis		/ajbəs/		
panggang			'panggang'		T	Toasted-		/tostəd		
				grid		id		grıd		
panggé /panggé/		'panggil'		Call		/kɔl				
panggông /Panggông/		1 00		Back		/bæk/				
21. Consonant/l/										
Leumah	/Leumah/	'tampak'		appearance		/əpɪrən/s				
langai	/langai/	ʻbajak,		Plow		/plaw/				
		٤	garu'							

geulunyueng	/geulunyuer	ı/ 'telinga'	ears	/irz/
paleuet	/paleuet/	ʻtelapak	Palm	/Pam/
		tangan'		
22. Consonant	/r/			
röt	röt	ʻjalan'	Road	/rod/
rô	rô	'tumpah'	spilled	/spild/
baroe	baroe	'kemarin'	Yesterday	/jɛstərde/
puréh	puréh	ʻlidi'	Leaf-rib	/lif rɪb/
23. Consonant	/w/			·
wa	/wa/	ʻpeluk'	Embrace	/ɛmbres/
wie	/wie/	'kiri '	Left	/lɛft/
weueh	/weueh/	'sedih'	Sad	/sæd/
aweueh	/aweueh/	'ketumbar'	Coriander	/kɔriændər/
geulawa	/geulawa/	ʻlempar, gada'	Cudgel	/kədʒəl/
24. Consonant	/y/			
yôh	/yôh/	'ketika'	Once upon	/wəns
			Time	әрап
				tajm/
yö	/yö/	ʻtakut	Affraid	/affraid/
sayeuep	/sayeuep/	'sayap'	Wings	/wiŋz/
payah	/payah/	ʻpayah, sukar'	Difficult	/dɪfəkəlt/
piyôh	/piyôh/	ʻistirahat'	Pause	/pɔz/

- ii. The mechanism of pronuncing multi-consonant sounds as stated on the bellow table are as follow:
 - (a). The ending sound with /h/i.e. /ph/, /th/, /ch/, /kh/, /bh/, /dh/, /jh/, /gh/, /lh/, and /rh/

Table 2.8 Acehnese Multi-Consonantsending sound with /h/sounds²⁹

1. Consonant/ph/					
Acehnese	Transcript	Indonesian	English	Transcript	
phôn	/phôn/	'pertama'	First	/fərst/	
phô	/phô/	ʻjenis tarian	Local Dances	/lokəl -	
		Aceh'		dænsəz/	
pha	/pha/	ʻpaha'	Thigh	/θaj/	
timphan	/timphan/	ʻjenis penganan	Local Cake	/lokəl kek/	
		khas Aceh'			

 $^{^{\}rm 29}$ Wildan. Tata Bahasa Aceh, Banda Aceh : Global Educational Consultant Institut, 2002.

_

timphiek	/timphiek/	'i	enis ikan		Tuna Fish		/tunə fiʃ/	
umpinen	/ timpriters	tongkol' - Tuna		Tana Tish		7 10110 1117		
2. Consonan	t <i>/th/</i>	10	ngnoi Iu	ita				
that	that	'sangat' More-Most /m		ıɔr-most/				
thô	/Thô/		ering'				rajd/	
thèe	/thèe/		ahu'	1			eknalıdʒ/	
lath 'uk	/lath'uk/	_	perlumur	Dir			ərti/	
		Ck	cotoran)'		· J			
thôn	/thôn/		ahun'	Yea	ars	/jɪ	rz/	
3. Consonan	t/ch/							
ch'a	/ch'a/	'pa	ncar'		Broadcast		/br>dkæst/	
chèn	/chèn/	ʻlo	mpat'		Jump - hop)	/dʒəmp hap/	
chik	/chik/	'de	wasa'		Mature – Adult		/mətfor — ədəlt/	
4. Consonan	t/kh/					<u> </u>		
kha	/kha/	'ku	at, keras'		Strong		/strɔŋ/	
jakhap	/Jakhap/		rkam'		pounce		/pawns/	
khueng	/khueng/	'ke	marau'		Dried Seas	son	/drajd- sizən/	
kh'iong	/kh'ieng/	'ba	,,,		stench		/stents/	
kh'ieng khèk	/kh teng/		ruk'		Awful		/stentj/ /afəl/	
5. Consonan		Du	run		Awiui		rujar	
bhah	/bhah/	'm	asalah'		Issue		/ɪʃu/	
bhan	/bhan/	'ba			Tire		/tajər/	
bhoe	/bhoe/		n puh,-renyah	, ,	Crispy		/krispi/	
bhôi	/bhôi/		e bolu'	ı	Medeline		/mædəlin/	
6. Consonan		пи	e ooiu		Wicdeline		/mædðim/	
dheuen	/dheuen/	'do	han'		Branch		/brænts/	
dhiet	/dhiet/		ntik'		Pretty		/priti/	
dhoe	/dhoe/		hi'		Forehead		/fɔrhɛd/	
7. Consonan		ш			Torchead		/Joined/	
jhô	/jhô/	'da	rong'		Push		/pvʃ/	
jhung	/jhung/		enarik'		Interesting		/intrəstin/	
8. Consonan							, 1 o s.i,	
leughum	/leughum/		'bunyi'		Sound		/sawnd/	
gham-ghum	/gham-ghu	m/	'bunyi'- ge	aduh			/nɔjzi/	
beughök	/beughök/				Old Maio	len	/old -	
O		(800000)				medən/		
9. Consonan	t/lh/		•		•		•	
lham	/lham/	'tei	nggelam'		Sink		/siŋk/	
lha	/lha/	'ampas gergaji'			Saw Dregs	5	/sɔ drɛgz/	
lhat	/lhat/	'tambat,sangkut'			Tether		/tɛðər/	
lhôh	/lhôh/	'terangi'			Light on		/lajt an/	
lhôn	/lhôn/	'telanjang'			nude		/nud/	

10. Consonant/rh/					
rhah	/rhah/	'cuci'	Wash	/was///	
rhoh	/rhoh/	'berbuah (padi)'	Meaty	/miti/	
rhop	/rhop/	ʻriuh'	Noisy	/nəjzi	

(b). The ending sound with ll i.e. pll, ll, ll

Table 2.9 Acehnese Multi-Consonantsending sound with /l/sounds³⁰

1. Consonant	/pl/				
Acehnese	Transcript	Inc	donesian	English	Transcript
plè	/plè/	ʻtu	iang'	Pour	/pɔr/
plueng	/plueng/		ıri'	Run	/rən/
plôh	/plôh/	ʻpi	uluh'	Tens	/tɛnz/
plöh	/plöh/	ʻle	pas'	Detached	/dətætʃt/
mamplam	/mamplam/	'n	angga'	Mangoes	/mæŋgoz/
campli	/campli/	'ca	abe'	Chili	/tʃɪli/
2. Consonant	/cl/				
clap-clup	/clap-clup/		'bunyi'	Wet-sound	/wɛt
					sawnd/
cl'am-cl'um	/cl'am-cl'un	1/	'bunyi'	Hard-sound	/hard
					sawnd/
3. Consonant	/kl/				
kleuet	/kleuet/	li	ar'	Wild	/wajld//
kleueng	/kleueng/	ʻel	'ang'	Eagle	/igəl/
klo	/klo/	ʻtu	ıli'	Deaf	/dɛf/
sukla	/sukla/	'hi	itam pekat'	Pitch-Black	/pɪtʃ-blæk
4. Consonant	/bl/				
blang	/blang/	'sa	awah'	Rice-field	/rajs fild/
bloe	/bloe/	'be	eli'	Purchaise	/purchaise/
Blie	/Blie/	'nе	elotot'	Stare at	/ster æt/
publa	/publa/	'т	elerai'	Resolve	/rizalv/
5. Consonant/gl/					
glue	/glu/	ʻlio	cin'	Slippery	/slɪpəri/
gla	/gla/	lie	cin'	Slippery	/slɪpəri/
glông	/glông/	li	ngkaran'	Circled	/sərkəld/
glöng	/glöng/	'po	ancangkan'	Plant it	/plænt ɪt/

 $^{^{30}}i\mbox{Wildan}.$ Tata Bahasa Aceh, Banda Aceh : Global Educational Consultant Institut, 2002.

(c). The ending sound with /r/ i.e/pr/, /tr/, /cr/, /kr/, /br/, /dr/, /jr/, dan /gr/.

Table 2.10 Acehnese Multi-Consonantsending sound with

/r/sounds³¹

1. Consonant/pr/						
Acehnese	Transcript	Indonesian	English	Transcript		
pr'iek	/pr'iek/	'robek'	Torn	/tɔrn/		
pruet	/pruet/	'perut'	stomach	/stəmək/		
prah	/prah/	'peras'	Squeeze	/skwiz/		
pruh	/pruh/	'tiup'	Blow	/blo/		
caprok	/caprok/	'cobek'	Plate	/plet/		
2. Consona	ant/tr/					
trieng	/trieng/	'bambu'	Bamboo	/bæmbu/		
trueng	/trueng/	'terong'	Eggplant	/egplænt/		
trang	/Trang/	'terang'	Bright	/brajt/		
trôh	/trôh/	ʻtiba'	Arrive	/ərajv/		
atra	/atra/	'harta'	Property	/prapərti/		
3. Consona	ant/cr/					
crah	/crah/	'retak'	Crack	/kræk/		
cr'ah	/cr'ah/	'tumis'	Sauteing	/sauteing/		
crôh	/crôh/	'goreng'	Frying	/frajɪŋ/		
crông	/crông/	ʻtimba'	Bucketing	/bucketing/		
cr'iek	cr'iek/	'robek'	Torn	/tɔrn/		
4. Consona	ant/ <i>kr</i> /					
kreueh	/kreueh/	'keras'	Solid	/saləd/		
krang	/krang/	ʻrapuh,	Fragile	/frædʒəl/		
krueng	/krueng/	'sungai'	River	/rɪvər/		
cakra ³²	/cakra/	'obrol'	Conversation	/kanvərsefən/		
5. Consonant/ <i>br</i> /						
breueh	/breueh/	'beras'	Rice	/rajs/		
brôh	/brôh/	'sampah'	Trash	/træʃ/		
brôk	/brôk/	'buruk'	Bad	/bæd/		
bruek	/bruek/	'tempurung'	Coconut	/kokənət fɛl/		
			shell			

³¹ Wildan. Tata Bahasa Aceh, Banda Aceh : Global Educational Consultant Institut, 2002.

³² Wildan. Tata Bahasa Aceh, Banda Aceh: Global Educational Consultant Institut, 2002. . The word "cakra" or added with "poh" as "poh-cakra" mean having conversation formerly. In addition, it possibly substituted with "peh-tem" with has similar meaning; however the word "peh-tem" usually used informal conversation and tends to be spoiled activity.

6. Consonant/ <i>dr</i> /						
droe	/droe/	ʻdiri '	self	/self/		
kadra ³³	/kadra/	ʻikan kadra'	Mullet-fish	/mullets-fif/		
jeundrang	/jeundrang/	ʻjerami'	Straw	/stro/		
geundrang	/geundrang/	'genderang'	Large drum	/lardz drsm/		
7. Consona	nt/ <i>jr</i> /					
jra	/Jra/	ʻjera'	Wary	/wɛri/		
jroh	/jroh/	'bagus'	Great	/greɪt/		
jruek	/jruek/	ʻawet,	Preserved	/prəˈzɜrvd/		
keujrun	/Keujrun/	ʻpengawas'	Supervisor	/ˈsupərˌvaɪzər/		
8. Consona	8. Consonant/gr/					
grah	/grah/	'haus '	Thirsty	/θзrsti/		
groh	/gr ô h/	ʻputik'	Blooming	/ˈblumɪŋ/		
grôp	/g rô p/	'lompat'	Jump	/дътр/		

These following Acehese pronunciation transcriptions are quoted from the guidance of T. Wildan in *Tata Bahasa Aceh*. This guidance also taken on language formulation composed by *the late* Prof. Drs. Budiman Sulaiman on *Proyek Pengembangan Bahasa dan Sastra Daerah*, Depdikbud, in 1985. As part of contribution, the writer also interviewed Acehenese linguist, Abdul Gani Asyik, Ph.D, to counter-part of the cultural dynamic in vowels and consonants for Acehese community.

³³Ikan Kadra or Mullet-fishBased on Interview session on Abdul Gani Asyik, Ph.D, on Phonetics Study of Aceh vowel and consonants contrastive to English Language. 30 December 2016, Banda Aceh.

CHAPTER III

RESEARCH METHOD

A. Research Design

This study is a library research which used descriptive qualitative approach. It was applied to collect primary and secondary data about the similarity and dissimilarity between Acehnese and English language in vowel and consonant. On the other hand, descriptive research, is descripted by Krathwohl, it might simply report the description emerges following creative exploration, and serves to organize the findings in order to fit them with explanations, and then test or validate those explanations.³³ Library research method is designed to collect the proper literature about the main and secondary data. In common are views of transcription, Edward *et.all* categories as a process that is theoretical, selective, interpretive, and representational.³⁴ Important differences in the literature relate to distinctive theoretical and methodological positions about how transcription should represent language and how researchers approach transcribing language to understand the world.

Library research is a research done by selecting of many books based on research tittle. The writer used several sources of data or information related to the problem being investigated. The data collected are read and classified

³³ Krathwohl, M. Constraints and opportunities with interview transcription: Towards reflection in qualitative research. Social Forces, 84(2), 1273–1289. 2005.

³⁴ Edwards, J. A., & Lampert, M. D. (Eds.). Talking data: Transcription and coding in discourse research. Hillsdale, NJ: Lawrence Erlbaum. 1993

systematically. The result of the exploration the similarity and dissimilarity between Acehnese and English language in vowel and consonant

B. The Source of Data

1. The Primary Data

The primary data was bounded chronologically searches of following phonetics transcriptions and sources form books, journals in linguistics. To cover English vowels and consonants sound, the writer focused on Andrew L. Sihler, *Language History: An Introduction.*³⁵ John Benjamins, then, Victoria Fromkin, Robert Rodman, and Nina Hymes: *Introduction to language.*³⁶ Furthermore, the writer also take other linguists on phonetics, Guenther; *Speech sound acquisition, articulation, and rate effects in a neural network model of speech production*, in contemporary RP, American English and most southern varieties of British English.³⁷ To collect the used Acehnese vowels and consonants sounds the writer refered to T. Wildan in *Tata Bahasa Aceh*. Primary linguistic data are (original or derived) representations of specific speech events with their spatial-temporal coordinates, i.e. of objects with a historical identity. At a first level of abstraction, it is composed that what Lyons called "system-sentences." These are sentences in

³⁵ Andrew L. Sihler, *Language History: An Introduction*. In John Benjamins, The English Phonectics, New York, 2000.

³⁶ Victoria Fromkin, Robert Rodman, and Nina Hymes, *Introduction to language*, 10th Edition, New York, Holt Rinehart and Winston. P. 34-45, 2014.

³⁷ Guenther, F. H. Speech sound acquisition, articulation, and rate effects in a neural network model of speech production, in contemporary RP, American English and most southern varieties of British English. In conservative RP and Northern varieties of British English, this is pronounced /1/, as in 'silly': /sɪlɪ/. Psychol. Rev.102, 1995. 594–621.

written representation that lack spatial-temporal coordinates and, therefore, a historical identity.³⁸

2. Secondary Data

To strengthen the primary data, the writer also extend the data from the other linguistics references, particulary for acehnese language, the writer belived that the interviewed session with Acehenese linguist, Abdul Gani Asyik, Ph.D, to counter-part of the cultural dynamic in vowels and consonants for Acehese community. Generally, secondary data are accounts written after the fact with the benefit of hindsight. They are interpretations and evaluations of primary sources. Secondary sources are not evidence, but rather commentary on and discussion of evidence. However, what some define as a secondary source, others define as a tertiary source. Secondary data analysis offers methodological benefits and can contribute to phonetics research through generating new knowledge. The overall goal of this method is the same as that of others, to contribute to scientific knowledge through offering an alternate perspective; it only differs in its reliance on existing data.

C. The procedure of Data Collections

To collect the data the writer use existing qualitative data which is aimed to reanalyse the data in order to find similarity and dissimilarity between

³⁸ Lyons, John. *Phonetics Data Transcription*. 2 vols. Cambridge: Cambridge University Press (Rep. 1990-1991). (1977).

³⁹ Beaulieu, Lionel J. *Identifying Needs Using Secondary Data Sources*, University of Florida. P. 67. 2010.

⁴⁰ Heaton, J. *Secondary analysis of qualitative data: An overview.* Historical Social Research, 33(3), 33-45. 2008.

Acehnese and English language in vowel and consonant. Data are collected in note, then read clearly, and wrote down the important things. These are the following steps to collect and process data:

- 1. Reading, it means read much from various definitions about the tittle in this research.
- 2. Editing, namely the re-examination of the data obtained mainly in terms of completeness, clarity and coherence of meaning from each other.
- 3. Organizing, it means compile the data obtained that has been determined.
- 4. Discovery research which is conducted further results analysis of preparation of the data by using rules, theories, and methods that have been determined, so that the conclusion (inference) is certain that the answers of research problem.

D. The Procedure of Data Analysis

The analysis of qualitative research involves aiming to uncover data to describe the phenomenon and what this means. The study analysis involves labeling and coding all of the data in order that similarities and differences can be recognized. The qualitative research, however, has no system for pre-coding, therefore a method of identifying and labeling or coding data needs to be developed that is bespoke for each research, which is called content analysis. ⁴¹ Content analysis can be used when qualitative data has been collected through documentary analysis. It is a procedure for the categorisation of verbal or

_

 $^{^{41}}$ Dooley, David. Social research methods. 4th ed. Upper Saddle River, NJ: Prentice Hall. 385p. 2001.

behavioural data, for purposes of classification the similarity and dissimilarity between Acehnese and English language in vowel and consonant. Additionally, the paper also proceeds to provide several practical techniques that can be employed to ease the experience that foreign-language learners go through while learning Acehnese. Having the phonetic transcription of the data which was done manually, the analysis began with the identification of the errors by comparing each student's actual pronunciation with the standard phonetic transcription. After listing down the deviations, the deviations were explained from the standpoint of English phonetic systems based on O'Grady, W., Dobrovolsky, M., & Katamba, F. 42 Afterwards, detailed descriptions to each of the deviations were noted down by relating the deviations to the Acehnese vowel and consonantal sounds based on the theory from Alamsyah *et. all*, 43 Then, in order to have further explanation about the errors, the linguistic environments when the deviations occurred were also described by using the symbols of IPA. 44

-

⁴² O'Grady, W., Dobrovolsky, M., & Katamba, F. (1996). Contemporary linguistics: An introduction. Essex: Pearson Education.

⁴³ Alamsyah, T, Rostina T, Azwardi, & Muhammad I, *Pemilihan Bahasa Indonesia sebagai bahasa pertama anak dalam keluarga masyarakat Aceh penutur Bahasa Aceh di Nanggroe Aceh Darussalam* (The selection of Bahasa Indonesia as children's first language in families from the Acehnese speaking community in Nanggroe Aceh Darussalam). *Jurnal Pendidikan Bahasa Melayu [Journal of Malay Language Education*] 1.2:31-44. 2011

⁴⁴ International Phonetic Association, Reproduction of The International Phonetic Alphabet, https://www.internationalphoneticassociation.org/content/full-ipa-chart access on 25 March 2017

CHAPTER IV

FINDING AND ANALYSIS

A. The similarity of vowels between English and Acehnese

1. Number of vowels in both languages

Table 4.1 the vowels in both languages

NO.	English Vowel	Acehnese Vowel
1.	/ I /	/a/
2.	/i:/	/i/
3.	/^/	/u/
4.	/a/	/é/
5.	/æ/	/e/
6.	/e/	/ô/
7.	/ø/	/ö/
8.	/:c\	/o/
9.	/ʊ/	/'i/
10.	/u:/	/'u/
11.	/ə/	/'o/
12.	/3:/	/'ö/
13.		/'a/
14.		/è/
15.		/'è/
16.		/é/
17.		/eu/

English single vowels consist of twelve vowels. In Acehnese, Single vowel has fifteen vowels variety. Both languages also have the combination of vowels that is called diphthong. English language has seven diphthongs and Acehnese language has nine diphthongs which are displayed as follows:

Table 4.2 the diphthong of both languages

NO.	English Diphthong	Acehnese Diphthong
1.	/eI/	/ië/
2.	/aI/	/uë/
3.	\Ic\	/èë/
4.	/oʊ/	/oë/
5.	/aʊ/	/'uë/
6.	/Iə/	ui
7.	\co\	ëi
8.		oi
9.		ai

2. The similarities of kinds of vowel in both languages

a. Front vowel

Front vowel of both languages is only seen in short mid-front spread.

- Short mid-front spread vowel

/e/ in English for example: bet (/bet/)

/è/ in Acehnese for example: bek (/bèk/)

b. Central vowel

Central vowel of both languages can be seen in long mid central spread vowel and Short low central spread vowel

- Long mid central spread vowel

/3:/ in English, for example: burn (/b3:n/)

/e/ in Acehnese, for example: le (/le/)

- Short low central spread vowel

 $/\wedge$ / in English, for example: cut $(/k \wedge t/)$

/a/ in Acehnese, sometimes sounds short low front spread

vowel. For example: pat (/pat/)

c. Back Vowel

Back vowel of both languages can be seen as follows:

- Short high back rounded vowel

/v/ in English, for example: put /pvt/

/u/ in Acehnese, for example: bulut /bulut/

- Long high back rounded vowel

/u:/ in English, for example: glue /glu:/

/u/ in Acehnese also can be seen as long high back

rounded. For example: hu /hu/

d. Diphthong

Diphthong of both languages is seen only in sound /Iə/ (English) and /ië/ (Acehnese). For example:

In English, beer /bIə/

In Acehnese, bing /biëng/

B. The similarity of consonants between English and Acehnese

1. Number of consonants in both languages

English language has twenty-four single consonants and Acehnese have twenty-five consonants that will be shown in the table below:

Table 4.3 number of consonants of both languages

NO.	English	Acehnese
	Consonant	consonant
1.	p	b
2. 3. 4.	t	c
3.	k	d
4.	b	F
5.	g	G
6.	d	Н
7.	1	J
8.	m	K
9.	n	L
10.	h	M
11.	W	N
12.	S	P
13.	z	R
14.	3	S
15.	ſ	T W
16.	ďз	W
17.	f	Y Z Ny
18.	ծ	Z
19.	θ	Ny
20.	r	Ng
21.	v	Th
22.	f	Ph
23.	j	Dh
24.	ŋ	Ch
25.		Sy

2. The similarities of consonant between English and Acehnese

The writer found that some single consonants of both languages are identically similar.

- Depending on voiced and non-voiced consonants, they can be compared as follows:
 - Voiced consonants in English: $\frac{b}{\sqrt{z}}, \frac{d}{\sqrt{g}}, \frac{\eta}{\sqrt{n}}$.
 - Voiced consonants in Acehnese: /b/, /z/, /d/, /g/, /ng/, /n/.
 - Non-voiced consonants in English : /p/, /s/, /t/, /k/, /ʃ/, /θ/, /δ /.
 - Non-voiced consonants in Acehnese: /p/, /s/, /t/, /k/, /sy/, /th/, /dh/.
 - There are no significant differences between English consonants and Acehnese consonants in term of voiced and non-voiced consonants. Acehnese use phonetic symbol /sy/ instead of /f/, /th/ instead of /θ/ and /dh/ instead of /δ/.

b. Depending on manner of articulations:

- Stop consonants in English: /p/, /b/, /t/, /d/, /k/, /g/.

 Stop consonants in Acehnese: /p/, /b/, /t/, /d/, /k/, /g/.
- Fricative in English: /f/, /s/, /z/, /h/, /ʃ/, /θ/, /δ/.
 Fricative in Acehnese: /f/, /s/, /z/, /h/, /sy/, /th/, /dh/.

- Affricates in English: /tf/, /dʒ/.

Affricates in Acehnese: /ch/, /j/.

- Nasalized consonants in English: /m/, /n/, /ŋ/

Nasalized consonants in English: /m/, /n/, /ng/

- Laterals in English: /l/

Lateral in Acehnese: /l/

- Approximants in English: /w/, /j/.

Approximants in Acehnese: /w/, /j/.

- c. Depending on place of articulations:
 - Bilabial consonants in English: /p/, /b/, /m/.

Bilabial consonants in Acehnese: /p/, /b/, /m/.

- Labio-dental consonants in English: /f/.

Labio-dental consonants in Acehnese: /f/.

- Dental consonants in English: $\theta/$, $\delta/$.

Dental consonants in Acehnese: /th/, /dh/.

- Alveolar ridge in English: /t/, /d/, /s/, /z/, /n/.

Alveolar ridge in Acehnese: /t/, /d/, /s/, /z/, /n/.

- Post-alveolar consonants in English: /tf/, /ʃ/.

Post-alveolar consonants in Acehnese: /ch/, /sy/.

- Palatal consonants in English: /j/.

Palatal consonants in Acehnese: /j/.

- Velar consonants in English: /k/, /g/, /η/.

Velar consonants in Acehnese: /k/, /g/, /ng/.

- Glottal consonants in English: /h/

Glottal consonants in Acehnese: /h/

C. The dissimilarities of vowel and consonant between English and Acehnese languages.

1. The dissimilarity of vowel between English and Acehnese

- a. Number of vowel between English and Acehnese are different.
 English have twelve single vowels and seven diphthongs.
 Acehnese have fifteen single vowels and nine diphthongs.
- b. Acehnese language have nasalized vowel such as /'i/, /'u/, /'o/, /'ö/, /'a/, /è/, /'è/. For example: /'ap/, /'isya/ and /'oh/. English have no nasalized vowel.
- c. English have sound /æ/ as single vowel which belongs to front vowel in short low front spread style. Acehnese have no /æ/ as single vowel except if it combines /a/ and /e/.
- d. English have /p/ as single vowel. Acehnese have no /p/ except if it combines sound of /a/ and /o/.
- e. English have long, short, middle, high and low in articulation of vowel. Acehnese have no specific articulation in average except if it is uttered in specific speech.
- f. Most of diphthongs in English are different with Acehnese diphthongs because Acehnese diphthongs are almost full of mid-

- low combination vowels such as /uë/, /èë/, /oë/, /'uë/, /ui/. For example: /uroë/, /iuë/, /setui/.
- g. Most of English vowels sound spread such as /i:/, /æ/, /a/, /e/, /i/.

 Acehnese have no many spread vowel except in diphthongs.

2. The dissimilarity of consonants between English and Acehnese

- a. Researched from their roots, they come from different roots. English language comes from west Germanic that originated from the Anglo-Frisian dialects brought to Britain by Germanic invaders from various part of what is now northwest Germany and Netherland. Acehnese language comes from Austronesia languages family.
- b. English language have twenty-four single consonants and Acehnese have twenty-five single consonants.
- c. There is some mismatches between sound and letter in both languages. Acehnese consonant proceed the combination of two letters to produce one sound. English have one single letter or symbol to represent a sound. For example, Acehnese combine /s/+/y/ to represent sound /ʃ/, /t/+ /h/ to represent /θ/ and /t/ +/h/ to represent /δ/, /k/+/s/ to represent /x/ and /n/+/g/ to represent /η/,
- d. Acehnese consonants have /ny/ that does not exist in English consonants. For example: /nyoe/, /nyan/, /nyeh/.

- e. Acehnese language have no consonant /v/ as sound. Letter V in Acehnese language equals to sound of /f/ in English consonants.
- f. Acehnese language consonants are speech sound that are produced by partly or completely stopping the air from proceeding through the mouth, particularly by closing the lips or touching the teeth with the tongue. For instance, the sound /p/ is pronounced with the lips, /f/ is pronounced by forcing the air through the lips with touching the teeth and /m/ is pronounced by forcing air through the nose.
- g. Based on place of articulation, there are some different ways between English language consonants and Acehnese language consonants. In English, /j/ is the only consonants that belongs to palatal consonant. But in Acehnese, /c/ and /j/ belong to palatal consonants.

CHAPTER V

CONCLUSION AND SUGGESTION

The writer states some conclusions as follows:

A. Conclusions

- 1. The similarity between Acehnese and English, for vowel in the combination of the two vowels, open central unrounded vowel */a/ and high back vowel */u/ of English underwent changed into half close back vowel /o/ in Acehnese when it was preceded by any sound of consonants, which is */au / → /o/. Represented as follows: */au/ → /o/.
- 2. The consonant sounds into voiceless consonant sounds in the end-position of a word, and this process occurs regularly. It take place in voiced velar stop sound of English /ŋ/ turned into a voiceless glottal fricative sound of Acehnese /ng/, Single Consonant /s/, Double-Consonant /tr/, and so on.
- 3. Vowels between English language and Acehnese language are not completely different.
- 4. The dissimilarities, the sound pattern (pure vowel) of Acehnese and English language, we can see that English has tense and lax pure vowel whereas Acehnese has mid long and lax vowel. This difference puts a strain to the learners, then, there is a mismatch between sounds and letters: in English pronunciation, sometimes two letters combine to

represent one sound, so that 's'+'h' combine to represent the sound $/\int$ / and 't'+ 'h' combine for $/\theta$ /, and sometimes one letter is pronounced as a sequence of two sounds, as 'x' is usually /ks/.

5. Many consonants of Acehnese that have no similarity with English consonants depending on a single phonetic symbol.

B. Suggestions

- The students should pronounce vowels and consonants correctly both in English and Acehnese languages.
- 2. the students should know how many vowels and consonants in both languages.

BIBLIOGRAPHY

- Alamsyah, T, Rostina T, Azwardi, & Muhammad I, Pemilihan Bahasa Indonesia sebagai bahasa pertama anak dalam keluarga masyarakat Aceh penutur Bahasa Aceh di Nanggroe Aceh Darussalam (The selection of Bahasa Indonesia as children's first language in families from the Acehnese speaking community in Nanggroe Aceh Darussalam). Jurnal Pendidikan Bahasa Melayu [Journal of Malay Language Education]
- Andrew L, Sihler, *Language History: An Introduction*. In John Benjamins, The English Phonectics, New York, 2000.
- Asyik, Abdul Gani *Bunyi dalam kata tituan bunyi bahasa Aceh*, Banda Aceh; Universitas Syiah Kuala, 1978.
- Asyik, Abdul Gani, *Bunyi dalam bahasa Aceh*, Banda Aceh; Universitas Syiah Kuala, 1978a.
- Asyik, Abdul Gani. A Contextual Grammar of Acehnese Sentences, Michigan: University of Michigan, 1987
- Beaulieu, Lionel J. *Identifying Needs Using Secondary Data Sources*, University of Florida. 2010.
- Dooley, David. Social research methods. 4th ed. Upper Saddle River, NJ: Prentice Hall,2001.
- Edwards, J. A., & Lampert, M. D. (Eds.). Talking data: Transcription and coding in discourse research. Hillsdale, NJ: Lawrence Erlbaum. 1993
- Foulkes, Paul & Vihman, Marilyn. "First language acquisition and phonological change", in Patrick Honeybone & Joseph C. Salmons (eds), The Oxford Handbook of Historical Phonology. Oxford: Oxford University Press, 2015.
- Fromkin, Victoria, Rodman, Robert and Hymes, Nina. *Introduction to language*, 10th Edition, New York, Holt Rinehart and Winston, 2014.
- Garrett, Andrew & Johnson, Keith. *Phonetic Bias in Sound Change*, in Alan C. L. Yu (ed.), Origins of Sound Change: Approaches to Phonology. Oxford: Oxford University Press, 2013.

- George Quinn, *The Learner's Dictionary of Today's Indonesian*. Sydney: Allen & Unwin. 2001.
- Goldsmith, J., & Xanthos, A. *Learning phonological categories*. Language, 85(1),4–38. 2006.
- Guenther, F. H. Speech sound acquisition, articulation, and rate effects in a neural network model of speech production, in contemporary RP, American English and most southern varieties of British English. In conservative RP and Northern varieties of British English, this is pronounced /ɪ/, as in 'silly': /sɪlɪ/. Psychol. Rev.102, 1995.
- Heaton, J. Secondary analysis of qualitative data: An overview. HistoricalSocial Research, 33(3), 2008.
- Kingston, John & Randy L. Diehl. *Phonetic Knowledge*, Language 70: 1994.
- Krathwohl, M. Constraints and opportunities with interview transcription: Towards reflection in qualitative research. Social Forces, 84(2), 2005.
- Lacy, Paul de "Transmissibility and the role of the phonological component", Theoretical Linguistics . 2006.
- Ladefoged, Peter; Maddieson, Ian. *The Sounds of the World's Languages*. Oxford: Blackwell. 1996.
- Lyons, John. Phonetics Data Transcrip. 2 vols. Cambridge: Cambridge University Press, 1977.
- McCardle, P., & Chhabra, V. *The voice of evidence in reading research*. Baltimore: Paul H. Brookes Publishing Co, 2004.
- O'Grady, W., Dobrovolsky, M., & Katamba, F. Contemporary linguistics: An introduction.

 Essex: Pearson Education, 1996.
- Roach, P. *English phonetics and phonology: A practical course* (3rd edition). Cambridge: Cambridge University Press. 2000.

Wardhaugh, Ronald, *An Introduction to Sociolinguistics*. London: Blackwell Publishing Ltd. 2006.

Wildan. Tata Bahasa Aceh, Banda Aceh: Global Educational Consultant Institute, 2002.

Internet Source:

International Phonetic Association, Reproduction of The International Phonetic Alphabet, https://www.internationalphoneticassociation.org/content/full-ipa-chart access on 25 March 2017